

2 HUMAN BEINGS – POPULATION & ECONOMIC

2.1 INTRODUCTION

- 1 This chapter of the Environmental Impact Statement (EIS) presents an evaluation of the proposed development as set out in Chapter 6, **Volume 3B** of the EIS, in relation to population and socio-economic issues. The information contained within this relates to the Cavan Monaghan Study Area (CMSA) as described in Chapter 5, **Volume 3B** of the EIS.
- 2 Chapter 6, **Volume 3B** of the EIS describes the full nature and extent of the proposed development, including elements of the overhead line (OHL) design and the towers. It provides a factual description, on a section by section basis, of the entire line route. The proposed line route is described in that chapter using townlands and tower numbers as a reference. The principal construction works proposed as part of the development are set out in Chapter 7, **Volume 3B** of the EIS.

2.2 METHODOLOGY

2.2.1 Scope of the Evaluation

- 3 This section of the EIS has been prepared in accordance with relevant EU and Irish legislation and guidance, including the requirements of Annex IV of the EIA Directive (which requires a description of the aspects of the environment likely to be significantly affected, including population) and in accordance with Schedule 6 of the *Planning and Development Regulations, 2001* (as amended) and conforms to the relevant requirements as specified therein. The scope of the evaluation is based on a review of legislation, guidance documents, other EISs, feedback from public consultation, consultation with prescribed bodies, consultation with An Bord Pleanála (the Board), and on a consideration of the likelihood for significant impacts arising, having regard to the nature of the receiving environment and the nature and extent of the proposed development.
- 4 The scoping opinion received from the Board (refer to Appendix 1.3, **Volume 3B Appendices** of the EIS) identified the following issues as being relevant to this chapter of the EIS:
 - The identification of potential impacts on settlement patterns along the route, including the identification of existing dwellings, community facilities or other public buildings such as schools, healthcare facilities, etc. and any extant planning permissions for such development;

- An assessment of the likely impacts on the linguistic or cultural heritage of the Gaeltacht area through which the route passes, or on the promotion of Irish as the community language;
- Any implications for, or impacts on, the local regional or national economy; and
- An assessment of the likely effects on the amenity / tourism value of the area, including designated tourist routes (e.g. the Monaghan Way) and possible impacts on fishing and fisheries tourism.

5 Therefore, this chapter concentrates on the population aspects of the existing environment and the potential for impacts on population, settlement, employment and economic opportunities as a result of the proposed development in the CMSA.

6 An evaluation of tourism and amenity issues in the CMSA is described in **Chapter 4** of this volume of the EIS.

7 Indirect impacts to employment locations may occur during the construction phase arising mainly from temporary traffic disruptions. These impacts have been considered and mitigation measures, where required, are outlined in **Chapter 13** of this volume of the EIS. Impacts from maintenance traffic during operation will be negligible and further consideration of these impacts with regard to employment locations has therefore been scoped out of this evaluation.

8 The evaluation primarily concentrates on the preferred corridor as identified in the *Final Re-evaluation Report (FRR) (April 2013)* (refer to Appendix 1.1, **Volume 3B Appendices** of the EIS) within which the proposed OHL is situated but does take account of the wider socio-economic environment outside of this corridor.

2.2.2 Information Sources

9 The information sources used to prepare this chapter include the following:

- Census and employment information published by the Central Statistics Office (CSO 2002-2014);
- Census information published by the Northern Ireland Statistics and Research Agency (NISRA) 2002-2014;
- Ordnance Survey Ireland (OSI) mapping and aerial photography;
- National and Regional Development Plans;

- *Cavan County Development Plan 2014–2020*;
- *Monaghan County Development Plan 2013–2019*;
- Local information and relevant websites (e.g. Monaghan and Cavan County Councils, Border Regional Authority, OSI);
- Information provided as a result of project consultation and scoping; and
- Site visits to the CMSA.

2.3 CHARACTERISTICS OF THE PROPOSED DEVELOPMENT

10 The proposed development primarily involves the erection of an overhead electricity line on lattice steel support structures. The types of issues which OHL developments of this nature typically raise in relation to this environmental topic include the potential for impacts on population, settlement, employment and economic opportunities. In that regard, the evaluation considers the construction, operational and decommissioning aspects of the proposed development.

2.4 EXISTING ENVIRONMENT

2.4.1 Population

2.4.1.1 Population Structure and Change

11 In terms of the county, region and the state, population structure and change is more strongly influenced by migration and emigration rates than by birth and death rates. The mid to late 1980s in Ireland was a period of heavy population outflow, mainly due to the poor economic and employment situation in the country at that time. Since 1990 there has been significant migration into the country with resulting population growth, mainly due to the improved economic performance of the Irish economy. **Table 2.1** provides an analysis of population change for the island of Ireland and at national, regional and local levels since 2002.

Table 2.1: Population Structure and Change at National, Regional and Local Level

Area	2002	2006	% Change 2002 -2006	2011	% Change 2006-2011
Ireland (incl. NI)	5,603,030	5,984,925	6.8	6,399,152	6.9
Ireland	3,917,203	4,239,848	8.2	4,588,252	8.2
Border Region	432,534	467,327	8.0	514,891	10.1
County Monaghan	52,593	55,816	6.4	60,483	8.0
County Cavan	56,546	64,003	13.2	73,183	14.3

(Source: Census of Population Ireland, 2002, 2006, 2011 and NI Census 2001 and 2011)

- 12 The population statistics in **Table 2.1** show significant increases in population between 2002 and 2011. The most recent population estimates (April 2014) published by the CSO² and the NISRA indicate that despite continuing high levels of emigration, population is still increasing in both Ireland and Northern Ireland, although at a lower rate than previously. Population projections for Ireland up to 2046 anticipate a population of approximately five million under the most pessimistic scenario and over 6.7 million under the most optimistic scenario. Population projections for Northern Ireland up to 2034 anticipate a population of approximately two million³.
- 13 As detailed in **Table 2.1**, the Border Region (which includes counties Donegal, Sligo, Leitrim, Cavan, Monaghan and Louth) shows population growth between 2002 and 2011 which is broadly in line with population growth at national levels. Significant population pressures have been exerted on certain parts of the region such as the southern parts of counties Louth and Monaghan and east County Cavan by external influences, such as the Greater Dublin Area (GDA) (which includes Dublin City and County as well as counties Meath, Wicklow and Kildare). In the case of the Border Region, population levels specified in the *Border Regional Authority Planning Guidelines 2012–2022* are projected to be approximately 595,000 by the year 2022.
- 14 Within counties Monaghan and Cavan an analysis of the population data indicates that population trends are as follows:
- Substantial growth has occurred in rural areas around the main towns;
 - Population growth in the urban areas has been slight or negative; and
 - Rural areas most removed from the main towns have experienced limited or negative population growth.
- 15 The *Monaghan County Development Plan 2013–2019* (the Monaghan CDP) forecasts a population increase for County Monaghan to 71,400 by 2022. The *Cavan County Development Plan 2014–2020* (the Cavan CDP) forecasts a population increase for County Cavan to 83,300 by 2022.
- 16 It is evident from population statistics published by the CSO and from county development plans that counties Monaghan and Cavan have experienced significant population growth since 2002, and are forecasting further but more limited growth up to 2022. It is also evident that significant growth has taken place in rural areas in close proximity to the main towns of both counties.

²www.cso.ie/en/media/csoie/releasespublications/documents/population/2013/poplabfor2016_2046.pdf.

³www.nisra.gov.uk/archive/demography/population/projections/Northern%20Ireland%20Population%20Projections%202010%20-%20Statistics%20Press%20Notice.pdf.

2.4.1.2 Settlement Patterns

- 17 Monaghan and Cavan towns are the largest urban settlements in the counties of the CMSA; however they lie outside the immediate vicinity of the CMSA where the proposed development is located.
- 18 Of most relevance to the proposed development are the population numbers and structure relating to settlements in counties Monaghan and Cavan in the vicinity of the proposed development. The main urban settlements that lie within the local and wider vicinities of the proposed development are profiled below. Urban settlements generally include a range of residential, commercial and community facilities. Smaller villages typically include a school, church, local shops as well as other community and recreational facilities.
- 19 As significant population growth has occurred outside the main urban areas in both counties, a number of smaller settlements are also identified.
- 20 Outside of identified settlements, it is recognised that other more dispersed settlements, often comprising groups of individual dwellings occur frequently in the vicinity of the proposed development.
- 21 Single (one-off) dwellings outside established settlements are also a significant feature of settlement patterns in both counties. These are both dispersed, and in clustered or linear patterns, throughout the receiving environment of the proposed development.
- 22 Planning applications in the vicinity of the proposed development are monitored on a regular basis with the aim of ensuring conflicts do not arise. The types of planning applications that typically occur in the vicinity of the proposed development primarily comprise discrete proposals for rural dwellings and agricultural developments. **Table 2.2** identifies extant planning permissions within approximately 200 metres of the proposed development (measured from the centreline).

Table 2.2: Extant Planning Permissions

County	Townland	Register Reference and Brief Description of Development	Decision Date / Decision due Date	Approx. Distance to North-South 400 kV (measured from the centreline)
Monaghan	Sreenty Between Towers 185 and 186	Reg. Ref. 09525 - consists of a 2 storey dwelling, detached garage, wastewater treatment system and percolation area and associated site works off new entrance. Significant Information revised plans consist of change of boundaries.	10.02.10	98.3m (approx.)
Monaghan	Greagh (Cremorne By) Between Towers 154 and 155	Reg. Ref. 13206 – consists of a 38 kV overhead line from a substation in Lisduff, Corderrybane, Greagh, Drumlane, Drumguillew Upper, Shane, Derryisland, Monagar, Muldrumman, Tullyskerry and Killycard, County Monaghan. Significant Further Information: The final 637m section of the line will be underground from Muldrumman to the substation at Killycard. The proposed locations for the poles are indicative only and a 50m wide corridor is proposed to facilitate micro-sitting if required.	13.01.14	0m 38 kV crossing
Monaghan	Tullynamalra Castleblayney Between Towers 172 and 173	Reg. Ref. 09561 - consists of a planning permission to build a 38 kV overhead line from a point in the townland of Cargaghoge and across the townlands of Cargaghmore, Ouvry, Sreenty, Corrienty, Lisacullion, Tullyglass, Reduff, and in to existing Tullynamalra 38 kV station.	14.03.11	0m 38 kV crossing

(Planning application data as at end of March 2015)

Carrickmacross (located approximately 7km east of the line route)

- 23 Carrickmacross is situated on the R179 (the reclassified N2 Dublin / Derry Road) in central County Monaghan. In the CSO data for 2011 it was recorded that the town had a population of almost 2,000 people, with a much larger population of approximately 12,500 additional people living in the surrounding Carrickmacross Rural Electoral Division (CRED) - the CRED includes the District Electoral Divisions (DEDs) of Carrickmacross Rural Area, Ballymackney, Bellatrain, Bocks, Broomfield, Carrickmacross Rural, Corracharra, Crossalare, Donaghmoynne, Brumboory, Drumcarrow, Drumgurra, Enagh, Inniskeen, Kilmurry, Kittybegs, Laragh, Loughfea and Raferagh. These figures represent an 11% increase for the CRED between 2006 and 2011. The town is identified as a Tier 2 town in the Monaghan CDP hierarchy of settlements, with the potential for further population growth. It provides an extensive range of services including

health, education, and sport, community, financial and retail for surrounding areas. It is an important employment centre in the county, on account of its long established identity as a market town and is identified as a settlement where growth is required.

- 24 Of the DEDs referred to above, the line route passes through the DEDs of Laragh, Bellatrain, Raferagh, Drumgurra and Drumcarrow.

Castleblayney (located approximately 6km east of the line route)

- 25 Castleblayney is situated north of Carrickmacross on the R183 (the reclassified N2). In the CSO data for 2011 it was recorded that the town and its environs had a population of approximately 1,750 people, with a much larger population of over 11,000 additional people living in the surrounding Castleblayney Rural Electoral Division (CRED) - the CRED includes the DEDs of Castleblayney Rural Area, Annayalla, Anny, Ballybay Rural, Ballybay Urban, Carrickaslane, Carrickatee, Castleblayney Rural (part), Church Hill, Clontibret, Cormeen, Creeve, Cremartin, Greagh (Cremorne By), Mullyash and Tullycorbet. These figures represent a 12% increase for the CRED between 2006 and 2011. The town is identified as a Tier 2 town in the Monaghan CDP hierarchy of settlements, with the potential for further population growth. The service sector is the main source of employment in the town, while the agricultural sector, including farming, is the main source of industry and employment in the surrounding area. It functions as a service and retail centre for the surrounding hinterland. One of the main tourist attractions in County Monaghan is Lough Muckno, which is located in Castleblayney.

- 26 Of the DEDs referred to above, the line route passes through the DEDs of Clontibret, Annayalla, Tullycorbet, Cremartin, Greagh (Cremorne By) and Carrickatee.

Ballybay (located approximately 3.4km west of the line route)

- 27 Ballybay is situated on the R183 in the south of County Monaghan. In the CSO data for 2011 it was recorded that the Ballybay Urban Area had a population of approximately 298 people with a larger population of over 1,500 people living in the surrounding Ballybay Rural Area. The town is identified as a Tier 3 town in the Monaghan CDP hierarchy of settlements, with the potential for further population growth. It has a similar profile of local employment and services to Castleblayney, while being a smaller town. The town was originally founded on the linen industry; it is now prominent as a base for angling in the region.

Kingscourt (located approximately 3.3km east of the line route)

- 28 Kingscourt is situated on the R162 in south-east of County Cavan close to the Meath / Monaghan border. It is identified in the Cavan CDP as a Tier 2 large town which recorded a population of 2,326 in Census 2011. The town does have an extensive rural hinterland. Like

other large towns it offers a variety of services such as health, education, professional, as well as providing retail and employment for a wide hinterland. Tier 2 towns have an important function in terms of balanced county level growth and are regionally important as part of an overall strategy for balanced regional growth in the county. These towns are regarded as development centres and the emphasis is on the consolidation of town cores and strengthening of town core retail and service functions. The headquarters of Kingspan (a major manufacturer of building construction materials) is located just outside the town. Gypsum Industries have a major production facility also just outside the town. Local attractions in and around Kingscourt include Cabra Castle Hotel, Dun a Ri Forest Park, and Lough an Leagh mountain and recreation area, which is the highest point in the surrounding area.

- 29 In this area the line route passes through the DEDs of Lisagoan, Enniskean and Kingscourt.

Shercock (located approximately 3km west of the line route)

- 30 Shercock is located in east County Cavan at the intersection of the R162 and R178 regional roads. It is identified in the Cavan CDP as a Tier 4 small town, which recorded a population of 531 in Census 2011. The town has an extensive rural hinterland. Tier 4 towns are identified as having important urban support roles. It is not anticipated that they will be strong centres of population growth or that they will develop in a significant way in the future. However, they have an important role to play as service and basic retail providers for their rural hinterlands. Similarly to Ballybay, the town was originally founded on the linen industry but it is now also prominent as a base for angling in the region.

Other Settlements

- 31 Smaller settlements identified as Tier 6 dispersed rural communities in the Monaghan CDP settlement hierarchy which lie within 5km of the line route include Annayalla, Clontibret, Corduff and Doohamlet. This is the smallest type of settlement identified in the statutory development plans. The character of these settlement areas mirror the rural countryside but have scattered individual houses with some clustering around one or more focal points. Focal points may include existing development around a crossroads, a shop, church and post office. Tier 6 settlements provide basic services to the community such as convenience goods and petrol stations. Post offices and schools are provided in some of these centres which serve an important community purpose. There are no lower order settlements identified in the Cavan CDP within 5km of the line route.
- 32 In considering individual dwellings, one of the design criteria for routing transmission infrastructure is to seek to maximise the distance from the OHL to such dwellings in so far as is practicable. An analysis of the dwellings along the route of the proposed OHL shows that, notwithstanding the extent of existing scattered one-off housing within the area of the proposed development, there are 39 dwellings (including one permitted but as yet unbuilt dwelling) within

- 100 metres (m) of the centre of the proposed CMSA line route. The locations of these dwellings are shown on the planning drawings included in **Volume 1** of the planning application documentation.
- 33 Community facilities, such as schools, churches and sports clubs, where large numbers of people frequently visit, are often found outside of the smaller settlements referred to previously. Similarly to dwellings, an additional design criterion seeks to maximise the distance to such facilities. In this regard the nearest community facilities which are located within 1km of the OHL are; Drumhowan Gaelic Athletic Association (GAA) club (approximately 330m east of Tower 150), Laragh National School and Church (approximately 410m east of Tower 230), Corcreaghagh National School (approximately 640m west of Tower 195), Ballintra Church (approximately 750m south-west of Tower 142) and Ballaghnamearn National School (approximately 820m south-east of Tower 207).
- 34 Other sections of this volume of the EIS evaluate the potential for specific environmental impacts on dwellings and community facilities arising from the construction and operation of the proposed OHL.

Conclusions

- 35 An increase in population has been experienced at a national and local level and in the towns and villages listed in this section. The predominance of scattered and clustered one-off housing in the CMSA has ultimately influenced the positioning of the line route, due to the aim of maximising separation distances between the proposed line and existing houses.

2.4.2 Employment and Economic Activity

2.4.2.1 Employment Profile

- 36 The economic base in counties Monaghan and Cavan has traditionally focussed on the following sectors; manufacturing, agriculture and food production, service industry (including education, health, professional services and retail), rural development and tourism. A significant portion of the productive output in both counties is based on high volume and low margins. While there are some internationally traded services located in the region, inward investment levels have to date been relatively low.
- 37 While employment and economic activity is dispersed throughout both counties, it is concentrated in the main urban settlements, with the exception of farm based employment. Given the limited employment base in both counties relative to the GDA, a significant proportion of the population commutes for work to areas outside the counties, primarily to the GDA.

- 38 The economic condition of Ireland has dramatically changed in the last five years, with unemployment at its highest for many years, but recently according to a variety of CSO economic indicators and data sources the economy is beginning to show signs of improvement. While the economic downturn has resulted in an increase in unemployment throughout the country, border counties tend to have suffered more than areas which have a more diverse economic base. **Table 2.3** presents an economic status profile for both counties.

Table 2.3: Persons Aged 15 Years + Classified by Principal Economic Status, 2011

Economic Status	Monaghan		Cavan		National
	Persons	%	Persons	%	%
Pop. aged 15+	46,993	-	55,951	-	-
Pop. aged 15+ in Labour Force	28,987	-	34,640	-	-
Employed	23,005	49.0	27,309	48.9	50.1
Looking for first job	471	1.0	559	1.0	1.0
Unemployed	5,511	11.7	6,772	12.1	10.8
Student	5,076	10.8	5,477	9.8	11.3
Home duties	4,569	9.7	5,989	10.7	9.4
Retired	5,973	12.7	7,241	12.9	12.7
Unable to work	2,192	4.7	2,385	4.2	4.4
Other	196	0.4	219	0.4	0.4

(Source: Census 2011 Profile 3 Employment, Occupations and Industry)

- 39 **Table 2.3** shows that unemployment rates for counties Monaghan and Cavan in 2011 were in excess of the national average.
- 40 More recent CSO data in relation to unemployment rates is available from the CSO live register data which is published monthly. Live register figures published in September 2014 by the CSO indicate that the standardised unemployment rate (SUR) in the State was 11.1% compared to 14.3% in December 2011. The downward trend in unemployment is reflected in live register data for counties Monaghan and Cavan.

2.4.2.2 Economic Activity

- 41 Diversity of employment and economic activity is measured, by the CSO, by analysing employment sectors. The diversity of employment within both counties is illustrated in **Table 2.4**.

Table 2.4: Persons Aged 15 Years + Classified by Employment Sector, 2011

Occupation	Monaghan		Cavan		National
	Persons	%	Persons	%	%
Total persons in labour force	23,005	-	27,309	-	-
Agriculture, forestry and fishing	2,818	12.3	3,348	12.2	5.2
Building and construction	1,508	6.6	1,565	5.7	5.0
Manufacturing and industry	3,206	13.9	3,787	13.8	10.7
Mining and quarrying	71	0.3	121	0.4	0.3
Wholesale and retail	3,612	15.7	3,679	13.5	14.7
Electricity, gas and water supply	248	1.1	298	1.2	0.7
Hotels and restaurants	1,053	4.6	1,418	5.4	5.7
Transport, storage and communications	1,152	5.0	1,293	4.8	5.4
Banking and financial services	512	2.2	943	3.6	5.2
Real estate, renting and business activities	1,308	5.7	1,608	5.9	10.2
Public service and community service	6,381	27.8	7,568	27.8	31.3
Others	1,121	4.9	1,517	5.7	5.6

(Source: Census 2011 Profile 3 Employment, Occupations and Industry)

- 42 A breakdown of those working within the broad employment groups, as outlined in **Table 2.4**, illustrates that although agriculture remains important, it is not the primary employer. In 2011 approximately 12% of the working population in both Cavan and Monaghan were directly employed in the agriculture, forestry and fishing sector; this is significantly higher than the national average. The manufacturing sector is also a significant employer, employing almost 14% of the population in both Cavan and Monaghan, again in excess of the national average. The service sector (including wholesale and retail, hotels and restaurants, transport, storage and communications, banking and financial services, real estate, renting and business activities and public service and community) was the most important employer in both counties accounting for over 60% of the total working population; this is lower than the national average of 72%.
- 43 Employment trends anticipate a continued contraction in the traditional sectors of the economy. It is therefore the aim of both counties to diversify and increase employment and economic activity across a wide range of sectors including agri-food, internationally traded services,

renewable energy, life sciences, tourism, natural resource, creative, caring and retail. An improved economy will assist in achieving these aims.

- 44 The Monaghan CDP and the Cavan CDP both reflect the need to deliver regional investment and to create jobs and growth. The plans acknowledge the need for improved infrastructure, including telecoms, energy and water, in order to attract Foreign Direct Investment (FDI) to the region and it is an objective of both plans to co-operate with the relevant bodies to ensure a co-ordinated approach to the provision of necessary infrastructure and services to support industrial development.

2.5 POTENTIAL IMPACTS

2.5.1 Do Nothing

- 45 Population demographics will continue to change in future years irrespective of whether this proposed development proceeds. The proposed development will have no noticeable impact on population demographics as they are influenced by wider social and economic factors.

- 46 In terms of employment and economic activity, in order to continue to attract future investment (both domestic and foreign) to both Ireland and Northern Ireland, it is essential that the electricity grid is maintained and improved. For example, in the *Government Policy Statement on the Strategic Importance of Transmission and Other Energy Infrastructure* published by the Department of Communications, Energy and Natural Resources (DCENR) on the 17th July, 2012 it is stated that:

“Our ability to rebuild the economy, deliver regional development, create jobs and growth and ensure the wellbeing of everyone as well as realising the economic potential of Ireland’s own renewable energy resources requires significant energy infrastructure.”

- 47 Doing nothing may eventually lead to a situation where an inadequate electricity grid becomes a barrier to further significant investment in employment generating and economic activities.

2.5.2 Construction Phase

- 48 The construction phase of the proposed development will not have any significant impacts on population demographics.

- 49 In economic terms, the capital value of the proposed interconnector is estimated to be in the region of €286 million. The project will involve the provision of direct and indirect jobs both on and off site, over the construction period. Employment will be created by the construction of the proposed development. Like other major construction projects, this project will be put out for

competitive tender. Therefore, it is not possible to state what volume of construction materials, services etc. will be purchased locally. Materials such as concrete and other standard materials may be sourced locally, where possible. Other more specialised electrical materials such as steel towers, conductors, insulators and other line hardware will be sourced outside the CMSA. Indirect employment and economic activity in local shops, restaurants and hotels is likely to be sustained as a result of the construction project and its employees being located in the CMSA.

- 50 Therefore, during the construction phase of the proposed development there are likely to be some local positive economic benefits in the study area.

2.5.3 Operational Phase

- 51 In order to provide for future forecasted population growth on the island of Ireland, it is essential that the electricity grid is maintained and improved. When operational, the proposed development will contribute towards ensuring that the electricity grid is adequate to meet the needs of future forecast population levels throughout the island of Ireland.

- 52 When operational, the proposed development will contribute towards ensuring that the electricity grid is not a barrier to further significant investment in employment generating activities.

2.5.4 Decommissioning

- 53 The proposed development will become a permanent part of the transmission infrastructure. The expected lifespan of the development is in the region of 50 to 80 years. This will be achieved by routine maintenance and replacement of hardware as required. There are no plans for the decommissioning of the OHL. In the event that part of, or the entire proposed infrastructure is to be decommissioned, all towers, equipment and material to be decommissioned will be removed off site and the land reinstated. Impacts would be expected to be less than during the construction phase and would be of short term duration.

2.6 MITIGATION MEASURES

- 54 As the proposed development will have no noticeable impact on population demographics, no mitigation measures are required.

- 55 In terms of minimising the potential for impacts on the amenities of existing and future populations, the principal mitigation measure has been to maximise the distance between the proposed development and larger urban settlements, local villages, clustered settlements, individual one-off dwellings, schools, churches and community facilities.

56 Specific mitigation measures are included in other chapters of this EIS to mitigate potential adverse impacts which could arise during the construction and operational stage on human beings, arising from other environmental pathways.

2.7 RESIDUAL IMPACTS

57 Once the proposed development is operational, no significant residual impacts on population demographics and local economic activity are anticipated.

2.8 INTERRELATIONSHIPS BETWEEN ENVIRONMENTAL FACTORS

58 This chapter should be read in conjunction with other chapters of this volume of the EIS including; **Chapter 3** Human Beings – Land Use, **Chapter 4** Human Beings – Tourism and Amenity, **Chapter 5** Human Beings – EMF, **Chapter 9** Air – Noise and Vibration, **Chapter 10** Air – Quality and Climate, **Chapter 11** Landscape, **Chapter 12** Material Assets – General and **Chapter 13** Material Assets – Traffic, for a full understanding of the main interrelationships between these environmental topics.

59 Impacts to population are inherently interrelated to the various environmental topics evaluated in the EIS. All likely significant impacts in relation to population have been considered throughout the relevant chapters which detail the environmental topics. The main impacts on population arise from the following interrelationships:

- **Chapter 4** - Tourism and Amenity - There may be a slight reduction in tourism spend and associated economic activity in the immediate areas where the proposed development will be located.
- **Chapter 9** - Air – Noise & Vibration - There is the potential for noise impact to population in the form of impact to sensitive receptors such as private dwellings etc. in the construction phase and the operational phase. In the operational phase corona noise has the potential to cause noise impact during inclement weather conditions. These impacts are addressed in the EIS and are not deemed to be significant.
- **Chapter 11** - Landscape - There is a negative impact for dwellings that are located in close proximity to the proposed development which arises from the visual impacts.

2.9 CONCLUSIONS

60 An evaluation of the impact on community amenity has been undertaken through the identification of community facilities within 1km of the proposed development. The closest community facility is located approximately 330m from the proposed development. In total there are six community facilities within 1km of the proposed development; Drumhowan GAA

club, Laragh National School and Church, Corcreeghagh National School, Ballintra Church and Ballaghnamearn National School. Additionally, there are 39 dwellings (including one permitted but as yet unbuilt dwelling) within 100m of the centre of the proposed CMSA line route.

- 61 The likely impacts during both the construction and operational phases have been evaluated. The significance of these impacts is evaluated within the various specialist chapters of this EIS. Impacts to residential amenity are inherently interrelated to the various environmental topics evaluated in this EIS. All likely significant impacts in relation to residential amenity have been considered throughout these topics. The main impact on residential amenity which is likely to be significant arises from the visual impacts, where dwellings are located in close proximity to the proposed development. The extent and significance of such visual impacts is detailed in **Chapter 11** of this volume of the EIS.
- 62 It is considered that the landscape and visual resources of the wider CMSA will not deteriorate to a significant degree and the overall impact upon population and residential amenity in general is therefore restricted to those receptors / areas within close proximity to the towers and OHL. The routing of the proposed OHL is considered to present the best overall option amongst the many alternatives considered throughout the development process.
- 63 There will be wider economic benefits arising from the improvements to the electricity grid in the island of Ireland, these will be experienced in both jurisdictions.