Tritax Symmetry (Hinckley) Limited

HINCKLEY NATIONAL RAIL FREIGHT INTERCHANGE

The Hinckley National Rail Freight Interchange Development Consent Order

Project reference TR050007

Environmental Statement Volume 1: Main Statement

Chapter 6: EIA scope and general methodology

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Planning Act 2008

The Infrastructure Planning (Applications: Prescribed Forms and Procedure) Regulations 2009 Regulation 5(2)(a)

The Infrastructure Planning (Environmental Impact Assessment) Regulations 2017 Regulation 14

This document forms a part of the Environmental Statement for the Hinckley National Rail Freight Interchange project.

Tritax Symmetry (Hinckley) Limited (TSH) has applied to the Secretary of State for Transport for a Development Consent Order (DCO) for the Hinckley National Rail Freight Interchange (HNRFI).

To help inform the determination of the DCO application, TSH has undertaken an environmental impact assessment (EIA) of its proposals. EIA is a process that aims to improve the environmental design of a development proposal, and to provide the decision maker with sufficient information about the environmental effects of the project to make a decision.

The findings of an EIA are described in a written report known as an Environmental Statement (ES). An ES provides environmental information about the scheme, including a description of the development, its predicted environmental effects and the measures proposed to ameliorate any adverse effects.

Further details about the proposed Hinckley National Rail Freight Interchange are available on the project website:

http://www.hinckleynrfi.co.uk/

The DCO application and documents relating to the examination of the proposed development can be viewed on the Planning Inspectorate's National Infrastructure Planning website:

https://infrastructure.planninginspectorate.gov.uk/projects/east-midlands/hinckley-national-rail-freight-interchange/

Chapter 6 ◆ EIA scope and general methodology

INTRODUCTION

- 6.1 Chapter 1: *Introduction* (document reference 6.1.1) of this ES explains the purpose of EIA and the role of the ES that accompanies TSH's DCO application for the HNRFI. Chapter 1 also explains how the assessment of the environmental effects of the Proposed Development has followed Rochdale Envelope principles.
- 6.2 This chapter explains how the scope of the EIA has been determined and then sets out the general methodology that has been applied to the technical assessments that have been undertaken as part of the EIA. Further topic-specific explanations of the assessment methodology are provided in later chapters of this ES.

THE SCOPE OF THE EIA

Geographic scope

- 6.3 The geographical coverage of an EIA is defined by the area of land that may be affected by the 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 DCO Order Limits shown in Figure 1.1 of this ES (document reference 6.3.1.1) 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 have also been assessed as part of the EIA. Wider study areas relevant to individual EIA topics are defined in the chapters that follow.
- 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 ES chapters and in Chapter 20: Cumulative, in-combination and transboundary effects (document reference 6.1.20).

Temporal scope

- 6.5 The envisaged construction phasing for the HNRFI is outlined in Chapter 3: *Project description* of this ES (document reference 6.1.3). Under the proposed programme, it is expected that construction will take 10 years to deliver, this assumes the period for obtaining the DCO, obtaining all necessary consents post-DCO and the construction of the Proposed Development.
- 6.6 The assessments presented in this ES are based, largely, on the comparison of anticipated environmental effects with current or recent baseline environmental conditions. In

addition, the assessments have considered the future baseline and how this might impact on their conclusions. For many topics the current baseline represents the worst case scenario, however a number of topics factor in future baseline changes into assessments in defined future year impact scenarios, for example transport and traffic, air quality, and landscape and visual effects. These approaches are explained in further detail in the relevant chapters.

Technical scope

- 6.7 In order to ascertain the technical scope of the EIA, a scoping process has twice been undertaken. Chapter 1: *Introduction* of this ES (document reference 6.1.1) explains that TSH applied originally to the Secretary of State for an opinion on the scope of the EIA in March 2018, with the Secretary of State's EIA Scoping Opinion being published the following month.
- As Chapter 1 of this ES explains, subsequent assessment of the effects of the Proposed Development on road traffic indicated that the scope of the EIA needed to be extended. In particular, transport modelling suggested that the proposed upgrade of Junction 2 M69 would change patterns of existing non-HNRFI-related road traffic in the locality, creating new routes on the local road network with consequential environmental effects. In response TSH requested an updated EIA scoping opinion from the Secretary of State, submitting an updated EIA scoping report on 12 November 2020 (document reference 6.2.6.1). A new EIA scoping opinion was adopted by the Secretary of State on 22 December 2020 ('the 2020 Scoping Opinion') (document reference 6.2.6.2).
- 6.9 The 2020 Scoping Opinion took into account responses from the following consultees.
 - Aston Flamville Parish Council
 - Blaby District Council
 - Burbage Parish Council
 - Cadent Gas Limited
 - Earl Shilton Town Council
 - Elmesthorpe Parish Council
 - Environment Agency
 - Forestry Commission
 - Harborough District Council
 - Health and Safety Executive
 - Highways England
 - Hinckley and Bosworth Borough Council
 - Historic England
 - Leicestershire County Council
 - Natural England
 - Nottinghamshire County Council
 - Nuneaton and Bedworth Borough Council
 - Public Health England
 - Royal Mail Group Limited

- Sapcote Parish Council
- Sharnford Parish Council
- Solihull Metropolitan Borough Council
- SP Energy Networks
- Stoney Stanton Parish Council
- Warwickshire County Council
- Wigston Parva Parish Council
- 6.10 Prior to the issuing of the 2018 Scoping Opinion request, the Applicant presented to the Lead Local Authorities as part of a working group throughout 2018. As part of this a draft Statement of Community Consultation was drafted, it was not formally published but was placed on the project website in October 2018 alongside the Notification to Local Community in regional newspapers. Informal consultation commenced in October 2018 lasting to December 2018, this included eight public exhibitions and the issuing of mail, site notices, website information, social media posts and ongoing meetings.
- 6.11 A second Notification to the Local Community was released in July 2019 with an informal highways consultation commencing at the same time, this included six public exhibitions. The 2019 informal consultation was advertised via direct mail, meetings, press releases, site notices, the project website and social media.
- 6.12 The formal Statement of Community Consultation was drafted alongside the Lead Local Authorities prior to the beginning of the statutory consultation in 2022.
- 6.13 The 2008 Act requires public consultation to be undertaken by an applicant before a DCO application is made. Between January and April 2022, TSH undertook a statutory consultation in accordance with sections 42, 47 and 48 of the 2008 Act. A Preliminary Environmental Information Report (PEIR) was prepared in support of this process.
- 6.14 The 2020 Scoping Opinion (document reference 6.2.6.2) and, where relevant and appropriate, comments received from the statutory consultation and informal engagement with statutory consultees have been taken into account in compiling the ES. The response to consultation feedback is described in the HNRFI Consultation Report (document reference 5.1), submitted with the DCO application. In addition, each topic based chapter of the ES provides a response to the 2020 Scoping Opinion (document reference 6.2.6.2) and to consultation responses.
- 6.15 The ES assesses all items identified in the project description in chapter 3 (document reference 6.1.3).
- 6.16 The topics that were formally agreed through the scoping process, i.e. those which the Secretary of State deemed to have the potential to give rise to significant environmental effects, are listed below.
 - Land use and socio-economic effects
 - Transport and traffic
 - Air quality

- Noise and vibration
- Landscape and visual effects
- Ecology and biodiversity
- Cultural heritage
- Surface water and flood risk
- Hydrogeology
- Geology, soils and contaminated land
- Materials and waste
- Energy and climate change
- 6.17 The 2017 EIA Regulations require consideration of the vulnerability of the Proposed Development to major accidents and disasters. This topic was not specifically identified through the scoping exercise to be considered, however the Applicant has provided an assessment of the topic to ensure that likely risks are appropriately considered.
- 6.18 The Proposed Development is not directly associated with an understanding of linked health implications and is not considered to represent a serious risk to public health. The ES chapters on air quality, noise and vibration, flood risk, hydrogeology and contamination and cumulative impacts assess the potential impact of the construction and operational phases of the HNRFI on human health. These topic assessment chapters, detail the outcomes of these assessments and identify any mitigation required to address the effects in accordance with appropriate industry standards.
- 6.19 Given the nature of the Proposed Development not being directly linked with risks to human health and the consideration of the issue across the relevant technical chapters, as detailed above, a separate technical chapter on human health has not been provided. The 2020 Scoping Opinion, confirmed that this proposed approach is appropriate. A Health and Equality Briefing Note has been prepared (ES Appendix 7.1, document reference 6.2.7.1) and is submitted as part of the ES. This summarises how and where health and equality have been inherently considered, assessed and addressed.
- 6.20 The 2020 Scoping Opinion did identify that there would be a need to assess possible health impacts of Electric and Magnetic Fields (EMF), should significant effects be likely to occur. Future provision for electrification of the line to be undertaken by Network Rail is at 25kv, at this level no EMF related health issues would occur. In addition, the distribution of energy between the energy centre and the HNRFI site will be via 11kV cables and the connection between the energy centre and substation will be no greater than 33kV. As the voltage is less than 132kv (the level at which effects would be experienced), EMF is scoped out from further assessment.

HABITAT REGULATIONS ASSESSMENT SCREENING

6.21 It is necessary to consider the potential effects of the Proposed Development in combination with other plans and projects on the national site network (internationally designated sites) (being European sites as defined in the European Commission's Habitats

- Directive 92/43/EEC) as required by the Conservation of Habitats and Species Regulations 2017 (the Habitat Regulations).
- 6.22 Two European site exists within 30 km of the Main HNRFI Site, namely Ensor's Pond, a Special Area of Conservation (SAC) located 11km to the south-west and the River Mease SAC located 18.1 km north-west.
- 6.23 Given the distance of the Proposed Development to the nearest European sites and the nature of the Proposed Development, it is not anticipated that the HNRFI in isolation or in combination with other plans and projects would have a likely significant effect without mitigation. The Habitat Regulations Assessment screening process, required to scope out any need to undertake an Appropriate Assessment, is set out within chapter 12: *Ecology and biodiversity* (document reference 6.1.12) and within the HRA Screening Report (Appendix 12.3, document reference 6.2.12.3).

ASSESSMENT METHODOLOGY

Baseline

- 6.24 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 area. It is against the defined baseline that the significance of environmental effects are assessed.
- 6.25 The topic specific assessments contained within this ES assess the likely significant effects of the Proposed Development at both the construction and operational phases. The EIA has not assessed decommissioning because HNRFI is intended to be a permanent development and consideration for decommissioning at this stage would be too hypothetical to be meaningful.

EIA methodology

- 6.26 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';
 - consultation with statutory and non-statutory consultees throughout the preapplication process;
 - consideration of relevant local, regional and national planning policies, guidance 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 judgement.
- 6.27 The assessments have considered the likelihood of significant environmental 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.
- 6.28 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, it is considered that there is a level of transparency to the assessment and it enables the reader to interpret the outputs of the technical assessments more readily.
- 6.29 Environmental effects have been considered on the basis of their magnitude, duration and reversibility.

Study areas

6.30 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 all environmental topics considered. Instead, appropriate study areas have been defined and justified in the respective topic-based chapters of this ES, where relevant, based on recognised topic-specific guidance.

Receptor Sensitivity

6.31 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 the discipline or the methodology being used. However, in this, 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 the table below. Following chapters of this ES consider the attributes of specific receptors in more detail.

Table 6.1: The measurement of environmental effects - receptor sensitivity

Sensitivity	Example			
Very High	Internationally designated site (e.g. Ramsar / SAC /			
	World Heritage Site).			
High	Nationally designated site (e.g. SSSI) / designated			
	Landscape (e.g. National Park) / designated			
	heritage asset / 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

- 6.32 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 any additional mitigation has been applied.
- 6.33 The table below sets out how magnitude is defined in relation to the HNRFI.

Table 6.2: The measurement of environmental effects – magnitude of impact

Magnitude		Example			
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.			
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 of, key characteristics, features, or			
		elements or 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, feature			
		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.			

Magnitude	Example	
No change	No change would be perceptible either positive or negat	ive.

Determining significance and the nature of effects

- 6.34 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 the table overleaf.
- 6.35 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.
- 6.36 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 6.3: 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

- 6.37 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 on 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'.
- 6.38 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 HNRFI EIA is identified in the relevant topic-based chapters of this ES. 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 ES (document reference 6.1.4).

- 6.39 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 Register of Environmental Actions and Commitments (REAC) in chapter 21: *Conclusion* of this ES (document reference 6.1.21). These measures will be secured pursuant to the DCO (including its requirements) and possibly additional legal mechanisms or agreements.
- 6.40 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 conclusions in chapter 21 of this ES.

IN-COMBINATION AND CUMULATIVE EFFECTS

- 6.41 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'.
- 6.42 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

6.43 The Planning Inspectorate's Advice Note 9: *Using the Rochdale Envelope* (version 3, July 2018) 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'.

6.44 The Planning Inspectorate's Advice Note 17: *Cumulative Effects Assessment* (version 2, August 2019) provides a four-stage approach to Cumulative Effects Assessment (CEA). This staged 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.
- 6.45 In its statutory consultation between January and April 2022, the Applicant invited feedback on a proposed list of cumulative schemes to be taken into account in the EIA. The final list employed in this ES has taken feedback into account and is set out in chapter 20: Cumulative and in-combination effects (document reference 6.1.20) with justifications for scheme selection. This ES considers the cumulative effects of the construction and operational phases of the Proposed Development against this CEA shortlist.
- 6.46 This ES also considers the inter-relationships 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 have been considered through a matrix-based approach.
- 6.47 The outputs from the CEA and inter-relationship assessments identified to date are described in Chapter 20: *Cumulative and in-combination effects* (document reference 6.1.20) of this ES.

TRANSBOUNDARY EFFECTS

- 6.48 Certain types of major development might exert environmental effects that extend beyond the boundary of the nation-state in which the development would be located. Planning Inspectorate Advice Note 12: *Transboundary impacts and process* (version 6, December 2020) offers guidance on the procedures for transboundary consultation associated with a DCO application.
- 6.48 PINS Advice Note 12 (paragraph 4.1.2) explains the role of developers and offers the following advice:
 - '... the Applicant is requested to provide information to the Inspectorate to enable a view to be reached as to whether the development is likely to have significant transboundary effects on EEA (European Economic Area) States. Information about the potential for transboundary effects should be provided by the Applicant as part of:
 - The suite of documents accompanying the application for development consent ...'
- 6.49 The Proposed Development boundary and the zones of influence identified by individual topics (as set out in chapter 20: *Cumulative and in-combination effects* (document reference 6.1.20)) does not extend to an area under the jurisdiction of another EEA state. No impacts have been identified that would be likely to have significant effects on the environment of another EEA state and therefore transboundary effects have been screened out of the EIA for further assessment. This provides confirmation of the PINS view documented in the 2020 Scoping Opinion (document reference 6.2.6.2) which stated 'having considered the nature and location of the Proposed Development, the Inspectorate

is not aware that there are potential pathways of effect to other EEA states'.

ASSUMPTIONS AND LIMITATIONS

- 6.50 The following key assumptions have been made in preparing the ES:
 - All legislative requirements will be met.
 - 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.
- 6.51 Where further assumptions have been made for individual topic assessments these are identified in the relevant topic based chapters.
- 6.52 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, any material limitations are identified in the chapters that follow.