

## **1. INTRODUCTION**

Kent International Gateway is intended to contribute to the continuing need in the Greater South East for warehousing sites, which is estimated to amount to around 590ha of B8 (industrial units) development to 2026. In order to comply with the guidance offered by the South East Plan, such development should be located at rail or water connected sites with intermodal facilities. The plan recommends that rail freight should be concentrated along the Channel Tunnel to London, London to the Bristol Channel and Solent to the Midlands railway corridors.

The site at KIG has been developed with the expectation that it will act as both a Regional Distribution Centre (RDC) and a National Distribution Centre (NDC). As an NDC, it would be expected to act predominately as a destination for goods from the continent arriving both by rail and through the ferry ports by road haulage. Goods would then be despatched into the domestic economy, by rail for destinations in Northern Britain. By being located close to the Channel Ports, it is suggested that KIG would allow the distance covered by international hauliers within the UK to be minimised. The long length of haul available to reach Northern Britain, it is suggested, would maximise rail's domestic opportunity.

The development will consist of 362,400 square metres of warehousing and a 6.5 ha intermodal terminal designed to handle at least 200,000 freight units per annum. Two of the largest warehouses would be directly rail linked.

It is anticipated that KIG alone will only address around 16% of future need in the Greater South East for rail connected warehousing. Forecasts suggest that up to 2026, there will be a need for around 590ha of B8 land are rail-connected sites.

Other sites, which either have been granted consent – Howbury Park, or are the subject of serious proposals are – Radlett, Slough and London Gateway (Corydon).

## **2. THE FREIGHT TRANSPORT ASSOCIATION**

The Freight Transport Association (FTA) is one of the UK's leading trade associations. It represents British industry using and operating freight services by road, rail, sea and air and is funded by members

## **FTA CONSULTANCY REPORT FOR SOUTH EAST ENGLAND DEVELOPMENT AGENCY**

---

involved in all modes of freight movement locally, nationally and internationally. The Association currently has just over 14,000 member companies ranging from small businesses to large multi-national enterprises. FTA employs over 500 staff based at its headquarters in Tunbridge Wells, Kent, in five regional offices across the UK and at its Brussels office. A high proportion of employees are skilled engineers and audit experts, providing on-site support and assistance where needed.

FTA provides an unrivalled portfolio of professional services to its members, including an established Consultancy service utilising highly experienced, expert consultants who undertake a wide range of projects within the industry. FTA has knowledge and experience in both the public and private sectors, with business assignments ranging from legal compliance, auditing and Health and Safety, through to strategies, benchmarking, operating procedures and planning studies.

FTA is a recognised and respected body within the supply chain arena. National and local government authorities work closely with FTA on a wide range of projects. Our work with companies throughout the UK is targeted to the needs of our members and offers key services to all aspects of the supply chain process, while our influence and knowledge is recognised in Europe by leading transport organisations. Our Membership Advice Centre handles over 100 calls per day on all aspects of freight movement and carriage. Our Vehicle Inspection Service supplies over 100 qualified engineers who carry out over 100,000 inspections per annum and our Tachograph Inspection Service provides detailed analysis of around 3 million charts and digital tachograph data per annum. As a result of these services, the association plays a major role in raising standards of excellence among its members and in promoting best practice across all sectors of the transport industry.

### **FTA Rail Policy**

Rail freight is vital for the future economic well-being of the British economy. It has an essential place in securing continuing competitiveness and business wealth creation through its part in an integrated supply chain. Rail freight has a particularly large potential for the UK over the next 30 years, as containerised imports increasingly become the basis.

FTA promotes the following as its core policy agenda on rail to achieve the growth in rail freight that the UK supply chain requires:

## FTA CONSULTANCY REPORT FOR SOUTH EAST ENGLAND DEVELOPMENT AGENCY

---

- **Cost** - delivering an economically competitive offering with ongoing reductions in operating costs
- **Service** - providing a seven day accessible freight network, and striving toward the achievement of 24 hour operation
- **Network capability** -
  - The removal of network pinch-points that constrain freight traffic
  - Gauge enhancement for intermodal containers
  - Expansion of European-gauge cleared routes for freight
- **Terminals** - facilitating the development of rail freight terminals via the UK planning system
- **International** - the liberalisation of rail freight services throughout Europe and affordable Channel Tunnel freight access

### 3. REVIEW OBJECTIVES

FTA was asked to conduct a desk-based exercise to review the relevant documentation and reports produced by MDS Transmodal, Jacobs Consultancy, Nathaniel Lichfield and Partners and others, concentrating efforts on the business model and viability from a transport industry viewpoint. In addition FTA was asked to factor in the following:

- SRA guidelines on RDC's and NDC's
- Channel Tunnel rail link opportunities/threats
- Open markets through the Channel Tunnel in the near future
- Other interchanges in the south east

Face to face, interviews to be conducted, if appropriate with a small number of potential users of the proposed new facility.

### 4. METHODOLOGY

A series of reports were reviewed, critiqued, summarised and compared by David Mitchell, FTA Associate Consultant and Karen Packham, FTA Managing Consultant. Interviews with potential users of the KIG facility were undertaken by John Walter - FTA Senior Logistics Consultant.

The detailed findings of the above activity are contained in the following sections.

## **5. SUMMARY OF INFORMATION PROVIDED**

### **5.1 SEEDA Background**

#### **Letter from SEEDA (3/12/07) to Maidstone Borough Council (MBC)**

This is a response to a request from MBC for comment following the submission by MDS Transmodal of the KIG Planning Application.

Advises MBC to request the applicant to provide more information on the following before they can offer definitive advice:

- The necessity of the SRFI
- Whether it meets Strategic Rail Authority location criteria being 20 miles from the M25
- Whether the proposed location is operationally viable
- The applicant's expectations about the onward transport of freight intercepted by KIG
- The size of the site (112 ha compared with the 40 ha minimum identified in the SRA report)
- Economic Impact of the potential 3500 jobs that KIG is expected to create

This information is required to enable them to understand how the proposal could help to deliver Regional Economic Development in a sustainable way and establish whether it meets the accepted planning guidelines.

#### **Letter from SEEDA (13/02/09) to MBC**

This is a response to the additional information provided by MDS Transmodal in July 2008. The main points covered are:

- The justification for the location is not supported by a definitive business model for the traffic which will be likely to use the KIG facilities
- There is no identified rail freight operator as a potential partner (although the letter acknowledges that the project has the support of the Rail Freight Group and support in principle from Network Rail)
- The inherent uncertainty surrounding the quantity of freight that KIG might attract (and the proportion that will be railborne to and from the

site) means that the planning decision cannot be straightforward and will need to be made on the basis of the suitability of the location and its potential to achieve modal shift

- SEEDA is satisfied that the development requires a site of the size envisaged and that information previously submitted demonstrates that the KIG site is the most suitable
- The applicant's estimates of the number of jobs expected to be created have been generated in a robust way
- The proposal is in line with DFT published strategy on delivering a sustainable transport system (DASTS) by encouraging modal shift from road to rail
- The development has the potential to deliver Target 8 of the Regional Economic Strategy to: *"Reduce road congestion and pollution levels by improving travel choice, promoting public transport, managing demand and facilitating modal shifts"*.
- SEEDA therefore **supports** the application, whilst recognising that MBC must assess highways, environmental and land impact issues

## **5.2 SRA Guidelines on RDC's and NDC's**

Whilst the SRA has been abolished, the Strategic Rail Freight Interchange Policy remains largely relevant with respect to the location and form of new rail linked distribution facilities.

The expression Rail Freight Interchange refers to rail linked distribution parks. This may reflect the fact that the SRA only had a remit to consider rail rather than freight distribution in general. MDS argue that it would be more accurate to define such sites as the grouping together of logistics buildings into one site sharing an intermodal terminal located within the park. Some locations would cater for national and regional distribution centres, and consequently large logistics service providers, manufacturers and retailers will occupy them.

The SRA argues that the scale and location requirements for such sites – in that

- They should be at least 40ha
- A valuable characteristic of each site will be the ability to accommodate expansion
- They also need to be large enough to handle full length 775m trains with appropriately configured on site rail infrastructure and layout
- They need to be located relative to the markets they serve
- As they are likely to be 24/7 operations they should not be located immediately adjacent to areas which may be sensitive to noise
- They should be located with good access to the primary road network and high quality links to the rail network are essential

- The railway lines serving them must have available capacity to run train services, the ability to handle full length trains and a loading gauge able to accommodate intermodal units on standard platform wagons

### **5.3 Channel Tunnel Rail Link Opportunities / Threats**

#### **Background**

Goods train traffic levels stabilised over 2008: 2,718 trains carried 1.24 million tonnes of freight via the Channel Tunnel, ie an average load of 456 tonnes per train.

This change of trend highlights the effectiveness of the new offer structure from October 2007.

Designed to establish the conditions for kick-starting cross-Channel rail freight again, the approach is built around 3 sections:

Free access to the infrastructure with a single pricing structure for all incumbents or new operators and a capping of essential cross-Channel services;

A simplified pricing structure, per train and no longer based on a variable price per tonne, depending on the nature of the goods carried;

A total crossing cost for operators cut by virtually half, down to €4,500 per train.

Fixed link operator Eurotunnel ascribes the increase to the success of the new pricing structure it introduced for rail freight in October 2007.

Through freight trains are operated by DB Schenker (EWS), SNCF Fret and Eurotunnel's own affiliate Europorte-2.

#### **Future**

Channel Tunnel route: A strategic rail freight network project funded for delivery control period 4 (2009-10 to 2013-14) to the value of £10 million for signalling modifications to allow trains hauled by Channel Tunnel electric freight locomotives to use the route to the south of London via Redhill.

A European loading gauge freight link has been secured as far as Barking through the Channel Tunnel access liberalisation and tariff reductions.

Source: DfT Strategic Rail Freight Network: The longer term vision

**6. OPEN MARKETS THROUGH THE CHANNEL TUNNEL IN THE NEAR FUTURE**

Network Rail studies have been commissioned to identify the future preferred freight routes between London and the South East.

**7. KEY FINDINGS FROM THE MDS, JACOBS AND NATHANIEL LICHFIELD**

**7.1 Key Conclusions – Jacobs Consultancy Report on Logistics Rationale**

Maidstone Borough Council commissioned this report (dated March 2009).

Its main conclusions are:

- New rail served distribution parks tend not to be located in the more northern areas of the UK identified by MDS as the most likely destinations for rail services from the proposed site
- KIG is unlikely to attract RO/RO traffic which uses the cross channel ferries and the Channel Tunnel shuttle (its principal target market) because it would incur additional handling costs, increased travel time and delivery uncertainty
- In order to attract container traffic to cross Channel rail services it will need to compete with the sea routes outside Kent – meaning that for it to succeed there will need to be changes to how traffic is handled on cross Channel routes
- Only the most northerly regions of the UK are likely to be an economic distance for rail from or to KIG
- The transfer of cross Channel road traffic to rail for onward UK distribution is the most costly option for all regions except Scotland
- Breaking a rail journey at KIG would incur extra handling costs that reduce the commercially viable market for onward distribution by rail
- The estimated costs for national distribution are lowest for both road and rail when freight traffic does not stop at KIG
- KIG is not well located to attract traffic from the deep sea ports nor to distribute freight nationally
- The potential for modal transfer from road to rail is significantly lower than estimated in the applicant's proposal – a maximum of 2 / 3 trains per day compared with the MDS estimate of 13

## **FTA CONSULTANCY REPORT FOR SOUTH EAST ENGLAND DEVELOPMENT AGENCY**

---

- Kent ranks second bottom of all UK regions in terms of attractiveness as a national distribution centre (as stated by Gerald Eve property consultants)
- The greatest demand for NDC sites will continue to be north of the M25 (e.g. 88% of the UK population can be reached with one day's driving from Daventry and only 61% from KIG)
- KIG would function mainly as an RDC and it should not be assumed that it will reduce M20 lorry traffic
- A daily train load with 30 TEUs daily distributed nationally (by road) from KIG would cost about £350,000 p.a. more than through a site located in the Midlands and receiving direct trains from the Channel Tunnel

### **7.2 Key Conclusions Nathaniel Lichfield and Partners Economic Assessment**

This report (dated March 2009) was commissioned by MBC.

Its main conclusions are:

- The proposed development has the potential to generate between 3,500 and 4,500 jobs – 75% of which would be in the “lower skill groups”
- There is a limited supply of suitable labour within walking distance of the site
- There is more potential labour within a reasonable cycling distance
- There is an even greater potential supply of labour within the wider catchment area (e.g. in the Medway towns) but this will entail a need for long distance car commuting
- The proposals are unlikely to significantly exacerbate existing economic weaknesses in the Maidstone area but are also unlikely to increase employment opportunities in higher skilled sectors
- The proposals may also attract investment to the area
- There are no significant land use implications as the site is already being considered for future development
- The overall conclusion is that the scale and nature of the economic benefit of the proposals would not produce major benefits for the Maidstone economy, nor do much to support current economic objectives. The benefits in employment provision could be outweighed by the increase in longer distance commuting and increased competition for available labour sources in the area

### **7.3 Key Conclusions - MDS Transmodal Final Report dated September 2007**

#### **Section 1 - Introduction**

Provides background of Logistics Market, explaining the roles of National Distribution Centres (NDC), Regional Distribution Centres (RDC) and outlines the case for rail-linked Logistics Parks.

The key requisites for rail to be attractive are explained (able to provide a quality service in a cost effective manner) and the benefits of having an NDC and RDC on the same (rail connected) site are set out.

Report gives “rule of thumb” guide for distance at which rail becomes competitive:

- Non rail connected origin to non rail connected destination – over 400 kms
- Rail connected origin to non rail connected destination – over 200 kms
- Rail connected origin to non rail connected destination – any distance (provided there is enough volume for a daily train)

The role of KIG will be to intercept cargo arriving from mainland Europe that currently goes round London by road. Traffic to the Midlands is considered economical to move by rail, as the distance is over 200 kms.

The ideal location is midway between the Channel ports and London. There is no room for development at Dover, Cheriton or Ashford.

#### **Section 2 – Policy Background**

This explains the Government strategy on rail freight developments of this kind. This is based on the Strategic Rail Authority’s *Strategic Rail Freight Interchange Policy* (published in 2004). This is confirmed as still being applicable until a new strategy is published.

Key factors in considering sites include:

- Suitable road and rail access
- Ability for 24/7 working
- Expansion potential
- Proximity to workforce
- Proximity to markets
- Ability to contribute to identified areas of gaps in provision

The document also identified a need for between 3 and 4 inter-modal interchange terminals to serve London and South East England.

Other policy documents considered in this section are:

- Government White Paper: Delivering a Sustainable Railway July 2007
- Freight Route Utilisation Strategy (FRUS) – published by Network Rail March 2007
- Regional Policy: The South East Plan 2006
- Regional Policy: The Regional Economic Strategy 2006-2026

Relevant sections which support the case for KIG are quoted and explained.

### **Section 3 – The Criteria Based Approach to Assessing Rail Linked Logistics Parks**

These criteria have been tested at a number of planning enquires and are based on:

- Planning policy with respect to the location, form and structure of strategic distribution sites
- The qualities and characteristics an individual site must possess in order to render it commercially attractive to the logistics market  
A site which is appropriate for hosting a large rail linked logistics park must have:
  - A 'market' need for the proposed facilities which cannot be met through existing capacity or at alternative locations
  - Good quality access to the highway network. Good quality access is defined as being served by the national motorway network or major non-motorway routes
  - Good quality rail access. Good quality access is defined in terms of a generous loading gauge which is capable of accommodating the full range of intermodal units on standard platform wagons, available capacity to run freight train services and which permits full operational flexibility
  - At least 50 hectares of development land available, together with a suitable configuration which allows large scale warehousing, intermodal terminal facilities and appropriate railway wagon reception facilities
  - Allow 24 hour operations and no restrictions on vehicle movements
  - Good access to labour

The rest of this section describes the rationale underlining each of the criteria and identifies the criteria which a site must meet in order to be commercially attractive.

#### **Section 4 – Assessment of Kent International Gateway**

This section 'tests' the proposed Kent International Gateway development against the criteria outlined in Section 3.

MDS Transmodal believes that it clearly demonstrates that the site meets all the criteria fully and to a high level, meaning it can therefore be considered an important location for a large rail linked logistics park.

##### Market Need

The proposed KIG development meets the identified general market need in that it will provide a substantial amount of distribution centre floor space, which will be served by rail. The warehousing will be served either from the intermodal terminal or by direct rail linkages should occupiers require such facilities.

Around 2.4 million square metres of new build warehouse floor space (in units of 25,000 sq metres – the size of warehouse, which is attracted to rail link sites) may be required in the Greater South East up to 2026 on new rail linked sites. This translates into a market need for 8 rail-linked logistics parks (75 hectares) across the Greater South East Region over the next 20 years on the basis of a mean site size of 75ha. KIG will be able to meet around 16% of the future regional need (375,000 square metres).

##### Good Quality Highway Access

The KIG site will have a dedicated entrance directly from the A20. This entrance itself will be located approximately 0.5km from Junction 8 of the M20, effectively giving the development direct access to the national motorway network. The report refers to a separate accompanying document containing a Highway Impact Assessment (not provided).

MDS claims that it demonstrates that in terms of road access, the KIG site meets the criteria in full and can be considered, against this criterion, to be an appropriate site for hosting rail linked logistics facilities.

*Good Quality Rail Access*

The report refers to a separate accompanying document *Railway Connectivity and Site Layout* report (not provided).

MDS claims that this demonstrates that, in terms of rail connectivity, the KIG site meets the criteria in full to a very high standard and that it can be considered to have good railway access. From this perspective, it is claimed that it is an appropriate site for hosting rail linked distribution facilities.

Although we have not been provided with this report, its main findings are summarised in the MDS report:

- The site is served by the main Swanley-Ashford line which is already gauge cleared to the W9 loading gauge (the minimum gauge at which intermodal services can operate without imposing serious cost or operational flexibility penalties on rail freight operating costs).
- The KIG site could also handle piggyback trailer operations to and from mainland Europe via the Channel Tunnel. The Channel Tunnel Rail Link to Ashford is already gauge cleared to piggyback standards, and only two structures between Ashford and KIG are foul of the requisite gauge. It is likely that these lineside structures could be enhanced relatively easily and cheaply, for example by means of track lowering.
- The KIG site possesses excellent rail connectivity from an 'operational flexibility' perspective. The site offers direct access to/from the south (Channel Tunnel) and the all major origins/destinations in Britain, without the need to change direction (by means of a locomotive 'run round') or utilise a long diversionary or circuitous route.
- An analysis of available freight capacity to/from KIG suggests that at least one available freight path per off-peak hour per direction is available to serve the site (the minimum requirement).
- KIG is to be developed with an open access intermodal terminal capable of handling 750m length trains. In addition, a number of the proposed warehouse units can also be constructed with dedicated sidings for conventional box wagon traffics (should occupiers require such facilities).

*Site Size and Configuration*

The *Railway Connectivity and Site Layout* report also contains an assessment of the site size and proposed layout.

The main findings of this report are summarised as follows in the MDS report:

- KIG will have reception sidings capable of receiving trains from both directions
- The railway layout permits efficient and operationally flexible train movements to, from and within the site
- KIG will have an intermodal rail freight terminal
- KIG is 112ha total size, provides around 345,000 square metres of floor space and individual plots, which permit very large units

The MDS report concludes that in terms of size and configuration the KIG site meets the criteria in full and to a very high standard. From this perspective, the site can be considered an appropriate site for hosting rail linked distribution facilities.

*Neighbouring Land Uses (Allows 24 hour operations without restrictions)*

An Environmental Impact Statement has been prepared for the KIG site (not provided).

This shows that the KIG development will be able to permit 24-hour operations and no restrictions on vehicle movements without significant impact on neighbouring land uses. Accordingly, the KIG site meets the criteria in full, meaning it can be considered an appropriate site for hosting rail linked distribution facilities.

*Labour Supply*

A *socio-economic assessment* has been prepared and is reported in an accompanying technical document (not provided).

This document demonstrates that, in terms of labour supply, the KIG site is located with a sufficient quality labour supply within a reasonable 'travel to work' distance. The KIG site therefore meets the criteria in full and to a very high standard. From this perspective too, the site can be considered an appropriate site for hosting rail linked distribution facilities.

**Section 5 – Traffic Forecasts for Kent International Gateway**

This section provides traffic forecasts for KIG. It sets out the assumptions used to arrive at numbers of inbound and outbound movements by road and rail.

They have been derived from the following underlying assumptions.

- At any one time, each square metre of floor space holds 1.5 pallets
- Stock turns over 12.5 times per annum (ie dwell time of 4 weeks)
- 25 pallets per standard unit load
- 300 operating days per annum

The detailed calculations of traffic forecasts are contained in Appendix 2. They have been produced using the Great Britain Freight Model and are based on data from the DfT Continuing Survey of Road Goods Transport (based on 2005 data, which was the latest available at the time the report was produced).

Goods which are not handled at distribution centres, ie bulk materials such as coal, petroleum products, aggregates and waste, were identified and excluded from the analysis.

Total traffic destined for a distribution centre in the Greater South East is forecast to rise by 32% (104.6/79.1 million tonnes) between 2005 and 2026.

Appendix 2 also contains calculations of current warehouse capacity and forecast capacity.

The traffic forecasts indicate that unitised goods going to distribution centres in the Greater South East will increase from 79.1 million tonnes in 2005 to 104.6 million tonnes in 2026, an increase of around 32%. This implies that a similar increase in distribution centre floor space will also be required over this period.

New warehouse build between 2005 and 2026 is estimated at 4.06 million square metres.

## **Section 6 – Alternative Site Search and Assessment**

This contains a summary of the alternative site search and assessment.

The purpose of this was to ascertain whether there are other sites in the 'Greater South East' with locational qualities of a comparable or superior level to those of KIG.

## FTA CONSULTANCY REPORT FOR SOUTH EAST ENGLAND DEVELOPMENT AGENCY

---

The initial work was carried out on the 'Landranger' series of Ordnance Survey Maps (1:50,000 scale). A two-stage process was adopted:

- The production of a 'long list' of sites. These are sites which are located near a railway line and major road interchange which, on first appearances, could potentially meet the site assessment criteria
- Assessing the 'long list' using the criteria based approach to produce a 'short list' of potentially suitable sites

In assessing the Long List, the following criteria were applied:

### At Least 50 Hectares of Development Land Available

Only individual sites larger than 50 ha, or a group of adjacent fields which when combined could form a site larger than 50 ha were considered for inclusion on the short list.

### Good Rail Access

Routes shown as W8 gauge (the minimum requirement for intermodal traffics) have been included to broaden the net to include routes, which could be upgraded at a reasonable cost.

### Good Quality Access to the Highway Network

Only sites located a short distance from a motorway or grade-separated dual carriageway was included on the short list. The maximum road distance to a major road was deemed to be 5km. In certain areas, where only 'A' roads occur this criteria was relaxed to include two-lane 'A' roads in order to ensure the compilation of a comprehensive long list.

### A Suitable Site Configuration

To meet this criterion the site should allow large scale high-bay warehousing, intermodal terminal facilities, appropriate railway wagon reception facilities and parking facilities for all goods vehicles using the site.

The initial OS map survey considered only sites of regular shape which were generally square or rectangular. Odd-shaped sites, which would require awkward rail layouts and storage facilities, were regarded as sub-optimal and discounted.

#### Located away from Incompatible Neighbours

This allows for 24-hour operations and no restrictions on vehicle movements, minimising the impact on the local environment. The need for HGVs to pass through significant built-up areas (especially residential settlements on or adjacent to a site) was regarded as a reason to discount locations.

#### Has Good Access to Labour

It was decided that the research needed to determine labour availability etc could be left to a later stage of the site selection process.

#### Site Topography

The site should be on flat terrain so that a rail system can be established that does not encounter gradients greater than 1:500, although some sites have been included where this limit has been exceeded on the understanding that earthworks may be needed.

#### Rail Access Across Roads

In order to ensure the site is operationally viable it should be ideally located with a rail line on one side and an access road on one of the other sides, so that there is no need for the rail line to access the site by crossing a road. Where a site was identified on the long list and rail access would need to cross a major road or motorway it has been discounted. If, however, the site only required the apparent minor re-alignment of a road, or rail access only crossed a minor road and/or there was alternative road access then this did not necessarily discount the site.

#### Watercourses

Although the presence of a watercourse through a site was not sufficient to discount it, if it was obviously a major watercourse or if there were more than one, then there was deemed sufficient potential engineering reason to discount it.

### **Site Identification and Assessment**

The study initially identified 120 sites that, on first appearances, could meet the site assessment criteria.

A total of 87 sites (out of 120) on the long list do not meet the criteria and were discounted.

*These sites are listed in Appendix 4 with a summary of their assessment against the criteria.*

A 'short list' of 33 potentially suitable sites was subsequently identified which meet the criteria to at least the minimum required standards.

*These sites are listed in Appendix 3 with a summary of their assessment against the criteria.*

MDS concludes that KIG is the only site on the Dover Straits-London corridor which is suitable for hosting large-scale rail linked logistics facilities.

## **Section 7 - Conclusions**

There is a strong market need for the proposed development at KIG.

The development meets the criteria fully and to a very high standard, meaning that it can be considered an appropriate site for rail linked distribution facilities.

Future demand is sufficiently robust to warrant the need for KIG in addition to other developments, which may be proposed for the Greater South East region.

The assessment of alternative sites suggests that while there are other locations in the Greater South East which appear to meet the criteria, and therefore could potentially contribute towards meeting the identified regional need for rail-linked facilities; KIG is the only site on the Dover Straits-London corridor, which meets the criteria. It is the only location in the corridor which combines suitable rail access (W9 loading gauge, available capacity), and direct access to the motorway network at a large enough site capable of hosting modern logistics warehousing.

Consequently, the conclusion is that KIG is the only location on this corridor, which is suitable for hosting large-scale rail linked logistics facilities. The Dover-London corridor has been identified within regional policy where modal shift will be promoted in general and where priority should be given for providing enhanced capacity for the movement of freight by rail.

Supplementary Information received 14 October 2009.

## **Statement of Common Ground on Rail Infrastructure and Rail Freight Operations**

### **Available Network Rail Capacity**

It is agreed that the route offers a guaranteed minimum of 35 trains per direction per day. Only around 5 trains per day per direction are currently scheduled to operate through the Tunnel and some trains do not run daily. Traffic conveyed through the Tunnel at present consists mainly of bulk and semi bulk such as china clay, steel, cars and car components, plus some intermodal freight. There is significantly more capacity through the Tunnel for additional freight services including those proposed to operate on the high-speed line.

### **The High Speed Line (HS1)**

For the purposes of rail freight, the high-speed line links the Channel Tunnel to Ripple Lane in Barking. KIG will not be directly connected to HS1 for trains operating to and from the North. Direct access to HS1 is possible at Ashford for trains operating to and from the Channel Tunnel. While freight does not currently operate on HS1, this is likely in the future, although such services are likely to be limited to a window of around 5 night time hours due to the performance penalties that apply to this line during the day.

### **Grants**

It is agreed that Freight Facilities Grants would not be available at KIG for any facilities that are required as a condition of planning.

### **Additional Comments on Additional Information**

There does not appear to be a capacity issue with the number of trains, however it is difficult to envisage how KIG can attract significant increases in volumes.

Whilst freight does not currently operate to HS1, it is only likely that such services will be available in the future.

What is the impact of grants not being available?

**7.4 Key Conclusions - MDS Transmodal Additional Information Report Dated September 2008**

The above prompted the following supplementary report - requested by Maidstone Borough Council to provide additional information and rationale to support the finding of the original report dated September 2007.

The objectives of this additional report are to-

Demonstrate

- A cost advantage to operators locating NDC's at KIG rather than the Midlands
- That across the South East there will be a need by 2026 to find 591ha of B8 land on large rail linked logistics parks similar in size/scale to that proposed at KIG. In order to provide the market with a choice of size and facilities

Describe

- The logistics supply chain
- Type of commodities likely to be handled by KIG
- The purpose of KIG, including key roles to be played by the proposed facilities

Explain

- Why it is expected that two thirds of floor space at KIG will be NDC activity
- Why Dunkerque cannot be considered at an alternative location

Address

- A number of miscellaneous issues relating to the wider railway network in Kent/South East England

**Where/How Does this Report Meet its Stated Objectives**

**Objective - Demonstrate**

## FTA CONSULTANCY REPORT FOR SOUTH EAST ENGLAND DEVELOPMENT AGENCY

---

1. A cost advantage to operators locating NDC's at KIG rather than the Midlands

### Observations

With regard to rail freight, the economics have been calculated as follows:-

- Fixed costs of circa £4,000 per 24 hours
- Drivers at £50 gross per hour
- Incremental costs of £5 per kilometre
- £50 per container in handling charges at each end of the journey

There are a couple of examples of how these figures have been calculated.

“On page 12, there is an argument that KIG is well located to exploit rail. The distance between KIG and the M62 corridor and beyond, which represents 40% of UK cargo destinations, is around 400km. It follows that given rail connection at KIG at one end of the journey, given the distance involved, rail will be competitive for a substantial proportion of onward distribution between a National Distribution Centre at KIG and a Regional Distribution Centre in Northern Britain”.

There is no consideration given in this assumption of the origin or nature of the cargo its final destination or the port of arrival in the UK. Does 40% of the cargo bound for the M62 corridor come in through the channel ports, as this is the only scenario where KIG could possibly be beneficial.

There are many assumptions in this section for example

- In terms of KIG's role, it is envisaged that the site will be attractive to importers/distributors of cargo from mainland Europe (suppliers to the retail industry, retailers or their appointed 3pl's who require modern facilities in which to store goods
- Such occupiers, who primarily import via the Dover Straits, will be attracted to KIG as they will be able to receive and despatch cargo by both rail and road transport
- It is expected that around two thirds of floor space to be occupied by NDC activity
- Importers/distributors of cargo from mainland Europe locating at KIG will be able to achieve significant financial benefits on both their inbound and outbound flows, compared with being in a similar site in the Midlands

## FTA CONSULTANCY REPORT FOR SOUTH EAST ENGLAND DEVELOPMENT AGENCY

---

- There will be service quality benefits and wider environmental benefits

In summary whilst some calculations can only be based on assumptions, there is no evidence that potential users of the intermodal service or occupiers of the NDC's or RDC's have been approached to ascertain whether this is a suitable or desirable location for the proposed use.

In addition, two providers, EWS and Freightliner have indicated that they are not interested in providing for this facility.

Page 17, an important reason why rail freight for consumer goods has failed to take off through the Channel Tunnel or to the South East is the absence of rail linked destinations or intermodal terminals. On what basis is this fact?

Page 18 – assumptions have been made on the economics of distributing goods from an NDC at KIG against a similar facility in the Midlands.

Pages 19, 20 and 21 – Estimates have been made on both in bound and out bound costs for KIG. On what basis have these been made are they assuming full capacity at all times to get low figures?

Based on the above assumptions – the statement is “clearly there is an economic case for locating NDC's at KIG”.

There is no visible evidence to support any of the above assumptions.

Assumptions have been made regarding the increased volumes of HGV traffic on the roads around KIG by both MDS and Jacobs.

MDS – 2007 report

In bound traffic – 1,710 hgv movements

Out bound traffic – 1,710 hgv movements

Total 3,420 hgv movements

Jacobs – 2009

In bound traffic – 1,413 hgv movements

Out bound traffic – 1,413 hgv movements

Total 2,827 hgv movements

The difference between the two figures is significant, this indicates that the volumes of goods in and goods out has been over calculated by one or under calculated by the other, which in turn questions the viability of the KIG site.

2. That across the South East there will be a need by 2026 to find 591ha of B8 land on large rail linked logistics parks similar in size/scale to that proposed at KIG. In order to provide the market with a choice of size and facilities.

### **Observations**

A forecast has been made of future demand for large scale warehousing, which gives an estimate of total new space required up to 2030. The assumption is based on new build and replacement build, linked to traffic volume growth.

Using the following criteria

- Replacement build
- Volumes of unitised goods delivered in the Greater South East (2005)
- Unitised goods delivered to the Greater South East 2005
- Floor space and volume throughout relationships at RDC's and NDC's
- Estimated existing warehouse floor space in Greater South East
- Estimated replacement new build in Greater South East to 2026
- Forecast unitised goods delivered in greater south 2026 and consequent growth new build
- Total new build floor space in greater south east and associated land requirements
- Forecast demand for new build units >25,000m<sup>2</sup> up to 2026 and land requirements

Which gives the conclusion that around 2.4 million square metres of new build floor space may be required in the Greater South East up to 2026 on new rail linked sites. In accordance with national policy, these should be rail connected. This equates to a gross land requirement of 591ha by 2026. This would mean that KIG is able to meet around 16% of the future regional need.

In summary based on assumptions, it is expected that the total gross warehouse new build in the Greater South East to be in the order of 3.9 million square metres by 2026. On the basis that all of the new build were to locate at new sites and that the actual warehouse floor space occupied 40% of a plot footprint, this implies a requirement for 974ha.

Page 35 – The logistics market, particularly operators of large distribution centres, are demanding facilities located alongside rail terminal facilities.

Which logistics operators have said this and have they determined where these facilities should be? See section 5 for the details of our own interviews with potential users.

**Objective – Describe**

1. The logistics supply chain

**Observations**

The report describes the logistics supply chain in some detail; the rationale appears to be sound for the contents of this section. One aspect does cause concern.

Transport from NDC's to RDC's (page 9) – *background to the movement of goods between NDC and RDC and road –v- rail statement.*

*“Rail freight has recently been gaining market share, particularly for flows between NDC's and RDC's in Scotland (and in the case of KIG, we anticipate significant flows to the M62 corridor”) comparing Scotland the Greater South East is like comparing apples and pears.*

This is an assumption that has not been substantiated with facts or any evidence of market research.

2. Type of commodities likely to be handled by KIG

**Observations**

The only mention of the types of commodities likely to be handled by KIG is on pages 24 and 25, where a European Transport Policy Information System project database table has been replicated.

There is no commentary or a priority list of what commodities are more likely to come through KIG rather than East Coast Ports straight into the Midlands. There is no rationale of what per cent of the 32,239 thousand tonnes lifted would realistically route through KIG.

## FTA CONSULTANCY REPORT FOR SOUTH EAST ENGLAND DEVELOPMENT AGENCY

---

3. The purpose of KIG, including key roles to be played by the proposed facilities

### Observations

The answer to this is spread across the whole document, key points are:

- The proposals at KIG meet both a commercial and a planning need
- They have been reviewed by Network Rail in terms of network capacity and operation and deemed satisfactory
- KIG meets the requisite criteria for scale, road and rail connections established and planning documentation and as established in a number of public enquiries

### Objective – Explain

1. Why it is expected that two thirds of floor space at KIG will be NDC activity.

### Observations

On page 37 – it is expected that around two thirds of the floor space at KIG is to be occupied by NDC activity, with the remainder being RDC's. This position has been derived by considering the volume of unitised cargo\* currently delivered annually to NDC's and RDC's in the East Midlands, West Midlands and the Greater South East combined. As shown below.

#### Unitised Cargo Delivered to Distribution Centres by Type

	To NDC's	To RDC's	Total
East Midlands 1	23.9	6.0	29.9
West Midlands 2	3.5	31.1	34.6
Greater South East 3	19.8	59.4	79.2
Total	47.2	96.5	143.7

1. From East Midlands Distribution Study, 80% tonnage to NDC

2. From West Midlands Logistics Study, 90% tonnage to RDC

3. Based on current 75% RDC 25% NDC split

\* (defined as those commodities, which will pass through NDC's and RDC's at some stage in the supply chain.)

In summary current occupancy in the Greater South East is 75% RDC and 25% NDC, there is no substantiated argument as to why that split at KIG should be 66% NDC and 33% RDC.

2. Why Dunkerque cannot be considered at an alternative location.

Very strong argument as to why Dunkerque is not really a suitable alternative.

8. **BRITAINS TRANSPORT INFRASTRUCTURE – STRATEGIC RAIL FREIGHT NETWORK: THE LONGER TERM VISION – SEPTEMBER 2009.**

### **Introduction**

Efficient and sustainable freight transport is increasingly both to the UK's economy and to the achievement of environmental goals.

### **Context**

There is a need to make the fullest use of the UK's predominately mixed traffic rail network. Conflicts occur between passenger and freight requirements. At present the network is almost nowhere near optimised for freight, which reduces the efficiency of the UK's rail distribution logistics.

### **Policy**

A Strategic Rail Freight Interchange (SRFI) is a large multi-purpose rail freight interchange containing rail-connected warehousing and container handling facilities. The site may also contain manufacturing and processing activities.

The aim of an SRFI is to optimise the use of rail in the freight journey by minimising some elements of the secondary distribution leg by road through co-location of other distribution and freight activities. SRFIs are a key element in reducing the cost to users of moving freight by rail and therefore are important in facilitating the transfer of freight from road to rail.

The Government's *Strategy for Sustainable Distribution*, which seeks to maximise the economic, environmental and social benefits of transferring freight movements from road to rail, incorporates a strategy

for major freight interchanges, including rail-intermodal terminals. SRFIs represent major gateways to the national rail network, which allow businesses to move freight by rail for distances and in quantities appropriate to their operational and commercial priorities. They are therefore key features of national rail infrastructure.

A network of SRFIs, complemented by other freight interchanges and terminals, is required to support longer-term development of efficient rail freight distribution logistics. Whilst SRFIs operate to serve regional and cross regional catchment areas, they are also key components in national and international networks. These networks are of strategic importance in facilitating links between UK regions and the EU.

It is important that SRFIs are located near the key business markets they will serve, which will largely focus on major urban centres, or groups of centres, and key supply chain routes. The need for effective connections for both rail and road means that the number of locations suitable as SRFIs will be limited.

It is essential that there is open access to such facilities to enable competitive rail haulage and customer choice. This means that the commercial structure controlling access at the site must ensure that all rail freight operators should be able to serve the SRFI without impediment.

### **Observations**

The arguments made for KIG meet the policy criteria laid down in this publication.

However, consideration must be given to the fact that the network requires significant improvement before a fully operational freight network is achievable, and has the confidence of those who may use it.

Intermodal traffic flows in 2030 are still predominately from

- Felixstowe to London & the South East, South Wales, West Anglia, West Midlands, Liverpool, Manchester, West Yorkshire, the North East and Scotland
- Southampton to London & the South East, South Wales, West Midlands, Liverpool, Manchester, West Yorkshire, the North East and Scotland
- Thames Ports to West Midlands, West Anglia, Liverpool, Manchester, West Yorkshire and Scotland.

It is difficult to envisage intermodal traffic coming in via the Thames Ports and diverting to KIG to make onwards journeys.

**9. CONCLUSIONS OF THE INTERVIEW WITH POTENTIAL USERS OF THE FACILITY**

A series of questions were put to a range of senior personnel within organisations that are potential users/occupiers of KIG. The questionnaire was structured to address the salient points raised in the various reports published, and to test some of the assumptions being made.

The companies interviewed represented the following sectors, Retail, 3PL, Global Technologies and Global Household Consumables.

1. The logistics market, particularly operators of large distribution centres are demanding facilities located along side rail terminal facilities. Do you believe this statement to be true?

*There is a general view that freight carried by rail has clear attractions, predominately for environmental reasons.*

*However, in the experience of those interviewed the above statement is not correct particularly in the short term and the near future. In addition to be attractive, these centres need to be well located.*

*Road movements will continue to dominate until fuel prices, transport/carbon taxes increase considerably, then the economic balance may shift.*

*There is a question mark over the Europe/UK gauge, capacity and time/effort/cost to transfer from road to rail, this coupled with the distances that need to be travelled to make rail viable, means that at present rail only works for particular supply chains.*

2. Would you agree with the following statement? – An important reason why rail freight has failed to take off through the Channel Tunnel or to the South East is the absence of rail linked destinations or intermodal terminals.

*Partly true – the need for bulk quantities and the lack of truly joined up capability are the major reasons for lack of take up.*

## FTA CONSULTANCY REPORT FOR SOUTH EAST ENGLAND DEVELOPMENT AGENCY

---

*The quality of rail supply across Europe is not reliable, compatible or robust enough in many areas, eg rail gauge difference. EU wide rail investment is needed.*

*There are other more important reasons – containers come in via Felixstowe and Southampton (both with rail links) therefore do not need to be moved through the South East. Felixstowe and Southampton ports are also used for cost reasons, not just because of their rail links. Handling containers or RO RO traffic into a South East location then back onto rail or road and then handling them again for delivery involves too much delay and cost. Port centric logistics has significant advantages .*

3. Would you agree with the following statement? “Rail freight has recently been gaining market share, particularly for flows between Europe and NDC’s and RDC’s in Scotland?”

*In general, agree in respect of Scotland to some RDC’s, however in the scheme of things this is not significant.*

*This is a logical view, however there is little to support the view. There is awareness of Daventry to Scotland but these movements cannot be described as significant in total supply chain terms.*

- If so, do you anticipate significant flows from Europe to the M62 corridor, being transported in the same way in the next 5 -10 years?

*At conceptual level, this is a logical development but there is no evidence that this will happen and to succeed it would need road freight taxes to be significantly increased.*

*Road will continue to dominate freight movements, due to the delay and costs of transfer onto and off rail. Short sea shipping of containers is likely to increase.*

4. What is your overall view of the proposed development in the form of pro’s and con’s?

- Pros
  - *State of the art facilities*
  - *Provision of warehouse space (land availability) – increase property portfolio in South East*
  - *Potential for train movements to KIG exists but only for RDC needs*

## FTA CONSULTANCY REPORT FOR SOUTH EAST ENGLAND DEVELOPMENT AGENCY

---

- *Could be useful for movements through the tunnel to Europe*
- *Financial incentives (normal for a new facility)*
- Cons
  - *Too close to ports to be economic as a transit point, making transshipment less cost effective, port centric logistics has major advantages over KIG*
  - *M20/M25 very busy now, congestion will be negative factor*
  - *No real NDC potential as it is in the wrong location, this is also true for most RDC's*
  - *Poor economics compared with alternatives*
- 5. In your opinion, would the facility at KIG prove useful, or not, in your current or future supply chain developments?

*No – storage and movement facilities need to be port based or close to production sites.*

*Too far South for an NDC facility.*
- 6. In your opinion, would the facility at KIG prove useful, or not, to other types of current or future supply chain developments?

*Unlikely/difficult to envisage.*

*Possibly high volumetric products.*

*No – supply chain is very unlikely to fit a Kent intermodal facility.*
- 7. Can you see viable movement goods imported from Europe by road via Dover/Channel Tunnel to KIG for onward shipment by rail to the M62 corridor? If yes why, if no why not.
  - Your own
    - *No – too close to Europe and ports and too far from logical NDC territory.*
    - *Cost penalties, delay through breaking movements from source to destination.*
    - *No – unless rail becomes so cheap or road so expensive that the cost of 2 additional handling points can be absorbed with no extra supply chain costs.*

## FTA CONSULTANCY REPORT FOR SOUTH EAST ENGLAND DEVELOPMENT AGENCY

---

- Other types of business

*Possibly perishables – but unlikely, only those with niche needs who want to be environmentally friendly.*

*No – a more logical approach would be to put containers or trailers on trains in Europe and run them straight to the Midlands or the North.*

8. What commodities would you see as appropriate to tranship/store at KIG?

- Your own

*Overall none, due to location and economics.*

*Possible potential as a southern RDC, but very unlikely to be cost effective for product transshipment.*

*No – commodities carried would suit this activity.*

- Other types of business

*Bulk storage but unlikely to involve rail movements.*

*Difficult to identify given disadvantages of location.*

*Unlikely to be cost effective for product transshipment.*

*Nothing obvious.*

9. Do you believe that there are cost savings to be made by locating an NDC or RDC at KIG?

- For your own business

- *No – it would more likely add costs.*
- *Would only be used as a RDC facility if a customer led restructure.*
- *No – there are likely to be cost penalties and supply chain delays.*

- Other types of business

- *Unlikely as an NDC.*
- *Possible for high value post delivered goods, even then cost savings would be difficult to identify.*
- *No - there are likely to be cost penalties and supply chain delays, unless a company is operating a Northern/Southern NDC/RDC structure.*

## FTA CONSULTANCY REPORT FOR SOUTH EAST ENGLAND DEVELOPMENT AGENCY

---

10. Would you consider locating a National Distribution Centre in Kent – circa 42 miles from Dover and 34 miles from the Channel Tunnel and circa 25 miles from the M25, even if there were rail freight facilities?

*No – NDC's need to be country central and there are much better options than KIG.*

*No for cost and location reasons.*

11. What square meterage would you require for an NDC? Plus, what land area?

*From 200 square feet up to 400k square feet of floor space, with land area outside of between 20 acres and 800K square feet dependent on commodity. For retail between 0.5 and 1 million square feet with 4-80 acres.*

12. What square meterage would you require for an RDC? Plus, what land area?

*Not all organisations interviewed operate RDC's. Large supermarkets average 346k square feet, for some 3PL's, RDC's can be as small as 200k square feet dependent on commodities.*

*No RDC structure – but for transshipment centres – 150k square feet and up to 8 acres.*

13. Would you relocate an existing RDC or NDC to KIG?

*No – for cost, location and supply chain interruption reasons. No tangible benefits.*

14. If you already have an RDC or NDC in the Greater South East, do you experience recruitment problems?

*No problems with recruitment envisaged.*

15. Any other salient comments?

*This site could possibly be used for a dotcom business, possibly a UK supermarket RDC.*

*Aside from additional warehouse space, which may be required in the future, KIG has little in the way of supply chain benefit either with or without the rail.*

*Port Centric centres of this type would make much more operational sense. If this type of location is not available , or for distance reasons they do not have customer reach, then central England is more attractive than KIG.*

There appears to be a lack of enthusiasm for the concept and the facilities to be offered at KIG from potential users of the RDC, NDC and rail facilities.

## **10. SUMMARY OF KEY CONCLUSIONS**

- There is evident conflict between the conclusions of the Jacobs' reports and the MDS Transmodal reports
- There is evident conflict between the conclusions of the Nathaniel Lichfield and Partners report
- There is no clear indication that MDS approached potential providers to ascertain if they are willing to provide the service, in contrast Jacobs have correspondence from both EWS and Freightliner dated January 2008 that they have no interest in the KIG facility
- There is no clear indication that potential users have been approached to see if the location is one that is attractive to them
- The large number of assumptions being made about the viability and potential usage of KIG
- No consideration appears to have been given about the additional handling costs that would be incurred by breaking a rail journey at KIG that potentially reduce the commercial viability for onward distribution by rail, or the nature of the cargo and whether it can be double handled
- There is no clear evidence that Kent is the optimum location for NDC's, there is acknowledgement in the MDS report that *"to date the small number of NDC's which have been established in Kent are associated with fairly specialist markets, primarily the packaging and distribution of fresh produce)"* there is no rationale as to why this would change
- There is a massive disparity between hgv movements numbers between MDS and Jacobs
- There are huge differences in capacity figures between what comes through the Channel Tunnel now and what is envisaged, this indicates that there needs to be a fundamental shift in the way freight is imported into the UK. There is no evidence on how this is likely to occur

### **MDS and Jacobs Consultancy principle areas of conflict**

#### Rail Served Distribution Parks

MDS have tested the location of KIG against the following:-

- Market Need
- Good Quality Highway Access
- Good Quality Rail Access
- Site size and Configuration
- Neighbouring Land uses
- Labour Supply

Whilst KIG on paper ticks all the above boxes, the rationale behind market needs appears not to have been tested. With assumptions being applied to a general market need for new build warehouse floor space in the Great South East.

There are currently only a very small number of NDC's in Kent and a handful of RDC's (which are on the whole very close to London).

Gerald Eve – Property Consultants, have stated that Kent ranks second bottom of all UK regions in terms of attractiveness as a national distribution centre.

MDS principle target market is traffic arriving from mainland Europe, where the role of KIG will be to intercept cargo and transfer it from road to rail. Traffic to the Midlands and beyond is considered economically viable as the distance is over 200kms.

The counter argument from Jacobs Consultancy is –

- KIG is unlikely to attract ro/ro traffic which uses the cross channel ferries and the channel tunnel shuttle because it would incur additional handling costs, increased travel time and delivery uncertainty
- The transfer of cross channel road traffic to rail for onward UK distribution is the most costly option for all regions except Scotland
- Only the most northerly regions of the UK are likely to be an economic distance for rail from or to KIG
- Breaking a rail journey at KIG would incur extra handling costs that reduce the commercially viable market for onward distribution by rail

### **Observations**

The views above were tested in interviews with potential users of the facility with different sector representatives; the outcomes from the interviews (see section 9 for detailed responses) support rail freight as a concept but the respondents have concerns about the location and proposed use.

**MDS and Nathaniel Lichfield and Partners area of conflict**

A socio-economic assessment was undertaken; from this, MDS have concluded that in terms of labour supply KIG is located with a sufficient quality labour supply within a reasonable 'travel to work' distance. The KIG site therefore meets the criteria in full and to a very high standard.

Nathaniel Lichfield have concluded from the same assessment that the scale and nature of the economic benefit of the proposals would not produce major benefits for the Maidstone economy, nor do much to support current economic objectives. The benefits in employment provision could be outweighed by the increase in longer commuting and increased competition for available labour sources in the area.