# HINCKLEY NATIONAL RAIL FREIGHT INTERCHANGE

# Policy and need

One of a series of background topic papers prepared by db symmetry in support of a public consultation on proposals for a strategic rail freight interchange in Blaby district, to the north-east of Hinckley in Leicestershire.

#### INTRODUCTION

- 1 In 2019 db symmetry will apply to the government for a Development Consent Order (DCO) for a proposed strategic rail freight interchange (SRFI) on a site in Blaby District, to the east of Hinckley in Leicestershire. The project is known as the Hinckley National Rail Freight Interchange (HNRFI).
- 2 A DCO is a special form of planning permission for large infrastructure projects. It can include a range of additional powers required to implement the proposals, such as powers to acquire land, undertake works to streets, trees and hedgerows and divert utility services.
- 3 This Topic Paper has been prepared by Peter J Frampton BSc (Hons) TP MRICS MRTPI. Director of Frampton Town Planning Ltd and David Baker FRICS FCILT MCIArb, Partner of Baker Rose Consulting LLP.
- 4 The topic paper addresses the policy and need case for the provision of Strategic Rail Freight Interchanges (SRFIs) at a national level; and identifies other relevant policy and particular need issues for the consideration of the merits of this specific proposal.
- 5 The Hinckley National Rail Freight Interchange (HNRFI) will perform an important function within the UK's manufacturing and distribution supply chains, associated with both national and international trade, in line with the policy aspirations for developing the core business competencies in the region sustainably.
- 6 This paper should be read in conjunction with db symmetry topic papers on *Site Selection* and *Rail Operations,* which explains how the HNRFI would work.

# NATIONAL PLANNING POLICY

# NATIONAL POLICY STATEMENT (NPS) FOR NATIONAL NETWORKS. DECEMBER 2014

- 7 Section 104 of the Planning Act 2008 states that the Secretary of State in deciding the application (for the DCO) must have regard to:
  - any national policy statement which has effect in relation to development of the description to which the application relates;
  - any local impact report (LIR) produced by local authorities;
  - any other matters which the Secretary of States thinks both important and relevant to his decision.
- 8 The NPS is the primary policy basis for the determination of this application.
- 9 A Strategic Rail Freight Interchange (SRFI) is a large multi-purpose rail freight interchange and distribution centre linked into both the rail and trunk road system. It has rail-served warehousing and container handling facilities and may also include manufacturing and processing activities. A SRFI must be at least 60 hectares in area and must be capable of handling consignments of goods from more than one consignor to more than one consignee and handle at least four goods trains per day. The rail freight interchange must be part of the rail network in England and must include warehouses to which goods can be delivered from the rail network in England and either directly or by means of another form of transport (Planning Act 2000 S26). In this context the Government has concluded that, at the strategic level:
  - There is a need for development on the national networks to support national and local economic growth and regeneration, particularly in the most disadvantaged areas (NPS 2.6).
  - There is a need to improve the integration between transport modes including linkages to ports and airports (NPS 2.8)
  - A compelling need for the development of the national networks both as individual networks and as an integral system (NPS 2.10)
  - It is important to facilitate the development of the intermodal rail freight industry (NPS 2.53)
  - To facilitate this modal transfer, a network of SRFIs is needed across the regions, to serve regional, sub-regional and cross regional markets (NPS 2.54)
  - In all cases it is essential that SRFIs have good connectivity with both the road and rail networks in particular the strategic rail freight network (NPS 2.54)

- There is specific compelling need for an expanded network of SRFIs, located near the business markets they will serve (NPS 2.56)
- 10 SRFI capacity needs to be provided at a wide range of locations to provide the flexibility needed to match the changing demands of the market with traffic moving from existing Rail Freight Interchanges (RFIs) to new larger facilities (NPS 2.58).
- 11 Subject to the detailed policies and protections in the NPS and the legal constraints set out in the Planning Act 2008, there is a presumption in favour of granting development consent for NSIPs that fall within the need for infrastructure established in the NPS (paragraph 4.2).
- 12 The starting point for the appraisal of Hinckley National and the related works to M69 Junction 2 is the policy requirements of the NPS for SRFIs. The Assessment Principles are set out at Section 4 of the NPS and include:
  - General principles of assessment
  - Environmental Impact Assessment
  - Habitat Regulations Assessment.
  - Alternatives
  - Criteria for good design for national network infrastructure
  - Climate change adaption
  - Pollution control and other environmental protection regimes
  - Common law nuisance and statutory nuisance
  - Safety
  - Security considerations
  - Health
- 13 Specific locational assessment principles are provided for Strategic Rail Freight interchanges. These are set out at paragraphs 4.83 4.89 of the NPS. The assessment principles maybe summarised as follows:
  - From the outset a SRFI should be developed in a form that can accommodate both rail and non-rail activities (NPS paragraph 4.83).
  - SRFIs are appropriately located relative to the markets they will serve proposed SRFIs should have good road access as this will allow rail to effectively compete with, and work alongside road freight to achieve modal shift to rail. As such countryside locations may be required (NPS paragraph 4.84).

- 14 As minimum a SRFI should ideally be located on a rail route with a gauge capability of W8 or more, or capable of enhancement to a suitable gauge (NPS paragraph 4.85).
  - As large-scale operations, with 24/7 continuous working arrangements SRFIs may not often be considered suitable adjacent to residential areas or environmentally sensitive areas (NPS paragraph 4.86).
  - SRFIs can provide many benefits for the local economy and can create many new job opportunities. The existence of an available and economic local workforce will therefore be an important consideration (NPS paragraph 4.87).
  - 15 In respect of 'scale and design' the NPS states that:
    - A proposed SRFI should provide for a number of rail connected or rail accessible buildings for initial take up plus rail infrastructure to allow more extensive rail connection within the site in the longer term (NPS paragraph 4.88).
    - The 'initial stages' of the SRFI must provide an operational rail network connection, and areas for intermodal handling and container storage. It is not essential for all buildings on the site to be rail connected from the outset but a significant element should be (NPS paragraph 4.88).
    - As a minimum a SRFI should be capable of handling 4 trains per day and where possible, be capable of increasing the number of trains handled. SRFIs should where possible have the capability to handle 775m trains (NPS paragraph 4.88).
  - 16 The NPS identifies general impacts under the following heading (relevant to this proposal)
    - Air Quality
      - Carbon Emissions
    - Biodiversity
    - Ecological Conservation
    - Waste Management
    - Civil and military aviation and defence interests
    - Dust, Odour, artificial light, smoke, steam
    - Flood Risk
    - Land Instability

- The Historic Environment
- Landscape and Visual Impacts
- Land use including open space, green infrastructure and Green Belt
- Noise and Vibration
- Impacts on Transport Networks
- Water Quality and Resources
- 17 A Planning Statement will accompany the application for the DCO, which will address the performance of Hinckley National to the locational principles set out in the NPS, and the conclusions reached within the Environmental Statement and other specialist reports of the impacts of the proposal.

# NATIONAL PLANNING POLICY FRAMEWORK 2018

- 18 National planning policy is provided within the Framework 2018. The Framework explains that there are three objectives to sustainable development, namely:
  - 'an economic objective to help build a strong, responsive and competitive economy, by ensuring that sufficient land of the right types is available in the right places and at the right time to support growth, innovation and improved productivity; and by identifying and coordinating the provision of infrastructure;
  - a social objective to support strong, vibrant and healthy communities by ensuring that
    a sufficient number and range of homes can be provided to meet the needs of present
    and future generations; and by fostering a well-designed and safe built environment,
    with accessible services and open spaces that reflect current and future needs and
    support communities' health, social and cultural well-being; and
  - an environmental objective to contribute to protecting and enhancing our natural, built and historic environment; including making effective use of land, helping to improve biodiversity, using natural resources prudently, minimising waste and pollution, and mitigating and adapting to climate change, including moving to a low carbon economy'.
- 19 The Planning Statement to accompany the application for the DCO will consider the proposal in the context of these objectives, recognising that these objectives s should not be undertaken in isolation because they are mutually dependent. Paragraph 8 of the Framework states:

'Achieving sustainable development means that the planning system has three overarching objectives, which are interdependent and need to be pursued in mutually supportive ways (so that opportunities can be taken to secure net gains across each of the different objectives)'.

#### **REGIONAL PLANNING CONSIDERATIONS**

Addressing the needs of the logistics sector.

Leicester and Leicestershire Strategic Distribution Sector Study, Final Report, November 2014.

- 20 In 2013 the Leicester and Leicestershire Housing, Planning and Infrastructure Group (HPIG) commissioned the study to examine the strategic distribution sector in the county. The HPIG represents the county's LPAs, LCC and Leicester and Leicestershire LEP on spatial planning matters. The underlying objective of the study was to enable a better understanding of the sector and objectively determine future need for strategic scale logistics provision.
- 21 The Study established a need to identify and allocate new land at commercially attractive strategic sites in order to maintain and enhance the established competitive advantages of this county for the logistics sector. The final Report dated November 2014 stated:

'The southern part of the East Midlands region (including Leicestershire) became the competitive 'location of choice' in both supply chain cost and performance terms when sourcing and distributing on a national basis. The area has become known as the 'golden triangle', and has to date consequently established a distinct competitive advantage in the strategic logistics sector'.

22 The study undertook a forecast of future demand for new build large scale warehousing in the East Midlands region and Leicestershire Sub-Region up to 2036. The preferred high replacement scenario suggested that 'once existing consents and potential sites are accounted for':

'Around 115 hectares of new land at rail served sites will need to be brought forward by 2036'.

The Final Report (paragraph 2.45) states 'the Preferred replacement scenarios suggests that, once existing consents and potential sites are accounted for, around 115 hectares of new land at rail-served sites will need to be brought forward by 2036. This suggests one further SRFI will need to be brought forward within Leicestershire up to 2036 (and towards the end of the planning period considered) given that the SRFIs currently planned for the region are in the 100 – 150 hectare size range'. This conclusion will be reviewed in the light of subsequent studies regarding the need for strategic scale logistics development. Table 5.3 Part B identified the following sites as being 'Planned, awaiting or seeking consent'.

- Eurohub Corby
- East Midlands Gateway SRFI
- East Midlands Intermodal SRFI
- South Northants SRFI
- 24 The East Midlands Gateway has received a DCO. The other two SRFIs remain to be determined under the DCO procedure. Eurohub Corby is not planned to be directly rail-linked.

#### Midlands Engine Strategy March 2017

- 25 The publication of the Strategy is a demonstration of the Government's commitment to making the Midlands a 'powerful engine for growth'. The Midlands is identified as being at the 'very heart of the UK economy' and also a 'gateway to the global economy'. The Government states that the 'Midlands is essential to our national economic success; being responsible for over a fifth of the UKs 'total manufacturing capability'.
- 26 The underlying purpose of the Strategy is to address 'productivity barriers across the Midlands enabling businesses to create' more jobs, export more goods and services and grow their productivity. Five Key Objectives are identified:
  - *'Improving connectivity in order to raise productivity.*
  - Strengthening skills in order to make the Midlands a more attractive location for businesses.
  - Supporting enterprise and innovation in order to foster a more dynamic regional economy.
  - Promoting the Midlands nationally and internationally in order to maximise trade and investment in the region.
  - Enhancing quality of life in order to attract and retain skilled workers, as well as to foster the local tourist economy'.

#### Midlands Connect Strategy 'Powering the Midlands Engine' March 2017

- 27 Midlands connect is a pan-Midland partnership of local enterprise partnerships and local business representatives working with the Department for Transport and its key delivery bodies. The Partnership forms the transport component of the Midlands Engine for Growth.
- 28 The Strategy sets out proposals for how to translate 'untapped economic potential into

economic growth: more and better jobs for local peoples, more trade and investment for local companies, and more opportunities for businesses to expand and for communities to thrive'.

29 'Early priorities' of the Strategy include reference to 'Rail Freight Accessibility'. The Strategy states:

'Midlands Connect will support the development of new Strategic Rail Freight Interchange proposals, particularly where rail and road access is good'.

# *Leicester and Leicestershire 2050: Our Vision for Growth September 2018*

- 30 The partners in this Strategic Growth Plan (a non-statutory plan) comprise the local planning authorities in Leicestershire, Leicestershire County Council, and the LEP. The purpose of the Plan is to prepare a 'long term plan to address the challenges that we face and the opportunities that are presented to us'. The Plan focuses on four key matters:
  - Delivering new housing
  - Supporting the economy
  - Identifying essential infrastructure, and
  - Protecting our environment and built heritage
- 31 The Priorities of the Plan are:
  - *Creating conditions for investment and growth balancing the need for new housing and jobs with protection of our environment and built heritage.*
  - Achieving a step change in the way that growth is delivered focusing more development in strategic locations and less on non-strategic sites.

• Securing essential infrastructure that is needed to make this happen – taking advantage of proposals to improve national and regional networks (as set out in the Midlands Connect Strategy) and maximising the benefits from them.

• Maintaining the essential qualities of Leicester & Leicestershire and delivering high quality development'.

32 The Plan acknowledges that more new jobs are expected in the LLEP's priority sectors which includes 'advanced logistics space'. The Plan identifies employment needs to 2036, and states (Appendix A):

'In addition... the authorities will seek to meet the need from strategic B8 uses identifies in a separate study relating to logistics and distribution'.

- 33 A crucial item of infrastructure to unlock the growth potential of Leicestershire is the expressway proposal for the A46 which is included in the Midlands Connect strategy. The expressway is proposed from a new or improved junction of the M69, and continuing to the south and east of Leicester with a new junction on the M1 (J20a). The new road would then re-join the A46 near Syston. Hinckley National is situated at the Western end of the proposed expressway as identified on the plan below. The plan identifies Hinckley for managed Growth in Local Plans.
- 34 The Plan states that the identified strategic infrastructure is required to resolve national and regional problems, which includes connectivity. The benefits of investment in this infrastructure is to maximise use by focusing growth in areas close to the new infrastructure proposals. The road infrastructure proposals include a new road to the south and east of Leicester linking into strategic highways to the west.

# **Rail freight**

# Rail Freight Strategy September 2016

- 35 The strategy states 'each tonne of freight transported by rail reduces carbon emissions by 76% compared to road and each freight train removes 43 to 76 tonnes from the road'. The Government has set a stretching and legally binding Fifth Carbon Budget which will see a 57 per cent reduction in emissions in 2032 compared to 1990 levels, on a path towards reducing emissions by 80 per cent by 2050 as set out in the Climate Change Act. The Government is committed to ensuring that transport plays a full part in delivering the economy-wide emissions reductions needed to meet this target.
- 36 Currently domestic transport emissions make up nearly a quarter of total UK domestic greenhouse gas emissions, with road freight a significant contributor in 2014 HGVs were responsible for 17 per cent of total UK transport emissions. Shifting more freight from road to rail therefore has the potential to make a real contribution to meeting the UK's emissions reduction targets.
- 37 The Government commissioned ARUP to assess rail freight growth potential by accommodating and reviewing the key capacity constraints that will limit this growth. The Strategy highlights the potential opportunity for the rail freight industry to establish new core markets, including the intermodal transport from the deep-sea ports.
- 38 The ARUP study assessed the potential to reduce carbon emission through greater modal shift from road to rail. The study concluded that with the right policy interventions and investment, rail freight could make a significant contribution to reducing UK emissions. In the Foreword to the Strategy the Rail Minister stated:

*'...rail is the most environmentally friendly means of land transport, which can help to meet our ever-growing demand for consumer goods. Rail freight is a vital part of the national* 

economy and it is difficult to imagine how industry could operate effectively and competitively without it'.

39 Figure 1 below shows the existing, approved and proposed SRFI schemes considered by Arup in 2016. Of these there are only two in England actually consented and operating, (DIRFT and London Gateway), with iPort Doncaster built (but presently awaiting assignment of train services to be settled with Network Rail) and East Midlands Gateway, now approved and under construction. The reference to Burbage in figure 1 is the location of the Hinckley National Rail Freight Interchange.

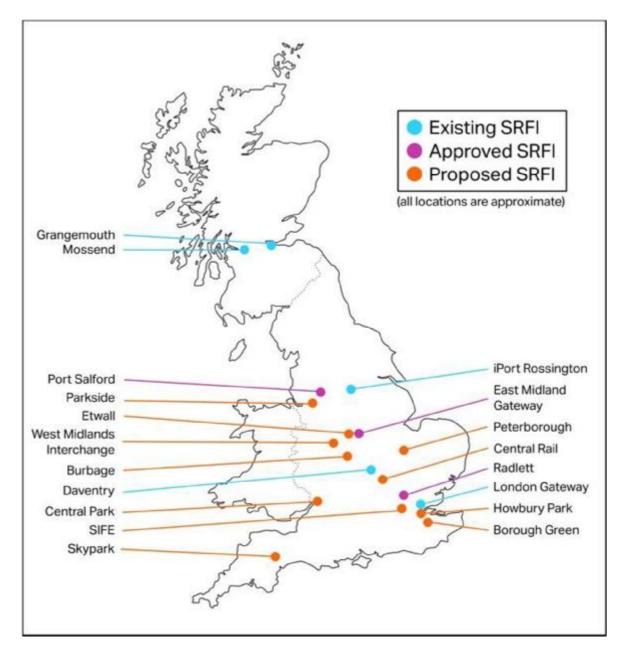


Figure 1: Proposed and existing SRFIs in the UK (Arup, *Future Potential for Modal Shift in the UK Rail Freight Market*, September 2016). The reference to Burbage is the location of the Hinckley National Rail Freight Interchange.

#### Leicester and Leicestershire Rail Strategy March 2016

40 In 2015 SLC Rail was commissioned by LCC, Leicester City Council and the LLEP to assess the adequacy of rail industry plans to support economic development of the county and city as set out in the strategic Economic Plan. The Strategy referred to freight services running through the county stating:

'Routes through the East Midlands are vital freight arteries, and the all the main lines are designated as part of the Strategic Freight Network. While the predominant flows are along the Birmingham – Derby and Midland Main Lines, the cross-country route between Nuneaton, Leicester and Peterborough is gaining increased importance following completion of works to increase the loading gauge to allow the passage of larger containers.

There are a number of sites generating rail freight traffic in the area:

- Ratcliffe-on-Soar power station and British Gypsum plant, near Trent
- Mountsorrel aggregates depot
- Stud Farm Quarry, Stanton-under-Bardon
- Bardon Hill Quarry, near Coalville
- Corby Metals Terminal
- Ketton Cement Works

The East Midlands rail network is used by a variety of different market sectors.

Maritime intermodal, consisting of container traffic to and from ports, primarily Southampton and Felixstowe, and the Channel Tunnel. Although much traffic from Felixstowe to the Midlands and North West England travels via London and the West Coast Main Line, an increasing volume is being routed via Peterborough and Leicester to join the West Coast Main Line at Nuneaton, or onwards via Water Orton to terminals in the West Midlands. Locally, there is an intermodal terminal at Burton-on-Trent which receives traffic from Southampton on a weekly basis, which is routed, along with longer-distance intermodal traffic, via Oxford, Birmingham and Derby.

Works to increase Loading Gauge clearances are being undertaken between Birmingham and Derby, and onwards to Doncaster via the Erewash Valley. This will enable deep sea 9' 6" high containers to be routed from Southampton via the West Midlands to Yorkshire without the need for special wagons, generating significant intermodal growth on this corridor, as well as opening up opportunities for routing traffic between Felixstowe and the north of England via Toton and the Midland Main Line rather than the West Coast.'

41 This work has now been completed. The proposed scheme enjoys W10 gauge cleared access to all the major ports and conurbations on the Strategic Rail Freight Network.

#### **Road freight**

#### Midlands Connect 'Long Term Midlands Motorway Hub Study' June 2018

42 Midlands Connect and Highways England published the report to build on the momentum of the Midlands Connect Strategy. Its purpose is to set out a strategy to harness full potential that a reliable and resilient Midlands Motorway Hub can unlock for the UK economy. The Midlands Motorway Hub (the Hub) is illustrated below.

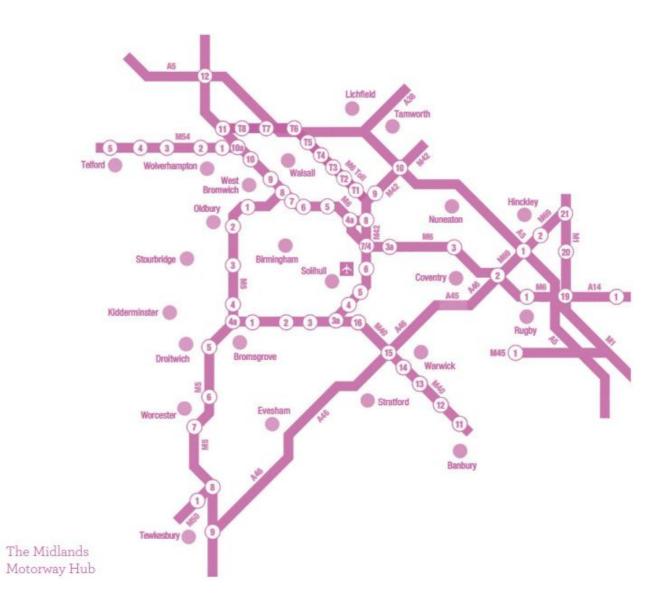


Figure 2: The Midlands Motorway Hub

- 43 The Study identifies four intervention approaches to the Hub strategy namely:
  - Making use of existing networks
  - Creating modal shift
  - Major investment in the Hub
  - Invest in strategic alternatives to the Hub
- 44 Investing in strategic alternatives to the Hub include upgrading the A46 to expressway standard as identified in the Midlands Connect Strategy and the Strategic Growth Plan. The Study states:

'This corridor has the potential to fulfil a significant national and regional economic function, unlocking employment and housing growth sites.'

#### LOCAL PLANNING POLICY CONSIDERATIONS

#### **Blaby District Local Plan policy**

- 45 The Core Strategy for the period up to 2029 was adopted in February 2013. The Strategic Objectives of the Core Strategy are stated as being:
  - 'To provide the appropriate quantity and mix of housing to meet the needs of the District's current and future populations;
  - To optimise the provision of affordable housing to meet local needs.
  - To deliver the infrastructure, services and facilities required to meet the needs of the population of the District of Blaby, including those arising from growth, and to make services accessible to all.
  - To maximise sport and recreation opportunities.
  - To improve the design quality of all new developments in the District including the need to design out crime. To protect the important areas of the District's natural environment (species and habitats), landscape and geology and to improve bio-diversity, wildlife habitats and corridors through the design of new developments and the management of existing areas by working with partners.
  - To preserve and enhance the cultural heritage of the District, recognising its contribution to local distinctiveness and to seek design solutions which preserve and enhance heritage assets where they are impacted by development.

- To minimise energy use and use of valuable resources and to encourage renewable energy production in suitable locations.
- To minimise the risk of flooding (and other hazards) to property, infrastructure and people.
- To provide the appropriate quantity, quality and mix of employment opportunities to meet the needs of the District's current and future populations, and to meet strategic employment, education and training needs;
- To deliver the transport needs of the District and to encourage and develop the use of more sustainable forms of transport (Including walking, cycling, other forms of non-motorised transport and public transport). To maintain, and where appropriate improve, the position of retail centres within the retail hierarchy. To make sure that the existing centres, primarily Blaby Town Centre, have opportunities to grow in order to enhance their vitality and viability and to prevent expansion of out of town centres (Including the Motorways Retail Area) where this would result in an unacceptable impact on existing centres'.
- 46 The Strategy makes reference to the impact of the transport network on economic success. It is stated:

'Some of the District's key employment and retail facilities are located close to junction 21 of the M1. The road network around junction 21 experiences severe congestion, particularly at peak times from traffic entering the City of Leicester from the motorway network, and those accessing the large employment and retail facilities at Grove Park and the Motorways Retail Area. Recent improvements to the motorway junction and traffic island have increased its capacity. Proposals to provide a direct link from the M1 to the M69 via a new 'flyover' are uncertain, it is not included in any committed transport programme and unlikely to be delivered during the plan period.'

# **Blaby District Local Plan 1999**

- 47 The Local Plan includes a Proposals Map which identifies the entire site as lying within the Countryside, subject to Policies C1 and C2. These policies have been 'saved' by the Secretary of State. ('Saving' Direction Letter 21<sup>st</sup> September 2007).
- 48 Policy C1 is not relevant and relates to Agricultural Buildings in the Countryside. Policy C2 'Other development in the Countryside' states:

'Within the area identified as countryside on the proposals map, planning permission will not be granted for built development, or other development which would have a significant adverse effect on the appearance or character of the landscape.

Planning permission will, however, be granted for limited small scale employment and leisure development (including dwellings essential for these needs), providing that all of

the following criteria are met:

- *i.* It is sited, designed and landscaped in a manner which limits the effect on the appearance and character of the landscape;
- *ii* It is in keeping with the appearance and character of nearby built development;
- *iii* It would have a satisfactory relationship with nearby uses, including considerations of vibration, emissions, hours of working, vehicular activity, privacy, light, illumination, noise, disturbance and an overbearing effect;
- *iv* It would not unacceptably sever or fragment an agricultural land holding. Where planning permission is granted for a dwelling essential for employment or leisure needs it will be subject to a planning condition which limits occupation'.
- 49 Burbage Woods and Aston Firs, located to the south west of the site, is identified as a Site of Special Scientific Interest. Sites of Special Scientific Interest are subject to Policy CE18, which states:

'Planning permission will not be granted for development which would adversely affect, directly or indirectly, sites of special scientific interest (SSSI) unless:

- *i.* The benefits of the development outweigh, substantially, the loss of the nature conservation or geological interest; and;
- *ii.* The reasons for development outweigh the national policy to safeguard the intrinsic nature conservation and geological value of the national network of such sites, and;
- *iii.* There is no other suitable site and, in the case of geological SSSI's, a suitable substitute site of equal or greater value can be proposed'.
- 50 A Scheduled Monument is shown as being located to the north of the site (the ruined church at Elmesthorpe) and Sapcote Castle and Moat on the west edge of Sapcote (east of the site). Scheduled Monuments are subject to Policy CE1, which states:

'Planning permission will not be granted for development which would adversely affect the preservation or setting of a scheduled ancient monument or other important archaeological site. The local planning authority will require all planning applications for development on sites of recognised or suspected archaeological importance to be accompanied by an archaeological assessment and (if shown necessary) evaluation'.

51 An extract from the Proposals Map is shown overleaf.

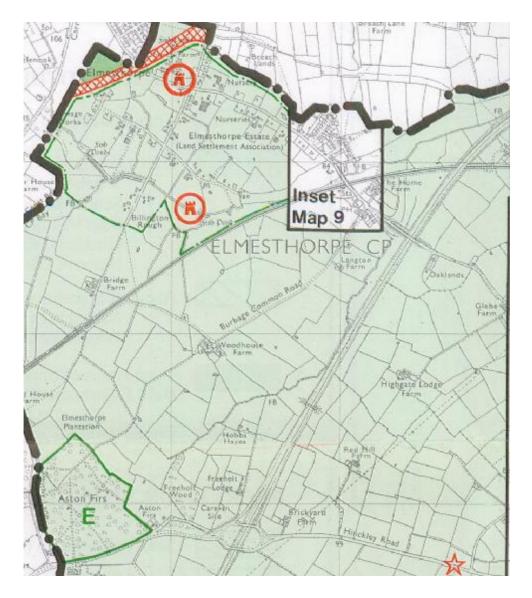


Figure 3: Excerpt from the Blaby District Local Plan proposals map

#### Fosse Village Neighbourhood Plan

52 The 'Fosse Villages' comprising the Parishes of Aston Flamville, Croft Huncote, Leicester Forest West, Potters Marston, Sapcote, Sharnford, Stoney Stanton, Thurlaston and Wigston Parva have published the Pre-submission version of the Neighbourhood Plan (NP). A small part of the site lies within the Sapcote Parish. The Plan makes reference to the proposal by db symmetry. There is a suggestion made that the 'Rail Terminal' development would provide a site for a passenger station serving the Fosse Villages. A response has been made to the effect that a passenger station does not form part of the proposal. The submission to the NP is set out as an Appendix to this Topic Paper.

#### NEED & DEMAND FOR RAIL FREIGHT CAPACITY

#### **Logistics Background**

- 53 The logistics industry underpins the efficient operation of most sectors of the wider national economy. It provides networks for the movement of goods for manufacturers, importers, wholesalers and retailers of consumer goods. It employs over 2 million people across 190,000 companies and generates over £90 billion annually.
- 54 Whilst this is currently predominantly a road-based industry, rail is becoming increasingly important. Users of logistics services are being driven by ways to integrate rail freight into their transport operations as a means of improving speed, efficiency in supply chains and environmental performance. In this way in future it is likely that rail freight options will become an increasingly prevalent feature of procurement contracts.
- 55 It is now becoming clear that the main growth segment for the rail freight industry in future years will be the intermodal market. The shift in the market balance in favour of intermodal, which has now become the largest single freight commodity moved by rail, was introduced in earlier paragraphs and is now examined in closer detail here. The intermodal sector is divided into 3 sub-sectors: ports, domestic and Channel Tunnel.
- 56 The principal sub-sector is ports intermodal which accounts for approximately 80% of total intermodal tonne kilometres. It is the movement of containerised goods between UK ports and inland UK terminals (i.e. deep sea containerised cargo into Britain). The second most important sub-sector is domestic intermodal which accounts for approximately 18% of total intermodal kilometre tonnes. It is the intermodal flow of containerised goods between terminals not related to international trade. The third sector is Channel Tunnel intermodal which accounts for approximately 2% of total intermodal kilometre tonnes. This is the transport of containerised goods via international train services through the Channel Tunnel that connect to inland terminals in the UK.
- 57 Network Rail's Freight Market Study (FMS) (October 2013) sets out average annual growth forecasts for the intermodal sub-sectors between the base year 2011/2012 to 2033. The ports and Channel Tunnel sub-sector was expected to grow by 5.2% and the domestic sub-sector by 11.9%.
- 58 These forecasts did not take into account potential constraints that may impact on achievement on these figures if not addressed. As such they are 'unconstrained' growth projections and are formulated on certain assumptions including: that the rail network, in terms of infrastructure and capacity, will adequately be able to cater for this demand; that the UK and global economy experiences continued growth; and fuel costs will increase over the period in line with DfT appraisal guidance. These factors are important given that ports intermodal demand is linked to trade and domestic intermodal demand is linked to domestic economic activity. Fuel prices are important for rail's ability to compete with road. This aspect is dealt with in the Forecast section below. The point here is that without

the necessary infrastructure, growth will be constrained.

- 59 Retailers and wholesalers are the prime consumers of intermodal transport; utilising rail freight to transport UK produced or imported consumer goods (food, clothes and white goods) from manufacturers/producers, ports and international locations to rail connected warehousing and distribution centres within the UK. These centres are known as Strategic Rail Freight Interchanges (SRFIs) and rely on good accessibility to the strategic rail and road network to enable onward delivery of goods to regional distribution sites, stores and end consumers.
- 60 The shippers, those that originate the instruction to ship goods, are normally the controllers of how the stock is being moved in the primary distribution to UK warehousing and manufacturers. They have historically driven the use of rail, to get containers out of expensive port stacks. The growth of control by the major UK retailers from secondary through to primary distribution, led to increased transparency in the total cost of the supply chain and therefore developed the competitive advantages of rail over road for the long haul. Major manufacturers have followed through in directing or contracting for more products to move by rail.
- 61 Consumer expenditure patterns, manufacturing and production outputs and their interactions with economic and population growth and trade, have a key bearing on demand for intermodal transport.
- 62 Deep sea container volumes to UK ports continue to grow. Ports act as natural agglomeration centres which facilitate the accumulation of the critical mass that makes movement by rail viable. Furthermore the prospective move towards 'mega-vessels' and larger 20,000TEU ships, which will reduce trips but with larger numbers of containers, will increasingly favour onward movement by rail rather than road, as the mode better able to move large volumes faster.
- 63 The busiest container port in the UK is Felixstowe, Suffolk, which handles approximately 42% of all ports intermodal traffic, followed by Southampton. Some 30% of throughput at these ports travels inland by rail. The three main ports in the south east (these two plus London Gateway) are expected to continue to dominate containerised port intermodal flows going forward.
- 64 Currently only 10% of deep-sea trade is taken to northern or Scottish ports, where rail use is limited. Development of these ports, namely Teesport, Port of Liverpool, Port of Tyne and the Humber ports, has the potential to attract new flows for example from feeder traffic from Holland and Belgium, as well as European flows post Brexit redirected volumes, to avoid congestion through Dover if customs delays become a serious constraint. The Port of Liverpool SuperPort has the potential to deliver more flows also, from the US and via the widened Panama Canal.
- 65 Demand for containerised goods is UK-wide, therefore there is a need to maximise national and regional coverage of inland rail connections from all ports. This is whilst emphasising

the need for greater south to north connectivity to accommodate growth due to high volumes through the southern ports, as well as better east/west connections across the country as part of wider objectives to boost the productivity of the Midlands regional economy, without having to go via London.

- 66 Domestic intermodal is integrated with supply chains and the logistics sector is identified as a key area for innovation in new models of rail freight operation that are essential for the future growth of the industry and to achieve modal shift. For the rail freight model to be successful, users require the purchasing power, critical mass and regular, stable volumes and / or consolidation via intermodal terminals, to make movement by rail viable.
- 67 Development of rail connected terminals is only realistically available through the support of the commercial property sector which is sensitive to economic activity. There are no significant public funds available for these developments. There is a continued, underlying need for nationwide coverage of rail connected development sites to fulfil and indeed stimulate demand for intermodal rail freight by retailers, wholesalers, manufacturers and producers across the UK.
- 68 The Channel Tunnel has strong medium to long term prospects to carry rail freight. Whilst the sub-sector was disrupted by security issues at Calais and industrial action during 2015 the effects are expected to be temporary. With over 6500 HGV's passing through the Port of Dover and 4000 using the Eurotunnel service, there are sufficient levels of HGV traffic that would make modal shift viable. The Channel Tunnel was designed to take 6.2M tonnes of rail freight traffic per year using 35 trains each way per day.
- 69 Intermodal freight is now successfully being trialled by rail to and from the UK through the Silk Route to China, via London Gateway's rail terminal and Duisburg in Germany. This means a 19-day travel time from Hinckley, to the heart of China's One Belt manufacturing and community growth area. This is very considerably shorter than deep-sea shipping; and a lot less expensive than air freight.

#### **Need and Demand for Strategic Rail Freight Interchanges**

- 70 There has been a noticeable rise in SRFI schemes, particularly within the 'Golden Triangle', the prime FMCG (fast moving consumer goods) logistics area in the Midlands bounded by the M1, M6 and M42; with expansion at Daventry (DIRFT), and East Midlands Gateway underway. There are other SRFI schemes in the planning stages.
- 71 Recent investment in intermodal rail freight has been driven by supermarket retailers working with Third Party Logistics (3PL) providers who have the expertise to create the bespoke logistics solutions necessary to effectively manage the supply chain complexities of these types of customers. The growth is also supported by the change in the planning regime for SFRI's which now classify as Nationally Significant Infrastructure Projects (NSIPs) and so qualify for a more streamlined Development Consent Order (DCO) planning process.

- 72 The National Networks National Policy Statement (NPS) 2014 provides the following definition:
- <sup>73</sup> 'A strategic rail freight interchange (SRFI) is a large multi-purpose rail freight interchange and distribution centre linked into both the rail and trunk road system. It has rail-served warehousing and container handling facilities and may also include manufacturing and processing activities.'
- 74 It is important to recognise that whilst the largest sector of intermodal rail freight growth may have been through its adoption by the primary trunking of products for the FMCG market, the ability to consolidate flows to and from different international ports and SRFI's using a common access train service, also allows manufacturing to access rail services, where on its own, it might struggle to have sufficient volumes.
- 75 This is seen as particularly important for Hinckley National given the close proximity to the major manufacturing centres to the west of Leicester and east of Birmingham, access to the M69 and being within the Golden Triangle for national and regional FMCG logistics.
- 76 The logistics industry, by its very nature has strong supply chain links with a wide variety of sectors in the national economy. The strongest connections exist with manufacturing, retailers including e-commerce, and consumers, as well as other transport and storage providers.
- <sup>77</sup> 'Logistics sequencing' whereby component parts are delivered to an 'upper tier' logistics company for assembly and then forward transshipment is a particularly important operation for promoting enhanced productivity with the manufacturing sector (just in time component delivery – a key feature within the car industry).
- 78 NPS National Networks states at paragraph 2.4.2:

'The logistics industry... underpins the efficient operation of most of the sectors of the winder national economy'.

79 The NPS acknowledges that a SRFI has 'rail served warehousing and container handling facilities and may also include manufacturing and processing activities'. (NPS National Networks Footnote 42).

# **Importance of Hinckley National**

80 The Leicester & Leicestershire Economic Partnership identified in its March 2015 Logistics & Distribution Growth Action Plan:

#### 1.1.4 Rail Interchange

The LLSDSS [Leicester and Leicestershire Strategic Distribution Sector Study] researched the baseline position, key challenges and plans for growth within the LLEP area and established that the development of new, commercially-attractive sites directly served by rail is of upmost importance for Leicestershire to remain one of the strategic locations for Logistics and Distribution. Currently Leicester and Leicestershire remains the "location of choice" for national distribution centres (NDCs) and regional distribution centres (RDCs) with an estimated 7:3 ratio between the two. This ratio is significant as it demonstrates that the South East Midlands, of which Leicestershire is part, is a favoured location for national distribution operations due to its central location and that a driver can take inbound and / or outbound cargo from both deep-sea and Dover Straits ports within a shift.

Though the Golden Triangle still offers a competitive advantage, rail freight is very important to goods movement from deep sea or Dover Strait container ports. The development of new sites such as the EM Gateway SFRI in the LLEP area will engage rail link infrastructure to compete with sites such as DIRFT and CIRFT to the south.

Further to rail infrastructure, the LLSDSS identified that there is a shortfall in non-rail warehouse sites which would start to have a negative impact on the LLEP area's ability to retain and attract new operators within the next 6 years. The study suggests that a combination of new build and replacement build are required to meet the need of over 450 hectares of development over the next 20 years. It also recommended a high replacement plan to not only develop new sites in the immediate term but also to replace builds that are currently functional but that are technologically obsolete.

- 81 Hinckley National is on the 'Felixstowe to Nuneaton Line', a key part of Network Rail's National Strategic Rail Freight Network. The line has been upgraded and developed to provide a key rail freight link in the Midlands between the West Coast Main Line, the East Coast Main Line, and to London Gateway and Felixstowe. This enables these ports to be accessed without using the most congested sections of the West Coast Main Line south of Nuneaton to London; or the North London Line, which are needed predominantly for passenger services.
- 82 The Felixstowe to Nuneaton Line connects the East Coast Main Line (ECML) at Peterborough, with the WCML at Nuneaton, with Hinckley National in between both. This makes Hinckley ideally placed to service by rail, London and the Southern Deep-Sea Ports, as well as connections to the North East Region (including the Humber Ports), the North West Region (including the Port of Liverpool); and Scotland.
- 83 Being located at such a key nodal point on Network Rail's Strategic Rail Freight Network significantly lowers the barrier to entry to utilise rail. It maximises the opportunity for occupiers to create viable shared user routes to and from terminals all over the UK, including the possibility of adding loads to passing train services.
- 84 Midlands Connect, whilst looking at passenger and freight service improvements has

identified this line as an Efficient Rail Freight Route, with sufficient capacity forecast to accommodate Hinckley National. Paragraph 80 the proposal for HNFI has been discussed with the rail managers at Midlands Connect who have indicated the proposals are aligned with the strategy.

# RAIL FREIGHT ECONOMIC BENEFITS AND FORECASTING

#### **Economic benefits**

- 85 Rail freight is the use of the rail network to transport goods on behalf of customers in industry and commence. The rail freight industry is often cited as a success of privatisation in the 1990's where competition has helped to transform the industry into a dynamic and efficient sector. The sector today is regulated and characterised by high costs of entry and economies of scale. For these reasons it is dominated by a small number of major providers, the top 4 of which generate 88.7% of the industry revenue.
- 86 Rail freight is a significant and growing part of the national economy. According to the Network Rail Freight Network Study (August 2016), total volumes of rail freight increased by 65% (from 13 to 22 billion net tonne kilometres) over the 20 years between 1995/1996 and 2014/2015. Whilst the sector experienced a fall in 2015/2016 attributed to a decline in movement of coal, it is expected that annual total rail freight volumes has the potential to grow steadily by 3% per annum to 2043. This figure represents 'unconstrained' capacity growth and does not take into account factors that have the potential to constrain or restrict growth (discussed later in this paper). The total value of goods carried today in the UK by rail is estimated to be in the region of £30bn annually.
- 87 The gains to business in productivity from movement of freight by rail were estimated at £1.1bn in 2013/2014, serving to underline the huge economic benefits that this industry has to offer.
- 88 There is evidence of increasing efficiency within the sector, with freight operators seeing a reduction in 18% in the number of freight train kilometres travelled over the last 10 years despite volume moved increasing by 10% over the same period. Over 10 years between 2003/2004 and 2013/2014 freight tonnes moved per staff member increased by over 60%.
- 89 As regards employment, the rail freight industry is part of the wider UK freight and logistics sector which employs some 1.62 million people, with a further 2.35 million in related occupations equating to about 7.6 per cent of the UK workforce.
- 90 Factors influencing the performance of the rail freight sector include the total volume of freight carried on railways (in turn linked to trade), level of business confidence and competition from road freight (including fuel prices). Other drivers are demand from key markets, such as electricity production, construction, manufacturing, retailers and wholesalers.

- 91 The level of rail freight movement is closely linked to international trade. Projected improvements in the overall UK economy in the next 5 years trade had been forecast to rise strongly. Rail freight increases were expected to be strong in volumes particularly from EU and international imports arriving at UK ports.
- 92 Business confidence can influence demand for rail freight as it is linked to decisions about stock and throughput, for example when and where to hold inventories and when to place new orders. Equally the ease of movement through the seaports will be a vital aspect in the routing of traffic if the customs borders become constrained. This could provide significant opportunities for some smaller ports to deal with flows and for inland free port / free trade zones to act as new storage and manufacturing hubs. Being linked by rail can provide a secure and efficient way to create an accepted off-dock customs zone, as had been created originally for the Channel Tunnel, at Wembley.
- 93 Performance of the road freight transport sector can be a threat to rail freight as its main competitor. Any changes in the costs, productivity or capacity of road freight transport are likely to affect the revenue and profitability of rail freight operators. The 2016/2017 fuel price drop became a serious challenge to the attractiveness and competition of rail relative to road. Fuel prices have now increased significantly, making rail freight increasingly competitive again.

# **Forecast need**

- 94 In preparing its Rail Freight Strategy (September 2016) the Government identified a need for more realistic 'constrained' growth projections against which progress going forward, including carbon reporting, can be tracked. The DfT commissioned Arup to derive new forecasts for growth of rail freight based on current levels in 2015/2016 up to 2030, according to low, medium and high scenarios which are based on assumptions that take into account varying degrees of constraints associated with policy, market and network factors.
- 95 Table A below summarises the 'best case' / 'unconstrained' forecasts in the 2013 Freight Market Study (FMS) compared to 'constrained' forecasts in the Arup 2016 report for rail freight, provided below for the key markets rail markets (intermodal, Electricity Supply Industries (ESI), construction and automotive (moving Built Up Vehicles, not components, the latter being in the intermodal numbers).
- **96** The figures demonstrate a clear disparity between 'unconstrained' and 'constrained' growth forecasts. This underlines the need for action to address barriers to increasing use of rail freight across all key markets so that this industry is able to fulfil its maximum potential and deliver other wider economic, social and environmental objectives; as well as recognising unusual externalities, like the period of falling and sustained lower fuel prices, which has now ended.

Commodity	Unconstrained Forecast*	Low Constrained Forecast	Medium Constrained Forecast	High Constrained Forecast
Ports Intermodal	41.76	22.00	31.81	45.69
Domestic Intermodal	24.26	2.78	4.03	5.81
Channel Tunnel Intermodal	1.95	n/a**	n/a	n/a
ESI Coal	5.44	0.00	0.00	0.00
Biomass	14.10	2.51	7.13	18.64
Waste	1.44	0.48	1.44	1.44
Construction	21.99	21.99	26.51	31.91
Automotive	0.41	0.42	0.51	0.61

Table 1: Rail Freight Forecasts 2015/2016 to 2030 for Key Market Commodities (Arup, FuturePotential for Modal Shift in the UK Rail Freight Market, September 2016)

\*million tonnes lifted \*\* Channel Tunnel numbers are accounted for in counts according to each different commodity

- 97 Ports and domestic intermodal volumes increased on average by some 0.4% per annum between 2011 and 2015, significantly lower than the FMS projections. According to the Network Rail FNS (August 2016) the most apparent reason for this is that the assumptions underpinning the unconstrained forecasts did not follow the trends they were expected to. Namely, economic growth has been lower than expected due to the vote for Brexit, and fuel prices have remained weak, declining some 17% over the period. Importantly there have also been delays in the delivery of enhancements planned to address priority capacity constraints on the rail network.
- 98 Whilst all these factors influence the extent of future growth, delay to improvements has potentially the most significant bearing. Intermodal traffic is driven by demand for goods, whether these be by end consumers or as part of a wider supply chain, and thus has a different geographic footprint to the movements of traditional bulk commodities that the UK railways were originally designed for. These new areas of demand, which are also having the effect of shifting freight flows towards busy passenger rail corridors, are presenting new and significant challenges for the capacity and capability of the classic rail network in terms of its operational efficiency and infrastructure.
- 99 Operational efficiency is concerned largely with creating a better balance of passenger and freight traffic through more effective pathing and is otherwise a barrier to growth common to nearly all markets seeking to use rail freight due to current and existing pressures on national networks. It is possible however to identify infrastructure issues that are more specific to different market sectors and routes.

- 100 Hinckley National, is on the Felixstowe to Nuneaton line, which has been a freight priority scheme developed to remove freight traffic to and from the Port of Felixstowe and London Gateway from having to use the North London Line and the West Coast Main Line in order to access the Midlands and beyond. The proposed scheme also avoids rail freight movements needing to go through the more congested aspects of the Midlands network, increasing reliability and allowing for passenger services to grow, including between the West Midlands and Leicester, a key aspiration of Midlands Connect.
- 101 More SRFI's are needed to enable ports and inland terminals to be connected by rail, reducing the distances required for local HGV moves and allowing the growth of rail services. A shortage is a barrier to rail freight growth.
- 102 Hinckley National is exceptionally well placed to provide services to and from the UK's deep-sea and short sea ports, by being on the Felixstowe Nuneaton line, between the WCML and the ECML. Felixstowe currently has 33 train paths each way, with the expectation to develop up to 60 each way per day. London Gateway is successfully trialling a new Channel Tunnel rail freight service through its rail terminal, via Duisburg, Germany to and from China, using the Silk Route, which can readily be extended to Hinckley National (or boxes can be consolidated with London Gateway Port traffic to and from Hinckley).
- 103 6.19 Where terminals have to be serviced away from a mainline, as a destination in their own right, or where there is considerable competition for train paths; then the barrier to starting new services can be high. Hinckley National will be one of the most readily accessible terminals in the country, able to best benefit from demand growth and ease of access, in an area of significant economic importance for both UK manufacturing and nationwide distribution, being within the Logistics Golden Triangle.

# CONCLUSION

- 104 Hinckley National Rail Freight Interchange is in an exceptional location, with mainline rail access on the Nuneaton to Felixstowe line, right at the hub of the National Rail Freight Network; and at Junction 2 of the M69, in the heart of the UK's Logistics Golden Triangle.
- 105 The scheme is being promoted in accordance with national and regional polices, both for Nationally Significant Infrastructure Projects through to achieving the ambitions of the Midlands Engine, Midlands Connect and the LLEP.
- 106 International connectivity, through the ports; and to other regions with the potential to assist, not hinder, in the development of passenger traffic through the region is clearly important for the economic sustainability and indeed, growth. Being on the mainline in this location, provides the greatest efficiencies and lowers the barrier to new rail freight users, enabling the potential of rail to be fulfilled.

#### Frampton Town Planning Ltd & Baker Rose Consulting LLP ♦ October 2018