Cork Line Level Crossing

Volume 3, Chapter 17: Interactions and Cumulative Impacts

Iarnród Éireann

March 2021

Project Name

Project No:	32111000
Document Title:	Volume 3, Chapter 17: Interactions and Cumulative Impacts
Document No.:	17
Revision:	A04
Date:	March 2021
Client Name:	Iarnród Éireann
Project Manager:	Alex Bradley
Author:	Lyndsey McGonigle

Jacobs U.K. Limited
Artola House
3rd & 4th Floors
91 Victoria Street
Belfast
BT1 4PN
T +44 (0)28 9032 4452
F +44 (0)28 9033 0713
www.jacobs.com

Document history and status

Revision	Date	Description	Author	Checked	Reviewed	Approved
A01	June 2020	Draft for Review	LMCG	HC	HC	AB
A02	November 2020	Final draft	HC	RM	RM	AB
A03	December 2020	For Legal Comment	HC	RM	RM	AB
A04	March 2021	For Issue to An Bord Pleanála	HC	RM	RM	AB

Contents

17. Interactions and Cumulative Impacts

17.1 Introduction

This Chapter considers and assesses the potential cumulative impacts arising from the proposed Project when combined with other existing and/or approved projects. It also provides a summary of interacting impacts of the proposed Project between the environmental assessment topic areas.

17.2 Methodology

17.2.1 Legislative Context and Guidelines

The overarching policy and legislation applicable to the proposed Project is set out at Volume 2, Chapter 4: EIA Process and Methodology. The following guidelines and publications were considered in undertaking this assessment:

- EIA Directive 2014/52/EU of the European Parliament and of the Council of 16 April 2014 amending the EIA Directive 2011/92/EU;
- Environmental Impact Assessment of Projects – Guidance on the Preparation of the Environmental Impact Assessment Report (European Commission 2017);
- Guidelines for the Assessment of Indirect and Cumulative Impacts as well as Impact Interactions (European Commission 1999)
- European Union (Planning and Development) (Environmental Impact Assessment) Regulations 2018 (S.I. 296 of 2018).
- Advice Notes on Current Practice in the Preparation of Environmental Impact Statements (EPA 2003) (and Advice Notes for Preparing Environmental Impact Statements Draft (EPA 2015);
- Guidelines on the Information to be Contained in Environmental Impact Statements (EPA 2002) (and draft revised guidelines (EPA 2015); and
- Advice Note on Cumulative effects assessment relevant to Nationally Significant Infrastructure Projects (Planning Inspectorate England & Wales Advice Note 17 August 2019).

The EC Guidelines for the Assessment of Indirect and Cumulative Impacts as well as impact interactions (EC 1999) provide the following definitions:

- Indirect Impacts: *'Impacts on the environment, which are not a direct result of the projects, often produced away from (the site) or as a result of a complex pathway.' These are sometimes referred to as 'secondary impacts*. An example of an indirect impact would be the deterioration of water quality due to soil erosion following shrub and tree clearance for a construction development. In this case the tree and shrub removal are a direct impact and the effects of the erosion are the indirect impact.
- Cumulative impacts: *'Impacts that result from incremental changes caused by other past, present or reasonably foreseeable actions together with the project*.'

Cumulative impacts result from the addition of many minor or significant effects, including effects of other projects to create, more significant effects. The cumulative impacts of a project refer to the way in which an environmental resource may be subject to a particular type of impact from more than one proposed project. The impacts from multiple projects may overlap or act in combination at a particular location or upon a particular resource, thereby leading to more significant environmental impacts than if the impacts were considered in isolation. Cumulative impacts can occur over time and can be interactive, additive, and/or synergistic in nature.

17.2.2 Indirect Impacts (Environmental Interactions)

Indirect impacts, caused by the interaction of environmental factors, are required to be considered in the EIAR, as outlined in Part 1(e) in Article 3 of the EIA Directive which states:

"*The environmental impact assessment shall identify, describe and assess in an appropriate manner, in the light of each individual case, the direct and indirect significant effects of a project on the following factors:*

a) Population and human health;

b) Biodiversity, with attention to species and habitats protected under Directive 92/43/EEC and Directive 2009/147/EC;

c) Land, soil, water, air and climate;

d) Material assets, cultural heritage and the landscape; and

e) The interaction between the factors referred to in points (a) to (d)."

During the assessment process, coordination took place between discipline experts assessment specialists to ensure that interacting impacts that could arise from the proposed Project were identified, assessed and, where appropriate, mitigated and the residual impacts assessed. These impacts are reported in the individual chapters of this EIAR and are summarised in this Chapter. A summary of the likely interacting impacts is outlined in Table 17. 1.

17.2.3 Cumulative Impacts from Other Projects

Article 3(1) and Annex III of the EIA Directive (2014/52/EU) confirms that the likely significant effects on the environment must be considered with regard to the impact of any project.

- Annex III (3)(g) includes for: '*the cumulation of the impact with the impact of other existing and/or approved projects*'; and
- Annex IV(5)(e) includes for a description of the likely significant effects of the project on the environment resulting from inter alia: '*the cumulation of effects with other existing and/or approved projects, taking into account any existing environmental problems relating to areas of particular environmental importance likely to be affected or the use of natural resources*'.

For the purposes of the proposed Project, the categories of other projects included in the cumulative impact assessment have been taken to include:

- Any approved and still implementable planning applications with the potential for significant cumulative impact with the proposed Project; and
- Any other projects that are currently subject to the pre-planning application and preliminary design phases with the potential for significant cumulative impact with the proposed Project.

Stage 1 – Establishing the long list

The first step in determining cumulative impacts of 'Other Projects' comprised the identification of a list of 'Other Projects' which may have the potential to overlap with the proposed Project. These were obtained within the 5km Zone of Influence (ZoI) of each site of the proposed Project. This involved contacting the planning departments of the local County Councils for Cork and Limerick in Spring 2020 to develop a list of all planning applications within the 5km ZoI from each site. In addition, other projects in pre-planning stage that we were aware of that may have the potential to create significant cumulative impacts were also included in Stage 1. For example, the N/M20 Cork to Limerick Road Improvement Scheme. The Buttevant Windfarm was also included on this basis even though it is outside of the 5km ZOI.

A desktop study was also carried out of all relevant planning authority websites including Cork County Council and Limerick County Council, their local development plan documents and relevant development frameworks, project team knowledge, and any other available sources to identify 'Other Projects' which may have the potential to impact the proposed Project. In total 54 projects were compiled for review and assessment by the discipline chapter experts including:

- 21 projects for XC187 Fantstown;
- 11 projects for XC201 Thomastown including 1 from Limerick County Council and 10 from Cork County Council;
- 8 projects for XC209 Ballyhay;
- 2 projects for XC 211 Newton and XC212 Ballycoskery;
- 5 projects for XC215 Shinanagh; and
- 5 projects for XC219 Buttevant.

Included in the list for review due to their significance and potential cumulative impacts from the proposed Project were the following projects:

- N/M20 Cork to Limerick Road Improvement Scheme; and
- Buttevant Windfarm located adjacent to Castlepook Windfarm.

Stage 2 – Establishing the short list

The full list of 54 projects was reviewed, and all applications that were determined to have the potential to have a cumulative significant impact with the proposed Project, due to their location, scale or nature were screened in for assessment. The remaining applications (21) were screened out (see Volume 5, Appendix 17A (List of Other Projects Screened Out)) at Stage 2.

Stage 3 – Shortlisting

Following Stage 2 the following projects remained for each site:

- 10 projects for XC187 Fantstown;
- 8 projects for XC201 Thomastown including 1 located in Limerick County Council and 7 located in Cork County Council;
- 5 projects for XC209 Ballyhay;
- 2 projects for XC 211 Newton and XC212 Ballycoskery;
- 2 projects for XC215 Shinanagh; and
- 4 projects for XC219 Buttevant.

The N/M20 Cork to Limerick Road Improvement Scheme and Buttevant Windfarm located adjacent to Castlepook Windfarm also remained due to their significance and potential impact from the proposed Project.

An assessment was carried out for each of the topics in the EIAR to determine the potential for cumulative impacts at both the Construction and Operational Phases. The list is contained in Volume 5, Appendix 17B (Shortlisting of Other Projects).

The following inclusion or exclusion threshold criteria were used in this exercise:

- *Temporal Scope – Is there any overlap and potential for interaction due to the construction, operation and decommissioning programmes of the 'other project'?;*

- *Scale and Nature – Due to the scale and nature of the projects, are they likely to interact with the Proposed Project to result in a cumulative impact?; and*
- *Other Factors – Are there any other factors specific to the speciality, such as the nature and / or capacity of the receiving environment that would make a significant cumulative impact with other projects more or less likely?*

Professional judgement was used in applying these threshold criteria. A 'short list' of potentially applicable projects requiring further assessment were identified and were taken forward to Stage 4.

Stage 4 – Assessment of Cumulative Environmental Impacts from Other Projects

The cumulative impacts of the proposed Project with the 'Other Project' were assessed to a level of detail commensurate with the information that was available at the time of assessment.

It is acknowledged that certain assessments, such as traffic and associated operational assessments for vehicular emissions (including air and noise) are inherently cumulative assessments. This is because they have incorporated modelled traffic data growth for future traffic flows.

The results of the assessment are documented in Section 17.4

17.3 Assessment of Environmental Interactions

The potential interactions between environmental aspects arising from the proposed Project were considered and are addressed in more detail within the applicable chapters of the EIAR.

A summary of potential interactions identified are:

- Population and Human Health: impacts from traffic, noise and dust. Interactions in the human environment are typically complex as there is the potential for receptors to be impacted in a number of ways in terms of employment, economy, tourism, land use and land-take, community severance and accessibility, and community and recreational amenity.
- Biodiversity: water quality, hydromorphological changes (e.g. to stream beds) and flow impacts have secondary/indirect impacts on aquatic ecosystems. There is also the potential for noise impacts to impact terrestrial and aquatic species, although no significant impacts were identified for these.
- Soils, Geology and Hydrogeology: the most significant interaction is that between groundwater and surface water; however, the geology of an area can also interact with surface water as it will determine the nature of any sediment that may run-off into water bodies in the absence of mitigation.
- Water: as set out above, water interacts with biodiversity receptors through aquatic ecosystems, both in terms of water quality, flows and hydromorphological aspects. There is a direct connection between groundwater and surface water and geological variations can affect the nature of silty water run-off.
- Noise and Vibration: interactions occur between this topic and traffic and transport primarily; potential increases in traffic could lead to increased noise impacts. In addition, as set out above, there is potential for interaction with terrestrial and aquatic species as a result of increased noise and vibration. In addition, noise impacts are a contributory factor to amenity impacts, assessed under Population and Human Health.
- Traffic and Transport: this topic primarily interacts with air quality and noise; increased traffic can lead to increased impacts in both of these environmental aspects. In addition, traffic impacts are a contributory factor to amenity impacts, assessed under Population and Human Health.

- Cultural Heritage: interactive impacts could potentially occur in relation to the landscape character and setting of cultural heritage assets; mitigation measures for archaeology e.g. trial trenching, can also impact upon biodiversity, water quality and groundwater.

- Landscape and Visual: interactive impacts could potentially occur with biodiversity as a result of loss of habitats (hedgerows, trees, grassland, etc); in addition, visual impacts are a contributory factor to amenity impacts, assessed under Population and Human Health.

- Resource Use and Waste Management: the management of waste has the potential to interact with water quality and groundwater/land contamination. The resources used have a direct contribution to the embodied carbon within the proposed Project.

- Air Quality: increased levels of dust and emissions from construction plant and vehicles, particularly from activities in close proximity to each other; increased emissions from traffic could occur with any increased traffic movements in operation.

- Major Accidents and Risks: There are interactions between this topic and a number of others within the EIAR: Volume 3, Chapter 7: Biodiversity (biosecurity); Volume 3, Chapter 8: Soils, Geology and Hydrogeology (Contaminate Land); Volume 3, Chapter 9: Water (pollution incident), Volume 3, Volume 3, Chapter 11: Traffic & Transport (Construction Traffic risks); and Chapter 15: Air Quality (Dust Management). The mitigation plans for these chapters provide the basis of mitigation for major accidents and disasters. Volume 5, Appendix 1L, CEMP also outlines the requirement for the Contractor to adhere to health and safety regulations and prepare an emergency and incident response plan.

- Material Assets: There are a number of interactions between the various topics of the EIAR and Material Assets. Where these occur, they have been detailed within the primary assessment. No further interactions are identified.

- Climatic Factors: this interacts with all topics indirectly, as climate change has the potential to affect all aspects of the environment, especially ecosystems, flood risk, water quantity and quality, air quality and the landscape. Specifically, there is a direct interaction with traffic and air quality impacts in relation to greenhouse gas emissions and resource use in the form of embodied carbon.

A matrix of the environmental interactions is presented in Table 17. 1 .

Table 17. 1: Environmental Interactions Matrix

Typical Inter-Relationship Matrix – Environmental Elements	Population and Human Health		Biodiversity		Soils, Geology and Hydrogeology		Water		Noise and Vibration		Traffic and Transport		Cultural Heritage		Landscape and Visual		Resource Use and Waste Management		Air Quality		Major Accidents and Disasters		Material Assets		Climatic Factors	
	Con.	Op.	Con.	Op.	Con.	Op.	Con.	Op.	Con.	Op.	Con.	Op.	Con.	Op.	Con.	Op.	Con.	Op.	Con.	Op.	Con.	Op.	Con.	Op.	Con.	Op.
Population and Human Health																					✓					
Biodiversity							✓	✓	✓	✓			✓		✓	✓					✓					
Soils, Geology and Hydrogeology			✓				✓	✓					✓				✓				✓					
Water			✓	✓	✓	✓							✓				✓				✓	✓				✓
Noise and Vibration	✓	✓	✓	✓							✓	✓														
Traffic and Transport	✓	✓							✓	✓									✓	✓	✓					
Cultural Heritage			✓		✓																					
Landscape and Visual	✓	✓	✓	✓										✓												
Resource Use and Waste					✓		✓												✓							✓

Typical Inter-Relationship Matrix – Environmental Elements	Population and Human Health		Biodiversity		Soils, Geology and Hydrogeology		Water		Noise and Vibration		Traffic and Transport		Cultural Heritage		Landscape and Visual		Resource Use and Waste Management		Air Quality		Major Accidents and Disasters		Material Assets		Climatic Factors	
	Con.	Op.	Con.	Op.	Con.	Op.	Con.	Op.	Con.	Op.	Con.	Op.	Con.	Op.	Con.	Op.	Con.	Op.	Con.	Op.	Con.	Op.	Con.	Op.	Con.	Op.
Air Quality	✓										✓	✓					✓									✓
Major Accidents and Disasters	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓			✓	✓	✓	✓
Material Assets																										
Climatic Factors	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓		

17.4 Assessment of Cumulative Environmental Impacts from Other Projects

In total 54 projects were compiled at Stage 1 for consideration. During Stage 2, 21 projects were screened out due to their size, nature or location. During Stage 3 the remaining below projects were provided to the discipline chapter experts for his/her review and assessment:

- 10 projects for XC187 Fantstown;
- 8 projects for XC201 Thomastown including 1 located in Limerick County Council and 7 located in Cork County Council;
- 5 projects for XC209 Ballyhay;
- 2 projects for XC 211 Newton and XC212 Ballycoskery;
- 2 projects for XC215 Shinanagh;
- 4 projects for XC219 Buttevant;
- N/M20 Cork to Limerick Road Improvement Scheme; and
- Buttevant Windfarm located adjacent to Castlepook Windfarm.

Upon review and assessment of the list of the above projects identified at Stage 3 the discipline chapter experts identified that there was potential for cumulative impacts from 1 project:

- N/M20 Cork to Limerick Road Improvement Scheme.

Due to the location of the proposed N/M20 Cork to Limerick Improvement Scheme each environmental discipline expert combined the 7 sites when assessing the potential cumulative impacts from this 'Other Project' and the proposed Project. The cumulative assessment is detailed in Section 17.4.1 to Section 17.4.11.

17.4.1 Population and Human Health

The list of 33 projects identified at Stage 3 have been reviewed in relation to population and human health for cumulative impacts. Due to distance, scale and nature of the development projects from the proposed Project all projects have been screened out for cumulative impacts in relation to population and human health during the Construction and Operational Phases.

The proposed M20 has been considered to be in close proximity to this site. In terms of sequencing, the M20 project team is still considering options so it is anticipated that the proposed Project would be determined and, if consented, potentially have construction commence before the application for consent for the M20 is submitted. The M20 team were consulted and a conference call held with them in March 2020; they raised no significant concerns. It is therefore unlikely that there would be a significant cumulative issue with the M20 project.

17.4.2 Biodiversity

There is potential for cumulative effects between hydrologically linked sites through a deterioration in water quality should a construction related pollution event occur. However, with the full implementation of mitigation measures detailed in this chapter, it is not anticipated that there will be any significant cumulative effects.

The risk of cumulative impacts from other local schemes is considered not significant due to the scale and location of the proposed Project. Residual impacts from the proposed Project are not significant following extensive mitigation discussed in this chapter. The N20, running north to south from Limerick to Cork, is proposed to be upgraded to the M20 motorway in its entirety. The N20 is close to some of the crossings, namely XC211 Newtown, XC212 Ballycoskery and XC215 Shinanagh. This scheme is currently within the design stage with construction anticipated to commence in 2023 with completion in 2027. As the proposed Project is projected for completion in October 2022 it is anticipated that there will be no overlap with the M20 construction programme.

Other major schemes within the local area will be subject to the EIA process and Appropriate Assessment process where appliable, with the intention to ensure that there are no significant impacts on biodiversity; therefore, the risk of cumulative impacts is considered not significant.

17.4.3 Soils, Geology and Hydrogeology

The list of 33 projects identified at Stage 3 have been reviewed and all have been screened out due to the distance, scope, and scale of the projects and low level of residual impacts associated with the proposed Project in relation to soils, geology and hydrogeology.

17.4.4 Water

There is potential for cumulative impacts from five of the seven sites (XC209 to XC219) and these are all within the Awbeg catchment. However, it is considered unlikely as the mitigation and control measures proposed will result in no significant effects on water bodies from any of the sites; as such no combined significant impact is considered likely.

With respect to other projects, the only project of significance within the study area is the upgrading of the N20 to motorway. This project comes close to the proposed Project, particularly at XC211 Newtown, XC212 Ballycoskery and XC215 Shinanagh. As is set out in the Biodiversity assessment, this scheme is currently within the design stage with construction anticipated to commence in 2023 with completion in 2027. As the proposed Project is projected for completion in October 2022 it is anticipated that there will be no overlap with the M20 construction programme.

17.4.5 Noise and Vibration

The M20 Cork to Limerick Road Improvement Scheme is currently at the Phase 2 Options selection stage with completion of this stage and the identification of a preferred option expected in 2021.

The N20 is close to some of the schemes, particularly XC211 Newtown & XC212 Ballycoskery as well as XC215 Shinanagh. However, as the construction programmes do not coincide there is no possibility of a cumulative impact during construction; the proposed Project is predicted to have no significant impacts during its operation and therefore there would be no likely significant cumulative impacts with the M20 in its operation.

17.4.6 Traffic and Transport

It is considered that whilst the construction phases at each existing crossing within the proposed Project may overlap, they are far enough apart to not have a significant impact on each other; except for proposed crossings XC211 and XC212 Newtown & Ballycoskery which have been considered together.

In terms of other projects. the list of 33 projects identified at Stage 3 have been reviewed in relation to traffic and transport for cumulative impacts. Due to distance, scale and nature of the development projects from the proposed Project all but 1 project has been screened out for cumulative impacts in relation to traffic and transport during the Construction and Operational Phases.

The project identified as having the potential for cumulative impacts in relation to Traffic and Transport is the N/M20 Cork to Limerick Road Improvement Scheme. This scheme is included in the National Development Plan and is currently within the design stage with construction anticipated to commence in 2023 with completion in 2027. As the proposed Project is projected for completion in October 2022 it is anticipated that there will be no overlap with the M20 construction programme. The N20 and R515 roads that may be impacted by this proposed Project are large enough in capacity to incorporate the construction traffic into the wider network, however, this would be considered within EIA and TTA assessments prepared for the M20 scheme.

In operation, it is not likely that there would be any significant interactions between the two projects however, XC215 Shinanagh and XC219 Buttevant are the closest to potential route corridors that have been identified for the M20. Consultation with the M20 project team has identified that the proposed Project improvements to the N20 at XC215 Shinanagh are potentially beneficial to any proposed N20 upgrade.

17.4.7 Cultural Heritage

Due to distance, scale and nature of the 33 development projects identified at Stage 3 from the proposed Project, all but 1 project has been screened out for cumulative impacts in relation to cultural heritage during the Construction and Operational Phases. The project identified as having the potential for cumulative impacts in relation to cultural heritage is the N/M20 Cork to Limerick Road Improvement Scheme. The overall cultural heritage study area for the proposed Project encompasses the N20 national primary route between Buttevant and Charleville. Any further upgrades to the existing N20 corridor will contribute to a further intensification of road infrastructure which may generate impacts on cultural heritage. However, based on available information, it is not considered that significant adverse cumulative effects will be generated by the proposed Project in conjunction with the N/M20 project for cultural heritage.

17.4.8 Landscape and Visual

The main aspect of the cumulative assessment of landscape and visual effects relates to the potential for impacts with the proposed upgrade of the N20 national primary route to a motorway (M20) which occurs in the near vicinity of almost all of the proposed Project sites. The landscape and visual impact assessment encompasses the existing N20 national primary route and the assessment notes that the proposed Project will represent an intensification of road infrastructure within the surrounds of the proposed road alignments. Any further upgrades to the existing N20 corridor will contribute to a further intensification of road infrastructure, however, as this is an established

existing land use, it is not considered that significant adverse cumulative effects will be generated by the proposed Project in combination with the proposed N20 upgrade.

A number of other developments were considered in relation to the cumulative impacts however, due to the scale, nature and proximity of these to the proposed Project it is not considered that there will be any material cumulative impacts.

17.4.9 Resource Use and Waste Management

The production of waste as a result of earthworks, is the only potential significant cumulative impact between the projects if construction were to occur at the same time. However, current proposals are that the construction periods would be several years apart and as a result no cumulative impact is considered likely.

17.4.10 Air Quality

The list of 33 projects identified at Stage 3 have been reviewed and all have been screened out due to the distance, scope, and scale of the projects and low level of residual impacts associated with the proposed Project in relation to Air Quality.

17.4.11 Cross-Cutting Themes

The only project with a potential cumulative impact with the proposed Project is the proposed M20 road scheme.

Major Accidents and Disasters

There will be no cumulative impacts during the construction stage as the construction programmes for the two projects do not overlap. The proposed Project has been designed in accordance with road safety standards and to ensure it does not contribute to nor is affected by flooding. As a result, no cumulative impacts with the M20 are predicted during operation.

Material Assets

There will be no cumulative impacts during the construction stage as the construction programmes for the two projects do not overlap. During the operational stage, there is the potential for cumulative impacts in relation to road infrastructure only. Here the impact is anticipated to be positive; continued dialogue with the M20 project team during the design of the proposed Project has resulted in updates to the design to ensure a smooth transition with any interfaces with the N20/M20 and the road-over-rail bridge at XC201 Thomastown has been made wider to facilitate future growth in traffic using this route which may occur as a result of the M20 project as well as other developments in the area. This was at the request of Limerick County Council.

Climatic Factors

There will be no cumulative impacts during the construction stage as the construction programmes for the two projects do not overlap. During the operational stage, there is potential for cumulative impacts on climatic factors as a result of proposed new roads and alignments. The findings of the FRA have been built into the drainage design for the proposed Project and therefore no significant impacts on flood risk are identified; and in terms of operational carbon emissions from the proposed Project, these would not be significantly different from existing emissions. As a result, there is no likelihood of cumulative impacts with other projects including the M20.

17.5 Mitigation Measures

No significant impacts are identified; therefore no additional mitigation is required for cumulative impacts.

17.6 Residual Impacts

No significant impacts are identified.

17.7 Difficulties Encountered in Compiling Required Information

There were no specific difficulties encountered when carrying out this assessment. However, it should be noted that this assessment only considers other projects as of Summer 2020. As new projects arise, further review and assessment may be required.

17.8 References

Directive 2014/52/EU of 16 April 2014 on the assessment of the effects of certain public and private projects on the environment [2014].

EPA. Advice Note on Cumulative effects assessment relevant to nationally significant infrastructure projects;

EPA (2002). Guidelines on the Information to be Contained in Environmental Impact Statements.

EPA (2003). Advice Notes on Current Practice in the Preparation of Environmental Impact Statements.

EPA (2015). Draft Advice Notes for Preparing Environmental Impact Statements Draft. September 2015.

EPA (2017). Draft Guidelines on the Information to be Contained in Environmental Impact Assessment Reports.

European Commission (1999). Guidelines for the Assessment of Indirect and Cumulative Impacts as well as Impact Interactions.

European Commission (2017). Guidance on the Preparation of the Environmental Impact Assessment Report.

European Union (Planning and Development) (Environmental Impact Assessment) Regulations 2018 – S.I. No. 296 of 2018