

7. EIA Assessment Methodology

Introduction

- 7.1 This Chapter of the PEIR sets out the process and methodology that has been adopted in undertaking the draft EIA. Whilst the overall approach and methodology is described in this chapter, further detail on how the methodology is tailored to each technical aspect is presented in the relevant technical chapters (**Chapters 9-25**).
- 7.2 This chapter refers to the assessment methodology that has been adopted for this PEIR, and which is expected to be adopted for the ES that will be submitted as part of the application for Development Consent.
- 7.3 As has been set out at **Chapter 4**, the Applicant considers that in the absence of mitigation the Proposed Development has the potential to result in likely significant effects on the environment. An EIA is therefore being progressed on a voluntary basis.

The Environmental Statement

- 7.4 The purpose of an ES is to provide a source of information for stakeholders regarding potential environmental issues that may result from the Proposed Development during its construction, operation and decommissioning:
- Construction - all those works, activities and processes that will be required to build the proposed development, including demolition and preparatory works;
 - Operation and maintenance - the developed scheme completed and in operation, planned and unplanned maintenance activities undertaken; and,
 - Decommissioning - all works and processes required to undertake the closure, dismantling and removal of the development (with the understanding that the operational life of the development is long-term such that decommissioning requirements are not reliably known at this stage – further commentary on this is provided later in this chapter).
- 7.5 The potential likely significant environmental effects of the Proposed Development have been assessed for each relevant environmental topic, by comparing the existing and likely future environmental conditions in the absence of the project (the baseline environmental conditions) with the conditions that would prevail if the proposed development is constructed, operated and decommissioned.
- 7.6 This PEIR has been informed by desk studies and baseline surveys and the outcome of both the Scoping exercise and formal and informal consultation processes.
- 7.7 The PEIR includes a description of the development, information on the site selection process, a description of the site, design and size of the development, a description of the aspects of the environment with the potential to be affected by the development proposals,

together with details of any likely significant effects and mitigation measures that may be required to avoid or minimise any such potential significant effects.

- 7.8 In accordance with the EIA Regulations 2017 the final ES will provide information in respect of (but not exclusively) the information required by Regulation 14 and Schedule 4, as set out at **Table 7.1** below.

Table 7.1: Information to be Included in an Environmental Statement

Information for Inclusion within an Environmental Statement (Infrastructure EIA Regulations 2017)		Where the information is provided
Site and project description, and description of reasonable alternatives		
Description of the Site	Confirmation of site size, which the development relates to	Chapter 5 'Project Description'
	Description of distinguishing site features	Chapter 2 'The Site and Surroundings'
Description of Development	Description of the location of the development	Chapter 2 'The Site and Surroundings'; Chapter 5 'Project Description'; Chapters 9-25
	Description of the design of the development	Chapter 5 'Project Description'
	Description of the physical characteristics of the whole development	Chapter 5 'Project Description'; Chapters 9-25
	Description of requisite demolition works	Chapter 5 'Project Description'; Chapters 9-25
	Description of land-use requirements during construction phases	Chapter 5 'Project Description'; Chapters 9-25
	Description of land-use requirement during operational phases	Chapter 5 'Project Description'; Chapters 9-25
	An estimate, by type and quantity, of expected residues and emissions produced during construction and operation phases	Chapter 5 'Project Description'; Chapters 9-25
	Description of Reasonable Alternatives relevant to the Proposed Development and its	Description of reasonable alternatives; for example, in terms of development design, technology, location, size and scale

specific characteristics		Sites Assessment
	Comparison of the environmental effects	Chapter 3 'Reasonable Alternatives'; Chapters 9-25 ; Separate Alternative Sites Assessment
	Indication of the main reasons for option chosen, taking into account effects of the development on the environment	Chapter 3 'Reasonable Alternatives'; Chapters 9-25 ; Separate Alternative Sites Assessment
Description of the current state of the environment	Description of the baseline environment	Baseline sections of Chapters 9-25
	The likely evolution of the environment without implementation of the development	Baseline sections of Chapters 9-25
Description of the factors likely to significantly affect the development		
	Effects of construction and existence of development, including demolition works where relevant	Construction assessment sections of Chapters 9-25
	Effects of using natural resources	Construction and Operation assessment sections of Chapters 9-25
Description of the likely Significant Effects of the development on the environment (including any indirect, secondary, cumulative, transboundary, short-term, medium-term, long-term, permanent, temporary, positive and negative effects)	Effects of emissions of pollutants, noise, vibration, light, heat and radiation, the creation of nuisances, and the disposal and recovery of waste	All assessment sections of Chapters 9-25
	Effects of risks to human health, cultural heritage or the environment	Relevant assessment sections of Chapters 9-25 (and in particular Chapter 11 'Archaeology'; Chapter 12 'Built Heritage'; Chapter 24 'Human Health'; Chapter 25 'Major Accidents and disasters')
	Cumulation of effects with other existing and/ or approved projects taking into account existing	Cumulative assessment sections of Chapters 9-25 ;

	environmental problems relating to areas of particular environmental importance likely to be affected or the use of natural resources	Chapter 26 'Cumulative Effects Summary'
	Impact of the project on climate and the vulnerability of the project to climate change	Chapters 9-25; Chapter 23 'Climate Change'; separate Sustainability Assessment
	Technologies and the substances used	Chapter 5 'Project Description'; Chapters 9-25; separate Rail Report and environmental DCO documents
	Provide information for reaching a reasoned conclusion on the significant effect of the development on the environment	Methodology, all assessment sections, residual effects and mitigation and monitoring sections of Chapters 9-25; Chapter 27 'Conclusions'.
Description of the forecasting methods or evidence to assess Significant Effects, including difficulties and main uncertainties, and a description of mitigation measures and monitoring arrangements		
	Description of measures envisaged to avoid, prevent, reduce, or if possible offset any identified significant adverse effects on the environment	Mitigation sections of Chapters 9-25; separate DCO schedule of mitigation.
Description of the features or measures to offset any adverse effects	Description of any proposed monitoring arrangements	Monitoring sections of Chapters 9-25
	Description of the extent to which significant adverse effects on the environment are avoided, prevented, reduced or offset, covering both construction and operational phases	All assessment sections, residual effects and mitigation and monitoring sections of Chapters 9-25.
Forecasting methods or evidence used to assess the Significant Effects on	Description of the methods or evidence used to assess significant effects on the environment	All methodology, data and assessment sections of Chapters 9-25

the environment	Details of difficulties (for example technical deficiencies or lack of knowledge) encountered compiling the required information and the main uncertainties involved	Limitations section of Chapters 9-25
Description of the expected significant adverse effects on the environment deriving from the vulnerability of the development to risks of major accidents and/ or disasters which are relevant to the project concerned		Chapter 25 'Major Accidents and Disasters'; Where relevant, Chapters 9-25 .
A Non-Technical Summary of the information provided within the Environmental Statement		Non-Technical Summary
A reference list detailing the sources used for the descriptions and assessments included in the Environmental Statement		References sections at the end of all ES chapters
Statement from the developer outlining the relevant expertise or qualifications of competent experts utilised to prepare the Environmental Statement		Chapter 1 'Introduction'.

7.9 This PEIR comprises a series of chapters each relating to specific environmental topics. In each chapter the following are addressed.

- Purpose of the Assessment;
- Legislative and Policy Framework;
- Consultation;
- Study Area;
- Baseline Surveys and Data;
- Baseline Conditions;
- Method of Assessment;
- Embedded Mitigation;
- Assessment of Construction Phase Effects;
- Assessment of Operational Phase Effects;
- Assessment of Decommissioning Phase Effects;
- Cumulative Effects (inter and intra-related effects);
- Mitigation;

- Residual Effects;
- Monitoring;
- Limitations and Assumptions; and
- References.

7.10 The assessment considers the principal aspects of the development:

- Main SFRI Site (including A43 access and all rail infrastructure);
- J15a works; and
- Other minor highway works.

Methodology

7.11 The specific approach to environmental assessment is set out in the subsequent sections of this chapter.

Scope and Context

7.12 Each environmental topic has been considered by a specialist ('competent expert') in that area. Each technical chapter sets out the general introduction and explanation of the subject area to be addressed, and provides a summary of the main and sub-headings provided in the chapter, as well as a list of the accompanying appendices and figures. A list of chapters to which the chapter should be cross-referenced is also provided.

7.13 Each technical chapter defines the scope of the assessment, together with details of the study area (and the reasons for the extent of the study area). Details of desk study and survey work undertaken is provided. A description of the baseline environmental conditions as obtained at 2016-17 (or including such other timescale as may also be set out in the technical topic chapters) is described, along with a qualitative prediction of how the baseline may be affected in the period between completion of the EIA and the anticipated date of commencement of construction of the Proposed Development.

7.14 Each technical chapter identifies those elements of legislation, policy and good practice guidance of relevance to the specific area of assessment. Also provided is a summary of consultation undertaken with statutory consultees, and non-statutory consultees if applicable, where this is directly relevant to the topic being assessed.

Key Parameters for Assessment

7.15 The approach to the assessment of options has taken into account PINS guidance with regard to the use of the Rochdale Envelope approach (**Ref. 7.1**) and is based on identifying the reasonable 'worst case' (also known as the maximum adverse scenario) from which the realistic and likely options might be developed. This allows for a project to be assessed on the basis of project design parameters that are not specific at the time of writing, but that

are indicated with a range of potential values. Each impact assessment, therefore, identifies the option that would have the greatest impact (for example the largest footprint or the tallest dimensions, depending on the topic under consideration). If this assessment shows no significant effect is anticipated, then it can be assumed that other (lesser) options would also have no significant effect (provided their characteristics are similar).

- 7.16 The Parameters used in this assessment are defined principally by the parameters plan which defines the scale and disposition of development around the site.
- 7.17 Where further parameters are required, for example, maximum sound pressure levels for noise assessment, these are set out in the relevant technical chapters.

Embedded Mitigation

- 7.18 Appropriate mitigation measures have been explored to eliminate, minimise or manage identified potential significant effects on the environment. Best practice strategies for mitigation are widely practiced and accepted within EIA and are followed when considering the methods of dealing with the environmental impacts of the Proposed Development.
- 7.19 Where possible, measures to avoid or mitigate environmental effects are designed and included in the proposals to form part of the project as 'embedded mitigation measures'. Details of embedded mitigation measures are presented in each topic chapter, which identifies where such mitigation will be secured within any development consent granted.
- 7.20 The assessment of effects has therefore taken into account all measures that form part of the development and to which the Applicant has committed and these are detailed within each chapter, where relevant to the topic.
- 7.21 In addition to reducing any adverse effects, consideration has been given to providing opportunities for environmental enhancement.
- 7.22 For the purpose of this EIA, embedded mitigation in the Proposed Development is as follows (further information is provided at **Chapter 5**):
- Main Parameters Plan (Main SRFI Site);
 - Main Parameters Plan (J15a works);
 - Main Parameters Plan (Other Highways Works);
 - Green Infrastructure Plan (Main SRFI Site);
 - Green Infrastructure Plan (J15a works);
 - All information shown on the Parameters Plan (Main SRFI Site);
 - All information shown on the Green Infrastructure Plan (a parameters plan) (Main SRFI Site);

- Some measures outlined in the draft Construction Environmental Management Plan (CEMP); and,
- Any commitments required as a matter of law.

Assessment of Effects

7.23 The EIA Regulations 2017 require the identification of the likely adverse or beneficial significant environmental effects of the project. This includes consideration of the likely effects during the construction, operation and decommissioning phases of the project. This is based on consideration of the likely magnitude of the predicted impact and the sensitivity of the affected receptor. The process by which effects have been identified and their significance evaluated is set out below.

7.24 Further topic-specific details relating to assessment methodologies adopted are provided within each technical chapter. This is particularly relevant to some topics which must deviate from the stated methodology in order to adhere to relevant guidance and practice. In general this PEIR identifies, describes and analyses the potential impacts of the proposed development using a source-pathway-receptor model.

7.25 The impact assessment process considers the following:

- The magnitude of the impact;
- The sensitivity of the receptor to a given impact;
- The probability that the impact on the receptor will result in a given effect;
- The significance of the resulting likely environmental effect; and,
- The level of certainty in the assessment.

7.26 The assessment also considers, for example, whether impacts are:

- Direct or indirect;
- Temporary or permanent;
- Short, medium or long term; and,
- Adverse, neutral or beneficial.

7.27 Effects are assessed against the baseline conditions and the climate change influenced baseline conditions.

The Magnitude of the Impact

7.28 The magnitude of an impact provides a useful initial measure of the likelihood of an environmental effect arising. Magnitude is defined via four factors:

- Extent – the area over which an impact occurs;
- Duration – the time for which the impact occurs;
- Frequency – how often the impact occurs; and,
- Severity – the degree of change relative to the baseline level.

The Sensitivity of the Receptor

7.29 The sensitivity of the receptor is a function of its capacity to accommodate change and reflects its ability to recover if it is affected. The sensitivity of the receptor is therefore quantified via the following factors:

- Adaptability – the degree to which a receptor can avoid or adapt to an impact;
- Tolerance – the ability of a receptor to accommodate temporary or permanent change without a significant adverse impact;
- Recoverability – the temporal scale over and extent to which a receptor will recover following an impact; and,
- Value – a measure of the receptor’s importance, rarity and worth.

The Determination of Effect Significance

7.30 The significance level of an effect, be it beneficial or adverse, is determined as a combination of the above measures of magnitude of the impact and the sensitivity of the receptor. Assessments of the significance of environmental effects carry a degree of subjectivity, as they are based on experienced judgement of the impact-receptor interaction that occurs and the data available. Consideration is given to the following factors:

- The probability that an impact-receptor interaction will occur (capturing the probability that the impact will occur and also the probability that the receptor will be present) - a precautionary approach is taken when determining probability;
- The spatial extent of the impact-receptor interaction; and,
- The temporal duration of the impact-receptor interaction.

7.31 The assessment of the significance of an effect is therefore determined with reference to the overall magnitude of impact and sensitivity of resource/ receptor.

7.32 In general, the terms assigned to categorise the significance of effects, where they are predicted to occur, can be described as follows:

- Major: beneficial or adverse – where the development would cause a considerable improvement in or deterioration of the existing environment;

- Moderate: beneficial or adverse – where the development would cause a noticeable improvement or deterioration of the existing environment;
- Minor: beneficial or adverse – where the development would cause a barely perceptible improvement in or deterioration of the existing environment; and,
- Negligible: beneficial or adverse – where the development would cause no discernible improvement in or deterioration of the existing environment.

7.33 The exact definition of these terms is made clear for each environmental aspect within the respective technical chapters. In general, categories described as ‘Major’ or ‘Moderate’ would be considered significant in EIA terms.

7.34 Predictions of impact are based on the best available data using a combination of professional judgement, expert knowledge and modelling where appropriate. The precautionary principle has been applied to ensure that potential effects are not ascribed unduly low probability of occurrence or low levels of significance.

7.35 An example matrix for determining the significance of effect is provided as **Table 7.2** below.

Table 7.2: Example Matrix for Assessing Significance of Effect

Assessing Significance of Effects					
Magnitude of Effect	Sensitivity of Receptors				
	Very High	High	Moderate	Low	Negligible
High	Major	Major	Moderate	Moderate	Minor
Medium	Major	Moderate	Moderate	Minor	Negligible
Low	Moderate	Moderate	Minor	Negligible	Negligible
Negligible	Minor	Minor	Negligible	Negligible	Negligible

Acknowledging Levels of Certainty

7.36 The assessment describes and takes into account any uncertainty inherent in, for instance, the data used in the assessment, the identification of activities and impacts, the confidence in determining impact magnitude and receptor sensitivity, and in assigning significance levels to predicted resulting effects.

Further Mitigation and Future Monitoring

7.37 Where the assessment concludes that impacts remain which are deemed to be significant, further mitigation may be required.

- 7.38 In addition to mitigation, each technical chapter identifies whether any future monitoring of the effects of the proposal is required. Typically monitoring may be required to validate predictions, deal with uncertainties, and to identify unexpected outcomes or impacts.

Approach to Decommissioning

- 7.39 Decommissioning phase effects are the effects resulting from the activities associated with the removal of the Proposed Development if it is removed once it is no longer required. It is not known when there will no longer be a need for the Proposed Development and many elements of the development are unlikely to be decommissioned at all.
- 7.40 The design life of the warehousing buildings will be in the order of 60+ years (approximately), and the rail infrastructure and civil engineering works will be significantly longer than this. Once the warehouses reach their design life, it is entirely feasible that they will be re-provided in a modern form. Predicting the baseline so far into the future to enable a meaningful assessment of the sensitivity of the environment, and the significance of effects from the decommissioning of the Proposed Development, is extremely difficult.
- 7.41 When and if parts of, or the whole of, the development is decommissioned, the appropriate environmental assessments will be undertaken at that time, to identify any significant environmental effects and propose suitable mitigation methods.
- 7.42 Nevertheless, where possible, broad assessment of the likely potential decommissioning phase effects are provided now (albeit these are entirely qualitative). Effects are, generally, likely to be similar to those assessed during the construction phase, and this is explained and justified in terms of topic-specific considerations within each technical topic chapter.

Cumulative Effects

- 7.43 The EIA Regulations 2017 require consideration of cumulative effects:

“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...”

- 7.44 The Planning Inspectorate has produced a guidance note on the Rochdale Envelope (April 2012) (**Ref 7.1**) setting out the views of PINs with regard to how this approach should be used in the context of the PA2008.
- 7.45 The Rochdale Envelope approach is a well understood concept that involves ensuring that any EIA is based on assessing the realistic worst-case scenario where flexibility or a range of options is sought as part of the consent application. It is important that the Rochdale Envelope is not only applied in terms of individual effects, but also for any cumulative and inter-related effects. The guidance states the following:

“The ES should not be a series of separate unrelated topic reports. The interrelationship between aspects of the proposed development should be assessed and careful consideration should be given by the developer to explain how interrelationships have been assessed in order to address the environmental impacts of the proposal as a whole. It need not necessarily follow that the maximum adverse impact in terms of any one topic impact would automatically result in the maximum potential impact when a number of topic impacts are considered collectively. In addition, individual impacts may not be significant but could become significant when their interrelationship is assessed. It will be for the developer to demonstrate that the likely significant impacts of the project have been properly assessed”.

7.46 Cumulative impacts are further defined within the guidance note as those impacts that:

“...consider other proposed development within the context of the site and any other reasonably foreseeable proposals in the vicinity”.

7.47 The NN NPS (**Ref. 7.2**) states that in considering any proposed development the Examining Authority and the SoS should take into account: *“... its potential adverse impacts, including any longer-term and cumulative adverse impacts, as well as any measures to avoid, reduce or compensate for any adverse impacts”* (paragraph 4.3). Paragraphs 4.16 and 4.17 go on to advise that when considering significant cumulative effects, the ES should provide information on how the effects of the applicant’s proposal would combine and interact with the effects of other development (including projects for which consent has been granted, as well as those already in existence), and that the:

“...Examining Authority should consider how significant cumulative effects and the interrelationship between effects might as a whole affect the environment, even though they may be acceptable when considered on an individual basis with mitigation measures in place”.

Cumulative Assessment: Intra-Project Effects

7.48 The assessment of intra-related effects considers only those effects produced by the Proposed Development, and not those from other projects (which are considered via the cumulative assessment inter-project process described separately below).

7.49 The assessment of intra-relationships considers the likely significant effects of a proposed development on the same receptor. These occur (for example) when a number of separate impacts, such as noise and air quality, affect a single receptor such as fauna.

7.50 The assessment of potential intra-related effects, therefore, considers receptor-led effects through an assessment of the scope for all effects to interact, spatially and temporally, to create intra-related impacts on a receptor (for example all effects on a given receptor such as human amenity – noise and air quality, access, and traffic – these might be short term, temporary or transient effects or incorporate longer term effects).

Cumulative Assessment: Inter-Project Effects

7.51 The EIA Regulations (**Ref. 7.3**) at Schedule 4 (5)(e) refers to inter-relationships in the following manner:

“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;”

7.52 Inter-project cumulative effects arise as a result of the Proposed Development interacting with other developments/projects in the vicinity. An example of an inter-project cumulative effect may result from the proposed construction traffic for the project using the same access routes as other construction traffic for another un-related major project in the vicinity. The resulting effect may be an increase in vehicles on the local road network and an increase in dust from construction vehicles over and above that which would be created by the development in isolation.

7.53 The other projects considered within the cumulative assessments for each technical topic chapter are set out based on a tiered approach. The ‘Tier’ identifies the level of detail that is likely to be available, where Tier 1 is a higher level of certainty and Tier 3 is a lower level of certainty.

Table 7.3: Project Tiers

Tier	Activity
	Under construction
1	Permitted applications, not yet implemented
	Submitted applications, not yet determined
2	Projects on the Planning Inspectorate Programme of Projects where a Scoping report has been Submitted
	Projects on the Planning Inspectorate Programme of Projects where a Scoping report has not been Submitted
3	Identified in the Development Plan (and emerging Development Plans – with appropriate weight being given as they move closer to adoption) recognising that much information on any relevant proposals will be limited
	Identified in other plans and programmes (as appropriate) which set the framework for future development consents/approvals, where such development is reasonably likely to come forward

- 7.54 All relevant projects/ plans considered cumulatively alongside the Proposed Development reflect their stage within the planning and development process. This allows the cumulative impact assessment to present appropriate future construction and operation scenarios.
- 7.55 Developments that were built and operational at the time that survey data were collected are generally considered to be part of the existing baseline conditions.
- 7.56 With respect to the spatial extent/resolution of the cumulative effects assessment, due to differing scales of potential effect according to EIA parameter, it is not possible to define a “cut-off” distance outside which cumulative effects may not arise in order to define a total study area extent. Therefore, the cumulative assessment is undertaken at an appropriate spatial scale for each given receptor or environmental topic area. An initial area of search has been used for the purposes of deriving the initial ‘long list’ of projects.
- 7.57 The process undertaken for determining projects for inclusion is set out below (based on PINS Advice Note 17) (Ref. 7.4).

Table 7.4: Assessment Stages for Cumulative Effects

Assessment Stage	Activity
Stage 1: Establish the NSIP’s Zone of Influence (ZoI) and identify initial ‘long list’	<ul style="list-style-type: none"> • Desk study to establish Zone of Influence (ZoI) of scheme for environmental topics proposed to be scoped into the EIA. The ZoI analysis for each topic area to be documented by reference to the Study Area. • Desk study of planning applications, development plan documents, relevant development frameworks and any other available sources used to identify ‘other development’ within the ZoI. • Level of certainty or tier assigned. • Projects identified in the PINS Scoping Opinion reviewed.
Stage 2: Identify shortlist	<ul style="list-style-type: none"> • Shortlist identified and further refined through inclusion/exclusion threshold criteria including consideration of potential for significant cumulative effects to arise by virtue of overlaps in temporal scope; the scale and nature of the other development or the receiving environment; and any other relevant factors. • Further consultation undertaken with statutory consultees and list refined.

Stage 3: Information gathering • Available shortlisted information gathered to inform the cumulative assessment. Information documented.

Stage 4: Assessment • Each development assessed to determine whether cumulative effects may arise. Measures identified in relation to adverse cumulative effects, with mitigation and monitoring identified to reduce significant effects.

Stage 1: Assessment

- 7.58 As set out above, Stage 1 of the process is to establish the NSIP's Zone of Influence (Zol) in order to define reasonable spatial parameters within which to identify other development that needs to be considered as part of the cumulative effects assessment. Other development includes planning applications, development plan documents, relevant development frameworks and other available relevant sources.
- 7.59 Each technical topic area was considered, and an approximate maximum Zol determined for each discipline. The broadest of these scales was 5km from the Main SRFI Site, and a 2km radius from each of the Other Minor Highways Works associated with the Proposed Development. For robustness these maximum Zol were used to search for all 'other development' and the results considered by consultants working on all topic areas before the refined list of 'other development' was determined for each discipline.
- 7.60 A map defining Zol used for each topic and a table setting out the reasoning for each radius is provided at **Appendix 7.1**.
- 7.61 Notwithstanding the methodology set out above, a search was also undertaken to identify any other development and projects that may need to be considered outside of the defined radius of search. Development of a scale and/or nature that may mean its effects may impact on the Proposed Development (or vice versa) despite the Project being more than 5km from the Main SRFI Site were identified and included on the initial long list of projects.

'Long-List' of Other Plans and Projects

- 7.62 A combination of an initial long-list of projects combined with information from the Scoping Opinion and statutory consultees resulted in a refined 'long-list' of other plans and projects to be further reviewed and potentially included as part of the cumulative impacts assessment. This list is provided as **Appendix 7.1**, and associated **Figure 7.1** shows the location of each project.
- 7.63 The other development considered for inclusion in this list was identified in line with the types of development for inclusion as defined in Table 3 of the PINS Advice Note 17 (**Ref. 7.4**). Projects that are expected to be completed before the construction of the Proposed Development where the effects of those projects are fully determined have been considered as part of the baseline. January 2018 was used as a cut off point for this purpose and, where information was available, developments where construction had not yet started at that date were taken forward for further assessment. Reasonable assumptions were applied in making

this judgement and a worst-case scenario position was adopted. It may well be the case that many of the developments included will be completed ahead of the start of construction of the Proposed Development, however, as stated, if there was no evidence available to suggest that the development had commenced at January 2018, the other development was included within the Cumulative Effects Assessment.

Stage 2: Identifying Shortlist of 'Other Development' for CEA

- 7.64 By definition the cumulative effect of a number of non-significant effects could in itself be significant. Exclusion criteria were not therefore applied without careful consideration. The methodology is being consulted on with the relevant Local Planning Authorities in order that a definitive list of 'other development' can be considered.
- 7.65 In order to ensure that the CEA is proportionate, threshold criteria were used to assist in deciding whether to include or exclude other development (and in all cases professional judgement and technical expertise was utilised and a precautionary principle adopted). The parameters for the search for other development were established as follows;
- Residential development of 1 dwelling or more, therefore excluding applications for the alteration, extension or subdivision of existing dwellings;
 - Increase in non-residential floor space of 1,000 square meters or more, or development of non-residential space on greenfield sites;
 - Development with Extant Planning Permission; and
 - Development that has not started as at January 2018.
- 7.66 The above list of other development was identified using desk based research methods. Specifically this involved a search of the online planning history records for both South Northamptonshire Council and Northampton Borough Council.
- 7.67 South Northamptonshire Council's web-based interactive planning map search facility was used for the ZoI within that Local Authority Area. This map search option shows applications that have been made from 2008 onwards.
- 7.68 Northampton Borough Council does not have a publically available web-based interactive planning map search facility. It was not therefore possible to identify other development within the ZoI that falls within this local authority area online. Contact has been made with Northampton Borough Council to agree a list of other development from within their administrative area. Contact has also been made with South Northamptonshire Council to confirm their agreement on the sites identified within that authority area from their online mapping tool.
- 7.69 The South Northamptonshire planning search also includes records of neighbouring authority consultations. Some developments within the administrative area of Northampton Borough Council but adjoining South Northamptonshire were therefore identified via this search.

- 7.70 The West Northamptonshire Joint Core Strategy was consulted to identify where local planning policy had identified specific development sites. This plan was used to identify several major development areas that needed to be considered as part of the CEA process and a search was undertaken in the relevant Local Authority area to establish whether any Core Strategy Allocations had planning permission and therefore whether they met the threshold criteria for inclusion.
- 7.71 The above approach undertaken to identify a short list of ‘other development’ has sought to be methodological and robust. As mentioned, contact has been made with both South Northamptonshire and Northampton Borough Councils seeking agreement on the short list. The worst case scenario has been applied when considering the appropriate ZoI for search and consequently this has resulted in a substantial geographical area of search. The volume of projects within such a wide area is large, and the publically available methods for identifying projects have limitations, for example, the lack of interactive planning map for Northampton Borough has meant that the advanced search function has been relied on to search for projects by date, there is a possibility therefore that some projects of relevance to the cumulative assessment may have unwittingly been overlooked. The upcoming consultation on this project provides a further opportunity for the Councils, and other stakeholders, to highlight additional projects that should be included in the short list for further assessment. A further review of projects on the short list and search for other relevant projects within the ZoI will be undertaken before the finalised Environment Statement is submitted to the Planning Inspectorate.
- 7.72 Notwithstanding the methodology set out above, professional judgement was used to avoid excluding ‘other development’ that may have significant effects but that does not meet the spatial, or scale based parameters.

Stage 3 & 4 Assessments

- 7.73 As recommended in Advice Note 17, the CEA shortlisting process has been documented using the recommended template Matrix (**Appendix 7.1**). As identified above, the relevant Local Planning Authorities have been consulted. The shortlisted sites that are being taken forward for further assessment are listed within the respective inter-relationship sections of the cumulative assessments undertaken at **Chapters 9-25**. The final ‘short list’ will be reported in the EIA that accompanies the application for Development Consent.
- 7.74 The assessments provided at **Chapters 9-25** have taken account of whether significant effects are likely, and have included consideration of (where known):
- proposed design and location information;
 - proposed programme of construction, operation and decommissioning; and
 - environmental assessments that set out baseline data and effects arising from the ‘other development’.

- 7.75 Each relevant project has been assessed at **Chapters 9-25** to determine whether cumulative effects may arise. Measures are identified in relation to adverse cumulative effects, with mitigation and monitoring identified to reduce significant effects.

Transboundary Assessment

- 7.76 The West Coast Main Line forms a core part of the Trans-European Network (TEN-T). There is therefore a physical connection(s) in terms of transport links between the Proposed Development and the European Economic Area (EEC) States. However, this does not mean that significant environmental effects will arise in those States. The connections to the EEC States are already in existence, and any significant adverse effects are expected to be local to the site.
- 7.77 Some movements passing through Rail Central would comprise European intermodal services, conventional wagon services and express freight services. This would represent the smallest component of movements associated with the Proposed Development.
- 7.78 Based on the current patterns of activity at existing SRFI, it is anticipated that the majority of rail traffic would comprise deep-sea containers (from a variety of locations), expected to be moved through the existing network of major UK port facilities.
- 7.79 The Proposed Development would have onward access at W10 gauge to the principal deepsea ports of Felixstowe, Southampton and London Gateway, mainland Europe and China via the Channel Tunnel, as well as other ports and SRFI in the regions.
- 7.80 The Rail Central scheme is being developed with capacity to cater for a significant level of traffic at maturity, noting that such levels of traffic would be expected to evolve over a number of years.
- 7.81 Transboundary Screening was undertaken by the Secretary of State on 03 February 2016 (**Ref. 7.12**). The Secretary of State is of the view that the Proposed Development is not likely to have a significant effect on the environment in another EEA State. In reaching this view the Secretary of State has applied the precautionary approach (as explained in the Planning Inspectorate's Advice Note 12: Transboundary Impacts Consultation) (**Ref. 7.6**), as well as the information supplied by the Applicant.
- 7.82 In consideration of the project information and assessments contained within this PEIR, it is concluded that significant effects on other EEC States will not arise.

References

- 7.1 PINS, 2012, *Advice Note 9: Rochdale Envelope*
- 7.2 Statutory Instrument 2017 No. 572 *'The Infrastructure Planning (Environmental Impact Assessment) Regulations 2017'*
- 7.3 Department for Transport, 2014, *'National Policy Statement for National Networks'*
- 7.4 PINS (2012), *'Advice Note 17: Cumulative effects assessment relevant to nationally significant infrastructure projects'*
- 7.5 PINS *'Transboundary screening undertaken by the Secretary of State'* (February 2016)
- 7.6 PINS (2012), *'Transboundary Impacts, Advice Note twelve: Regulation 24 of the EIA Regulations'*