

Intermodal Logistics Park North Ltd

INTERMODAL LOGISTICS PARK NORTH (ILPN)

Intermodal Logistics Park North (ILPN) Strategic Rail Freight Interchange (SRFI)

Project reference TR510001

Preliminary Environmental Information Report (PEIR)

Chapter 05: EIA scope and general methodology

October 2025

Planning Act 2008

The Infrastructure Planning (Environmental Impact Assessment) Regulations 2017

This document forms a part of a Preliminary Environmental Information Report (PEIR) for the Intermodal Logistics Park North (ILPN) project.

A PEIR presents environmental information to assist consultees to form an informed view of the likely significant environmental effects of a proposed development and provide feedback.

This PEIR has been prepared by the project promoter, Intermodal Logistics Park North Ltd. The Proposed Development is described in Chapter 3 of the PEIR and is the subject of a public consultation.

Details of how to respond to the public consultation are provided at the end of Chapter 1 of the PEIR and on the project website:

<https://www.tritaxbigbox.co.uk/our-spaces/intermodal-logistics-park-north/>

This feedback will be taken into account by Intermodal Logistics Park North Ltd in the preparation of its application for a Development Consent Order for the project.

Chapter 5 ◆ EIA scope and methodology

INTRODUCTION

- 5.1 Chapter 1: Introduction of this PEIR explains the purpose of EIA and the role of the PEIR. It also explains how the assessment of the environmental effects of the Proposed Development has followed Rochdale Envelope principles.
- 5.2 This chapter explains how the scope of the EIA has been determined and then sets out the general methodology for the assessment. Further topic-specific explanations of the assessment methodology are provided in later chapters of this PEIR.

THE SCOPE OF THE EIA

- 5.3 This section sets out the scope of the EIA in terms of the geographical coverage and the timescales assessed. The section also describes the process undertaken to determine the technical scope of the EIA in consultation with other relevant parties and consultees.

Geographic scope

- 5.4 The geographical coverage of an EIA is defined by the area of land that may be affected by the Proposed Development, the nature of the current environmental conditions and the manner in which environmental effects are likely to be generated. Whereas land within the boundary of a development site – in this case defined by the draft Order Limits shown in Figure 1.1 of this PEIR – forms a focus of the assessment, the influence of many predicted environmental effects can extend beyond the immediate DCO Site boundary. Where identified and relevant, these effects are also being assessed as part of the EIA for the Proposed Development. Wider study areas relevant to individual EIA topics are defined in the chapters that follow.
- 5.5 The geographical extent of the EIA also takes into account the potential implications of related and unrelated development activities. The potential cumulative effects of the Proposed Development in association with other developments during construction and in operation are taken into account in individual PEIR chapters and in Chapter 20: Cumulative, in-combination and transboundary effects.

Temporal scope

- 5.6 The envisaged construction phasing for ILPN SRFI is outlined in Chapter 3: Project description of this PEIR.

- 5.7 The preliminary assessments presented in this PEIR are based, largely, on the comparison of anticipated environmental effects with current or recent baseline environmental conditions, which have been informed by a review of desktop information, field surveys and in some instances intrusive surveys. This is with the exception of topics such as transport and traffic, air quality, and landscape and visual effects, which factor in future baseline changes into assessments in defined future year impact scenarios. These approaches are explained in further detail in the relevant chapters.

Technical scope

- 5.8 In order to ascertain the technical scope of the EIA, a scoping process has been undertaken. Chapter 1: Introduction, of this PEIR explains that the Applicant requested an EIA Scoping Opinion from the SoS for Transport on 4 November 2024, with the Scoping Opinion being published on 12 December 2024 and adopted by the Planning Inspectorate on behalf of the SoS.
- 5.9 The Scoping Opinion took into account responses from the following consultees:
- The Canal and River Trust
 - Chorley Borough Council
 - The Coal Authority
 - Coppull Parish Council
 - Croft Parish Council
 - The Environment Agency
 - Greater Manchester Combined Authority
 - Halton Borough Council
 - Historic England
 - Health and Safety Executive
 - Indigo Pipelines Limited
 - National Highways
 - Natural England
 - Royal Mail
 - Salford City Council
 - Southern Gas Networks

- SP Energy Networks
- St Helens Council
- UK Health Security Agency
- United Utilities
- Warrington Borough Council
- Wigan Council

5.10 Table 5.1 sets out the overarching comments received from the SoS in relation to the EIA and how they have been addressed through the PEIR. Further consideration of comments received by the SoS in relation to technical topic chapters is provided in Chapters 6 – 19 of this PEIR.

Table 5.1 Overarching EIA comments in the Scoping Opinion issued by the Secretary of State

Scoping opinion Paragraph ref	Description	Inspectorate's comments	Applicant's response
Description of the Proposed Development			
Paragraph 3.2 Paragraph 3.10	Project elements and options	In addition to the rail freight infrastructure, the Scoping Report lists other elements such as energy infrastructure, battery storage, a Combined Heat and Power Plant (CHP), and photovoltaics that are not yet confirmed but may form part of the Proposed Development. The Inspectorate expects that at the point an application is made, the description of the Proposed Development will be sufficiently detailed to include the design, size, capacity, technology, and locations of the different elements of the Proposed Development. Where details are not yet known, the assumptions applied to the impact assessment in relation to these aspects should also be set out. Where flexibility is sought, the ES should clearly set out and justify the maximum design parameters that would apply for each option assessed and how these have been used to inform an adequate assessment in the ES. The Applicant should nevertheless make every attempt to narrow the range of options within the ES, explain clearly which elements of the Proposed Development have yet to	Chapter 3 of the PEIR (and subsequently the ES) sets out all of the defined elements of the Proposed Development in detail and is supported by a draft Parameters Plan (Figure 3.1) and a draft Illustrative Masterplan (Figure 3.2). The description of the Proposed Development has been refined from the description provided as part of the Scoping Report as a result of ongoing design development, technical work and consultation responses. However, the Proposed Development still remains materially unchanged from the description provided at scoping. Following the statutory consultation and as a result of further design development and technical work to be undertaken, the Applicant will refine the description of development further to ensure that the description is sufficiently detailed and that every attempt to narrow the range of options has been made.

Scoping opinion Paragraph ref	Description	Inspectorate's comments	Applicant's response
		be finalised and provide the reasons. At the time of application, any Proposed Development parameters should not be so wide-ranging as to represent effectively different developments. It should be noted that if the Proposed Development materially changes prior to submission of the Development Consent Order (DCO) application, the Applicant may wish to consider requesting a new Scoping Opinion.	
Figure 1.1 Paragraphs 3.9 and 3.25	Parkside West Scheme Parkside Link Road	An area of redevelopment known as Parkside West and the Parkside Link Road are both identified within the Scoping Report project description as potential or future developments overlapping (temporally and spatially) with the Proposed Development. The Parkside Link Road is identified as the main construction access to the Proposed Development and is stated to be currently under construction. The ES should confirm the status and location of these developments and be clear how both developments have been taken into account within the aspect assessments and/ or as projects considered in the cumulative effects	The Parkside Link Road has now officially opened and therefore forms part of the baseline conditions. Chapter 3 of the PEIR sets out how these developments link into the Proposed Development, and Chapter 20 of the PEIR describes the approach taken to, and the initial findings of, the cumulative assessment.

Scoping opinion Paragraph ref	Description	Inspectorate's comments	Applicant's response
		assessment.	
Paragraph 3.16	Parameters	The Scoping Report refers to a maximum building height of 35m, but no minimum building height. No maximum or minimum height is given for the lower buildings that are proposed to be in zones of greatest sensitivity and no depths of foundations are provided. This should be set out and used to inform the assessment in the ES. Measurement units should be expressed in relation to the existing ground levels.	The draft Parameters Plan, PEIR Figure 3.1, and the description set out in chapter 3 of the PEIR describes the maximum and minimum parameters for built development contained within each zone.
n/a	Operation of the Proposed Development	The Scoping Report provides few details of the operation of the Proposed Development, which has limited the Inspectorate's ability to comment on this matter. The ES should provide sufficient information on the operation of the Proposed Development to provide certainty on the environmental effects and mitigation requirements. This should include, but not necessarily be limited to: • operational requirements including the main characteristics of the freight process; • site access; • expected train movements;	The PEIR, chapter 3, provides sufficient information on the expected operation of the Proposed Development. It addresses the matters identified by the Inspectorate in the Scoping Opinion. The final ES will include a chapter describing the Proposed Development, updated to reflect any design changes made between statutory consultation and submission of the DCO application. . This is further supported by a Rail Operations Report, which forms part of the statutory consultation and will subsequently form part of the DCO application. This sets out the expected

Scoping opinion Paragraph ref	Description	Inspectorate's comments	Applicant's response
		- loading and unloading activities; - operational working hours; - phasing, if relevant; - working hours; employment and workforce requirements; and - energy use. Where uncertainty remains, the ES should describe how the parameters for the assessment have been developed and how this has informed the assessment of effects.	operational requirements of the SRFI in more detail. The Applicant can confirm that they are working with an experienced rail terminal operator with knowledge of similar logistics operations in the UK.
n/a	Transport and traffic	The Scoping Report identifies potential for offsite highway works to be required that have not yet been defined. The ES should therefore describe how the spatial scope of the assessment for operational transport and traffic has been derived and demonstrate how the scope of the assessment has been discussed and where possible agreed with relevant consultation bodies.	The Applicant can confirm that the ES will provide the requested detail on the spatial scope of assessment for operational transport and traffic. The ES will also provide detail on the scope of the assessment which has been informed by extensive engagement with key statutory consultees through a regular programme of meetings with the Transport Working Group

Scoping opinion Paragraph ref	Description	Inspectorate's comments	Applicant's response
			(TWG). The TWG has been established to bring together key decision members and technical leads from St Helens Council, Wigan Council, Warrington Borough Council, National Highways and Transport for Greater Manchester, and the Applicant's highway consultant team. At the PEIR stage, the Applicant has identified through highway assessment work undertaken to date, review of policy requirements and engagement with the TWG, 15 potential highway mitigation options at locations remote to the Main Site. These are being consulted upon and considered as part of the statutory consultation (PEIR Appendix 7.2). These include the option for the Lane Head South Relief Road. Following the consultation and completion of highway modelling work and ongoing discussions with the TWG, the highway mitigation strategy will be refined and set out clearly within the ES and accompanying DCO application documents.
n/a	Project description	The Inspectorate notes some aspect chapters contain additional information on the description of the Proposed Development (such as references to piling) that is not	Chapter 3 of the PEIR, and subsequently the ES, will provide a comprehensive description of the project, against which all technical assessments

Scoping opinion Paragraph ref	Description	Inspectorate's comments	Applicant's response
	consistency	included within Scoping Report Chapter 3. A consistent project description that is used to underpin all the aspect assessments should be provided in the ES.	will be based.
EIA methodology and scope of assessment			
Paragraph 2.9 to 2.19	Site and environmental constraints	The Inspectorate notes that there are environmental constraints, such as designated wildlife and heritage sites, either within the site or directly adjacent to it. The site also has underlying features such as a Principal Aquifer and falls within a Nature Improvement Area and Core Biodiversity Area identified by St Helens Borough Council. The ES should demonstrate how the mitigation hierarchy has been applied in the design and consideration of alternatives.	Chapter 4 of the PEIR and subsequently the ES, describes the approach taken to consideration of alternatives and design development. Where relevant the topic-based chapters describe the approach taken to the mitigation hierarchy as relevant with specific reference to the topics. They also include information about the proposed mitigation measures to be implemented where relevant.
Table 4.4	Neutral effects	The ES should define the term 'neutral' in relation to magnitude of effects and provide a justification for whether these effects are significant or not significant.	The methodology set out in this chapter (which will subsequently form part of the ES) describes the different terms used to assess magnitude and significance and sets out that effects of moderate or greater are defined as being

Scoping opinion Paragraph ref	Description	Inspectorate's comments	Applicant's response
			significant. In accordance with this methodology, neutral effects would not be defined as significant in EIA terms. Each technical chapter of the PEIR (and subsequently the ES) will define these effects further and describe any industry standard methodologies that may result in a different approach.
Paragraphs 4.3.1 to 4.3.4	Maximum Design Scenario (MDS)	Where flexibility is retained, any Limits of Deviation should also be set out in the ES and secured within the DCO.	The flexibility required for the Proposed Development is described in chapter 3 of the PEIR (and subsequently the ES) and set out in the Parameters Plan, Figure 3.1. This includes Limits of Deviation where relevant. The flexibility required through parameters and Limits of Deviation will be secured through the relevant plans and the DCO itself.
Paragraph 4.10	Decommissioning	The Inspectorate does not therefore agree that decommissioning effects can be scoped out of the assessment at this stage. The ES should provide a proportionate description of all decommissioning activities or describe those activities required to extend operational life, where these are relevant. Where significant effects are likely to occur as a result of such works, these should be assessed in the ES.	The Proposed Development is intended to be a permanent operation with no end date. The Applicant's proposed approach to decommissioning for developments such as these is in line with the approach taken in a number of similar DCO applications and is therefore considered to be a reasonable approach. It should be noted that any activities that would theoretically be associated with the

Scoping opinion Paragraph ref	Description	Inspectorate's comments	Applicant's response
			decommissioning phase of the Proposed Development would be similar to those identified at the construction stage but over a shorter period of time and therefore the effects are not considered to be worse or different to those assessed as part of the potential construction phase effects.
Paragraph 4.31	Maximum Design Parameters / Flexibility	The Inspectorate also notes the Applicant's intention to apply a Rochdale Envelope approach, define a 'Maximum Design Scenario' (MDS) and retain optionality within the design of the Proposed Development. The parameters should use the maximum envelope within which the built development may be undertaken, to ensure a worst-case assessment. When considering the worst-case scenario for each aspect scoped in to the assessment, the interactions between aspects should also be taken into account. The development parameters should be clearly defined in the DCO and in the accompanying ES. The description of the Proposed Development in the ES must not be so wide that it is insufficiently certain to comply with the	The Applicant notes the comments provided and confirms that Advice Note Nine has been and will continue to be taken into account in the EIA. Chapter 1 of the PEIR sets out the Applicant's approach to the principle of applying the Rochdale Envelope and Chapter 3 of the PEIR (and subsequently the ES) sets out the maximum design scenario that has been applied to the Proposed Development at this stage, this is also defined within the draft Parameters Plan, Figure 3.1.

Scoping opinion Paragraph ref	Description	Inspectorate's comments	Applicant's response
		requirements of Regulation 14 of the EIA Regulations. The Inspectorate draws the Applicant's attention to Advice Note 9: Rochdale Envelope, which states that "it will be for the authority responsible for issuing the development consent to decide whether it is satisfied, given the nature of the project in question, that it has 'full knowledge' of its likely significant effects on the environment."	
Paragraph 14.31	Extent of peat deposits	The presence of peat deposits and peat habitats within the Proposed Development is identified in Scoping Report Chapter 14. The extent of these deposits should be identified in the ES and considered in the relevant aspect assessments, where significant effects are likely to occur.	The presence of peat and likely effects associated with the Proposed Development on this resource is assessed within Chapter 15: Geology, Soils and Contaminated Land, of the PEIR (and subsequently the ES).
n/a	Phasing and assessment years – construction and operation	The Scoping Report refers to the daily rail freight movements potentially increasing to a maximum capacity but the period of time over which this would occur is not defined. This should be set out in the ES and considered within the assessment. The ES should describe whether the Proposed Development would be phased in its delivery and how these phases have been assessed with reference to defined assessment years.	The phasing will be considered with the potential rail terminal operator and details of the anticipated phasing and rail movements will be described.

Scoping opinion Paragraph ref	Description	Inspectorate's comments	Applicant's response
n/a	Transboundary	The Inspectorate on behalf of the SoS has considered the Proposed Development and concludes that the Proposed Development is unlikely to have a significant effect either alone or cumulatively on the environment in a European Economic Area State. In reaching this conclusion the Inspectorate has identified and considered the Proposed Development's likely impacts including consideration of potential pathways and the extent, magnitude, probability, duration, frequency and reversibility of the impacts. The Inspectorate considers that the likelihood of transboundary effects resulting from the Proposed Development is so low that it does not warrant the issue of a detailed transboundary screening. However, this position will remain under review and will have regard to any new or materially different information coming to light which may alter that decision. The SoS' duty under Regulation 32 of the 2017 EIA Regulations continues throughout the application process. The Inspectorate's screening of transboundary issues is based on the relevant considerations specified in the Annex to its Advice Page 'Nationally Significant	The Applicant notes the Inspectorate's agreement on the transboundary screening and therefore no further action is required on this matter.

Scoping opinion Paragraph ref	Description	Inspectorate's comments	Applicant's response
		Infrastructure Projects: Advice on Transboundary Impacts and Process', links for which can be found in paragraph 1.0.7 of this opinion above.	
Cumulative and in-combination effects			
n/a	n/a	No matters have been proposed to be scoped out of the assessment	Noted
Paragraphs 20.10 and 20.11	Proposed list of projects	Figures should be provided for ease of reference to show the projects considered in the cumulative effects assessment (CEA). The list and nature of the projects should be discussed and where possible agreed with relevant consultation bodies. The Applicant's attention is directed to the response of St Helens Council which includes further projects for consideration in the CEA.	The Applicant has provided a number of figures within the CEA which set out the projects considered as part of the process (Figures 20.1 to 20.6). The long list if cumulative projects is included as an appendix to the PEIR (Appendix 20.1) and the summary of outcomes at this stage is described in chapter 20 of the PEIR. The Applicant can confirm that all projects identified to date by relevant consultees have been included in the CEA screening process.

ASSESSMENT METHODOLOGY

- 5.11 The ES will explain the Applicant's approach to EIA, including scoping, the collection of baseline environmental data, consultations, an assessment of likely significant environmental effects, the identification of mitigating measures, and the assessment of residual effects. The ES will identify the methods used for the collection of data and the identification and assessment of likely significant environmental effects. Any assumptions made will be clearly identified.

Baseline

- 5.12 Defining a consistent baseline is an important part of the EIA process. Baseline conditions are defined as the existing state of the environment and how it might develop in the future in the absence of the proposals. This is established through desk-based analysis and surveys of the DCO Site. It is against the defined baseline that the significance of environmental effects are assessed.
- 5.13 The topic-specific assessments contained within this PEIR assess the preliminary likely significant effects of the Proposed Development during both the construction and operational phases. The EIA has scoped out assessment of decommissioning because ILPN SRFI is intended to be a permanent development and consideration for decommissioning at this stage would be too hypothetical to be meaningful. It should be noted that any activities that would theoretically be associated with the decommissioning phase of the Proposed Development would be similar to those identified at the construction stage but over a shorter period of time and therefore the effects are not considered to be worse or different to those assessed as part of the potential construction phase effects.

EIA methodology

- 5.14 The detailed methodology employed for the assessment of individual environmental topics is explained at the beginning of the chapters that follow. These methodologies have the following activities in common:
- establishing the existing 'baseline conditions' – in other words the existing or, where relevant the future, status of the DCO Site and surroundings and their environmental characteristics;
 - consultation with statutory and non-statutory consultees throughout the application process – including this PEIR;
 - consideration of local, regional and national planning policies, guidelines and legislation relevant to EIA and to the topic;
 - consideration of technical standards for the development of significance criteria;
 - review of secondary information, previous environmental studies and publicly available information and databases;

- physical surveys and monitoring;
- desk-top studies;
- computer modelling; and
- professional judgment.

- 5.15 The assessments have considered the likely significant effects on the defined baseline conditions as a direct / indirect result of the Proposed Development. Predictions are necessary when forecasting future impacts. In order to ensure that predictions are as accurate as possible, assessments have been undertaken in accordance with best practice guidelines published by relevant professional bodies, any guidelines followed are referenced.
- 5.16 Where no topic-specific assessment guidance is available, a common framework of assessment criteria and terminology has been utilised for the presentation of predicted environmental effects. This is based on a widely used 'matrix approach' to environmental assessment and combines the characteristics of the impact (magnitude and nature) and the sensitivity of the receptor. In using this approach, there is a level of transparency to the assessment and it enables the reader to interpret the outputs of the technical assessments more readily.
- 5.17 Environmental effects have been considered on the basis of their magnitude, duration and reversibility.

The Rochdale Envelope

- 5.18 The ES for the Proposed Development will be undertaken in accordance with what are known as 'Rochdale Envelope' principles reflecting that the DCO will need to retain flexibility around the internal layout and design of the ILPN SRFI¹.
- 5.19 This means that the DCO application will be similar in concept to an application for outline planning permission. The DCO application will fix the outer envelope or 'parameters' of the Proposed Development including its position, land uses and the overall maximum dimensions of built features such as buildings, roads and landscape areas.
- 5.20 If the DCO is made, the Applicant will be required to submit details of individual buildings and elements within development phases (such as drainage, landscaping and access arrangements) to St Helens Borough Council, Wigan Council or Warrington Borough Council (depending in which jurisdiction the works falls within) for approval prior to construction of those elements. These design details would be within the assessed and approved parameters.
- 5.21 The EIA Regulations require that the development parameters must be identified with

¹ *The Rochdale Envelope approach originated in two court decisions in 1999 and 2000, in which it was established that a planning application for a development requiring EIA could be made in outline provided that sufficient design detail was provided to inform a reliable assessment of environmental effects in accordance with the EIA Regulations. The court decisions concerned a planning application for a business park in Rochdale.*

sufficient precision so that their likely significant environmental effects can be defined and assessed. Paragraph 2.4 of PINS Advice Note Nine: Using the Rochdale Envelope (version 3, July 2018 and updated on 25 March 2025) identifies the guiding principles for the use of the Rochdale Envelope as follows:

- *‘the DCO application documents should explain the need for and the timescales associated with the flexibility sought and this should be established within clearly defined parameters;*
- *the clearly defined parameters established for the Proposed Development must be sufficiently detailed to enable a proper assessment of the likely significant environmental effects and to allow for the identification of necessary mitigation, if necessary, within a range of possibilities;*
- *the assessments in the ES should be consistent with the clearly defined parameters and ensure a robust assessment of the likely significant effects;*
- *the DCO must not permit the Proposed Development to extend beyond the ‘clearly defined parameters’ which have been requested and assessed. The Secretary of State may choose to impose requirements to ensure that the Proposed Development is constrained in this way;*
- *the more detailed the DCO application is, the easier it will be to ensure compliance with the Regulations’.*

Study areas

- 5.22 Given the scale of the Proposed Development and the diverse nature of the environmental effects being assessed, it is not possible to define a single standard study area for the environmental topics considered. Instead appropriate study areas have been defined and justified in the respective topic—based chapters of this PEIR, where relevant, based on recognised topic-specific guidance.
- 5.23 As set out in Chapter 4: Site Selection, Alternatives and Scheme Evolution, the draft Order Limits have changed since the EIA Scoping Process was undertaken. This has taken place in order to incorporate additional land within the Proposed Development to accommodate proposed mitigation. In response to the expansion of the draft Order Limits, the relevant Study Areas have increased, and these are described within the technical chapters of this PEIR.

Receptor sensitivity

- 5.24 The sensitivity of a receptor refers to its importance, i.e. its environmental value and attributes. This may include a feature’s level of statutory designation. The terminology defining sensitivity can vary according to discipline or the methodology being used. However, in this PEIR, and subsequent ES, sensitivity is generally defined as *Very high, High, Medium, or Low*. An example of the definition of the sensitivity of receptors is set out in Table 5.2. The following chapters of this PEIR consider the attributes of specific receptors in more detail.

Table 5.2 The measurement of environmental effects – receptor sensitivity

Sensitivity	Examples
Very High	Internationally designated site (e.g. Ramsar / Special Protection Area (SPA) / World Heritage)
High	Nationally designated site (e.g. Site of Special Scientific Interest (SSSI)) / designated landscape (e.g. National Park (NP)) / principal aquifer / main watercourse / human health
Medium	Regionally designated ecology / heritage site / secondary aquifer / minor watercourse
Low (or lower)	Locally designated ecology / heritage site; area of hardstanding / brownfield land / industrial site / site of low ecological value
Negligible	No sensitivity to change

Determining impact magnitude

5.25 Magnitude is determined by predicting the *scale* of any potential change in the baseline conditions. Where possible magnitude is quantified, but where this is not possible, a fully defined qualitative assessment has been undertaken and a magnitude assigned as a result of this. The assessment of magnitude takes into account any design or embedded mitigation in a proposed development, and assumes that any additional mitigation has been applied.

5.26 Table 5.3 sets out how magnitude is defined in relation to ILPN SRFI.

Table 5.3 The measurement of environmental effects – magnitude of impact

Magnitude		Examples
Major	Adverse	A permanent or long-term adverse impact on the integrity and value of an environmental attribute or receptor.
	Beneficial	Large scale or major improvement of resource quality; extensive restoration or enhancement; major improvement of attribute quality.

Magnitude		Examples
Moderate	Adverse	An adverse impact on the integrity and/or value of an environmental attribute or receptor, but recovery is possible in the medium term and no permanent impacts are predicted.
	Beneficial	Benefit to, or addition or, key characteristics, features or elements improvement of attribute quality.
Minor	Adverse	An adverse impact on the value of an environmental attribute or receptor, but recovery is expected in the short-term and there would be no impact on its integrity.
	Beneficial	Minor benefit to, or addition of key characteristics, features or elements; some beneficial impact on attribute or a reduction in the risk of a negative impact occurring.
Negligible	Adverse	Very minor loss.
	Beneficial	Very minor benefit.
No change		No change would be perceptible either positive or negative

Determining significance and the nature of effects

- 5.27 To determine the significance of effect, the predicted magnitude of the impact is combined with the assigned sensitivity of the receptor, as set out in Table 5.4.
- 5.28 The interaction of magnitude and sensitivity combined enables the determination of significance of an environmental effect on a scale. Deviation from the terminology may occur in cases where an established methodology requires this, and where relevant this is explained in the chapters that follow.
- 5.29 According to Schedule 4, paragraph 5 of the EIA Regulations 2017, the description of the likely significant effects should cover *‘the direct effects and any indirect, secondary, cumulative, transboundary, short-term, medium-term and long-term, permanent and temporary, positive and negative effects of the development’*. The definition of at what level of significance a significant effect arises is provided in the topic method section of each of the topic-based chapters that follow, this is typically those effects deemed to be moderate significance or greater.

Table 5.4 The measurement of environmental effects – significance of effect

		Magnitude of impact				
		No change	Negligible	Minor	Moderate	Major
Receptor sensitivity	Very high	Neutral	Slight	Moderate	Large	Very large
	High	Neutral	Slight	Moderate	Large	Large
	Medium	Neutral	Slight	Slight	Moderate	Large
	Low	Neutral	Slight	Slight	Slight	Moderate
	Negligible	Neutral	Neutral	Neutral	Neutral	Neutral

Mitigation

- 5.30 Schedule 4, paragraph 7 of the EIA Regulations 2017 requires: ‘A description of the measures envisaged to avoid, prevent, reduce or, if possible, offset any identified significant adverse effects of the environment and, where appropriate, of any proposed monitoring arrangements...’. When describing mitigation measures, they generally fall under two headings, ‘design or embedded mitigation’ and ‘additional mitigation’.
- 5.31 Design or embedded mitigation is where the design of the Proposed Development has been altered to take account of a particular environmental consideration or accommodate an important feature. The mitigation taken into account in the ILPN SRFI EIA is identified in the relevant topic-based chapters of this PEIR. The arrangement of the Proposed Development has involved the consideration of potential impacts of alternative designs and layouts. This is summarised in Chapter 4: *Site selection and evolution* of this PEIR.
- 5.32 Additional mitigation is all other mitigation that has been identified as a result of the EIA undertaken for the design of the Proposed Development. Additional mitigation is described and assessed in the chapters that follow and is summarised in the Commitments Register (PEIR Appendix 20.1) and in Chapter 21 of the PEIR. These measures will be secured pursuant to the DCO (including its requirements) and possibly additional legal mechanisms or agreements.
- 5.33 Effects that remain after consideration of the proposed mitigation measures are termed ‘residual effects’. The key outcome of the EIA is whether these residual effects are likely significant effects and these are clearly defined within the technical chapters and set out in the conclusion of the PEIR, and will be subsequently in the ES.

IN-COMBINATION AND CUMULATIVE EFFECTS

- 5.34 Schedule 4(5)(e) of the EIA Regulations 2017 requires the EIA to take into account the *‘cumulation of effects with other existing and / or approved projects taking into account any existing environmental problem relating to areas of particular environmental importance likely to be affected or the use of natural resources’*.
- 5.35 Schedule 4(5) of the Regulations requires also that:
- ‘The description of the likely significant effects on the factors specified in regulation 5(2) should cover the direct effects and any indirect, secondary, cumulative, transboundary, short-term, medium-term and long-term, permanent and temporary, positive and negative effects of the development.’*

Methodology for cumulative assessment

- 5.36 The Planning Inspectorate’s Advice Note 9: Using the Rochdale Envelope (version 3, July 2018 and updated in March 2025) states that: *‘The potential cumulative impacts with other major developments will also need to be carefully identified such that the likely significant effects can be shown to have been identified and assessed against the baseline position (which would include built and operational development). In assessing cumulative impacts, other major development should be identified through consultation with the local planning authorities and other relevant authorities. Applicants should have regard to the staged approach to cumulative effects assessment set out in Planning Inspectorate’s Advice Note Seventeen: Cumulative Effects Assessment’*.
- 5.37 The Planning Inspectorate’s Advice on Cumulative Effects Assessment (September 2024, updated in March 2025) provides a four-stage approach to CEA. This staged cumulative effects assessment (CEA) process has been followed to identify a ‘long list’ and then to establish the ‘short-list’ of developments for the CEA in order to ensure that it is appropriately focussed and proportionate. Using the guidance provided, developments have been identified by reference to local knowledge, published information and consultation with local planning authorities in the area.
- 5.38 Prior to submission of the Application, this process and list of projects will be reviewed as part of the iterative nature of CEA, as part of the EIA. The EIA will consider the cumulative effects of the construction and operational phases of the Proposed Development.
- 5.39 This PEIR also considers the interrelationships between different aspects of the Proposed Development (also termed in-combination or synergistic effects). This is where receptors experience multiple potentially non-significant effects that might collectively become significant. These will be considered through a matrix-based approach.
- 5.40 The outputs from the CEA and interrelationship assessments identified to date are described in Chapter 20 of this PEIR.

ASSUMPTIONS AND LIMITATIONS

- 5.41 The following key assumptions have been made to date in the EIA work for the Proposed Development.
- all legislative requirements will be met; and
 - the Proposed Development will be constructed in accordance with industry standard techniques and currently enforced mandatory minimum standards and assumes suitably experienced contractors will be appointed to design, construct and commission the development.
- 5.42 Where further assumptions have been made for individual topic assessments, these are identified in the relevant topic-based chapters of this PEIR and will be identified in the ES that will support the DCO application.
- 5.43 Any limitations or uncertainties associated with the impact prediction or the sensitivity of receptors – for example, due to the absence of data or other factors – will give rise to uncertainty in the assessment. In accordance with the EIA Regulations 2017, any material limitations are identified in the PEIR chapters that follow and will subsequently be clearly set out in the ES.