



Rail Central

Draft Population and Human Health Scoping Statement



Quality Management

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1 Introduction

Background

- 1.1 The proposed Rail Central Strategic Rail Freight Interchange (SRFI) constitutes up to 740,000 m² of rail-served warehousing space and facilities to operate and provide fast, efficient processing of containers and other intermodal units between trains, road vehicles and intermediate storage areas.
- 1.2 This document is informed by recent project information, the ES Scoping Report [1] and the ES Scoping Opinion [2], and constitutes a draft population and human health scoping statement investigating construction and operational activities with the potential to influence health. The output is intended to inform the health assessment approach and scope of works for the SRFI.
- 1.3 The content of this document is intended as a basis to inform a discussion with the Director of Public Health (DPH) in order to refine the scope, focus and ensure all expectations are met with regards to assessing the potential health impact from the Proposed Development.

Population and Human Health

- 1.4 Paragraph 4(2)(a) and Schedule 4 of the recent 2017 EIA Regulations require that the Environmental Impact Assessment (EIA) process assesses the effects (where likely to be significant) on population and human health, among other factors. While health is inherently assessed and addressed through planning within EIA, Health Impact Assessment (HIA) is considered to be an effective means of further communicating and setting any potential risk into a context amenable to both decision makers and the public alike.
- 1.5 In this instance, the Secretary of State Scoping Opinion offered that it is up to the applicant to decide on if a separate HIA is required, or would be of value in investigating and addressing community health concerns:

“The Secretary of State considers that it is a matter for the applicant to decide whether or not to submit a stand-alone Health Impact Assessment (HIA). However, the applicant should have regard to the responses received from the relevant consultees regarding health, and in particular to the comments from the Health and Safety Executive and Blisworth Parish Council in relation to health issues” – (p44, Scoping Opinion).
- 1.6 RPS was subsequently commissioned to provide an additional HIA scoping exercise, to investigate any construction or operational activities with the potential to influence health (both adversely and/or beneficially), to review the scope and focus of the EIA, and where appropriate to define a proportionate assessment to assess and address any residual health pathways (both adverse and beneficial).

- 1.7 The remainder of this section provides an introduction to the Proposed Development, drawing from the project description. Section 2 provides a health scoping exercise addressing air quality, noise and vibration, transport and socio economic health pathways before presenting final conclusions and recommendations for action in Section 3.

Project Description

- 1.8 The Proposed Development constitutes up to 740,000 m² of rail-served warehousing space and facilities to operate and provide fast, efficient processing of containers and other intermodal units, between trains, road vehicles and intermediate storage areas.
- 1.9 The Proposed Development can be separated into the following elements:
- The Main SRFI Site;
 - Works to J15a of the M1; and
 - Other minor highways works.

Site Location

- 1.10 Figure 1.1 shows the Proposed Development site plan. As detailed in the ES Scoping Report (Section 3: Site Description), the Proposed Development would be located in Northamptonshire, approximately 20km northwest of Milton Keynes and approximately 6km south of Northampton. The application site is approximately 250 ha; is bound to the east by the Northampton Loop Line and to the south by the West Coast Main Line, beyond which lie agricultural fields and the village of Blisworth. To the north, the site is bound by agricultural fields and the village of Milton Malsor. The A43 bounds the site to the west. Northampton Road/Towcester Road runs through the site from north to south and the M1 motorway is located 1km north of the site.

Figure 1.1: Site Plan



Project Timescale

1.11 As outlined below, it is currently anticipated that the development will take around 10 years to deliver, with some overlap between construction and operation. The operational life is expected to be approximately 60-years.

Table 1.1: Project Timeframe

Project Timeframe			
Construction	First Operation	Operation 'Short-Term'	Operation 'Long-term'
2019-2029	2021	2029-2039	2039-2089
Source: ES Chapter 5: The Proposed Development			

Construction

- 1.12 The construction phase will include the use of mobile plant such as earthmoving equipment, mobile cranes and heavy goods vehicles (HGVs), as well as temporary stationary plant such as fixed cranes, compressors and generators.
- 1.13 The principal elements of the construction works includes:
- construction access from the A43;
 - main spine road / estate road to allow works on the underpass;
 - formation of the underpass;
 - creation of a bus terminus;
 - creation of rail connections;
 - construction of a rail served and rail connected warehouse space;
 - soil movement for landscaping / bunding; and
 - creation of landscape zones.
- 1.14 Construction hours of work (excluding archaeological investigations, landscaping and any non-intrusive internal fit-outs) will be largely confined to 7.00am – 7.30pm weekdays and 8.00am – 1.00pm on Saturdays (excluding public holidays) except in emergencies or where prior agreement has been reached with the Local Planning Authority for 24-hour working (e.g. continuous concrete pouring). Sunday and bank holiday working is permitted where works do not cause noise that is audible outside the boundary of the site.
- 1.15 A range of full-time, part-time and shift pattern construction work will be required during the construction phase. Over the estimated 10-year construction period, construction of the Main SRFI Site could be expected to directly support approximately 268 full-time equivalent (FTE) gross temporary construction jobs per annum, albeit with some fluctuation around intense periods of activity.
- 1.16 Construction of the Main SRFI Site will also generate indirect and induced effects, beyond the direct creation of construction jobs. Investment will generate considerable expenditure on construction materials, goods and other services that will be purchased from a wide range of suppliers locally, regionally and nationally.
- 1.17 Construction activities are subject to various high level documents which comprise a comprehensive list of management protocols to minimise impacts beyond the site perimeter and to further minimise community disruption. Documents include the Construction Environmental Management Plan (CEMP); Site Waste Management Plan (SWMP); Materials Management Plan (MMP); Pollution Prevention Method Statement (PPMP); and Traffic Management Plan (TMP). Each of these focus on managing any potential environmental precursor to a health impact, and are therefore inherently protective of health and wellbeing.

Operation and Maintenance

- 1.18 The range of operational activities associated with SRFI typically include:
- road and rail haulage services;
 - road / rail interchange facilities (transfer of traffic between modes, intermediate storage of wagons / containers);
 - receiving of loads into warehousing;
 - breaking down large deliveries for redistribution;
 - storage of goods for later processing / distribution;
 - processing of goods (e.g. relabelling, repackaging, adding UK instruction manuals or plugs);
 - resorting goods into consolidated outbound deliveries;
 - despatching of loads from warehousing; and
 - management and planning of distribution activities up and down the supply chain.
- 1.19 It is anticipated the operation of the Proposed Development will be 24-hours a day, 7-days a week.
- 1.20 Based on the application of employment densities and an allowance for the train maintenance depot, the additional floorspace proposed at the SRFI Site can be expected to accommodate 8,111 gross FTE jobs.

Decommissioning

- 1.21 Given the long term operational life of the Proposed Development, decommissioning requirements are not reliably known at this stage, and as a result will be assessed in the future to the regulatory requirements and standards, bespoke to the community and environment at that time.

2 Health Scoping Exercise

Introduction

- 2.1 Following a review of the proposed application and engagement with air quality, noise, transport and socio economic teams; construction and operational activities have been broken down into individual health pathways to explore any potential change in hazard exposure that might influence local community health, and to ascertain as to how and where they may already be addressed and assessed within the EIA.

Health Scoping

- 2.2 Table 2.1 presents the health pathways associated with the construction and operational phases of the Proposed Development, and provides an indication as to the type of influence (be it adverse, beneficial or neutral), timescale (temporary or permanent), and geographic scope (local, regional or national).

Table 2.1: Health Pathways

Feature	Health Pathway	Potential Impact	Timescale	Geographic Scope
Construction Phase (including any demolition)	Environmental			
	Changes to local air quality (potential dust nuisance)	Adverse	Temporary	Local
	Changes in noise exposure	Adverse	Temporary	Local
	Changes in local transport nature and flow rates	Adverse	Temporary	Local/Regional
	Socio Economic			
	Direct, indirect and induced income employment opportunities	Beneficial	Temporary	Local/Regional
	Displacement following demolition of existing farm and residence	Adverse	Permanent	Local
Operational Phase	Environmental			
	Changes to local air quality	Adverse	Permanent	Local
	Changes in noise exposure	Adverse	Permanent	Local
	Changes in local transport nature and flow rates	Adverse	Permanent	Local
	Socio Economic			
	Direct, indirect and induced income employment opportunities	Beneficial	Permanent	Local/Regional

- 2.3 Each of the health pathways are discussed below, and set the justification for the scoping statement.

Air Quality and Health

- 2.4 The major influences on air quality during the construction phase are likely to be from fugitive dust and exhaust emissions. Once operational, changes to air quality will predominantly be as a result of changes in local traffic flow characteristics.
- 2.5 Impact from dust will be assessed qualitatively while changes in ambient concentrations of NO₂, PM₁₀, and PM_{2.5} exhaust emissions will be assessed quantitatively through prediction modelling in the final ES.
- 2.6 Prior to mitigation, the impact of dust is likely to constitute a temporary annoyance and is expected to be of short duration. Following site specific mitigation measures outlined within IAQM Guidance, it is anticipated that the residual effect from dust will be categorised as “not significant” and will therefore not be of a quantum to have any measurable impact on human health.
- 2.7 Any change to emission concentrations as a result of the Proposed Development will aim to meet limit values set out in the Air Quality Standards Regulations 2010 and the objective levels specified under the current UK Air Quality Strategy. As these concentrations are set to be protective of the environment and health, and are unlikely to be of a concentration or exposure sufficient to quantify any manifest health outcome, no further health assessment through a stand-alone HIA is required.
- 2.8 However, it is recommended that the air quality section of the ES provides a concluding health sentence to help set risk into context, and to more effectively address community health concerns.

Noise, Vibration and Health

- 2.9 Potential impacts from construction activities will be temporary and intermittent in nature, and will adhere to BS 5228-1:2009 Code of practice for noise control on construction and open sites – Part 1: Noise guidance and BS 5228-2:2009 Code of practice for vibration control on construction and open sites – Part 2: Vibration.
- 2.10 The potential noise and vibration effects during the construction phase are limited to daytime hours only. As a result, the effect on noise sensitive receptors including residents, schools and amenity areas is limited to disturbance and annoyance and the potential for chronic sleep disturbance and associated risk factors such as hypertension are not present and can be scoped out.
- 2.11 Temporary vibration up to a limit of 1.0 mms⁻¹ will be tolerated where significant vibration effects occur in exceedance of 0.3 mms⁻¹ for permanent activities. Impacts are likely to occur from piling activities which will only take place with appropriate warning to residents and as a result can also be scoped out.

- 2.12 During the operational phase, there is the potential for long-term noise generation during both day and night time hours as operational hours are anticipated to be 24/7. Operational vibration is highly unlikely and as a result has been scoped out.
- 2.13 Where possible, site-specific mitigation measures will be deployed at source and through design to keep noise and vibration levels within guidelines set to be protective of the environment and health.
- 2.14 While a separate HIA is not necessary, it is recommended that the noise and vibration chapter of the ES provides health-specific commentary to effectively address any noise related community health concerns.

Transport and Health

- 2.15 Once operational, the Proposed Development should lead to a net reduction in HGV traffic on the national road network outside of the study area due to a meaningful shift of national freight movements from road to rail. This affords regional and national health benefits through a reduction in traffic related emissions (air and noise) and risk of accident and injury.
- 2.16 However, during both the construction and operational phases there will be additional trips by all modes of travel to and from the site on the local highway network. To manage this, the following documents will be prepared:
- Construction Traffic Management Plan (CTMP) – aims to manage travel demand through controlling numbers, times and routing of deliveries;
 - Framework Travel Plan (FTP) – sets out measures and initiatives to manage travel demand by minimising vehicular trips and improve / encourage sustainable methods of transport such as walking and cycling; and
 - Public Transport Strategy – maximise the accessibility of the site by detailing availability of and connectivity to existing bus and rail services and facilities.
- 2.17 Where the bespoke Transport Assessment (TA) deems necessary, additional mitigation measures will be provided to improve junctions and increase capacity of the local highway network to avoid any significant adverse impacts.
- 2.18 Health risks associated with changes to transport patterns will be managed through design and mitigated through a number of initiatives. The resultant Transport Assessment will assess any residual impact, including road capacity risk of accident and injury. On this basis, the potential health pathways are already addressed through the Transport Assessment, and a stand-alone HIA is not required. However, it is recommended to supplement the conclusion of the Transport Assessment to convey how and where health has been assessed and addressed. This will more effectively address community health concerns.

Socio Economic Factors and Health

- 2.19 Throughout the 10 year construction phase of the project, it is anticipated that 268 Full Time Equivalent (FTE) gross temporary construction jobs will be required per annum. Once operational, the SRFI Site has an anticipated economic life of 60 years and is expected to create 8,111 gross FTE jobs. In addition to direct employment, it is expected that the Proposed Development will support a number of indirect and induced employment benefits.
- 2.20 Due to the scale of the project, it will be necessary to draw on a wider labour force than is currently available in South Northamptonshire and will therefore provide socio economic benefits on a local and regional scale.
- 2.21 It is recommended that the Socio Economic section of the ES provides a summary on the health and wellbeing specific implications of the mentioned socio economic factors to help put in to context the wider benefits of employment. Equally, it is recommended to explore training and procurement initiatives to support the uptake of local socio-economic health opportunities. On the above basis, the health pathways are already addressed, and a stand-alone HIA is not required.

3 Conclusion and Recommendations

3.1 Table 3.1 outlines each individual health pathway, provides a summary of what is included within the chapter (i.e. gap analysis), and provides a recommended action for how each pathway should be further addressed.

Table 3.1: Recommended Actions

Health Pathway	Scope Summary	Recommended Action	
		Health Assessment Approach	Gap Analysis
Air Quality	Dust, NO ₂ , PM ₁₀ and PM _{2.5} during construction and operational phases are all covered within the air quality assessment using a mixture of quantitative and qualitative methods where appropriate	An integrated approach expanding upon the air quality assessment section within the Environmental Statement (ES)	N/A
Noise and Vibration	Both noise and vibration will be assessed for construction and operational phases within the specific technical chapter; vibration has been largely scoped out. Baseline surveys will be undertaken and quantitative modelling techniques will be used to assess impacts	An integrated approach expanding upon the noise and vibration assessment section within the ES	N/A
Highways and Transportation	Junction capacity, access to amenities / public transport, walking / cycling conditions and personal injury accident analysis will all be analysed within the transport assessment. In addition, there will be the provision of a Construction Traffic Management Plan, Framework Travel Plan and a Public Transport Strategy to mitigate any adverse impacts on the local road network	An integrated approach expanding upon the highways and transportation assessment section within the ES	Transport team to consider community severance and the effect of shift patterns on the local road network
Socio Economic	Forecasts for employment, expenditure and investment will all be taken into account within the socio economic assessment and will largely be qualitative	An integrated approach expanding upon the socio economic assessment section within the ES	Socio Economic team to consider the scale of displacement as a result of the Proposed Development, and explore potential training, recruitment and procurement policies to maximise local socio-economic health benefit uptake

3.2 During the construction phase, any potentially adverse impact on health from changes to air quality, noise and transport are limited to daytime hours only and constitute a temporary and intermittent annoyance. Therefore, it is anticipated that health impacts from construction do not require any further health assessment.

- 3.3 As the SRFI will be operational 24/7, there is scope for potentially adverse air quality, noise and transport impacts to occur during day and night time hours. Any potentially adverse impacts will be addressed through site-specific design and initiatives to ensure significance is minimal.
- 3.4 In addition, it is expected that the 10 year construction period and 60 year economic life will provide direct, indirect and induced employment benefits within South Northamptonshire and the wider region presenting opportunities for improved socio-economic health and wellbeing.
- 3.5 In conclusion, any potential adverse impact will be inherently managed at the design stage to remain protective of human health. In this instance, all the potential health pathways identified are already addressed within the current ES scope, and a standalone HIA is not required. However, we recommend integrating elements of HIA within the ES to draw from and expand upon the technical disciplines to improve transparency to local communities, set potential and perceived risk into context, and to maximise any opportunities to support the uptake of benefits locally.

4 References

[1] Rail Central, "Planning Inspectorate," December 2015. [Online]. Available: <https://infrastructure.planninginspectorate.gov.uk/wp-content/ipc/uploads/projects/TR050004/TR050004-000027-Scoping%20Report.pdf>. [Accessed 18 August 2017].

[2] Planning Inspectorate, "Scoping Opinion Proposed Rail Central Strategic Rail Freight Interchange," January 2016. [Online]. Available: <https://infrastructure.planninginspectorate.gov.uk/wp-content/ipc/uploads/projects/TR050004/TR050004-000018-Scoping%20Opinion.pdf>. [Accessed 18 August 2017].



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