Iarnród Éireann
Irish Rail

Rosslare ORE Hub

EIAR Environmental Topic Chapters

Chapter 21:

Population and Human Health

venterra | GDG GAVIN & DOHERTY GEOSOLUTIONS

NICHOLAS O'DWYER an RSK company

Co-funded by the European Union

TABLE OF CONTENTS

LIST OF TABLES

LIST OF FIGURES

LIST OF ABBREVIATIONS

AA	Appropriate Assessment
AQMP	Air Quality Management Plan
CFRAM	Catchment-based Flood Risk Assessment and Management
CLO	Community Liaison Officer
CSO	Central Statistics Office
CTMP	Construction Traffic Management Plan
DMP	Dust Management Plan
ED	Electoral Division
EEC	Eastern Economic Corridor
EIA	Environmental Impact Assessment
EIAR	Environmental Impact Assessment Report
EPA	Environmental Protection Agency
GDG	Gavin & Doherty Geosolutions
HAT	highest astronomical tide
HGV	Heavy Goods Vehicle
HRA	Health Risk Assessment
IAIA	International Association for Impact Assessment
IAQM	Institute of Air Quality Management
IEMA	Institute of Environmental Management and Assessment
NSL	Noise Sensitive Locations
NVMP	Noise and Vibration Management Plan
ORE	Offshore Renewable Energy
PCU	passenger car units
REAR	Rosslare Europort Access Road
RoRo	Roll-on, Roll-off
SEA	Strategic Environmental Assessment
TII	Transport Infrastructure Ireland
WTE	Whole Time Equivalent

Funded by the European Union. Views and opinions expressed are however those of the Author(s) only and do not necessarily reflect those of the European Union. Neither the European Union nor any granting authority can be held responsible for them.

21 POPULATION AND HUMAN HEALTH

21.1 INTRODUCTION

Iarnród Éireann – Irish Rail is applying for development permission for the Rosslare Offshore Renewable Energy Hub (hereafter the 'Proposed Development'), located immediately adjacent and to the northwest of the existing Rosslare Europort at Rosslare Harbour in County Wexford, which is operated by Iarnród Éireann. The Proposed Development includes capital dredging to achieve navigable depths for vessels delivering ORE components; land reclamation to create a storage area for these components; and construction of two new berths to facilitate loading and unloading of ORE components. The land reclamation works include infilling the existing small boat harbour, after the construction of a new small boat harbour. The Proposed Development also includes the installation of a new slipway and facility for local clubs, such as the Sea Scouts.

The purpose of the Proposed Development is to provide a facility for the efficient handling and storage, marshalling, staging and integration of ORE components to facilitate installation of offshore wind energy projects by ORE developers and operators. The Proposed Development is designed to provide facilities that accommodate a wide range of infrastructure uses, both for current requirements and anticipated future needs. For instance, the Proposed Development could be used for traditional port activities if required, including during periods of reduced ORE-related activity. Refer to EIAR Chapter 6: Project Description for further detail.

This chapter of the Environmental Impact Assessment (EIA) Report presents the assessment of the likely significant effects (as per the "EIA Regulations") on population and human health arising from the construction and operation of the Proposed Development, both alone and cumulatively with other projects.

This chapter provides a summary of topic-relevant guidance and outlines the data sources used to characterise the Population and Human Health baseline. Building on the methodology outlined in Chapter 1: Introduction and Methodology, the topic-specific methodology followed in assessing the impacts of the Proposed Development on topic-specific environmental receptors is set out, as is the assessment of likely effects on the topic-specific receptors arising from the construction and operation of the Proposed Development. Relevant mitigation measures, following the 'mitigation hierarchy' of avoidance, minimisation, restoration and offset, and/or monitoring requirements, are proposed in respect of any significant effects, and a summary of residual impacts is provided.

21.2 STATEMENT OF COMPETENCE

This chapter has been prepared by David Cahill (BSc (Hons) Environmental Science, MEngSc (Hons) Sustainable Energy Engineering) and Charlotte Manwaring (BSc (Hons) Geological Sciences, MSc Geochemistry, BA Archaeology).

David is an Environmental Scientist at GDG with broad knowledge of EIA processes and has produced EIAR chapters for several different projects, including for onshore and offshore wind development projects.

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

This chapter has been reviewed by Laurie McGee (BA, MA, PgDip,MIPI, MRTPI, Affil IEMA). Laurie is an Associate Director at RSK Environment and has 20 years of post-qualification experience in town and environmental planning consultancy. Laurie has experience in preparing comprehensive reports and coordinating all aspects of project design, EIA and AA/HRA reporting, including EIA Scoping, and consent applications and discharges of consents for a range of infrastructure projects including renewable energy and energy infrastructure, solar, minerals, water and wastewater including pipelines, ports and harbours, airports, and housing and commercial developments. Laurie's specialist areas in EIA include Population and Human Health (all types of developments), and Shadow Flicker (wind energy).

21.3 RELEVANT LEGISLATION AND GUIDELINES

Regulations and guidance pertaining to the Proposed Development and EIA in general are outlined in Chapter 2: Legislation and Policy Context. This section details the regulations and guidance specific to population and human health.

21.3.1 LEGISLATION

This chapter has been prepared having regard to the following legislation.

- EU Directive 2011/92/EU on the assessment of the effects of certain public and private projects on the environment as amended by Directive 2014/52/EU (the "EIA Directive")
- EU Planning and Development (Environmental Impact Assessment) Regulations 2018 (S.I. No. 296 of 2018).

21.3.2 GUIDANCE

The following guidelines/guidance is considered relevant to this chapter:

- Environment Protection Agency (2022) Guidelines on the Information to be contained in Environmental Impact Assessment Reports
- Institute of Environmental Management and Assessment (IEMA) (2022) Determining Significance for Human Health in Environmental Impact Assessment
- IEMA (2022) Effective Scoping of Human Health in Environmental Impact Assessment
- Institute of Public Health Ireland (2021) Human Impact Assessment Guidance: A Manual
- International Association for Impact Assessment (IAIA) (2020) Human health: Ensuring a high level of protection
- US EPA (2016) Health Impact Assessment Resource and Tool Compilation
- WHO (2014) Regional Office for Europe. Health in impact assessments: opportunities not to be missed.

As described previously, this chapter is informed by other environmental topics of the EIAR. The legislation and guidance relevant to these topics are discussed within each chapter.

21.4 ASSESSMENT METHODOLOGY

The assessment methodology has been prepared with reference to the EPA, (2022) Guidelines on the Information to be Contained in Environmental Impact Assessment Reports. The two environmental factors of population and human health, although intrinsically linked, are addressed under separate headings within this chapter.

Population is typically covered through consideration of socioeconomics, such as economic impacts for employment and social effects such as impact of construction on quality of life and well-being issues such as settlement and land use, transport and amenity of the people living in that area (IAIA, 2020).

Human health is not defined in the EIA Directive however the European Commission's SEA Implementation Guidance states "*The notion of human health should be considered in the context of other issues mentioned in paragraph (f)".* (Paragraph (f) lists the environmental factors including soils, water, air, etc).

The assessment of impacts on human health refers to the potential effects on human health from the bio-physical environment (air quality, noise and vibration, water quality, traffic and transport) (EPA, 2022).

This chapter therefore draws on information presented in the following EIAR chapters:

- Chapter 9: Water Quality and Flood Risk
- Chapter 17: Traffic and Road Transport
- Chapter 18: Air Quality
- Chapter 19: Noise and Vibration
- Chapter 22: Material Assets
- Chapter 23: Seascape, Landscape and Visual Assessment
- Chapter 24: Climate

The assessment of significance of effects is a professional judgment based on the sensitivity of the receptor and the magnitude of any change.

The methods used for assessment of effects on population and human health is based on the EPA, (2022), as set out in Chapter 1: Introduction and Methodology, it follows IEMA, (2022) EIA guidance, and expert judgment.

21.4.1 TOPIC-SPECIFIC CONSULTATION

As part of the EIA scoping process, the project team engaged directly with Wexford County Council in July 2022 to confirm the scope of the noise and dust monitoring requirements for the Proposed Development. Otherwise, no scoping response relevant to Population and Human Health was received.

Following scoping, and as detailed in Chapter 4: Scoping and Consultation, an extensive programme of public consultation was undertaken between December 2023 and December 2024 to seek the views of the wider public on the Proposed Development with the dedicated project website (www.rosslareorehub.ie) launched in May 2024.

As set out in Chapter 4, Wexford County Council wrote to the Project Team on the 21st of June 2024 to provide their views on the Proposed Development and following this, the project team met with Wexford County Council on 24th October 2024. The below extract from the Wexford County Council submission relates to visual amenity and as such is relevant to Population and Human Health:

The Rosslare Harbour and Kilrane Settlement Plan (Volume 3 of Wexford County Development Plan 2022-2028) *"recognises the need to improve the public realm and visual amenities of the settlement to encourage visitors to spend time there, and also to give a positive introduction to our county for those arriving at the Europort."*

Chapter 23: Seascape, Landscape Visual Impact Assessment considers potential impacts of the Proposed Development on visual amenities of Rosslare Harbour and Kilrane in more detail.

21.4.2 DATA SOURCES

This chapter of the EIAR draws on information from the following sources:

- Central Statistics Office (CSO), (www.cso.ie), Central Statistics Office (CSO), Census 2016, 2022.
- Central Statistics Office (2025), Live Register Data – Information relating to population, local economy, income and employment,
- Central Statistics Office (2025) Labour Force Survey.
- Department of Health (2019), Healthy Ireland Outcomes Framework. Government of Ireland.
- Department of Health (2022), Health in Ireland: Key Trends 2022. Government of Ireland.
- The Department of Education and Skills (www.education.ie)
- Environmental Protection Agency. (n.d.). EPA website – Water quality data, human health data, and guidelines on the information to be contained in EIARs. Retrieved from https://www.epa.ie
- Health Service Executive. (n.d.). HSE county health profiles – Health statistics within the study area. Retrieved from https://www.hse.ie
- Lenus Health Repository. (2015). Health Profile 2015 Wexford. Retrieved from https://www.lenus.ie/handle/10147/584056?show=full
- Project Ireland 2040 – Department of Public Expenditure, NPD Delivery and Reform. (2019). Project Ireland 2040. Government of Ireland.
- Pobal HP Relative Deprivation Index (2023) https://data.pobal.ie/Portal/apps/sites/#/pobal-maps
- Wexford County Council. (2024). Wexford County Council Draft Noise Action Plan 2024-2028. Wexford County Council.
- Wexford County Council. (2022). Wexford County Development Plan 2022-2028. Wexford County Council.

21.4.3 APPROACH TO ASSESSMENT OF EFFECTS

The assessment of likely significant effects of the Proposed Development on population and human health receptors has been undertaken having regard to the EPA Guidelines (EPA, 2022). The assessment considers the following areas of particular relevance to the Proposed Development:

- The potential for significant effects on population including economic impacts for employment and social issues such as settlement and land use, transport and amenity of the people living in that area to ensure their protection during the construction and operational phases.
- The potential for significant effects on human health, the bio-physical environment (air quality, noise and vibration, water quality, traffic and road transport).

21.4.3.1 ASSESSING POPULATION EFFECTS

The baseline information obtained has been used to provide an understanding of the value of each population receptor and its sensitivity to the potential impacts associated with the construction and operation of the Proposed Development. Effects can be beneficial (positive), neutral or adverse (negative) in nature.

Professional judgment has been used to establish the significance criteria used in this assessment. The significance criteria used for this assessment are outlined in Table 21.1.

Table 21.1: Significance criteria for assessment of significance of effects

Significance Level / Degree of Impact	Criteria
Profound	Where additional employment and indirect effects on local economy would significantly change socioeconomics at a regional level Where there is a permanent disruption of a major piece of infrastructure, accessibility and journey patterns. There are notable changes in amenity (recreation, tourism, visual) characteristics over an extensive area or a very intensive change over a more limited area.
Very significant	Where additional employment and indirect effects on local economy would change socioeconomics at a regional level. Where there is long-term disruption of a major piece of infrastructure, accessibility and journey patterns. There are notable changes in amenity (recreation, tourism, visual) characteristics over a substantial area or an intensive change over a more limited area.
Significant	Where additional employment and indirect effects on local economy would significantly change socioeconomics at a local level. Where there is a medium-term disruption of a major piece of infrastructure, accessibility and journey patterns. There are minor changes in amenity (recreation, tourism, visual) over some of the area or moderate changes in a localised area.
Moderate	Where additional employment and indirect effects on local economy would have changes to socioeconomics at a local level.

Significance Level / Degree of Impact	Criteria
	Where there is a temporary disruption of a major piece of infrastructure, accessibility and journey patterns (>6 months). There are minor changes in amenity (recreation, tourism, visual) over some of the area or moderate changes in a localised area.
Slight	Where additional employment and indirect effects on local economy would have limited changes to socioeconomics at a local level. Where there is a temporary disruption of a major piece of infrastructure, accessibility and journey patterns (<6 months). There are minor changes in amenity (recreation, tourism, visual) over a small proportion of the area or moderate changes in a localised area or changes that are reparable over time.
Not significant	Where additional employment and indirect effects on local economy would have minor changes to socioeconomics at a local level. Where there is a brief disruption of a major piece of infrastructure, accessibility and journey patterns. There are minor changes in amenity (recreation, tourism, visual) over a small proportion of the area or moderate changes in a localised area or changes that are reparable over time.
Imperceptible	Where additional employment and indirect effects on local economy would have no changes to socioeconomics at a local level. Where there is a minor disruption of a major piece of infrastructure, accessibility and journey patterns. There are no noticeable changes in amenity (recreation, tourism, visual).

For the purposes of assessing the significance of effects on Population receptors in EIA terms:

- Effects determined as imperceptible to moderate significance inclusive are considered to be not significant in EIA terms.
- Effects determined as significant to profound significance inclusive are considered to be significant in EIA terms.

21.4.3.2 ASSESSING HUMAN HEALTH EFFECTS

The assessment of human health effects within this chapter summarises findings from the relevant topic specific chapters. The topic specific methodologies and potential for effects are discussed separately within the respective chapters. While both quantitative and qualitative methods have been used to establish magnitude of impact and the resultant significance of effect for these chapters, the significance of effects from topic specific chapters have been considered with regard to human health following IEMA guidance, (2022).

The IEMA guidance on human health significance criteria consider the magnitude and duration of the effects on the relevant receptor and the value of the receptor. The significance criteria are outlined in Table 21.2.

Table 21.2: Significance criteria for assessment of significance of human health effects

Significance level / degree of impact	Criteria
Major (significant)	There is likely to be a substantial change in the health baseline of the population, including as evidenced by the effect size and scientific literature showing there is a causal relationship between changes that would result from the project and changes to health outcomes.
Moderate (significant)	There is likely to be a small change in the health baseline of the population, including as evidenced by the effect size and scientific literature showing there is a clear relationship between changes that would result from the project and changes to health outcomes
Minor (not significant)	There is likely to be a slight change in the health baseline of the population, including as evidenced by the effect size and/or scientific literature showing there is only a suggestive relationship between changes that would result from the project and changes to health outcomes.
Negligible (not significant)	There is likely to be a very limited change in the health baseline of the population, including as evidenced by the effect size and/or scientific literature showing there is an unsupported relationship between changes that would result from the project and changes to health outcomes.

21.4.4 MITIGATION

Three types of mitigation measures are considered in this chapter, following IEMA, (2024).

- **Primary mitigation** is an inherent part of the project design. Primary mitigation relates to the location, design or timing of the project, and these measures are intended to avoid and reduce significant adverse effects on the environment.
- **Secondary mitigation** requires further activity in order to achieve the anticipated outcome. Where potentially significant adverse effects have not been avoided by project location, design or timing or require to be further reduced to within acceptable levels, secondary mitigation may be required. These measures, where required, are recommended in this chapter of the EIAR, and may include measures that are set out in best practice guidance.
- **Tertiary mitigation** measures are required regardless of any EIA assessment and may include measures that are set out as a result of legislative requirements and/or standard sectoral practices. Typically, these measures are standardised and often covered by other forms of legislation or controls, therefore they are not presented in extensive detail in the EIA.

21.4.5 STUDY AREA: POPULATION RECEPTORS

The study area for population receptors for this Chapter of the EIAR has been identified as the Electoral Divisions (EDs) containing the Proposed Development (i.e., St. Helen's ED) and the EDs immediately adjacent (i.e., Kilscoran ED and Lady's Island ED), as shown in Figure 21.1.

21.4.5.1 POPULATION RECEPTOR SENSITIVITY

Within the identified population, individuals will have varying levels of sensitivity to impacts. As is it not possible to differentiate sensitivity accurately at a population level, it is assumed that for population receptors the population within the study area is uniformly sensitive to the impacts assessed in this Chapter.

21.4.6 STUDY AREA: HEALTH RECEPTORS

Human health receptors include environmental health determinants which are likely to have impacts at a local level. As this chapter considers receptors identified in other chapters (i.e., water quality, traffic and road transport, air quality, noise and vibration, visual amenity), the health receptor study area aligns with those identified in the associated topic-specific chapters (see Table 21.3 and Figure 21.2).

Table 21.3: Human health receptors

Chapter	Study Area
9: Water Quality and Flood Risk	Onshore and offshore elements that are governed by hydrological linkages
17: Traffic and Road Transport	Road Users Study Area
18: Air Quality	Sensitive Receptors within 20 m, 50 m, 100 m and 250 m of Proposed Development Boundary
19: Noise and Vibration	Identified noise sensitive locations
23: Seascape, Landscape and Visual Assessment	5km buffer around Proposed Development Boundary
24: Climate	Proposed Development Boundary

21.4.7 DIFFICULTIES AND UNCERTAINTIES

The baseline for this assessment was established using all publicly available information considered accurate and up to date, reflecting the current population and human health baseline. As this chapter draws on information contained in other relevant chapters of this report, this chapter is also bound by the limitations outlined in those specific chapters.

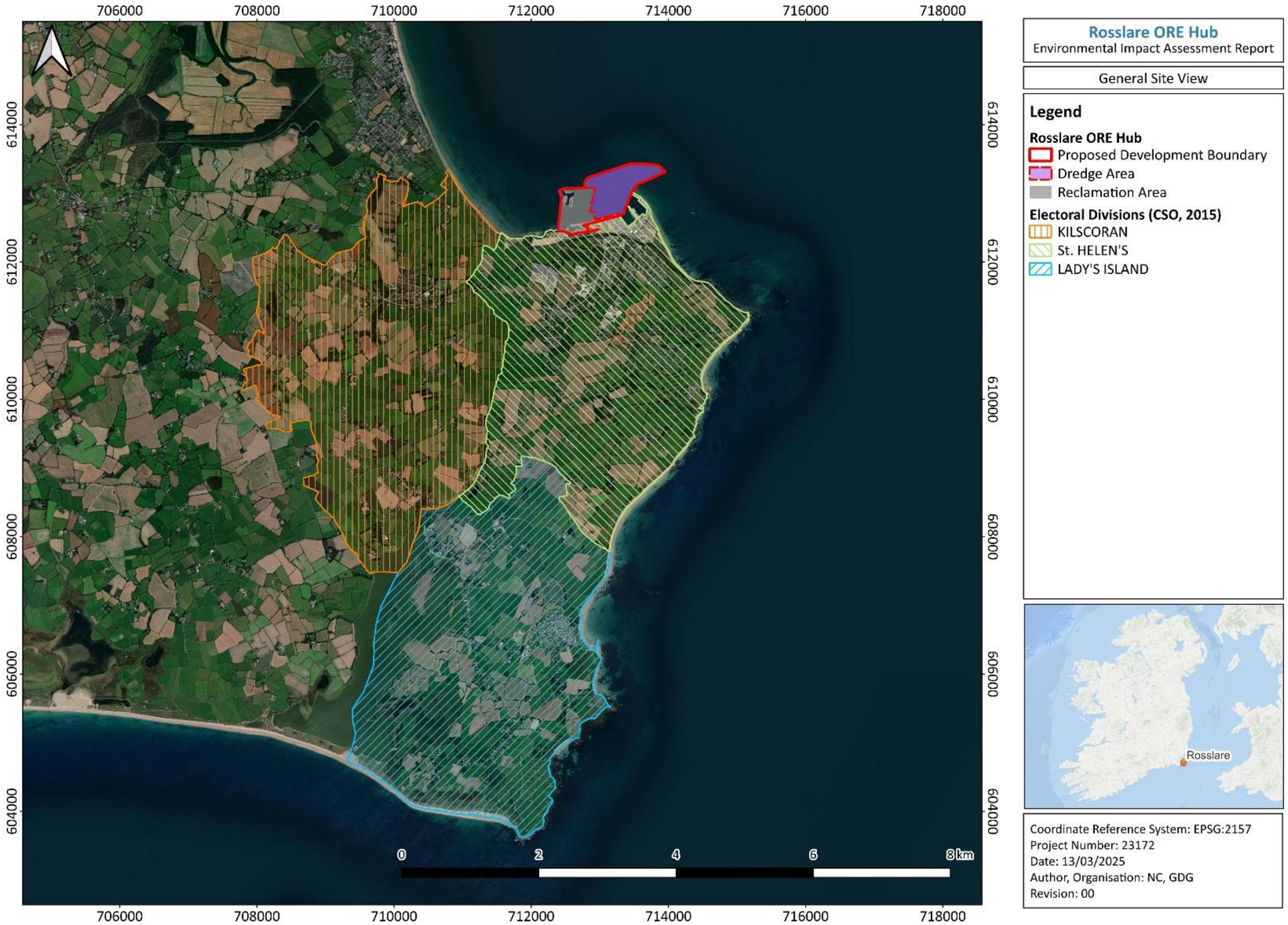


Figure 21.1: Population study area

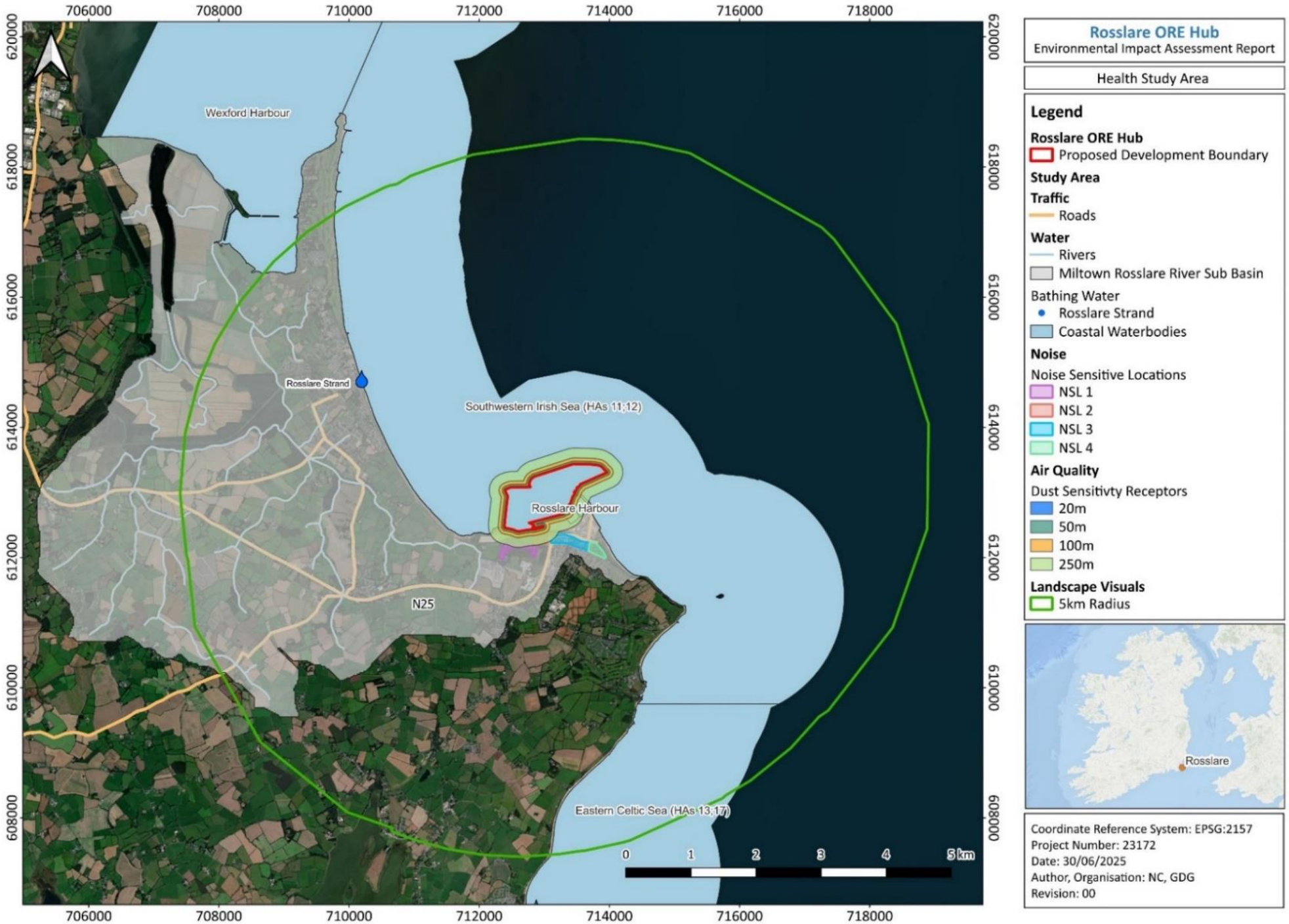


Figure 21.2: Human Health Study Area

21.5 POPULATION BASELINE ENVIRONMENT

The following sections present an overview of population and human health profile of the study area and existing receiving environment influencing population and human health within the study area.

21.5.1 BASELINE POPULATION

Data from the 2022 Census showed that Ireland had a population of 5,149,139 as of April 2022. Compared to figures from April 2016, the population had increased by 387,274, an 8.1% increase over the six-year period.

County Wexford experienced a 43.4% increase in population base over the 20-year period 1996 to 2016; this is the fifth highest rate in the state. According to the 2022 census data, Wexford's population climbed to 163,919, compared to 149,722 in 2016, an increase of 9%.

The population within the three EDs for 2016 and 2022 (Central Statistics Office, 2017 and 2022) are given in Figure 21.4.

Table 21.4: Population Data for Electoral Divisions 2016 and 2022

Electoral Division	2016	2022	Percentage Change
St. Helen's	2,240	2,719	21%
Lady's Island	620	625	0.8%
Kilscoran	954	1,073	12%

21.5.2 DEMOGRAPHIC TRENDS

According to the 2022 Census, of Wexford's population, 83,142 were female and 80,777 were male. The average age of Wexford's population in April 2022 was 40 years, higher than the average age of 38.1 years recorded in Wexford in 2016, and higher than the national average of 38.8 years. The average age within the study area is 41.2, higher than the county and national average age.

The population of those aged over 65 in Wexford increased by 25% in 2022 compared to 2016, rising to 27,403. This is slightly higher than the national increase of over 65's over this period, which was 22%.

Within the St. Helen's ED, the age profile for 2016 compared to 2022 is illustrated in Figure 21.3. The age profile indicates a similar increase in population across all age ranges.

Figure 21.3: St. Helen's age profile 2016 (left) & 2022 (right) (CSO, 2025)

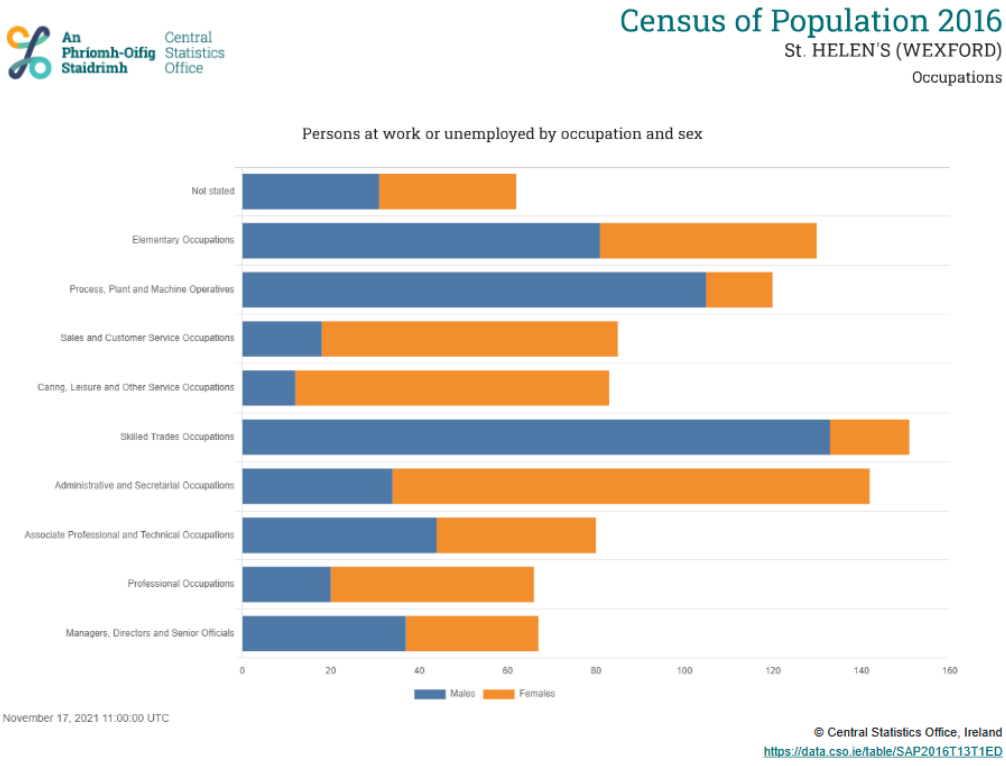
21.5.3 EMPLOYMENT

Data from the 2016 Census show that Wexford had an unemployment rate of 16.6% compared to the national average of 12.9% at that time. According to the 2016 data, there were 1,478 unemployed people in Wexford (CSO, 2016). The census data from 2022 show that the employment rate in Wexford increased by 20%, to 69,500 compared to that of 2016, while the national average increase from 2016-2022 was 16%.

Figure 21.4 illustrates the range of occupations within St. Helen's in 2016 and 2022. Skilled trade occupations make up the largest employment for males both in 2016 and 2022.

The primary economic activity within the study area is the existing Rosslare Europort, which is one of Ireland's leading ports, and gateways to Europe for the freight and tourism industries. The existing port facilities, managed by Iarnród Éireann, provide for passenger and freight ferries to and from the United Kingdom and the European continent. Rosslare is Ireland's second busiest Roll-on, Roll-off (RoRo) and freight and passenger (RoPax) port, after Dublin. Rosslare is Ireland's closest port to mainland Europe.

Rosslare Europort employed 119 workers according to Iarnród Éireann's 2024 annual report, the most recently published record of employment numbers for the port (Iarnród Éireann, 2025).



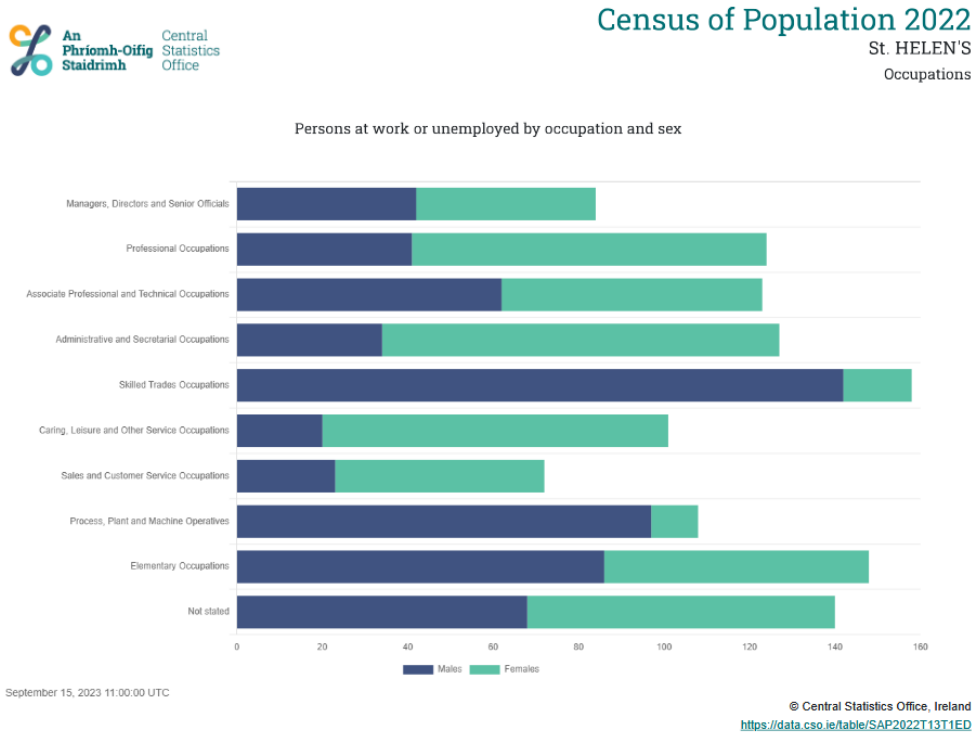


Figure 21.4: Persons at work by population in 2016 (above) and 2022 (below) (CSO, 2025)

21.5.4 SOCIO-ECONOMIC INDICATORS

Within the Proposed Development study area, the St. Helen's, Kilscoran and Lady's Island EDs are all marginally below the average Irish relative deprivation index according to data acquired from Pobal (Pobal, 2023).

21.5.5 EDUCATION

The local primary school is in Kilrane and had an enrolment of 329 students as of July 2025 (Department of Education and Youth, 2025). The school was expanded in recent years and has further land for future expansion. There is no secondary school within the settlement. Post primary education for students in the region is provided in Bridgetown and Wexford town, which are 18km and 21km from the Harbour respectively. There is one third level institute within the county, Southeast Technological University located in Wexford town.

21.5.6 SETTLEMENT PATTERNS

21.5.6.1 SETTLEMENT AND LAND USE

Rosslare Harbour and Kilrane is designated as a Level 3(a) Service Settlement in the Core Strategy Settlement Hierarchy (Wexford County Council, 2022). Level 3(a) settlements are important service settlements for their local communities and their wider rural hinterlands. Some of these settlements are important contributors to economic activity in the county including Rosslare Harbour and Kilrane which is home to Rosslare Europort. The settlement performs important retail, commercial, education, residential, service and amenity functions.

Within Rosslare Harbour's village centre area are residential, leisure, retail and hotel facilities. The harbour also houses the National Vehicle Distribution Centre, and Perennial Freight and Roches Freight, which are transport and logistic companies.

21.5.6.2 TRANSPORT

The existing road infrastructure around Rosslare Europort includes a network of local roads and the main N25 national route, running towards the port as a main route connecting to the entrance at the east of the port. Access to the Rosslare Europort is primarily via the N25 national road. The N25 is connected by regional and local roads which provide easy access by bus and car to both the port entrance and Rosslare Europort train station.

Rosslare Europort is part of Ireland's Eastern Economic Corridor (EEC) which extends from Belfast to Dublin to Rosslare and includes the national road and rail links along the corridor. This corridor is important nationally for transport and for the economy, particularly in the wake of Brexit. The EEC also interlinks with the TEN-T network, providing many strategic connections throughout Ireland. A more detailed description of the public and active transport baseline is presented in Chapter 17: Traffic and Road Transport.

21.5.6.3 UTILITIES

Rosslare Harbour village and Rosslare Europort are served by a water supply network from Uisce Éireann with local distribution around the port site by Iarnród Éireann pipelines.

Local wastewater is collected in Iarnród Éireann pipework and pumped out of the Rosslare Europort to join the domestic Uisce Éireann sewerage in Rosslare Harbour village and run by gravity westwards to the treatment works. The local area is served by an Uisce Éireann wastewater treatment plant, situated 900m north of Kilrane village, near the coast. This facility treats the wastewater before pumping back eastwards towards Rosslare Harbour village and discharging the treated effluent into St. George's Channel at Rosslare Harbour. An underground pipeline crosses the trailer storage area of the port to the west of Fishermans Quay.

Chapter 22: Material Assets presents a detailed description of the utilities baseline.

21.5.6.4 AMENITY

Visual Amenity

Chapter 23: Seascape, Landscape and Visual Assessment presents a detailed description of the visual amenity baseline, describing the receiving environment as a relatively complex landscape context comprising a varied array of contrasting landscape values. Whilst the immediate study area is that of a coastal context, it has largely been influenced by highly anthropogenic development over the past several decades associated with Rosslare Europort.

Recreational Access

The primary recreational amenity in the study area is Rosslare Strand, where water sports and other recreational activities take place.

The Wexford cycle hub, a network of cycling trails that passes through Enniscorthy, Wexford town, Rosslare and Kilmore Quay, runs along the N25 within the study area. The Rosslare Harbour Village Trail also passes through the central areas of Rosslare Harbour, where views are afforded across the existing port facility. A section of the EuroVelo 1 – Atlantic Coast Route also runs along the N25 in the central parts of the study area. A local cliff walking trail is also located along the coastline in the eastern half of the study area to the south of Rosslare Harbour Beach.

St. Helen's Bay Golf Club and Tuskar Rock Golf Club are both situated immediately adjacent to each other, 2km to the southeast of the Proposed Development. A number of public beaches are situated along the adjoining coastline, including Rosslare Harbour Beach located approximately 600m east of the Proposed Development, St. Helen's beach located approximately 2.2km to the southeast, and Rosslare Strand beach located approximately 3km to the north of the Proposed Development.

Cultural Heritage Amenities

While no previously recorded archaeological monuments, sites or features have been noted in the Proposed Development Boundary, there are archaeological and heritage features in the port and vicinity. The only recorded cultural heritage feature that is located within the Proposed Development Boundary is the lighthouse on the pier head.

Eight monuments and archaeological sites, comprising ring ditches and excavation sites, have been recorded in the wider environs of the study area, while two listed buildings (a windmill and a 17th century house, known as Ballygerry Castle) are nearby. Two historic shipwreck sites are located to the south and east of the Proposed Development Boundary Area respectively.

Chapter 16: Cultural Heritage presents a detailed description of the cultural heritage baseline.

Small Boat Harbour

To the west of the existing port area lies a small shallow harbour where locals with historic rights have traditionally stored fishing and leisure craft. This harbour basin was created by Iarnród Éireann as compensation for loss of beach access, when an earlier phase of reclamation and development work was carried out at Rosslare Harbour in the early 1990s. Despite some decline in use (potentially because of silting-up), locals continue to use the Small Boat Harbour together with a limited number of local fishermen and Sea Scouts. This usage will be maintained and enhanced through provision of a new Small Boat Harbour as part of the Proposed Development (see Chapter 6: Project Description).

21.6 HUMAN HEALTH BASELINE ENVIRONMENT

21.6.1 PUBLIC HEALTH

As of 2024, Ireland's 'self-perceived' health status showed that 82% of people aged 15+ rated their health as 'good' or 'very good' (Department of Health, 2025). In the 2022 Census, 83% of people in all age categories in County Wexford stated that their health was 'good' or 'very good' compared with 87% in 2016, this is similar to the national trend, where a 4% decrease was also observed in 2022 compared to 2016. As specific health data for individuals in the study area is confidential, it is difficult to establish local profiles or provide specific detail for the region. An overall community health profile has therefore been applied to account for this difficulty in acquiring data.

Health profiles for all Local Authority areas in Ireland have been published by the Health Services Executives Lenus and the Irish Health Repository, although the most recent publications are from 2015. The publication for Wexford dated 2015, considers data over the period 2007-2012.

Based on the 2015 Wexford Health Profile published by Lenus (Lenus, 2015):

- Incidence rates for all cancers were lower than, or close to the national rates, except for female malignant melanoma where Wexford had the highest rate nationally.
- Death rates for all causes and all ages were above the national average.
- Wexford had a suicide rate of 15.9, higher than the national average of 11.3.

The above data refers to the entire population of County Wexford and are based on the 2011 census figures, a population of 145,320. Although the data is taken to be the most accurate available, this data is over a decade old and may not accurately reflect the current state of human health in localised areas in the study area.

Impacts on air quality and noise from the Proposed Development are the main considerations for human health for this assessment.

21.6.2 AIRBORNE NOISE AND DUST

As described in Chapter 19: Noise and Vibration, a baseline noise survey was carried out in March to July 2023 at four locations in the area surrounding the existing Rosslare Europort with the monitoring locations determined in agreement with Wexford County Council.

- STN1 was located 600m (closest distance) to the nearest port activity. This location is considered a quiet area with little or no influence from current Rosslare harbour activities.
- STN2, 3 and 4 locations are closer to the nearest port activities (175m, 120m and 75m respectively). The noise environment at all these locations is influenced by current Rosslare harbour activities.

Refer to for results of the baseline noise surveys in Table 21.5.

Table 21.5: Data Collected During the Baseline Noise Survey

DAYTIME – 12-hour (0700 – 1900)				
Location	**$L_{Aeq, 12\ Hour}$**	**L_{AMax}**	**$L_{A10, 12\ Hour}$**	**$L_{A90, 12\ Hour}$**
STN 1	47.0	61.4	49.4	40.9
STN 2	44.2	57.7	46.2	40.0
STN 3	54.7	67.9	57.4	49.3
STN 4	57.7	70.3	60.0	53.2
EVENING – 4-hour (1900 – 2300)				
Location	**$L_{Aeq, 4\ Hour}$**	**L_{AMax}**	**$L_{A10, 4\ Hour}$**	**$L_{A90, 4\ Hour}$**
STN 1	43.0	54.9	45.1	38.3
STN 2	42.7	53.9	44.5	39.4
STN 3	52.4	65.3	54.8	47.3
STN 4	56.3	68.6	58.4	52.3
NIGHT-TIME – 8-hour (2300 – 0700)				
Location	**$L_{Aeq, 8\ Hour}$**	**L_{AMax}**	**$L_{A10, 8\ Hour}$**	**$L_{A90, 8Hour}$**
STN 1	40.3	51.2	42.7	35.4
STN 2	40.4	50.7	42.2	37.4
STN 3	49.9	61.4	51.9	45.9
STN 4	53.0	64.3	54.9	49.3

21.6.3 AIR QUALITY

The baseline for air quality has been acquired from the most recent annual report on air quality in Ireland "*Air Quality in Ireland 2024*" (EPA, 2025a). The EPA website details the range and scope of monitoring undertaken throughout Ireland and provides both monitoring data and the results of previous air quality assessments.

The nearest EPA air quality monitoring point to the Proposed Development is at Carnsore Point which measures ozone concentrations. An annual mean of 64.7ug/m^3 was recorded for 2024 (EPA, 2025b).

Wexford Opera House[1] also has a monitoring site, classed as suburban and measuring PM_{10} and PM_{25}. Currently the rating is Good (EPA Air Quality data, accessed 11/11/2025).

The air quality in the suburban background area is generally good, with concentrations of the key pollutants generally well below the current relevant limit values.

21.6.4 WATER QUALITY

As described in Chapter 9: Water Quality and Flood Risk, the study area comprises onshore and offshore elements which spans river and transitional watercourses including the Miltown Rosslare

[1] Wexford Opera House is part of the National Ambient Air Quality Monitoring Programme.

stream, Rosslare Town and the South Slob Channel, to the offshore coastal waterbodies such as the Southwestern Irish Sea and Rosslare Harbour. Currently, these waterbodies display moderate to good status, but several are deemed to be at risk of environmental degradation in quality.

The marine water quality particularly bathing water at Rosslare Strand (3km to the northwest) is classified as having "excellent" water quality (EPA, 2025c, 2025d).

21.6.5 FLOOD RISK

Historical records indicate a single flood event occurred at Rosslare Harbour in 2006, which was caused by backing of high tides in surface water drains. According to the Strategic Flood Risk Assessment accompanying the Rosslare & Kilrane Local Area Plan 2012 – 2018 (Wexford County Council, 2012), a large proportion of Rosslare Europort and adjacent reclaimed land are located in Flood Zone A. The Proposed Development Boundary overlaps with Flood Zone A.

The Strategic Flood Risk Assessment reports on instances of Medium probability fluvial flooding 2. in downstream sections on the Milltown_Rosslare_010 watercourse.

EPA flood risk mapping (EPA, 2025e) indicates that area within the Proposed Development Boundary is not currently at risk of pluvial flooding, and the CFRAM coastal flood mapping does not indicate any pre-development risk of coastal flooding at the Proposed Development Boundary. Closest instances of high probability coastal flooding occur 2.6km northwest of the Proposed Development at Rosslare town.

21.6.6 VISUAL

The visual baseline environment is described in Chapter 23: Seascape, Landscape and Visual. A Zone of Theoretical Visibility (ZTV) was established for the purpose of the Chapter 23 assessment and the key points noted in relation to the visual baseline are outlined below:

- The proposed area of reclamation is generally well screened beyond the immediate coastline due to the steep escarpment located immediately south of the proposed development.
- There is potential for visibility of the Proposed Development from the surrounding port complex and from the nearest visual receptors located along the immediate coastline at the settlement of Rosslare Harbour.
- The Proposed Development will also be theoretically visible along Rosslare Strand and from visual receptors situated along the immediate coastline.
- Some localised areas of theoretical visibility also extend inland to the southwest of the site and in the vicinity of the settlement of Tagoat.

It was also noted that the proposed reclamation area will only rise slightly above the high tide line and will, therefore, be considerably screened by surrounding and intervening hedgerow vegetation, trees, and numerous buildings, walls, and embankments scattered throughout the study area, resulting in a much lesser degree of actual visibility.

The ZTV does not account for the potential visibility of operational-phase structures that will be stored and partially assembled along the area of reclamation. Therefore, consideration was given in Chapter 23 to including representative views further inland that may be screened by the proposed reclamation area, but which will have potential visibility of the operational-phase structures.

21.7 ASSESSMENT OF EFFECTS

21.7.1 KEY RECEPTORS

With due consideration of the population and human health receptors described in section 21.4.5 of this chapter, the following subset of key receptors has been identified and assessed for effects due to the Proposed Development on population and human health.

Key population receptors:

- Existing residential and commercial population employment and local economy.
- Existing residential and commercial population (includes social, community and leisure users) ability to travel, commute, undertake everyday tasks.
- Existing residential and commercial population (includes social, community and leisure users) and the visual amenity value.

The key human health receptors are residential, community and commercial local population.

The sensitive human health receptor locations are described in detail within Chapter 17: Traffic and Road Transport, Chapter 18: Air Quality and Chapter 19: Noise and Vibration.

21.7.2 "DO-NOTHING" SCENARIO"

The 'do-nothing scenario' assumes the Proposed Development is not built and the factors with regards to population and human health in the Study Area continue. This assumes that past trends for population growth, demographic changes in the county, and the Rosslare Harbour area, and human health are expected to continue.

The existing road infrastructure around Rosslare Europort is expected to be enhanced through the proposed N25 Rosslare Europort Access Road (REAR) project by Wexford County Council. The REAR project was granted planning permission by An Bord Pleanála in October 2023 and is currently progressing through the "Enabling and Procurement" Phase 5 of TII's Project Management Guidelines.

As the 'do-nothing' scenario assumes that the Proposed Development will not occur, it can be concluded that no additional effects will occur with regards to population and human health in the Study Area beyond changes in line with current trends and those brought about by other developments such as the REAR project.

21.7.3 PRIMARY MITIGATION

Integrated measures built into the project design (i.e., primary mitigation) are described in EIAR Chapter 6: Project Description. The measures relevant to population and human health receptors are summarised below.

The ORE Hub is above the high-end future scenario (or RCP8.5) of 1m of sea level rise projected by the OPW from the current sea level. The quay deck is designed at +4.2mOD (Malin). The current highest astronomical tide (HAT) level, which is the highest tide predicted to occur at a specific location, is +0.9mOD. With this taken into consideration the ORE Hub retains an additional 3.3m of freeboard at HAT, which is significantly above the projected sea level rises for the high-end future scenarios.

In addition, the drainage design include an additional 30% uplift factor to account for the predicted future effects of climate change, which is in line with high-end future scenarios for climate change.

Construction works (excluding dredging and reclamation) will be undertaken between 7am to 7pm Monday to Saturday. Work outside of these hours may be required on an infrequent basis to suit tides and vessel movements. If, in exceptional circumstances, works are required outside of these hours, the relevant statutory authorities will be notified in advance.

Dredging activities are expected to be ongoing for up to 24 hours per day, 7 days per week (24/7). The dredged material needs to be continually transported to the reclamation area to enable continuous dredging activities. For this reason, the reclamation activities will also need to be carried out on the same schedule. Dredging works undertaken at night (i.e., between 19:00 and 23:00hrs) will have a maximum percentage on-time of 66% and the dredging vessel will not come within 200m of the shore line.

The Proposed Development includes for a new access road to the new Small Boat Harbour and supporting infrastructure for a future potential future uses. The proposed new Small Boat Harbour will provide enhanced access from deeper water with pontoons for 64 local boats will be provided. The new Small Boat Harbour also provides a 50m long fixed berth with -4mCD depth alongside and 80m length of floating pontoon for local fishermen to maintain the tradition of fishing at Rosslare Europort. The fishing pontoon allows for easy docking and manual loading at low tide whilst the solid quay allows for loading/unloading of heavier goods from a davit or mobile crane on the solid quayside.

A phased approach is anticipated to infilling and reclamation, since the south-western section of the reclamation area is expected be closed-in last in the sequence to allow existing Small Boat Harbour operations to continue until the new Small Boat Harbour is completed. Once the new Small Boat Harbour has capacity to accommodate the relocated boats, then the reclamation of that south-western corner can be completed. The transition of local boats from existing to new locations will take cognisance that the new Small Boat Harbour must be substantially complete and ready to accommodate the local afloat boats before their displacement and the reclamation of the old small harbour is undertaken. This maintains “always-afloat” provision for local boat users and local fishermen.

In accordance with the fire-fighting requirements of Wexford Fire Department, a water storage tank has been included at the southwestern corner of the site.

The design of the proposed lighting for the Proposed Development includes the following primary mitigation measures, which will mitigate the potential impact on human receptors:

- Restriction of Lighting Hours: Hours of lighting operation will be restricted to essential times only, where possible, to minimise nighttime illumination.
- Motion Sensors and Timers: Where possible, motion-activated lights will be installed instead of continuous illumination. This reduces the duration of lighting in areas that are not actively in use, thereby reducing potential disturbance
- Low-Intensity Lighting using Zero-UV LEDs or Low/High-Pressure Sodium Lamps: Only low-pressure sodium, high pressure sodium or LED luminaires with a "warm" lighting colour temperature (ideally less than 2700 Kelvin) will be used, to reduce the blue and UV components on site to minimise disruption.
- Minimise Light Spill: the height of columns will be considered to minimise fugitive lighting in areas where placement cannot be altered.

21.7.4 TERTIARY MITIGATION

21.7.4.1 CONSTRUCTION STAGE

Tertiary mitigation measures proposed to avoid or minimise adverse effects on population and human health receptors during construction of the Proposed Development are:

- The implementation of the following construction management plans:
    - Construction Traffic Management Plan (CTMP).
    - Air Quality Management Plan (AQMP)
    - Dust Management Plan (DMP)
    - Noise and Vibration Management Plan (NVMP)
- The implementation of strict security and safety protocols which will be enforced during construction of the project.
    - The Main Contractor will operate under the Safety, Health and Welfare at Work Act 2005 and the Safety, Health and Welfare at Work (Construction) Regulations 2013.
    - A Project Supervisor (Construction Stage) will be appointed by the principal contractor to manage health and safety throughout the works.
- A Community Liaison Officer (CLO) will be appointed as the primary point of contact for the local community. The CLO will manage all public-facing communications and respond to queries or concerns raised by members of the public, local groups or statutory consultees.

21.7.4.2 OPERATIONAL STAGE

Tertiary mitigation measures proposed to avoid or minimise adverse effects on population and human health receptors during the operational phase of the Proposed Development include:

A management plan will be put in place for the operational stage to include a procedure for when the car parks will require closure due to potential for wave overtopping.

For operatives that arrive to site during the night period:

- Vehicle engines shall not be left idling once on site.

- Drivers should minimise impact sounds whilst exiting or entering their vehicle.
- All radios and amplified music in the vehicles shall be turned off prior to the doors being opened.
- There should be no unnecessary shouting or communicating in raised voices whilst on site.
- There should be no unnecessary sounding of horns whilst on site.

Additional screening in the form of areas of vegetation beyond the proposed verge of native trees will be considered and the storage of renewable energy infrastructure within the ORE Hub will be undertaken in a neat and organised manner to reduce any further visual effects relating to visual clutter and confusion.

21.7.5 CONSTRUCTION PHASE IMPACTS

Activities proposed during the construction phase of the Proposed Development are detailed in Chapter 6: Project Description. The potential effects on population and human health receptors associated with the construction phase due to potential air, noise and dust emissions and traffic effects on the receiving environment are discussed in the relevant environmental topic chapters, as outlined above. The following potential impacts to population and human health receptors have been identified for assessment in this chapter:

Population

- Changes in employment due to the Proposed Development
- Effects on road users from changes in transport nature and flow rate
- Visual amenity effects (local community, recreation and tourism) from construction activities.

Human Health

- Health effects from changes to local air quality
- Health effects from changes in noise and vibration exposure.

21.7.5.1 POPULATION EFFECTS

Employment

Construction of the Proposed Development is anticipated to take approximately 24 months. During this stage of the Proposed Development there will be a temporary need for construction workers.

The construction phase of the Proposed Development will create up to 350 direct Whole Time Equivalent (WTE) jobs (Iarnród Éireann, 2025) and will bring socio-economic growth and employment to the region by direct employment in the construction industry. In addition, construction workers would be expected to spend some of their earnings in the local area and thereby increase employment in local shops and other services, this is classified as induced employment effects.

Although positive, the relatively low number of direct employment opportunities generated during the construction phase of the Proposed Development is not expected to result in a measurable

population-level effect. The significance of effects of the proposed construction activities for changes in employment is therefore considered slight and not significant in EIAR terms.

Transport Nature and Flow Rate

Chapter 17: Traffic and Road Transport assesses the traffic generated during construction of the Proposed Development. This has the potential to have effects on pedestrians and cyclists, driver delay and accident and safety. This chapter assesses the traffic generated during the construction phase and estimates that at peak construction there would be maximum of 528 passenger car units (PCU) which is a metric used in transportation engineering to assess traffic-flow rate on a highway construction. Construction is anticipated to take place over a 24-month period.

There is one school which is located along the potential haul routes, Scoil Náisiúnta Cill Ruadháin, Harristown, Co. Wexford. During the construction of the Proposed Development, it is not anticipated that any road closures will be required.

Construction activities will generate additional traffic on the local highway network resulting in an increase in traffic levels by up to 10.76% on the N25. Averaged out over the 24-month construction programme, this equates to 10 vehicles per day. The increase in HGV traffic, when considered as a 45% of total vehicle movements, equates to 5 HGVs per day.

The predicted increase in PCU and HGV traffic during construction represents a worst-case daily scenario, based on the estimated 24-month construction programme and the assumption that all deliveries are made via one route. The effects are considered temporary, lasting the duration of the construction phase of the Proposed Development with a moderate impact.

According to the relevant IEMA, (2023) Guidelines, where changes of flow rates do not exceed 30%, the effect would be only slight changes in pedestrian severance, driver delay and amenity. These effects are slight, negative and not significant in EIA terms.

Amenity Effects

Chapter 23: Seascape, Landscape and Visual Assessment identifies the likely landscape and visual effects of the Proposed Development on local receptors The chapter includes seascape and landscape baseline descriptions including recreation, tourism and visual amenity effects.

During the construction phase, there will be a higher intensity of activity at the site of the Proposed Development than during the operational phase. The Proposed Development will be a permanent physical disruption of the land cover of the site to prepare for the extensive area of reclaimed land, which will result in a substantial modification to the existing seascape and coastal context, extending some 500m north of the existing coastline.

The main visual impacts will arise from frequent heavy vehicle movements and worker vehicles travelling to and from the site, in addition to the large vessels located within the surrounding coastal areas used for construction and dredging purposes. These are likely to encompass mobile cranes and large structures that will be visible from the surrounding coastal context.

There will also be dredged material moved about in the reclamation area by bulldozers and construction materials awaiting use, whilst the establishment of the broad area of reclaimed land

will also be clearly visible from the immediate surrounding coastal context. Overall, the construction materials, vehicles and vessels associated with the Proposed Development will likely result in heavily cluttered views of the surrounding coastline and will represent a marked increase in the intensity and scale of development.

Chapter 23 highlights that the potential landscape and visual effects during construction will vary depending largely on the proximity of the receptor to the Proposed Development. Construction stage visual effects are temporary.

The visual amenity effects for local community, recreation and tourism are highly localised to small sections of the coastline in the immediate surrounding of the Proposed Development (i.e., visual receptors within approximately 250m of the Proposed Development that would have a clear view of the construction-stage works). The significance of effects of the proposed construction activities for visual amenity (in close proximity) are considered significant and moderate and are therefore significant in EIA terms. Beyond the immediate context of the site (>250m), the significance of effect will reduce rapidly to 'Moderate-slight' and 'Slight' as the construction-stage activities become a much smaller component of the surrounding coastline and are therefore not significant in EIA terms.

21.7.5.2 HUMAN HEALTH EFFECTS

Health effects from Changes to Local Air Quality

As outlined in Chapter 18: Air Quality, there is the potential for changes to local air quality during the construction phase of the Proposed Development. Potential sources include traffic emissions and dust emissions from construction activities such as demolition and earthworks.

There is the potential for traffic emissions to impact air quality with respect to human health in the short-term over the construction phase, particularly due to the increase in HGVs accessing the site.

In Chapter 18, the construction phase traffic with the TII guidance *Air Quality Assessment of Specified Infrastructure Projects – PE-ENV-01106* (TII, 2022a) was reviewed. A construction stage air quality assessment was scoped out as none of the road links impacted by the Proposed Development satisfy the TII assessment criteria. The significance of effects of the proposed construction activities for human health effects changes in air quality from traffic are considered negligible and are therefore not significant in EIA terms.

Dust was considered to have the greatest potential impact on air quality and nuisance during the construction phase of the Proposed Development. While construction dust tends to be deposited within 250m of a construction site, most of the deposition occurs within the first 50m (IAQM, 2024). Chapter 18 presents an assessment of the construction phase dust impact risks and concluded that earthworks, construction and trackout activities all present a 'Low Risk' for human health and dust soiling. The significance of effects of the proposed construction activities for human health effects / nuisance and changes in air quality from dust are considered negligible and are therefore not significant in EIA terms.

Health effects from Changes in Noise and Vibration

As outlined in Chapter 19: Noise and Vibration, there is the potential for changes to local noise environment during the construction phase of the Proposed Development. Potential construction

noise sources include piling, concrete pumping, dredging and excavation, earthwork activities and traffic. Vibration impacts during construction are likely to be limited to blasting and piling activities.

Construction noise and vibration from land-based activities is expected to occur during day-time hours, Monday to Fridays on-site during the construction phase of the project and includes noise and vibration effects from traffic movements. No land-based night-time or evening construction works will take place unless in exceptional circumstances with prior approval.

At the time of writing, there are no Irish statutory limits regarding noise from construction activities. Chapter 19 presents an assessment of noise levels using BS 5228 (British Standard Institute, 2014a) which uses the 'ABC' method for the purpose of setting appropriate construction noise thresholds for a development, and takes into account daytime, evenings and weekends and overnight noise impacts.

Vibration standards for construction activities are outlined in Chapter 19 and follow BS 5228 (2014b), where vibration criteria for different building responses are set out. Given the distance between the blasting sites and the NSLs (>50m), as well as the infrequency of blasting events, it is expected that the effects of blasting will be negative, moderate and momentary in the absence of mitigation. With respect to piling, given the distance to the nearest receptors (>150m), the impacts due to driven piling in terms of building response and human perception during all phases are predicted to be negative, not significant and temporary in the absence of mitigation.

Although there is the potential to cause nuisance from noise and vibration to the nearby population, limiting the hours where land-based construction activity may occur will ensure there is no disturbance caused during typical sleeping hours or night-time hours, alleviating the potential for any health issues associated with disturbance to sleep.

Dredging works are anticipated to involve night-time work. As outlined in Chapter 19, during periods outside of daytime hours, the dredging vessel will be located a minimum of 200m from the shoreline in order that noise levels attenuate sufficiently to the local receptor locations. Noise measurements will be monitored to ensure that the construction thresholds are not exceeded.

The significance of effects of the proposed construction activities for human health effects / nuisance and changes in noise levels and vibration is considered negligible and therefore not significant in EIA terms.

21.7.6 OPERATIONAL PHASE IMPACTS

Activities proposed during the operational phases of the Proposed Development are detailed in Chapter 6: Project Description. The potential impacts identified which could lead to the following effects on receptors, are identified below:

Population Effects

- Changes in employment due to the Proposed Development
- Road User effects from changes in transport nature and flow rate
- Visual Amenity effects (local community, recreation and tourism).

Human Health Effects (including nuisance)

- Health and nuisance effects from changes to local air quality
- Health and nuisance effects from changes in noise and vibration exposure
- Health effects from changes in transport nature and flow rate.

21.7.6.1 POPULATION EFFECTS

Employment

ORE Hub Operation

During the operational phase of the Proposed Development, the ORE facility is expected to provide up to 100 direct jobs at the port to support the installation phases of offshore wind developments in both the Irish and Celtic Seas.

As identified in Chapter 6: Project Description, at any one time, there will typically be between 40 to 60 personnel at the Proposed Development (comprising 20 to 30 compound/office based staff and 20 to 30 quayside staff), with an anticipated maximum peak scenario of 150 personnel considered for more intense operations over short durations. When the installation vessel is in port there will be a short-term peak (e.g. 24-hour period) with incoming and outgoing crew, and vessel replenishment and possibly service technicians coming to do maintenance on the vessel.

The operational phase of the project will also create employment opportunities through the development of ORE infrastructure both within the port and offshore. Iarnród Éireann estimates that 1,650 WTE jobs will be created during the operational lifetime of the Rosslare ORE Hub (Iarnród Éireann, 2025), which has a design life of 50 years. The employment is to come in the form of administrative, security and engineering roles which will have a positive effect on employment within the study area and in the southeastern region.

Although positive and beneficial, the significance of effects of the proposed ORE Hub operation for changes in employment are considered slight and therefore not significant in EIA terms.

Traditional Port Activities and Small Boat Harbour

No significant increase to existing port staff numbers is predicted as a result of traditional port activities which may take place at the ORE Hub.

Employment associated with the local fishing boats in the new Small Boat Harbour is expected to remain the at the same level as the baseline.

An indirect positive effect on employment is expected to be generated in the wider region as result of the Proposed Development. The significance of this effect is considered slight and therefore not significant in EIA terms.

Transport Nature and Flow Rate

ORE Hub Operation, Traditional Port Operations and Small Boat Harbour

Chapter 17: Traffic and Road Transport presents an assessment of the traffic generated during the operational phase of the Proposed Development from 2028 and from 2040 for all activities at inclusive of ORE activities, RoRo units, Bulk freight, ORE Hub, ORE Operations & Maintenance, and the new Small Boat Harbour.

From 2028, an estimated average of 751 trips will be generated per day from the Proposed Development during operation. Of these trips 21.07% will be HGVs resulting in an average of 51 new HGV trips per day that will be generated by the Development. The effect of these additional traffic flows on the surrounding local highway network will be adverse and long term. With less than a 30% increase, the operational phase is considered to result in imperceptible changes in the environmental effects of traffic.

From 2040, an average of 834 trips will be generated per day. Of these trips 16.03% will be HGVs resulting in an average of 134 new HGV trips per day that will be generated by the Development. Therefore, the effect on the surrounding local highway network will be adverse and long term. With less than a 30% increase, the Proposed Development is considered to result in imperceptible changes in the environmental effects of traffic.

In accordance with the IEMA Guidelines, (2023), the assessment would focus on the highway network where a potential increase in traffic of more than 30% has been identified. Therefore, the effects to traffic and road transport during the operational phase from 2028 and from 2040 would be permanent, slight, negative and not significant in EIA terms for Pedestrian Severance, Delay, Amenity, Fear and Intimidation and Accidents and Safety.

Visual Amenity Effects

ORE Hub Operation

Chapter 23: Seascape, Landscape and Visual Assessment addresses the likely landscape and visual amenity effects of the Proposed Development during operation. The chapter includes seascape and landscape baseline descriptions including recreation, tourism and their visual amenity effects, and assesses visual amenity effects that represent the worst-case scenario where turbine components and large vessels are present at the ORE Hub.

The area of land reclamation and dredging are considered the greatest physical and landscape change. The visual presence of large-scale operational features and incoming vessels will have the most notable effect on the character of the surrounding coastal environs.

Whilst the Proposed Development is not considered an out of character development in the context of this busy port setting, it will result in marked intensification of development of wider port related development and will become one of the predominant land uses along this section of the coastline, l considerably increasing the quantum of built development here. However, potential landscape and visual amenity effects during operation will fluctuate over time and vary depending largely on the proximity to the Proposed Development.

The visual amenity effects for local community, recreation and tourism are highly localised to small sections of the coastline in the immediate surrounding of the Proposed Development (i.e., visual receptors within approximately 250m of the Proposed Development that would have a clear view of the operation activities). The significance of effects of the ORE Hub for visual amenity (in close proximity) is considered significant and moderate and therefore significant in EIA terms. Beyond the immediate context of the site (<250m) the significance of effect will reduce rapidly to 'Moderate-slight' and 'Slight' as the operation activities become a much smaller component of the surrounding coastline and therefore not significant in EIA terms.

21.7.6.2 HUMAN HEALTH EFFECTS

Health Effects from Changes to Local Air Quality

ORE Hub Operation, Traditional Port Operations and new Small Boat Harbour

As outlined in Chapter 18: Air Quality, there is the potential for changes to local air quality during the operation phase of the Proposed Development. Potential sources include traffic emissions. There is the potential for traffic emissions to impact air quality with respect to human health particularly, due to the increase in HGVs accessing the site.

The significance of effects of the operation activities for human health effects changes in air quality from traffic are considered negligible and are therefore not significant in EIA terms.

Health Effects from Changes in Noise & Vibration

ORE Hub Operation and RoRo Operations

As outlined in Chapter 19: Noise and Vibration, there is the potential for changes to local noise and vibration during the operation phase of the Proposed Development. Potential sources include plant operation on the site and ship movements. There is the potential for noise emissions to impact background noise levels with respect to human health. However, from modelling undertaken it is predicted that the change in ambient noise levels will range from +0 to a potential +1 dB, with associated impacts ranging from 'Imperceptible' to 'Not Significant'.

Furthermore, where operations at the port are currently undertaken 24/7, the local noise environment is considered to vary depending on the operations being undertaken at the port. Hence, the existing local noise environment will fluctuate with existing operations at the port.

Given the existing character of the noise environment, the low level of absolute noise calculated and the prediction of internal noise levels, it is considered that the impact due to the operation of the port will be negative, slight and long-term**.**

21.8 SECONDARY MITIGATION MEASURES FOR POPULATION AND HUMAN HEALTH

The Proposed Development is not expected to require any additional construction phase mitigation measures, as the necessary primary and tertiary mitigation strategies have already been incorporated.

Given that the operational phase is anticipated to have minimal impact on the population and human health receptors discussed in this chapter, no further measures are deemed necessary.

21.9 INTERACTIONS

21.9.1 CUMULATIVE EFFECTS

Potential cumulative effects may arise from impacts from the Proposed Development when combined with impacts from other plans or projects where the zones of influence overlap. In accordance with the EPA Guidelines, (2022), existing and proposed projects with the potential for cumulative effects have been identified. These include projects within Rosslare Europort, and those located outside but in close proximity to the Proposed Development. A summary table of all projects

considered in this EIAR, with descriptions of the scale and nature of each project, is provided in Chapter 25: Interactions.

The following developments may give rise to cumulative effects on Population and Human Health receptors in conjunction with the Proposed Development:

- Reg. Ref. 314015 – N25 REAR Project
- Reg. Ref. 20211322 – Rosslare Europort Terminal 7
- Berth 3 extension

Future offshore wind development Phase 1 projects and the South Coast DMAP are also considered:

- Arklow Phase 2
- Codling Wind Park
- Dublin Array
- South Coast DMAP

21.9.1.1 POPULATION CUMULATIVE EFFECTS

The cumulative effects examined relate to employment, transport nature and flow rate, and amenity

Employment

If the construction of the Proposed Development were to run alongside these above listed developments, additional construction workers would be required. For changes in employment, the significance of effects of the construction activities for all developments are considered positive and slight. Therefore, cumulative effects related to employment are considered not significant in EIA terms.

The Proposed Development is needed for the development of future offshore Phase 1 projects and the South Coast DMAP. 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.

Transport Nature and Flow Rate

If the REAR project and Berth 3 construction overlapped with the Proposed Development, construction activities will generate additional traffic on the local highway network. This will be adverse, resulting in an increase in traffic levels by up to 13% on the N25, the effects of which would be temporary.

The significance of cumulative effects of the proposed construction activities for changes in transport nature and flow rates and effects on pedestrians and cyclist, driver delay and accident and safety are therefore considered slight and are not significant in EIA terms.

Amenity

In terms of cumulative visual amenity effects, the Proposed Development alone will result in a highly noticeable degree of visual change, especially at receptors along the immediate coastline to the south of the Proposed Development. However, due to the scale of the Proposed Development and the relatively smaller scale and nature of all other proposed and permitted developments within the immediate vicinity, should the construction of one or more developments run concurrently with the Proposed Development, it would have the potential to contribute to a significant cumulative effect.

21.9.1.2 HUMAN HEALTH CUMULATIVE EFFECTS

The projects examined do not have potential to lead to cumulative effects in combination with the Proposed Development impacting Human Health receptors.

21.9.2 TRANSBOUNDARY EFFECTS

No transboundary effects on Human Health and Population receptors are anticipated.

21.10 RESIDUAL EFFECTS

With respect to the effect on visual amenity, the Proposed Development will have a significant residual effect for receptors in close proximity (<250m). Following the implementation of design and construction phase mitigation measures and tertiary mitigation measures the remaining residual effects during the construction and operational phases will not be significant.

Table 21.6 summarises the potential impacts and residual effects of the Proposed Development during its construction and operation. As the operational phase is anticipated to have minimal impact on the population and human health receptors outlined in this chapter, no further measures are considered necessary to address residual effects.

21.11 SUMMARY

This chapter of the EIAR has assessed the potential environmental impacts on Population and Human Health receptors from the construction and operation phases of the Proposed Development, the assessment is summarised in Table 21.6.

Table 21.6: Assessment Summary

Receptor(s)	Potential Effect	Construction/ Operation	Significance Level / Degree of Impact	Secondary Mitigation	Residual Impact
Population Existing residential and commercial population employment and local economy.	Changes in employment due to the Proposed Development	Construction	Slight	-	Not Significant in EIA terms
		Operation	Slight	-	Not Significant in EIA terms
	Road User effects from changes in transport nature and flow rate	Construction	Slight	-	Not Significant in EIA terms
		Operation	Slight	-	Not Significant in EIA terms
	Visual Amenity effects (local community, recreation and tourism)	Construction	**In close proximity <250m** significant and moderate **>250m** Moderate-slight and Slight	-	**In close proximity <250m** Significant in EIA terms **>250m** Not Significant in EIA terms
		Operation	**In close proximity <250m** significant and moderate **>250m** Moderate-slight and Slight	-	**In close proximity <250m** Significant in EIA terms **>250m** Not Significant in EIA terms
Human Health Residential, community and commercial local population	Health effects from changes to local air quality	Construction	Negligible (not significant	-	Not Significant in EIA terms
		Operation	Negligible (not significant	-	Not Significant in EIA terms
	Health effects from changes in noise & vibration exposure	Construction	Negligible (not significant	-	Not Significant in EIA terms
		Operation	Negligible (not significant	-	Not Significant in EIA terms

21.12 REFERENCES

British Standards Institute. (2014a). BS 5228-1:2009 +A1 2014 Code of Practice for noise and vibration control of construction and open sites - Part 1: Noise

British Standards Institute. (2014b). BS 5228-2:2009+A1:2014 Code of Practice for noise and vibration control of construction and open sites - Part 2: Vibration

Central Statistics Office. (2017). *Census 2016: Profile 2 – Population distribution and movements*. Central Statistics Office. https://www.cso.ie/en/csolatestnews/presspages/2017/census2016profile2-populationdistributionandmovements/

Central Statistics Office. (2022). *Census of population 2022*. Central Statistics Office. https://www.cso.ie/en/statistics/population/censusofpopulation2022/

Department of Education and Youth (2025). Kilrane NS enrolment 2025. https://www.gov.ie/en/department-of-education/schools/kilrane-n-s/

Department of Health. (2025). *Health in Ireland Key Trends 2024.* *https://www.gov.ie/en/department-of-health/collections/health-in-ireland-key-trends-2024/*

Environmental Protection Agency. (2022). *Guidelines on the information to be contained in environmental impact assessment reports* (2022 ed.). Environmental Protection Agency. https://www.epa.ie/publications/monitoring--assessment/assessment/EIAR_Guidelines_2022_Web.pdf

Environmental Protection Agency. (2023). *Air quality standards*. Environmental Protection Agency. https://airquality.ie/information/air-quality-standards

Environmental Protection Agency. (2025a). *Air Quality in Ireland in 2024*. Environmental Protection Agency. https://www.epa.ie/publications/monitoring--assessment/air/air-quality-in-ireland-2024.php

Environmental Protection Agency. (2025b). AirQuality.ie real time air quality monitoring data. https://airquality.ie/station/EPA-63

Environmental Protection Agency. (2025c). *Bathing Water Quality in Ireland in 2024.* https://www.epa.ie/publications/monitoring--assessment/freshwater--marine/bathing-water-quality-in-ireland-in-2024.php

Environmental Protection Agency. (2025d). Beaches.ie real-time water quality for beaches in Ireland. https://www.beaches.ie/find-a-beach/#/beach/IESEBWC010_0000_0100

Environmental Protection Agency. (2025e). Floodinfo.ie national indicative flood mapping. https://www.floodinfo.ie/map/floodmaps/#

European Parliament & Council of the European Union. (1985). *Council Directive 85/337/EEC of 27 June 1985 on the assessment of the effects of certain public and private projects on the environment*. EUR-Lex. https://eur-lex.europa.eu/legal-content/EN/TXT/?uri=CELEX%3A31985L0337

European Parliament & Council of the European Union. (2011). *Directive 2011/92/EU of the European Parliament and of the Council of 13 December 2011 on the assessment of the effects of certain public and private projects on the environment*. EUR-Lex. https://eur-lex.europa.eu/eli/dir/2011/92/oj/eng

European Parliament & Council of the European Union. (2014). *Directive 2014/52/EU of the European Parliament and of the Council of 16 April 2014 amending Directive 2011/92/EU on the assessment of the effects of certain public and private projects on the environment*. EUR-Lex. https://eur-lex.europa.eu/eli/dir/2014/52/oj/eng

European Parliament & Council of the European Union. (2001). *Directive 2001/42/EC of the European Parliament and of the Council of 27 June 2001 on the assessment of the effects of certain plans and programmes on the environment*. EUR-Lex. https://eur-lex.europa.eu/legal-content/EN/ALL/?uri=celex%3A32001L0042

Health in Environmental Impact Assessment – A Primer for a Proportionate Approach (hereafter referred to as the IEMA Primer) (Cave et al. 2017 on behalf of IEMA)

Health Service Executive. (2009). *Health impact assessment guidance* (2009). Health Service Executive. https://www.publichealth.ie/sites/default/files/resources/Health%20Impact%20Assessment%20Guidance%202009.pdf

Iarnród Éireann. (2024). Annual Report 2024 Year Ended 31 December 2024 (2025 https://www.irishrail.ie/getmedia/445a55b5-eb0c-4a62-a04b-97f39154208b/Iarnrod-Eireann-Annual-Report-2024.pdf

Institute of Environmental Management and Assessment. (2022). *IEMA guide to determining significance for human health in environmental impact assessments* (Nov. 2022). Institute of Environmental Management and Assessment. https://www.iema.net/media/yljb2nbs/iema-eia-guide-to-determining-significance-for-human-health-nov-2022.pdf

Institute of Environmental Management and Assessment. (2023). *Environmental assessment of traffic and movement* (Rev. 07, July 2023). Institute of Environmental Management and Assessment. https://www.iema.net/media/5mrmquib/iema-report-environmental-assessment-of-traffic-and-movement-rev07-july-2023.pdf

Institute of Environmental Management and Assessment. (2024). *Implementing the Mitigation Hierarchy from Concept to Construction.* Institute of Environmental Management and Assessment. *https://www.iema.net/media/oone2qce/iema-mitigation-in-eia-guidance-final.pdf*

Institute of Public Health Ireland. (2021). Human Impact Assessment Guidance: A Manual Standalone Health Impact Assessment and health in environmental assessment. Institute of Public Health. Dublin and Belfast.

International Association for Impact Assessment (IAIA). (2020). Human health: Ensuring a high level of protection. A reference paper on addressing Human Health in Environmental Impact Assessment. As per EU Directive 2011/92/EU amended by 2014/52/EU. International Association for Impact

Assessment and European Public Health Association. https://eupha.org/repository/sections/HIA/Human%20Health%20Ensuring%20Protection%20Main%20and%20Appendices.pdf

Iarnród Éireann. (2025). *Rosslare Europort- Offshore Renewable Energy Hub* Iarnród Éireann Projects and Investments [assessed June 2025]

Lenus. (2015). *Health Profile 2015 Wexford. https://www.lenus.ie/handle/10147/584056?show=full*

Pobal. (2023). *Mapping social inclusion 2020: Thematic map viewer*. Pobal. https://data.pobal.ie/portal/apps/storymaps/stories/5cf638fb421a40778f5c2cfcd108abc3

Wexford County Council. (2022). *Wexford County Development Plan 2022-2028*. Wexford County Council. https://www.wexfordcoco.ie/planning/development-and-local-area-plans/current-plans/wexford-county-development-plan-2022-2028

Wexford County Council. (2012). *Rosslare Harbour and Kilrane Local Area Plan 2012 – 2018, Appendix 3 Strategic Flood Risk Assessment.* Wexford County Council. https://www.wexfordcoco.ie/sites/default/files/content/Planning/ArchivePlans/RosslareHbrAndKilraneLAP12-18/Appendix3-StrategicFloodRiskAssessment.pdf

World Health Organization. (2014). *Health impact assessment: The guidance manual* (WHO-EURO-2014-8523-48295-71712). World Health Organization. https://iris.who.int/bitstream/handle/10665/137369/WHO-EURO-2014-8523-48295-71712-eng.pdf?sequence=6&isAllowed=y

Iarnród Éireann
Irish Rail

venterra
Offices

GDG
GAVIN & DOHERTY GEOSOLUTIONS

NICHOLAS O'DWYER
an RSK company

Co-funded by the European Union