## Contents

<table>
<thead>
<tr>
<th>Section</th>
<th>Page</th>
</tr>
</thead>
<tbody>
<tr>
<td>Foreword</td>
<td>1</td>
</tr>
<tr>
<td><strong>Chapter one: Background</strong></td>
<td></td>
</tr>
<tr>
<td>1. Purpose of the Strategic Rail Freight Interchange Policy</td>
<td>3</td>
</tr>
<tr>
<td>2. The SRA and rail freight</td>
<td>5</td>
</tr>
<tr>
<td>3. The SRA and the planning system</td>
<td>7</td>
</tr>
<tr>
<td><strong>Chapter two: Strategic Rail Freight Interchange Policy</strong></td>
<td>9</td>
</tr>
<tr>
<td>4. Function and form of Strategic Rail Freight Interchanges</td>
<td>9</td>
</tr>
<tr>
<td>5. The role of Strategic RFI in sustainable development</td>
<td>14</td>
</tr>
<tr>
<td>6. The need for Strategic RFI</td>
<td>16</td>
</tr>
<tr>
<td>7. The delivery of Strategic RFI</td>
<td>20</td>
</tr>
<tr>
<td>- Planning system</td>
<td>20</td>
</tr>
<tr>
<td>- SRA role</td>
<td>23</td>
</tr>
<tr>
<td>- Promoters/developers</td>
<td>24</td>
</tr>
<tr>
<td>8. Liaison and support</td>
<td>26</td>
</tr>
<tr>
<td><strong>Appendices</strong></td>
<td>27</td>
</tr>
<tr>
<td>A. Glossary</td>
<td>27</td>
</tr>
<tr>
<td>B. Other Rail Freight Interchange types and characteristics</td>
<td>29</td>
</tr>
<tr>
<td>C. Rail Freight Interchange examples</td>
<td>32</td>
</tr>
<tr>
<td>D. Policy background</td>
<td>55</td>
</tr>
<tr>
<td>E. Map: Rail Freight Interchanges</td>
<td>59</td>
</tr>
<tr>
<td>F. Maps: Main road freight movements, international and domestic</td>
<td>61</td>
</tr>
<tr>
<td>G. The need for rail connected warehousing in the UK</td>
<td>63</td>
</tr>
<tr>
<td>H. SRA Rail Freight study references</td>
<td>67</td>
</tr>
</tbody>
</table>
Foreword

The origin and development of Britain's rail system was based on the movement of freight; raw materials to the factories of the Industrial Revolution and the transport of finished goods to the ports for world-wide export. Rail remained the primary transport system for goods until the second half of the last century, when road transport started to gain a serious market share. Rail's market share suffered substantial decline following network rationalisation in the 1960's, followed by subsequent decades of under-investment in the network that remained. The development of the UK motorway system and the de-regulating of road freight led to the inexorable rise in road transport, and the inevitable decline in the use of rail for freight and passengers.

Now, 40 years on, the situation has changed radically. The growth of road transport is clogging the vital road arteries of the UK and the European mainland, raising serious environmental concerns about pollution and congestion. In turn this has lead to legislation and policy with the clear objective of increasing freight on the railways of Europe, including specific UK policies to that effect.

Economic issues have become increasingly important, as witnessed by the Working Time Directive, which is expected to exacerbate the growing shortage of lorry drivers. This, together with the effect of road congestion and economic trends, indicates the potential for change in the pattern of distribution of goods in the UK from centralisation in the Midlands, to a more regionally focused activity for which there is already evidence of an emerging trend. Such change will play to the strength of rail in providing the trunk haul in place of road to and from the ports and inter-regionally. However if there is not sufficient land available of the right sort, in the right locations, with good rail and road connectivity, then rail will not be able to play its part.

In the UK a growing and more affluent population is driving change in supply chains that are global, stretching increasingly to the Pacific rim. The increase in the demand for consumer goods is stimulating the need for new ports to handle large container ships and a rapidly increasing volume of deep-sea containers. The attributes of rail make it ideal for moving the containers inland where the goods are distributed and consumed. In addition to this traffic large volumes of goods are trunked by lorry between regions in unitised loads such as pallets and rollcages. These road trunk flows have the potential to be hauled by rail, if they can be consolidated into trainloads. The scale of the addressable market is very large, over 900 million tonnes per annum.

The success and growth of rail freight can only be sustained if there are enough Rail Freight Interchanges to enable modal shift. Rail freight interchanges have an important role to play whether they are terminals for aggregates or waste, sub-regional interchanges or other rail served industrial facilities and should be encouraged in the planning process, in accordance with Government policy. However, this Policy is concerned with a particular class of interchange, the Strategic Rail Freight Interchange. They are needed in relatively small numbers to serve major conurbations and are key to delivering growth of rail in the general freight market.
These interchanges are long term strategic infrastructure investments with operating lives going beyond 2020 with rail infrastructure, container handling and rail-connected warehousing, on a sufficient scale to enable critical mass for consolidation of train load freight. By creating facilities on a scale, which effectively creates a rail connected distribution park or 'village', a wide range of businesses in the general freight market will be encouraged to locate their logistics operations, or production, where they have the option of rail or road transport. This also has the economic benefit of reducing the viable distance of the rail trunk movement, improving competitiveness with road, by locating businesses with direct access to rail, taking out the 'last mile' double handling and transport cost.

In the longer term these interchanges will make a major, essential, contribution to developing the national strategic rail freight network linking, rail freight interchanges of all types, ports and the Channel Tunnel, connected by a range of competitive rail operator services.

This policy has been developed in discussion with the rail freight community and has attracted widespread support.

Richard Bowker  
Chairman and Chief Executive  
Strategic Rail Authority
Chapter one: Background

1 Purpose of the Strategic Rail Freight Interchange Policy

1.1 The purpose of this Policy is to inform stakeholders of the need for, the form, function, operating characteristics and role of Strategic Rail Freight Interchanges (Strategic RFI). It is also to advise on how they fit with Government objectives for the movement of freight by rail, environmental quality and the achievement of sustainable development and to explain the role of the SRA in the delivery of freight interchanges to meet these objectives. Its purpose is also to establish a framework to facilitate the essential delivery of Strategic RFI, allowing for their full and proper promotion and assessment against policy, environmental and economic considerations.

1.2 This Strategic RFI Policy sits alongside Government policies for rail freight, transport, planning, sustainable development and economic growth and is directed at developing a national policy framework via the land-use and transport planning systems.

1.3 The SRA has identified a need for individual Strategic RFI, which will contribute to the development of a national network in order to deliver growth and sustain the competitiveness of rail freight in the general freight market. This arises from the requirement for enhanced capacity, plus greater opportunities and more commercially viable access to the railway in order to facilitate rail freight use. It is expected that this national network will evolve over time through the creation of Strategic RFIs serving regional areas and will build upon the existing networks of rail freight services and interchanges.

1.4 A national policy framework is required to facilitate the delivery of this network of Strategic RFI. This is identified in the Government’s Sustainable Distribution Strategy, which recognises rail-intermodal terminals as Major Freight Interchanges and explains that:

“... our economy needs a clear, national policy framework within which the future development of our major freight interchanges can be planned and considered.” (Paragraph 5.17)

1.5 In terms of its focus, this Policy aims to inform the national land use and transport planning systems, plus developers and promoters of Strategic RFI. It is recognised by the SRA that the planning process is critical in the delivery of Government objectives for an enhanced role for rail freight as part of its wider sustainable development programme. The Policy aims to explain the strategic case and the need for Strategic Rail Freight Interchanges and to highlight the key items to be taken into account when planning for Strategic RFI, identifying sites or assessing proposals.

1.6 This Policy has been drafted within a period of material reform within the planning system. It may be, therefore, that the incorporated references to Government policy documents will become technically inaccurate, it is not expected that the Policy will itself date. The Policy is firmly based on stated Government objectives for rail freight, sustainable development, environmental improvement and economic prosperity and it is not expected that these underlying principles will change in the near future. The Strategic RFI Policy is, therefore, expected to have a relatively long life.

1.7 The Policy is also targeted at developers and promoters of Strategic RFI, to give guidance on the development of projects which will satisfy Government objectives for rail freight but which will also fit within the national planning system.

1 General freight market: goods capable of transportation by a variety of modes, not necessarily bulk or full train loads.
Strategic RFI are explained in detail in Section 4 and other classes of RFI in Appendix B of this Policy, from where it will be seen that there are a range of freight interchanges with a variety of roles and characteristics. The freight market is dynamic and will continue to need to access rail across the network as origins and destinations change in response to market conditions. Whilst all freight interchanges are important in supporting rail freight and its greater use, this Policy is primarily directed at Strategic Rail Freight Interchanges. These Strategic RFIs represent the basis of a sustainable rail freight network for the general freight market. Other forms of rail freight interchange feed into and out of the primary structure and are, therefore, of considerable value. However, it is the national network of Strategic Rail Freight Interchanges which is key in delivering material growth in rail freight in the general freight market.

The Policy runs through a number of stages, the first being to explain what comprises a Strategic RFI in order that the concept is more fully understood. The sustainability benefits of Strategic RFIs are explained, to allow planning authorities and interested parties to appreciate the potential gains from Strategic RFI, whether as promoters or assessors of proposals. The Policy also highlights the need for the development of Strategic RFI and explains the role of the SRA relative to the delivery of Government transport objectives via Strategic RFI. Guidance is also provided for both the planning system and promoters on proactively planning for Strategic RFI growth, their incorporation in policy development and their assessment via development control.

It is expected that the Strategic RFI Policy will facilitate the necessary development of a network of Interchange facilities in a manner compatible with land use and transport planning policies and also effective rail freight operating requirements.

This Policy fits within the SRA’s range of strategies, statements and guides with which it will work closely to deliver the SRA’s objectives. The SRA’s strategy for the railway is published annually in its Strategic Plan and updated through specific strategies published from time-to-time. Of significance are the SRA’s Land Use Planning Statement and Guide for Local Planning Authorities and Regional Planning Bodies, the Freight Strategy, Network Utilisation Strategy and individual Route Utilisation Strategies. Both of the land use planning documents are to be taken forward under the SRA’s new Regional Planning Framework and the Freight Strategy is now embedded in SRA strategies generally and elements of it are updated in the specific strategies mentioned.
2  The SRA and rail freight

The role of the SRA

2.1 The SRA is a non-departmental public body, sponsored by the Department for Transport and established under the Transport Act 2000. The SRA’s purposes are to:

- Promote the use of the railway network for the carriage of passengers and goods;
- Secure the development of the railway network and associated facilities; and
- Contribute to the development of an integrated system of transport of passengers and goods.

The SRA must exercise its functions in a manner best calculated to, inter alia, ‘contribute to the achievement of sustainable development’.

2.2 The Government’s 10 Year Plan for Transport (July 2000) established a number of targets, which include:

- A significant increase in rail’s share of the freight market; and
- To deliver a modal shift from road to rail.

2.3 The development of freight movements by rail can be seen, therefore, as a key Government target and one that is an integral element of its wider transport strategy. Rail freight growth is seen as promoting environmental benefits, reducing congestion and enhancing the national economy. The transfer of freight from road to rail has long been a Government objective, supported via grant aid since 1974. More recently, the Government’s 1998 Integrated Transport White Paper, the associated document on Sustainable Distribution and the 10 Year Plan, highlight the benefits of freight movement by rail, stressing in particular the potential contribution to congestion relief and environmental improvements.

2.4 The SRA’s report ‘Everyone’s Railway’ has also identified the environmental benefits arising from reduced emissions from rail freight when compared with road.

2.5 National economic growth, prosperity and competitiveness depend significantly upon efficient and cost effective transport services and infrastructure. Rail freight has an important role to play alongside other modes in servicing British industry.

2.6 The SRA’s role in rail freight is different from that for rail passenger operations. The SRA lets and manages passenger franchises, which are contract based and the SRA, thereby, has effective control. Rail freight operators and the rail freight market are wholly private sector and the SRA does not have control. The delivery of rail freight growth is, therefore, materially reliant on private investment and commercial and economic drivers.
The SRA's strategies and freight

2.7 The SRA’s strategy for the railway as a whole, including freight, is published and updated in its annual Strategic Plan. This plan outlines the actions being taken by the SRA on its various policy initiatives, projects and spending plans. The Freight Strategy\(^6\), first published as a stand-alone document in May 2001, is now an integral part of the SRA’s overall strategy and is updated in the annual Strategic Plan.

2.8 The aims of the original SRA Freight Strategy remain in place as part of SRA strategy - being ‘to secure rail freight services which are more competitive, more reliable and meet the needs of industry’. The SRA is empowered to work towards its objectives for rail freight growth by a range of means including:

- Investment in the rail network infrastructure;
- Financial support for rail freight projects through freight grants to support the development of new freight facilities, interchanges and traffic movements;
- Influencing the development of public and regulatory policy which might impact upon achieving rail freight growth;
- Reducing constraints on the effective working of the market; and
- Land use planning.

SRA Strategy on Rail Freight Interchange

2.9 The SRA Freight Strategy comprises four elements; covering the network, interchanges, funding and service delivery. The Interchange element of the Freight Strategy identifies the need for interchange capacity to support long term growth.

- Growth from traditional rail markets will require additional and replacement facilities at; quarries, steel stockholding points, open cast sites, major manufacturing production plants and similar;
- Capturing greater market share of imports and exports will require expanded port facilities and inland terminals; and
- Growth in use of rail for the general freight market will require a substantial increase in the proportion of warehousing that is rail connected and some increase in intermodal handling capacity to serve the major centres of economic activity, particularly the South East.

2.10 The aim of the Strategy is to facilitate the development of a network of commercially viable rail freight interchanges with the right facilities and in appropriate locations to support the required growth of freight on rail. It is recognised that a significant proportion of growth will come from the general freight distribution and fast moving consumer goods (fmcg) markets and from customers who are not directly connected with the railway today\(^7\). The development of greater Strategic RFI options and availability will increase business choice to use rail for freight movements.

2.11 Guidance on the need for Strategic RFI and on the need for other types to serve other markets and business sectors is included in Section 6 and Appendix B.
3 The SRA and the planning system

3.1 The SRA is a key player within the national Land Use Planning system. The Directions and Guidance issued by the Secretary of State require the SRA to work within the system and, in particular, the SRA is required to:

- Have regard to relevant Government policies;
- Have regard to relevant policies of the Scottish Executive, the National Assembly for Wales and the Mayor of London in relation to their respective responsibilities;
- Ensure consistency with Regional Planning Guidance issued by the Secretary of State; and
- Work closely with local and regional planning bodies and have regard to Local Transport Plans.

3.2 PPG13 requires the planning system to seek the advice of the SRA on the potential for improving rail travel in general and on identifying and protecting sites and routes for rail freight in particular, this includes liaising with the SRA on infrastructure for the development of Major Freight Interchanges. The SRA, therefore, not only works proactively within the planning system but is also an important consultee and reference for planning and other public bodies where rail issues are involved.

3.3 The SRA believes that it can improve the prospects for achieving both its own and the Government objectives for the railway network and services by taking a proactive role within the planning system and seeking to apply its influence in support of rail network development, wherever appropriate. The SRA’s approach to Planning and its involvement in the system is set out in its Land Use Planning Statement of November 2001 and its Guide for Local Planning Authorities and Regional Planning Bodies of November 2001.

3.4 The Statement advises on the Guiding Principles for SRA engagement with the planning system, which are:

- **The SRA is committed to work in partnership with regional planning bodies and local planning authorities**

3.5 The SRA recognises the inter-relationship and the benefits of the flow of information and guidance between the spatial development roles of planning bodies and the planning of the national rail network. Complementarity and compatibility, as well as an understanding of the needs and objectives of both the land use and railway planning processes, is recognised as key to delivering a range of Government objectives.

- **Sustainable development requires the integration of land use planning and transport planning**

3.6 The development of new or improved transport infrastructure or services has been shown to have a number of beneficial effects, including modal shift from road to rail and environmental benefits of taking freight off roads at both a local and national scale. Encouraging greater proportionate use of rail will support the planning system in the delivery of sustainable development.

- **Land use planning can contribute to a better-integrated transport network**

3.7 The Planning system is recognised by the SRA as presenting the opportunity to support the development of the rail networks/services and associated public benefits via constructive planning policies and development control decisions.
3.8 The SRA has identified a number of tools to influence the land use planning system and to maximise the benefits of transport infrastructure development. These include Facilitation, Advocacy, Consultation and Research and Information. Whilst the SRA was only fully established in 2001, it has developed a high profile role within the planning system both as an influencer and supporter of planning bodies.

3.9 The SRA has also identified a number of Strategic Objectives, which it will aim to deliver via the planning system. These include:

- Encouraging the provision of infrastructure for rail freight use;
- Promoting and safeguarding the future expansion of the rail network; and
- Promoting the development of rail access to major traffic generators.

3.10 The SRA will work with the planning system in the implementation of this Policy and the achievement of rail freight growth.
Chapter two: Strategic Rail Freight Interchange Policy

4 Function and form of Strategic Rail Freight Interchanges

4.1 A Rail Freight Interchange is a facility at which freight can be transferred between transport modes, mainly to facilitate its primary trunk journey from A to B. A Strategic Rail Freight Interchange is a facility which optimises the use of rail in the freight journey and minimises the secondary distribution leg by road. Rail is unable in many freight movements fully to complete the journey and it must, therefore, work as part of an integrated journey, alongside other modes, primarily road. The best use of rail is in the long-haul element or the primary trunk journey, linking, as necessary, with other modes for the secondary leg of the journey. Strategically located interchanges are required to allow the best use of rail in national freight movements.

4.2 Strategic RFI are seen by the SRA as a form and type of rail interchange without which longer term growth and development of an efficient rail freight distribution network will not be achieved.

4.3 Strategic RFIs are, therefore, key features of national rail infrastructure necessary to promote a shift from road to rail freight and to achieve the associated sustainability benefits. They represent 'major gateways' to the national rail network which allow businesses to move freight for distances appropriate to their particular operations and commercial priorities.

4.4 A network of Strategic RFI is required to support longer term freight growth. Whilst Strategic RFI operate such as to serve regional areas, they are also key components in a national and international network. This network is of strategic importance in facilitating links between UK regions and within a growing EU.

4.5 Strategic RFI represent the potential for businesses to use rail freight now or in the future and are key features in encouraging a gradual conversion from road to rail. They should be seen not simply as locations for freight to access the railway but also sites for the accommodation of businesses capable now or in the future of supporting their commercial activities by rail. To this end, Strategic RFI will normally accommodate both rail and non-rail served businesses at the outset, with an expectation of increasing the proportion of rail servicing over time. The mixed nature of Strategic RFI is essential for the longer term development of rail freight. Accommodation only of existing commercial rail users would fail to present the opportunity and encouragement for wider business conversion to rail. It is essential that Strategic RFI are developed in a form to accommodate both rail and non-rail served businesses, in order to promote future rail freight opportunities.

4.6 The SRA considers it of great importance in delivering a growth in rail freight that the planning system understands, and is familiar with, the differing roles of the various types of Rail Freight Interchanges and their locational, site and operational needs. With this full understanding, the system will be able to properly plan for Strategic RFI and respond to Strategic RFI proposals from an informed position. This chapter, therefore, gives a general description of Strategic RFI and their characteristics. Further information on Rail Freight Interchanges in general is provided in Appendix B, with examples in Appendix C.
Function

4.7 Strategic RFI serve major conurbations and clusters of industry and commercial activity. A number of such Strategic RFI may be required to serve such concentrations of development and freight-generating activity.

4.8 This type of facility provides a focus for general freight activity, not simply rail specific. This allows industry the choice and opportunity to incorporate rail into its supply chain at a time and scale to match the evolution of its operations. A Strategic RFI should be a focus of intermodal handling activity, serving both companies located on the interchange itself and in the wider region.

4.9 Occupiers are likely to be major logistics service companies and national and multi-national manufacturers or retailers. Strategic RFI will also operate in the role of consolidating freight to and from multiple consignors/consignees at other rail connected facilities such as ports, the Channel Tunnel and other Strategic RFI in UK and Europe. They are also emerging as ‘inland ports’, as deep-sea ports and shipping lines put more freight on rail.

4.10 It is important that there is open access to such facilities to enable competitive rail haulage and customer choice. This means that all rail freight operators should be able to serve the Strategic RFI without impediment.

On site activities

4.11 Whilst each Strategic Rail Freight Interchange will be different, the activities which are commonly undertaken are:

- Warehousing; and
- Intermodal handling.

In addition, there can also be bulk handling, where there is market demand.

4.12 A Strategic Rail Freight Interchange is a major interchange of a scale which allows a range of different on site rail activities to be undertaken. This will include intermodal (container) handling and also the accommodation of large-scale warehousing, processing or manufacturing facilities. Occupiers of such Strategic RFI will often include businesses which choose to locate their national and regional distribution centres at such strategic locations.

4.13 Bulk handling includes the traditional markets for rail freight of cement, metals, aggregates, fuels, waste and automotive products and components. The Strategic RFI might also be used for the distribution of finished products from a manufacturing facility located on site.

4.14 Rail linked warehousing allow for raw materials and finished products to be moved by rail for storage, processing and onward distribution. They may be used by single companies such as retailers, or as part of a logistics operation serving a range of customers. Onward distribution from the Strategic RFI can be by rail, but is most commonly by road.

4.15 There are economic benefits in businesses being located at Strategic RFI, by taking out the 'last mile cost' - being the expense of the road link from the Strategic RFI to the warehouse or factory. The transport economics of businesses connected to rail at one or both ends of the freight movement are materially improved, significantly reducing the economic minimum rail trunk distance which businesses will find commercially acceptable.
4.16 It is critical to appreciate, however, the operational changes and investment required to be made by business in moving towards the use of rail freight. Strategically integrating rail freight into a supply chain can require companies to reconfigure substantial elements of their operation to maximise the efficiencies and economies that can be generated. This reconfiguration is much greater than with traditional road based servicing and needs time to develop and mature.

4.17 Strategic RFI can, therefore, also contain non-rail served warehousing and other commercial activities, which are materially reliant on consolidated freight movements. These activities tend to have the same locational requirements as Strategic RFI and their siting at Strategic RFI, where rail access is easily and commercially possible, presents the opportunity for conversion from road to rail. The commercial costs associated with making the conversion to rail are not necessarily recoverable at day one and businesses may need to continue to operate with road-based access until the opportunity arises for conversion to rail.

4.18 Intermodal facilities handle containerised freight, most often to and from ports. Freight is loaded to and from rail, onto road vehicles for the final distribution leg. In most cases, intermodal facilities at Strategic RFI will serve many customers, generally located outside the site and within the local region.

4.19 It is common for warehousing and intermodal facilities to be provided at the same site and this is a key characteristic of Strategic RFI.

**Transport links**

4.20 The vast majority of freight in the UK is moved by road. This will continue to be the dominant mode and will drive the structure of supply chains. In most distribution journeys, it is not possible to complete the final distribution to end customers by rail and, hence, Strategic RFI need to facilitate the full journey by allowing linkages with other modes, primarily road. The rail based supply chain is, therefore, significantly reliant on road access.

4.21 To achieve modal shift, rail cannot succeed without fitting into a road-based movement model. Essentially the role of rail is to provide an alternative to road for the primary trunk leg of the supply chain, as happens in other countries.

4.22 Good connections with the primary road network are, therefore, important for Strategic RFI. Road access is, as mentioned above, vital to allowing rail to effectively compete with, and work alongside, road freight to achieve a modal shift to rail.

4.23 High quality links to the rail network are also essential. Rail access will vary between rail lines, both in the number of services that can be accommodated, and the physical characteristics such as the train length and, for intermodal services, the size of intermodal units that can be carried (the ‘loading gauge’).
**Locational requirements**

4.24 Strategic RFIs tend to be large scale commercial operations, which are most likely to need continuous working arrangements (24 hours). They will also necessarily involve large structures, buildings and the operation of heavy machinery. Locationally, therefore, they may not be considered suitable adjacent to uses such as residential, which may be sensitive to the impact of noise and movements.

4.25 It is also important that Strategic RFIs are appropriately located relative to the markets they will serve, which will largely focus on major urban centres, or groups of centres, and key supply chain routes. The strategic nature of Strategic RFIs and their successful operation as part of a co-ordinated network are reliant on proximity to key business markets. This locational relationship is material to the potential of Strategic RFIs to successfully convert current road-freight journeys to rail - optimising the use of rail for the primary trunk leg and minimising the secondary distribution leg by road.

4.26 A further, and increasingly important determining factor in the effective siting of Strategic RFIs, is the presence of an available and economic workforce. Picking, handling and administrative functions of major distribution operations remain relatively labour intensive, often employing significantly more people than many factory or manufacturing developments, where automated production has largely replaced traditional manpower.

4.27 Traditional prime distribution locations are, on occasion, being passed over for what were previously considered more secondary locations. When major distribution facilities can employ well in excess of 1,000 people, the economics of access to a reliable and skilled workforce, employable at economical cost, is of high importance.

**Scale**

4.28 The size of a Strategic Rail Freight Interchange will vary considerably around the UK reflecting, inter alia, existing and potential business growth. Existing examples are the Daventry International Rail Freight Terminal (DIRFT) at 147 hectares and Hams Hall at 169 hectares. In general, size range would be likely to be within 40 hectares to 400 hectares. A valuable characteristic, however, is the need for expansion potential.

4.29 Increasing globalisation of manufacturing, the growing status of the UK as a net importer of goods, overall GDP growth and supply chain efficiencies, have led to the trend towards fewer but considerably larger manufacturing and distribution facilities. Recognising that economic growth and global commercial forces will drive further economies of scale, Strategic RFIs will need to reflect and cater for these demands. It is beneficial, therefore, that new and existing Strategic RFIs have the capability for future expansion.

4.30 In addition to the road and rail infrastructure accessibility, the attractiveness to the market of a Strategic Rail Freight Interchange is likely to include the scope to accommodate longer term business development and growth. This is already recognised in the increasing scale of footprint of industrial property. It should be recognised that the number of rail connected interchange locations will be less than non-rail options. Therefore, the ability to accommodate future change and business expansion is critical to facilitate business development and to prompt business to effect a modal shift to rail. In this respect, Strategic RFIs are distinguished from road-only distribution sites where the range of alternative site opportunities are greater.
Design

4.31 Strategic RFI are usually developed to a masterplan, which sets out the core infrastructure for the entire site, to be developed in phases over a period of time. The overall masterplan should provide for a number of rail connected buildings for initial take up, plus rail infrastructure, to allow more extensive rail connection within the site in the longer term. The initial stages of the development should provide an operational rail network connection and areas for intermodal handling and container storage.

4.32 Strategic RFI have quite particular locational requirements in terms of rail connections and ideally should have the capability to handle full length 775 metre trains with appropriately configured on-site infrastructure and layout. The layout should minimise the need for on-site rail shunting and provide for a configuration, which will enable main line access for full length trains from either direction. This will reduce the cost of serving the terminal, so increasing the commercial potential for modal shift to rail.

4.33 Site configuration and infrastructure constraints may not always permit the ideal layout, for example, the site configuration may not permit 775 metre trains to be handled. This need not automatically disqualify otherwise suitable sites, as there may be railway operational solutions. In such circumstances, advice should be obtained from the SRA before proposals or site allocations are progressed, together with expert technical opinion on rail layout design. The views of rail Freight Operating Companies (FOCs) and Network Rail on accessibility matters should also be sought.
5 The role of Strategic Rail Freight Interchanges in sustainable development

5.1 In 2002, 89% of surface based freight in the UK was moved by road and 11% by rail. Lorries are, on average, larger than historically and travel considerably further. Forecasts also point to a continued strong growth in lorry traffic in future years and even higher growth in Light Goods Vehicles (LGVs) traffic.

5.2 The Government recognises that, whilst improvements have been made in fuel economy and emissions performance, the forecast growth in road traffic, if left unchecked, would threaten the achievement of its environmental objectives. Significant impacts are seen as arising from air pollution, greenhouse gas emissions and noise pollution.

5.3 The report ‘Climate Change: the UK Programme’ (DEFRA 2000) explains that the transport system is the third largest source of greenhouse gas emissions in the UK. More importantly, it is the fastest growing source. Left unchecked, van and lorry traffic is forecast to grow by around 22% over the next 20 years.

5.4 Put in context, national initiatives to reduce greenhouse gas emissions show an overall reduction by 2010, but growth, thereafter, to 2020. These projections reflect the emissions of business, domestic, agriculture, public and transport activities. All categories, except transport, show a reduction to 2010 and a reduction at 2020 from the 1990/95 baseline. Transport is distinguished in showing a continuously rising trend, resulting in it constituting a rising percentage of total UK greenhouse gas emissions.

5.5 In 1990, greenhouse gas emissions from the UK transport sector were 39.7 MtC (mega tonnes of carbon). Annual emissions increased by 7% between 1990 and 1998 and projections predict that emission will increase to 47.8 MtC in 2010. DEFRA explains that most of the forecast increase is from road transport, which accounted for 94% of carbon dioxide emissions from the transport sector in 1998.

5.6 Commercial vehicles were responsible for around 38% of all carbon dioxide emissions from road transport in 1998. Lorries are the second most important source of such emissions from road transport.

5.7 ‘Climate Change’ identifies the 10 Year Plan as a key means for transforming our transport system to tackle pollution and congestion. Measures identified as acting to reduce greenhouse gas emissions include both the Government’s Sustainable Distribution Strategy and the desire for 80% growth in rail freight. DEFRA estimates that implementation of the 10 Year Plan will reduce carbon emissions by 1.6 MtC in 2010.

5.8 The DEFRA report also highlights the role of local transport plans in addressing climate change - noting that they ‘mark a decisive shift in favour of more sustainable transport solutions’. It recommends that carbon dioxide emissions should be a factor for local authorities when considering road traffic reduction targets, reducing congestion or improving air quality.

5.9 A further consequence of the forecast growth in road traffic will be the exacerbation of congestion problems which has an impact on the efficiency of the UK economy and which may only be manageable by increasing road capacity, again contrary to well-established sustainable development policies. Rail freight can be significantly more effective in supporting sustainability principles by virtue of its better energy-efficiency, reduced emissions and its clear ability to reduce road congestion and capacity problems.

5.10 Rail freight has a material advantage over road freight in terms of carbon dioxide emissions, which impact on climate change. The average CO₂ emission per tonne kilometre of rail freight is 23g whereas, for HGVs, it is 178g.
5.11 In terms of wider air quality considerations, there are environmental advantages of rail freight over road freight movements across all pollutants, except sulphur dioxide. However, a further reduction in the sulphur content of diesel fuel will come into force in 2008, which should improve the situation. The SRA report ‘Everyone’s Railway: The Wider Case for Rail’ (2003) summarises the relative air quality impacts as follows:

<table>
<thead>
<tr>
<th></th>
<th>Rail</th>
<th>Road (HGV)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Fine Particulates (PM10)</td>
<td>0.005</td>
<td>0.061</td>
</tr>
<tr>
<td>Carbon Monoxide (CO)</td>
<td>0.031</td>
<td>0.400</td>
</tr>
<tr>
<td>Nitrogen Oxide (NOX)</td>
<td>0.110</td>
<td>2.050</td>
</tr>
<tr>
<td>Sulphur Dioxide (SO2)</td>
<td>0.017</td>
<td>0.005</td>
</tr>
<tr>
<td>Volatile Organic Compounds (VOC)</td>
<td>0.023</td>
<td>0.190</td>
</tr>
</tbody>
</table>

**Fig 1 Average emissions per tonne kilometre**

5.12 Rail freight emissions can be seen as materially lower than those from HGV, ranging from 9 to over 14 times less than road based freight movements.

5.13 However, to gain the environmental, sustainability and economic benefits which can arise from rail freight, essential infrastructure, including Strategic RFI, must be set in place. Without such intermodal access points to and from the rail network, the ability of rail to remove freight traffic from roads will be materially restricted, as will be the clear environmental, sustainability and economic benefits associated with this modal shift.
6 The need for Rail Freight Interchanges and in particular, Strategic Rail Freight Interchange facilities

6.1 In Section 5, this document set out the environmental benefits which can accrue from the conversion of freight movements from road to rail. It is also acknowledged that rail use can assist in reducing congestion and journey times, which has both environmental and economic benefits. Section 2 explained that the SRA’s Interchange Strategy has identified the need for interchange capacity to deliver the growth in the movement of freight by rail expected by Government policy in order to achieve environmental, economic and sustainability benefits. In effect, rail freight cannot effectively grow without the necessary national interchange infrastructure to facilitate rail accessibility and ease of use in commercial freight journeys.

6.2 Interchange development is necessary for growth in all sectors of the freight market, being both existing and potential new business for rail. For example:

- Development of the traditional rail markets at, for example, quarries, open cast sites and major manufacturing plants will require new, expanded and replacement interchange facilities if rail freight is to prove both attractive and efficient;
- Capturing a greater market share for rail of imports and exports will need expanded port rail facilities and major inland freight terminals; and
- Expansion of the rail role for general freight will be dependent upon a substantial increase in the proportion of warehousing that is rail connected and an increase in intermodal handling capacity to serve the major centres of economic activity.

6.3 In terms of the scope for growth within rail freight, clearly rail has been at a competitive disadvantage in the general freight market with road, which has the majority of the market and a long history of preferred use by a wide range of businesses. The choice of transport within the supply chain depends on which mode or combination of modes gives business the best result in terms of cost, reliability, flexibility, journey time and a range of other criteria, depending on the nature of the consignment. If rail freight is to improve its competitive position it must provide business confidence that these critical commercial requirements can be satisfied. For sustainability reasons, it is therefore critical that Strategic RFI are developed such as to enhance the competitive position of rail relative to road.

6.4 Currently, the popularity and use of rail within the national supply chain reflects rail’s strengths and weaknesses. Movements of large consignments of bulk commodities between rail connected sites are a natural market for rail because of the economics of train load movement and bulk material handling. However, where customers are not rail connected, the additional cost and handling of a road movement to and from the Rail Freight Interchange fundamentally alters the transport economics compared with those of door to door road transport. This increases the distance beyond which rail movements can be commercially competitive. Freight journeys, which require a road movement at both ends of a rail trunk haul, further increase the transport costs and extend the commercial ‘break even’ distance.

6.5 It is the case, therefore, that closer proximity of business to a rail servicing facility will reduce transport costs and, so, enhance the viability and competitive attraction of rail over road. The location of interchange facilities in relation to ultimate journey origin or destination is critical, therefore, in making the rail option attractive to business customers. The siting of Strategic RFI with easy access to business activities, and vice versa, is key to facilitating rail freight use.
The criticality of the provision and location of Strategic RFI is made more clear when it is recognised that the greater part of the growth in rail freight necessary to deliver Government targets can only come from containers, general freight, premium logistics and other new markets whose distribution choices and the option of rail will be significantly influenced by the efficiency of rail and the road/rail interchange element. These are markets which are currently heavily reliant on road freight. Maps showing the impact of domestic and international road freight on the UK road system are in Appendix F.

SRA analysis has indicated that only about one third of rail freight growth could come from the more traditional bulk commodities. In being the railway’s historic freight market, these are less influenced by the provision of new Strategic RFI facilities, although equally dependent on provision of adequate RFIs to enable modal shift.

The ‘need’ for Major Freight Interchanges is not only recognised by the SRA but also by the Government in its sustainable distribution policies. The Government’s Strategy for ‘Sustainable Distribution’ incorporates a strategy for Major Freight Interchanges, including rail-intermodal terminals. This states:

“The performance of these ‘hubs’ in our distribution networks is vital both to promoting greater use of inland intermodal freight, with rail providing the ‘trunk haul’ elements, and in maintaining efficient trading links with our immediate neighbours in Europe and across the world”. (Paragraph 5.15).

The SRA’s analysis shows that, to support development of rail in the general freight market, a number of large new interchanges will be required with both intermodal capacity and rail connected warehousing. The original analysis work (The Radical Study) is described in Appendix C ‘Interchange Modelling’ of the SRA Freight Strategy (May 2001). The supporting ‘Demand Modelling’ is in Appendix B of that document. The SRA is continuing with an extensive programme, including assessment of supply chains and market sectors for convertibility to rail, together with inter-regional flows. These analyses include revisions to the proprietary ‘GB Freight Model’ (owned by MDS Transmodal) which is used by Government. A subset of that work is ‘The need for rail connected warehousing in the UK’ which provides further strong evidence of the need for rail freight interchanges - see Appendix G.

The outputs from the Radical Consultants Study indicated that, with sufficient Strategic RFI capacity, London and the South East could contribute about 17% of rail freight growth in the general freight market. This required capacity would be met by three or four new Strategic RFI in the region, supplemented by smaller locations within the M25 ring. The qualitative criteria to deliver the capacity mean that suitable sites are likely to be located where the key rail and road radials intersect with the M25.

Further research since the Radical Study into the need for Strategic RFI to serve London and the South East reviewed existing information and carried out further analysis of the warehousing and distribution industry, logistics and operational trends, together with infrastructure requirements. This confirmed the need for three to four Strategic RFI in the region and the vital importance of London and the South East in the overall UK rail freight market, see Appendix H; the current under provision is demonstrated in Appendix E.

Outside the South East, interchange capacity is most likely to present a constraint to growth in the West Midlands, where new capacity equivalent to two strategic facilities is needed, together with significant new capacity for metals, aggregates and minerals. Apart from the Freightliner Intermodal Terminal at Landor Street in the centre of Birmingham, which may be working at or near capacity, most of the current interchange capacity is located to the east and south of the region. The major conurbation of the West Midlands primarily lacks capacity in the northern and western quadrants. (It should be noted that the West Midlands region is also supported by the DIRFT facility at Daventry, which is within the East Midlands region).

8 Freight Strategy (SRA 2001) and Freight Progress Report (SRA 2003)
The SRA West Coast Main Line (WCML) Strategy (June 2003) identifies the route as the key rail freight artery in the UK, carrying some 43% of UK rail freight and serving the West Midlands, the North West and Scotland. The existing freight interchanges using this route are, however, currently operating at or near capacity. The WCML Strategy identifies provision of capacity for up to 60-70% more trunk freight paths, creating the opportunity for the development of further Strategic RFI to meet the need arising in this region.

For Greater Manchester, Liverpool and the North West, there is also a need for further Strategic RFI capacity to support future growth. The SRA WCML Strategy provides advice on the incorporation of freight interchanges and their optimum siting:

"3.17.3 The growth in rail freight, which is forecast on the WCML after the upgraded track capacity is provided, will be handled through growth in traffic at existing and by some new rail freight facilities. In view of the high use of capacity projected for the route on project completion, in particular north of Crewe, it is essential that new terminals are able to assist, through their siting and design, towards the most efficient utilisation of the WCML, and of connections with the rest of the rail network. It is for the promoter of any new terminal or interchange to satisfy himself that his detailed needs can be met from within the route capacity available.

3.17.4 A particular region where new interchanges are proposed to meet anticipated demand is North West England. The SRA is aware of a number of projects within this region. The SRA view is that the most efficient use of the WCML, and of the rest of the network in the area, would be made by those projects located within the Liverpool-Warrington-Manchester commercial belt to the south of the NW Region. These would in addition offer the most attractive locations in a rail based logistics supply chain." (Section 3.17)

The SRA is aware of four potential sites identified by developers for Strategic RFI in the North West and three associated schemes for Strategic RFI. The proposed schemes are in fairly close proximity, for delivery within a similar general time frame, to accommodate growth within the same period. It will be for each promoter to justify the appropriateness of his proposal to the SRA in terms of its impact on the railway network and, in particular, on the route capacity available. In determining which of these should be taken forward, the planning system should have regard to proximity issues, together with a timeline for bringing new Strategic RFI's capacity on stream in the North West. There is a risk that if all current proposals are delivered in the same time frame then there will be excess interchange capacity until the national growth in freight on rail has advanced sufficiently to match that capacity in a balanced way.

In the North East current and medium term growth is likely to be satisfied by the development of capacity at existing interchanges, particularly at the ports, where the rail freight facilities are developing as freight interchanges in their own right, as well as serving the maritime traffics. Longer term, there may be a need for further interchange development as the rail freight market and services expand.

The eastern end of the M62 corridor, Yorkshire & Humberside are currently well provided for by existing interchange capacity and there is no immediate perceived need for new capacity to serve these areas. The current situation to serve the East Midlands and East of England is similar. (Boundaries are indicative and facilities close to a boundary may service an adjacent region(s)). Analysis indicates that the South West needs another Strategic Rail Freight Interchange and all of these regions will need development of Interchange capacity during the term of the 10 Year Plan.
6.17 In Wales, SRA analysis indicates that interchange need is currently satisfied by existing facilities in the South Wales industrial belt. This view is generally shared by the Welsh Assembly Government through its research.

6.18 The Scottish Executive commissioned a Study ‘Opportunities for Developing Sustainable Freight Facilities in Scotland’, which reported in March 2002. The SRA was a member of the Study steering group and endorses its findings. To this end, the SRA has safeguarded land in its ownership to the south of Edinburgh, should this be required for Strategic RFI development.

6.19 Whilst the above sets out the SRA’s current understanding of the need for Strategic RFI’s provision, it does not necessarily mean that proposals outside of these arrangements are unacceptable or incapable of contributing towards the advantageous growth of rail freight.
The delivery of Strategic Rail Freight Interchanges

7.1 It is quite clear that there are potentially valuable sustainability, environmental and economic benefits to accrue from the development of Strategic RFI as part of the provision necessary to secure increased use of rail for freight movement. Strategic RFI are critical to the growth of rail in the general freight market and that there is strong Government policy support for their development. The Government’s Sustainable Distribution Strategy recognises the need for a ‘clear, national policy framework’ within which the future development of Major Freight Interchanges can be planned and considered. To establish this framework, it is necessary to bring together the key influences on their delivery. These are identified by the SRA as the national land use and transport planning systems, the SRA and independent commercial promoters of Strategic RFI.

7.2 The role of these key constituents is set out below.

The role of the planning system

7.3 There is a review of the national policy background attached at Appendix D, from which it is clear that there is an obligation on the planning system to support the development of Strategic RFI via its planning policy and development control functions. These requirements involve the planning system from regional down to local level and in both planning policy and development control functions. Set out below is SRA advice on how these planning functions can act to support the delivery of Strategic RFI.

Planning policy

7.4 The Government’s strategy for Major Freight Interchanges requires forward planning, which will demand their consideration in policy development, spatial planning and site allocations. It is expected that this long term planning will develop from a local and regional consensus, within a national framework.

7.5 Regional Planning Policy and Regional Transport Policy must, therefore, set the policy context for the guidance of local level policies for Strategic RFI. The regional level is the key tier in planning for Strategic RFI which require a strategic view if they are to be properly incorporated into a national network. The regional level is also the most capable of planning for major and, possibly, inter-regional infrastructure, such as the essential elements of rail and road access.

7.6 The proposed integral role of the Regional Transport Strategy within the planned Regional Spatial Strategies also presents the appropriate context for the high level integration of land-use and transport planning.

7.7 Regional planning policy should identify areas where Strategic RFI could or should be developed, or delineate those parts of the region most suitable to Strategic RFI’s development. High level guidance on areas of need is provided in Section 6 of this Policy. The essential operating characteristics of Strategic RFI must be integral to allocations for their potential development.
7.8 The key factors in considering site allocations include:

- Suitable rail and road access - on rail freight routes with capacity and avoiding congestion. With good access to motorway junctions, primary and trunk roads;
- Ability for 24/7 working;
- Adequate level site area and potential for expansion;
- Proximity to workforce;
- Proximity to commercial customers, both existing and potential. (Noting the potential to change to rail achieved by close proximity);
- Fit with primary freight flows in the area;
- Ability to contribute to the national network by filling ‘gaps’ in provision (see Section 6); and
- Fit with SRA strategies, including the Freight Strategy, Route Utilisation Strategies and Regional Planning Assessments.

7.9 Site allocations might also present themselves as extensions to existing Strategic RFI facilities where these are well located relative to the above considerations and are operating successfully and efficiently.

7.10 In addition to locational policies for the development of Strategic RFI, in all circumstances, regional policy must include criteria for the assessment of rail freight and Strategic RFI's developments. These should reflect local circumstances but also fully take on board the support for rail freight and Major Freight Interchanges in the Government’s Sustainable Distribution Strategy and recognise the environmental and economic gains which will accrue from a modal shift of freight from road to rail. The characteristics of Strategic RFI in Section 4 and Appendix B must be recognised in such assessment criteria. The SRA can provide guidance in this area.
7.11 Policy should not predetermine the outcome of applications for new or expanded Strategic RFI, but should present the tools to allow planning authorities to consider proposals in a constructive and informed manner. These should include provision for achieving the required balance where there are conflicting interests, as set out in Government advice on Sustainable Distribution (see Appendix D). Relevant considerations will include:

- The reduction in road freight movements (number, frequency and journey lengths) arising from the proposal, including the future potential to effect modal shift;
- Contributions towards improvements in air quality and greenhouse gas emissions (existing and potential), perhaps measured as ‘lorries off-road’;
- The potential to fit with national/SRA strategies, including those for rail freight. A clear distinction in evaluation should be given to proposals directly satisfying SRA strategies and policies. The SRA should be consulted on the alignment of Strategic RFI proposals with its strategies;
- Satisfaction of other Government policy on matters such as the re-use of brown field sites, where possible, concentrating development at accessible locations, the focusing of freight development away from congested and residential areas encouraging the full and efficient use of existing interchange facilities, promoting of economic advantage including reductions in road congestion; and
- Fit with Green Belt and countryside policies, noting the potential for exceptional circumstances to be proven where fundamental policy objectives are not compromised and the long term environmental gains are taken into account.

7.12 The Government’s Strategy for Major Freight Interchanges (Sustainable Distribution) clearly recognises that such developments are major investments but can have environmental and wider implications which can make it difficult to find acceptable new sites and which necessitate careful, long term planning. The planning criteria for the assessment of Strategic RFI must, therefore, fully recognise this possibly contentious context and provide adequate guidance to respond to particular issues in a manner which promotes balance and a full consideration of the costs and benefits. The implications of a road alternative to rail freight will, therefore, be a material consideration.

7.13 There is the possibility that Strategic RFI proposals will also need formal review via Environmental Assessment requirements, within which the costs and benefits can be identified. It is important, therefore, that the contextual planning policies within the Regional guidance/strategy set priorities and objectives and associated criteria against which proposals can be tested.

7.14 Regional planning policy should also incorporate Strategic RFI in its guidance on the location of major employment development, directing businesses with freight activity to Strategic RFI as preferred employment locations. This approach will facilitate the modal shift to rail, which will be more difficult to achieve if solely road-based employment sites continue to be promoted via planning policy. Strategic RFI are not simply rail features but an integral part of planning for sustainable employment growth and development.

7.15 Overall, regional policy must display the fact that it has taken rail freight and Strategic RFI fully into account in formulating its policies, strategies and site allocations. This is an essential consideration in delivering the national sustainability agenda.

7.16 At the more local level, Local Development Plans and Local Transport Plans should similarly clearly indicate their consideration of both rail freight and Strategic RFI in policy development, include policies for the constructive assessment of Strategic RFI’s proposals and identify and safeguard sites or areas for their development. The steer will be expected to emerge from regional policies with local policies and proposals providing greater contextual detail and site specification. However, the criteria and key factors outlined above will also be applicable at the local level.
7.17 Local planning documents are an appropriate route for site-specific allocations for Strategic RFI and are, therefore, key elements of the proactive planning system necessary to support a growth in freight movements by rail. This will require the allocation of sites and the setting of assessment policies for the characteristics of Strategic RFI outlined in Section 4, Appendix B and paragraph 7.8. Strategic RFI represent mixed commercial operations with varying reliance on servicing by rail and road. The location of major distribution and freight associated activities at sites with both existing and potential opportunities for rail servicing will deliver a significant force to move from road to rail freight. It is important, therefore, that planning policies and site allocations recognise the potential advantage of locating currently road-based businesses at rail serviced locations in order to facilitate modal conversion.

7.18 Local level planning should, where appropriate, build Strategic RFI’s potential into its employment policies and site allocations. Major employment uses should be encouraged to locate where their freight movements can, either currently or in the future, be served by rail. In this respect, Strategic RFI should not simply be seen as rail specific activities, but a key element of spatial planning for employment development.

The SRA role

7.19 The SRA has developed national strategies based on considerable research and experience, which fit alongside wider Government policies and which have support from both the rail and freight industries. It is the co-ordinating body for the delivery of a growth in rail freight from a range of angles including policy development, funding, best practice and advice. The SRA should be seen by the planning system as an accessible and valuable resource in supporting the development of policy, site allocations and assessing specific schemes and close consultation is encouraged.

7.20 The SRA Strategies and their regular reviews set the framework for both planning bodies and promoters to plan proactively for Strategic RFI. The SRA will continue to update its advice on the role of rail freight, the achievement of Government targets and innovations in the field. The planning system should take guidance from SRA strategies, including the Freight Strategy, Route Utilisation Strategies and Regional Planning Assessments in formulating strategies, policies and site allocations. Where further guidance is required, perhaps in respect of the review of development proposals, the SRA can provide advice on the fit with its strategies.

7.21 Regional Planning Assessments will capture, in conjunction with the rail freight industry, current patterns of rail freight demand and drivers of change to these demand patterns. This work is intended to guide the development of SRA strategies for each planning region, whether this be overall network capacity or specific elements such as Strategic RFI. In developing its RPAs to consider potential constraints to future growth, the SRA will take into account regional planning policy, in terms of wider land use and transport planning strategies.

7.22 The SRA will also monitor and actively involve itself in the development of regional and local planning policies in order to ensure the application of its Strategic RFI policy and the promotion of rail freight in general. The SRA is a key player at the regional planning level and will maintain ongoing and proactive involvement. In this context, it is expected that regional planning bodies will seek the SRA’s advice on the application of its Strategic RFI Policy and Freight Strategy in policy development and site allocations.

7.23 Where the SRA finds proposed Strategic RFI to justify its support, either due to delivery of its strategies or because of other positive rail freight outputs, it will consider publicly supporting such proposals through the planning process. A material increase in freight by rail is an acknowledged Government target and the SRA will, as appropriate, adopt proactive involvement in the planning process to deliver Strategic RFI.
Promoters/developers

7.24 Whilst the SRA will support the development of new Strategic RFI and work closely with freight operators, it is expected that the private sector (property and logistics) will bring forward new Strategic RFI on a commercial basis. The SRA will endorse such projects where they are compatible with its freight strategy and Government objectives for sustainable development and the movement of goods by rail. This support will not, however, be given blindly and promoters will need to work within planning policies to ensure acceptable development of the freight interchange network.

7.25 Promoters must assure themselves of the ability of the rail network to support their proposals and should also design Strategic RFI such as to minimise the costs of rail freight use in order to promote conversion from road use.

7.26 Promoters must aim to work within applicable planning policies and to respond to the assessment criteria included within regional and local planning documents. Compliance with national policy considerations should also be the target.

7.27 In these respects, the SRA would strongly advise that promoters have regard to the following general considerations in putting together Strategic RFI proposals, plus any particular and material local issues:

- **Rail servicing and the potential to deliver a modal shift from road to rail.** The promotion of freight by rail in preference to road is a clear Government objective and Strategic RFI proposals should aim to deliver and facilitate this modal shift. The potential of a proposal to effect modal shift at the start and over time will be an important consideration;

- **Compliance with planning policies in site search and selection.** The Government promotes the re-use of urban and brown field sites and the concentration of development. There are also policies protective of open countryside and designated areas. Site search must aim as far as possible to satisfy such policies and, where a possibly non-compliant location presents the preferred option, this must be fully justified and supported in submissions to the planning authority;

- **Impact on environmental, residential and other amenities.** The site selection process should have full regard to the local impact of Strategic RFI proposals. The Government promotes a balance in its Sustainable Distribution Strategy and it must be expected that site search should, other things being equal, aim to minimise any harmful impacts. This analysis will also include, however, an assessment of the environmental gains which might be generated by the proposal; and

- **Compliance with site or area allocations.** Where the planning system has identified locations for Strategic RFI’s development but an alternative site is proposed, it will be necessary to illustrate how the allocation fails to satisfy Government rail freight objectives and the operational requirements of Strategic RFI. It would also be appropriate to indicate how the alternative location would better meet these requirements and/or deliver other gains such as those for highway congestion, environment or residential amenity. In the case of such scheme proposals outside planning allocations, the fit of both with the SRA Freight Strategy and other guidance will be a material consideration.

- **The promotion of appropriate design** to allow the Strategic RFI to best fit local circumstances.
7.28 Promoters should also liaise with Network Rail and the SRA and have regard to their strategies and policies in respect of the ability of the railway network to accommodate the proposal. Particular issues will include line capacity, congestion and the ability to achieve appropriate track access.

7.29 The SRA’s Route Utilisation Strategies and, in future, its Regional Planning Assessments will provide guidance on network capacity, as will various Network Rail publications. Network Rail will be able to provide technical advice on rail connections and the Office of the Rail Regulator on connection agreements. Independent promoters might also benefit from consultation with groups already within the rail freight industry. The SRA will work with developers and planning authorities to deliver successful Strategic RFI.

7.30 The SRA would advise Strategic RFI promoters to be as diligent and rigorous in identifying and pursuing proposals as it expects the planning system to be proactive and constructive in facilitating the development of Strategic RFI. There is considerable potential for all parties to collaborate in the successful delivery of a growth in rail freight via the development of Strategic RFI.
8 Liaison and support

8.1 The SRA recognises that rail freight and Strategic RFI are not familiar areas to all and that planning authorities and promoters may need reference and support in applying this Policy and achieving necessary Strategic RFI’s growth. The SRA is also keen to ensure that allocations or proposals for Strategic RFI fit to the operational and functional characteristics of a Strategic RFI, the characteristics of the network and the delivery of its Freight Strategy.

8.2 The SRA will, therefore, make available support to relevant groups involved in serious Strategic RFI proposals. Contact should be made with the Freight Business Development team through:

Jeff Miles
Strategic Rail Authority
55 Victoria Street
London
SW1H 0EU

Tel: 020 7654 6163

Email: freight@sra.gov.uk

Websites: www.sra.gov.uk
www.railfreightonline.com
## Appendix A: Glossary

<table>
<thead>
<tr>
<th>Term</th>
<th>Explanation</th>
</tr>
</thead>
<tbody>
<tr>
<td>3PL</td>
<td>Third Party Logistics, a company providing logistics services for a client but not having ownership of the goods it is managing in the supply chain.</td>
</tr>
<tr>
<td>Cross Dock</td>
<td>The transfer of freight from one vehicle or mode to another for onward distribution with little or no dwell time; a function in a supply chain between primary and secondary distribution.</td>
</tr>
<tr>
<td>EU</td>
<td>European Union.</td>
</tr>
<tr>
<td>Footprint</td>
<td>The physical ground-floor area taken by a warehouse or building on a site.</td>
</tr>
<tr>
<td>HGV</td>
<td>Heavy Goods Vehicle, vehicle over 7.5 tonnes Gross Vehicle Weight.</td>
</tr>
<tr>
<td>Inland Port</td>
<td>Rail freight interchange used as a destination for trunk flows from a port reducing exposure to port charges and congestion while increasing speed of response by locating goods closer to likely final destination.</td>
</tr>
<tr>
<td>Last Mile Cost</td>
<td>Costs incurred in delivering goods from a rail freight interchange to a consolidation point (i.e. an RDC/NDC), which could be removed if these facilities are located at a rail freight interchange.</td>
</tr>
<tr>
<td>LGV</td>
<td>Light Goods Vehicle, vehicle below 7.5 tonnes Gross Vehicle Weight.</td>
</tr>
<tr>
<td>Logistics</td>
<td>The science of ensuring that the right products reach the right place in the right quantity at the right time and at the right price to satisfy customer demand.</td>
</tr>
<tr>
<td>LPA</td>
<td>Local Planning Authority.</td>
</tr>
<tr>
<td>Masterplan</td>
<td>Indicative plan for entire development area marking out core infrastructure and areas for infrastructure and buildings, to be delivered over a period of time.</td>
</tr>
<tr>
<td>National Distribution Centre (NDC)</td>
<td>Distribution centre whose purpose is to serve the whole country or supply a network of RDCs to achieve national coverage. Goods are usually received and often despatched on a trunk haul journey.</td>
</tr>
<tr>
<td>Premium Logistics</td>
<td>Freight with a higher value to weight or volume ratio, usually requiring fast delivery times. Often moved in individual form, i.e. parcels, usually trunk hauled in unitised loads.</td>
</tr>
<tr>
<td>Primary Distribution</td>
<td>Movement of goods from source to intermediary processing or warehousing facility, or inter-site movements between intermediary processing or warehousing facilities. This usually involves a medium/long distance trunk haul with a single origin and destination.</td>
</tr>
<tr>
<td>Regional Distribution Centre (RDC)</td>
<td>Distribution centre serving a region as part of a wider network of similar facilities to achieve national coverage. Usually served by a trunk haul from a port, manufacturing site or national distribution centre.</td>
</tr>
<tr>
<td>RFI</td>
<td>Rail Freight Interchange - a facility facilitating transfer of freight between rail and road, often a rail trunk haul and secondary distribution by road. Usually comprises rail infrastructure, rail connected (or rail accessible) warehousing, and handling/lifting equipment to service various methods of transport by rail.</td>
</tr>
</tbody>
</table>
RPB  Regional Planning Body.

RTS  Regional Transport Strategy.

Secondary Distribution  Movement of goods between intermediary processing or warehousing facility to retail outlet or final consumption. This is usually a multi-drop trip by road within a region economically accessible from the point of distribution.

SRA Regional Planning Assessments  Regional Planning Assessments will set out the SRA's long term view of the roles, functions and future development of the railway in each region.

Strategic RFI  A class of RFI on a scale, form and function without which longer term growth and development of an efficient rail based, general freight distribution network will not be achieved.

Supply Chain  The linked set of resources and processes that begins with the sourcing of raw material and extends through the delivery of end items to the final customer. It includes vendors, manufacturing facilities, logistics providers, internal distribution centres, distributors, wholesalers and all other entities that lead up to final customer acceptance.

Trunk Haul  Longer distance consolidated/unitised movement of goods, usually primary distribution. Often referred to as ‘primary’ or ‘A<>B’ trunk haul.

UDP  Unitary Development Plan.

Unit Loads  Goods moved and handled in a consolidated/unitised form, i.e. pallet, rollcage or container.
Appendix B: Other Rail Freight Interchange types and characteristics

Non Strategic RFI

In addition to the network of Strategic RFI there is an acknowledged need for other ‘sub-regional’ facilities. These will have similarities with the Strategic RFI, providing a complementary and important role in rail freight provision within a region. They will have the ability to serve a smaller catchment area of industry and provide a useful contribution to rail freight growth.

Such facilities will often be smaller in size but retain the ability to handle both intermodal units and rail linked warehousing. Often, they provide services for a variety of rail traffic, including trains of mixed commodities using a range of rolling stock, aggregates, minerals and car carrying trains. Although the occupiers may be similar in nature to the Strategic RFI, they are less likely to locate their national or regional distribution activities on these sites, rather looking for sub-regional or backup provision.

It is more common for such RFIs to be owned or operated by a single party, providing services for a range of customers.

Scale

This type of RFI can have a wide range of sizes, from around 20 hectares to over 250 hectares. Current examples include Birch Coppice, Tamworth at 161 hectares, Potter Group at Ely at 28 hectares and Prologis Park, Coventry at 247 hectares.

Design

The Interchange will, as with the Strategic level RFI, incorporate a mix of intermodal facilities and warehousing but on a more modest scale. The non-strategic facility should have the ability to handle intermodal containers but does not essentially need to accommodate 775 metre trains. Facilities often accommodate a range of rail services and modes and may, for example, include aggregates storage and processing, and/or car storage and distribution.
Intermodal only Rail Freight Interchanges

Some RFIs focus only on a single activity such as rail linked warehousing or intermodal handling. This limits their ability to handle the widest range of freight, but they perform an important role, often for a single customer or rail freight operator, on a sub regional basis. A number of important intermodal only RFIs specialise in the handling and storage of containerised freight traffic. They are usually operated by a rail freight haulier or logistics company, and will serve a wide range of customers in the area.

Distribution to end customers will almost always be by road and, as such, these interchanges are often located close to areas of consumption in urban areas. Sizes range generally from 10-30 hectares.

Increasingly, intermodal facilities are being located on Multi-modal sites, recognising the synergies between modes. Nonetheless, there remains a need for well located intermodal only facilities.

Examples are the Freightliner terminals and O’Connor Group at Widnes.

Rail linked warehousing only

Like the intermodal only interchanges, there are a number of locations, which include only rail linked warehousing. These are generally small-scale facilities, and can be a single unit, sometimes serving a single customer, or logistics company.

Examples include the Carlisle Warehousing facility at Carlisle, Tibbett & Britten at Neasden and a dedicated distribution centre for Whirlpool at Paddock Wood. These facilities have similar locational requirements to the rail interchanges, although on a much smaller scale and often more specific to its operator’s business. Sizes range from 10-30 hectares.

Bulk terminals

As discussed earlier in the main text, bulk terminals are not the focus of this Policy. However, for completeness they are covered here.

Bulk terminals have a wide range of sizes depending on the nature of the facility they serve, and the volume of freight they receive. For example, a rail terminal serving a large industrial facility such as a power station would cover a substantial site, whilst a small aggregates terminal supplying a ready mix concrete plant might only be a few hectares.

Bulk terminals are almost always owned and operated by a single company.

There are many examples of all these types of Rail Freight Interchange across the UK mainland, which can be found on the SRA freight website at www.railfreightonline.com.
<table>
<thead>
<tr>
<th>Type of RFI</th>
<th>Function</th>
<th>Likely size (indicative only)</th>
<th>Transport requirements (indicative only)</th>
<th>Examples</th>
</tr>
</thead>
<tbody>
<tr>
<td>Strategic</td>
<td>Major interchange with significant intermodal and warehousing, located at nationally strategic sites proximate to major conurbations.</td>
<td>100 - 400 Ha</td>
<td>Requires high quality links to motorway and trunk road network. Rail links need high capacity and good loading gauge.</td>
<td>Hams Hall, Daventry - DIRFT, Mossend</td>
</tr>
<tr>
<td>Non strategic</td>
<td>Large interchange with significant intermodal and warehousing, located at important sites within regions.</td>
<td>20 - 250 Ha</td>
<td>Requires high quality links to motorway and trunk road network. Rail links need sufficient capacity and good loading gauge.</td>
<td>Potter Group, Selby. Malcolm Group, Grangemouth.</td>
</tr>
<tr>
<td>Intermodal only</td>
<td>Interchange handling only intermodal traffic, often located at key points in urban areas.</td>
<td>10 - 30 Ha</td>
<td>Requires good links to urban road and trunk road network. Rail links require sufficient loading gauge.</td>
<td>Freightliner terminals. O’Connor Group, Widnes.</td>
</tr>
<tr>
<td>Rail linked warehouse</td>
<td>Single warehouse unit providing rail services.</td>
<td>10 - 30 Ha</td>
<td>Requires good links to urban road and trunk road network.</td>
<td>Carlisle Warehousing, Tibbett &amp; Britten, Neasden. Whirlpool, Paddock Wood</td>
</tr>
<tr>
<td>Bulk terminal</td>
<td>Bespoke terminal for single bulk product types such as aggregates and minerals, often linked to a manufacturing or processing facility. Also includes car, automotive terminals and waste terminals</td>
<td>5 - 10 Ha</td>
<td>Road and rail links need to be appropriate to bulk commodity - often heavy loads. Aggregates and minerals terminals often require urban location to serve construction industries and road maintenance.</td>
<td>Numerous examples of aggregates and construction material facilities, power stations and basic industries</td>
</tr>
<tr>
<td>CAR terminals</td>
<td>Bespoke terminal for handling cars on rail transporter vehicles</td>
<td>8 - 10 Ha</td>
<td>Often include car storage with PDI and preparation facilities</td>
<td>Corby</td>
</tr>
</tbody>
</table>
Appendix C: Rail Freight Interchange examples

C (i) Daventry International Rail Freight Terminal

Picture courtesy of Severn Trent Properties
<table>
<thead>
<tr>
<th><strong>Status:</strong></th>
<th>Strategic Rail Freight Interchange</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Developer:</strong></td>
<td>Severn Trent Properties</td>
</tr>
<tr>
<td><strong>Rail terminal operator:</strong></td>
<td>Tibbett &amp; Britten</td>
</tr>
<tr>
<td><strong>Opened:</strong></td>
<td>1997</td>
</tr>
<tr>
<td><strong>Area:</strong></td>
<td>364 acres (147 Hectares)</td>
</tr>
<tr>
<td><strong>Main rail connections:</strong></td>
<td>On West Coast Main Line</td>
</tr>
<tr>
<td><strong>Main road connections:</strong></td>
<td>M6/ M1/ A14</td>
</tr>
<tr>
<td><strong>Rail connected buildings:</strong></td>
<td>Three</td>
</tr>
<tr>
<td><strong>Details:</strong></td>
<td><a href="http://www.dirft.com">www.dirft.com</a></td>
</tr>
</tbody>
</table>

Daventry International Rail Freight Terminal (DIRFT) was one of the first new-generation Multi-modal hubs to be developed in the post Channel Tunnel era.

The extent to which rail was integrated into the overall development was limited to a core intermodal handling area, managed by Tibbett & Britten Group and rail lines serving three warehouses.

Development since the original build has included investment by the Malcolm Group to increase siding capacity to their warehousing and allow a separate area of intermodal handling operated by themselves for their own requirements.

Demand for intermodal handling and rail connected warehousing has increased in the intervening years as market and economic forces have taken effect. Severn Trent Properties are proposing much greater integration between rail and warehousing for the forthcoming phase 2 development to reflect this changing demand.

The terminal is operated on an open access basis and receives rail freight services from Direct Rail Services, EWS, Freightliner and GB Railfreight. DIRFT is a receipt and dispatch point of trunk rail flows from both the Channel Tunnel and the port of Felixstowe in addition to being an access point for customers using UK wagonload services.

The second terminal operator on the site, WH Malcolm, provides a dedicated point-to-point trunk service between the Midlands and Scotland using the DIRFT Strategic RFI.

The intermodal terminal serves rail and non rail-connected warehousing on the freight village and acts as a strategic access point to the rail network for intermodal traffic in the wider region, including regular flows from companies based on the nearby Lutterworth distribution park.

At the time of writing, businesses attracted to DIRFT for the development of warehousing have been a combination of logistics service providers servicing retail customers and end retail customers on their own account, including the £40 million investment by the Royal Mail to create a hub as part of their network rationalisation. This is a combination of rail and non-rail users.

Rail traffic attracted to the site that goes into associated warehousing includes imported beverages in both conventional rail wagons and intermodal containers.

The DIRFT site has no facilities for accommodating traditional bulk traffics.
C (ii) Mossend Cluster

Picture courtesy of Eurocentral Partnership Ltd
Status: Strategic Rail Freight Interchange
Developer: Eurocentral Partnership Ltd
Rail terminal operator: EWS
Opened: 1994
Area: 650 acres (263 Hectares)
Main rail connections: On West Coast Main Line
Main road connections: A8/ M8
Rail connected buildings: One
Details: www.eurocentralm8.com

The Mossend area of Glasgow represents a cluster of strategic Multi-modal freight activity incorporating a number of separate terminal activities including the Eurocentral Freight Village, the rail freight ‘Euroterminal’ and other independent freight facility providers in the immediate area.

The overall effect is to create a focus of freight activity including manufacturing and distribution with access to rail freight, in a similar manner to a single strategic Multi-modal interchange.

Eurocentral

The extent to which rail was integrated into the overall development at Eurocentral was limited to a core intermodal handling area, developed primarily to accommodate international traffic as a result of opening the Channel Tunnel and operated by EWS plus sidings connecting one warehouse.

At the time of writing, users attracted to the Eurocentral site for the development of warehousing have been a combination of logistics service providers servicing retail customers, end retail customers on their own account and manufacturing companies in a wide range of sectors. The development at Eurocentral has benefited from Enterprise Zone status.

Euroterminal

The intermodal terminal, ‘Euroterminal’, serves both non rail-connected warehousing on the Eurocentral and the wider region with rail borne freight traffic. It also provides capability to handle rail borne automotive traffic and a vehicle distribution company, fed by rail, operates from Eurocentral.

Collectively, the Mossend cluster is a receipt and dispatch point of trunk rail flows from both the Channel Tunnel and the deep-sea ports in addition to being an access point for customers using UK wagonload services.

Additional rail facilities operated by PD Stirling are an independent and adjacent terminal operation providing a wide range of rail freight services in addition to the intermodal activities of Euroterminal.

While Euroterminal has no facilities for accommodating traditional bulk traffics, PD Stirling provide services to the bulk, intermodal and general freight sector.
C (iii) Wakefield Europark
**Status:** Strategic Rail Freight Interchange

**Developer:** Amec Developments

**Rail terminal operator:** EWS

**Opened:** 1996

**Area:** 338 acres (137 Hectares)

**Main rail connections:** On east end of TransPennine line, with good access to East Coast Main Line

**Main road connections:** M62

**Rail connected buildings:** None

**Details:** [www.wakefieldeuroport.co.uk](http://www.wakefieldeuroport.co.uk)

Wakefield Europark was developed by Amec Developments as a major Multi-modal hub and focus for manufacturing and distribution activity and was one of the first new-generation Multi-modal hubs to be developed in the post Channel Tunnel era.

The extent to which rail was integrated into the overall development was limited to a core intermodal handling area, the management and operation of which is with EWS. EWS are the only operator using the terminal at present.

Despite the intermodal terminal being reasonably central within the overall development, no warehousing was developed with rail connection and interest in the development has been limited to intermodal traffic as a result.

Development has been ongoing on large areas of the industrial park but this has mostly been for large footprint road-only distribution warehouses.

At the time of writing, Wakefield Europort has attracted mainly retail customers taking large footprint warehousing on their own account (which may be serviced by third party contractors), in addition to some speculative property by industrial property developers.

Occupiers of Wakefield Europort generate a small amount of intermodal traffic through the rail terminal. The rail terminal also serves as a strategic access point to the rail network for intermodal traffic in the wider region.

Wakefield Europort is a receipt and dispatch point of trunk rail flows from both the Channel Tunnel and the deep-sea ports in addition to being an access point for customers using UK wagonload services. The terminal is also a main destination for dedicated services from London.

Wakefield Europort has no facilities for accommodating traditional bulk traffics.
(iv) Hams Hall

Pictures courtesy of ABP Connect
Status: Strategic Rail Freight Interchange
Developer: Powergen
Rail terminal operator: ABP Connect
Opened: 1996
Area: 420 acres (170 Hectares)
Main rail connection: On Birmingham to Nuneaton Line, close to West Coast Main Line
Main road connections: M6/ M1
Rail connected buildings: None

The Hams Hall development including the rail freight terminal was formerly Europe’s largest power station. On decommissioning, its owners, Powergen, gained planning approval to develop the site into a distribution park and rail freight terminal and was one of the first new-generation Multi-modal hubs to be developed in the post Channel Tunnel era.

The 420 acre site included a modest area for intermodal handling which, with hindsight was relatively poorly designed and laid out. Although the masterplan indicated rail connection to a number of buildings, none has been served by rail.

Development has been ongoing on large areas of the industrial park but this has mostly been for large footprint road-only distribution warehouses.

Recent investment by the terminal operator ABP Connect to increase the capacity of the terminal has stimulated growth in traffic through the terminal, which is served by EWS, Freightliner and GB Railfreight.

At the time of writing, Hams Hall distribution park has attracted a combination of retail customers taking large footprint warehousing on their own account, logistics service providers and large scale manufacturing, notably a new BMW engine manufacturing plant and one of Sainsbury’s new generation ‘mega footprint’ distribution centres.

Occupiers of Hams Hall generate a small amount of intermodal traffic through the ABP Connect operated rail terminal however the terminal acts as a strategic access point to the rail network for intermodal traffic in the wider region.

Hams Hall is a receipt and dispatch point of trunk rail flows from both the Channel Tunnel and the deep-sea ports in addition to customers using UK wagonload services.

The capacity and capability of the site has encouraged deep sea shipping lines to establish strategic inland operations, indeed ABP Connect is a subsidiary of ABP, the UK’s largest port operator, who has taken the strategic decision to invest in Hams Hall on this basis.

Hams Hall has no facilities for accommodating traditional bulk traffics.
C (v) Trafford Park, Manchester
**Status:** Strategic Rail Freight Interchange

**Rail terminal operator:** English, Welsh and Scottish Railway, Freightliner, and Roadways Container Logistics

**Opened:** From 1965

**Main rail connections:** On Manchester to Warrington Line

**Main road connections:** M60 and M602

**Rail connected buildings:** Several throughout the overall industrial estate

Trafford Park Industrial Estate in Manchester was the first and is one of the largest industrial parks in Europe, originally developed by the Manchester Ship Canal Company in the 19th Century. It contains a cluster of rail and non-rail freight activity which, taken together, create a strategic location for rail freight.

From a low point in the mid 1980’s where the road, rail and canal infrastructure was in poor condition and business was in decline, the Trafford Park Development Corporation (TPDC) between 1987 and 1998 regenerated the area attracting 1,000 companies, 28,299 new jobs and £1.759 billion of private sector investment during the period.

The rail operating sites are within a much wider area of industrial activity and comprise three distinct rail operations, managed respectively by Freightliner, EWS and Roadways Container Logistics.

A fourth rail connected area, owned and operated by the Manchester International Freight Terminal (MIFT) operates no rail services. Collectively known as the Trafford Park World Freight Centre, it is the UK’s largest road/rail interchange outside of London.

Although the site was extensively rail connected originally, consolidated rail operations and the shape of operations seen today, have developed over the last 40 years, as follows:

- The 26 acre Roadways Container Logistics terminal (owned and leased by Manchester Ship Canal Co., the original developer of the overall Trafford Park Industrial Estate) initially opened between 1965-1970;
- The Freightliner terminal opened in 1969 as part of the UK wide British Rail (BR) initiative to create a network of intermodal terminals to handle port based flows; and
- The 20 acre EWS Euroterminal facility opened in 1993 as part of the BR initiative to create a network of intermodal terminals to handle traffic from the Channel Tunnel, with all the security clearance measures necessary for through tunnel movements.

On average the rail terminals handle approaching 800 containers a day between them, comprising port based traffic, European Channel Tunnel traffic (both imports and exports) and UK domestic flows.

The industrial nature of the north west economy is reflected in the types of traffic commonly handled through the rail terminals, which include significant volumes of chemical and industrial commodities in addition to consumer and white goods for retail chains.

The industrial estate has several rail connected warehousing facilities receiving traffic in conventional rail wagons and there are facilities within the intermodal terminals to support chilled or heated equipment, container storage and repair operations.

It is estimated that rail operations across the three rail centres is approaching 75% capacity, against a background of growing overall demand.

Development in recent years on the industrial estate has included the Trafford Centre, a large retail development close to the Roadways terminal and the Manchester United football ground close to the Freightliner terminal.

Trafford Park has no facilities for accommodating traditional bulk traffics.
C (vi) The Potter Group, Selby

Picture courtesy of The Potter Group
Potter Group’s Selby interchange is an example of a terminal developed using an existing connection by a transport and logistics company rather than a property development or rail industry business.

Formerly a processing plant for British Sugar, the 64 acre site was purchased by Potter Group in 1984. Extensive development has taken place in the intervening years, with support from Freight Facility Grants, to re-lay much of the existing rail infrastructure and develop warehousing.

Having an active interest in seeing a return on its own investment in rail facilities, Potter Group has been proactive in encouraging rail borne business into its warehousing. A majority of customers at the Selby site have some connection to the availability of rail into the site. Inbound goods for many on-site customers are either direct into store or through an on site intermodal handling area.

This includes a significant new directly rail connected warehousing for the receipt of Scandinavian paper products by rail from Immingham for regional distribution.

In addition a purpose designed national distribution centre has been build for a high street retailer, a significant proportion of whose inbound goods are delivered to the site by rail through the intermodal facilities.

In addition to intermodal handling and rail connected warehousing, the site has developed operations for customers including the handling of bulk commodities more usually associated with rail including an aggregates terminal.

The terminal is operated on an open access basis and receives rail freight services from EWS and GB Railfreight.
C (vii) Freightliner, Landor Street, Birmingham

Picture courtesy of Getmapping
**Status:** Intermodal only Rail Freight Interchange

**Rail terminal operator:** Freightliner Ltd

**Opened:** 1969

**Main rail connections:** On Birmingham to Nuneaton line, with good access to West Coast Main Line and Birmingham rail routes

**Main road connections:** A1M/ A19

**Rail connected buildings:** None

**Details:** www.freightliner.co.uk

The Landor Street terminal was one of a number of similar intermodal terminals developed and opened by British Rail in the late 1960’s, as part of their ‘Freightliner’ network to connect the UK ports to main UK cities, to capture the emerging container business.

At privatisation, the ‘Freightliner’ business along with ‘Freightliner’ terminals were sold as a package and Freightliner Ltd was formed to develop the business.

The Landor Street terminal is owned, operated and serviced by Freightliner Ltd.

The intermodal only nature of the terminal means it is configured to optimise the handling of trains and transfer of containers directly to road vehicles. The volume of intermodal business through Landor Street terminal is considerable and, as with other Freightliner terminals, is an important interchange in the continued growth of market share for rail. Original public investment in rail infrastructure and handling equipment by BR and subsequent private investment by Freightliner Ltd, means these terminals are well equipped to handle significant volumes of intermodal traffic.
C (viii) Carlisle Warehousing

Note: Site has recently been expanded. Rail access from right of picture at ●
Carlisle Warehousing is a small, private rail connected development in Cumbria that consists of two rail served warehouses and an open storage and loading area. The terminal is equipped with forklift trucks to handle traffic in conventional rail wagons and there is additional space to facilitate a limited amount of intermodal handling.

Carlisle Warehousing is located on the Kingstown Industrial Estate and is adjacent to the M6 motorway. It has successfully attracted a range of customers handling palletised and bulked cement and steel traffic.

This type of terminal typically serves a local catchment area or can act as an access point to the rail network for industrial clusters. Securing services from Freight Operating Companies into this smaller type of terminal often requires a regular baseload flow of rail traffic, such as the steel traffic at Carlisle Warehousing.

**General comment**

This category of terminal can also include the type of operation typically associated with parcel and premium logistics operations. In these instances there may not even be any storage warehousing, but just the ability to cross-dock palletised or roll cage freight quickly from road to rail.

The economics of this type of traffic mean this type of operation has to be cheap, offer rapid execution and terminals are often developed as part of an overall network, rather than as a stand-alone facility.
C (ix) Wembley Super Urban Plant

Picture courtesy of Aggregate Industries
**Wembley Super Urban Plant** is an example of a bulk products terminal traditionally associated with rail freight. The long association of the sector and use of the railway at the time when it was in public ownership has resulted in many origins and destinations for these products served by rail and an established relationship with rail freight companies.

Customers in north and north west London are supplied directly with asphalt, concrete and drystone products by a railhead linked to Aggregate Industries' quarry network. The newly completed site located at Neasden, close to Wembley is central to the company’s strategy of using the rail network to serve urban markets.

London is a large market for construction materials, which go into road building and maintenance, residential and industrial construction with materials often used individually in relatively small quantities.

Wembley offers the ability to deliver large quantities of materials directly to the heart of this market, taking pressure off congested roads and using the rail network. Around 80% of Aggregate Industries’ aggregate requirements in the South East in 2000 were imported by rail.

The Wembley Super Urban Plant receives 10 x 1,000 tonne trains every week, which arrive during the night and serve other distribution centres in the area as well as Wembley. Rail unloading at Wembley is via a computer controlled conveyor system that automatically transfers the material into the plant’s grade and material separated storage depot.

As with other bulk terminals, Wembley not only receives, but processes materials and is equipped to convert bulk materials into secondary products, which can be dispensed in small loads on a just in time basis. There is a modern asphalt plant with hot storage and recycling capability, a drystone depot, concrete block distribution centre and ready mixed concrete plant operated by London Concrete, all supplying local markets in some cases with a dedicated fleet of road vehicles.

Wembley is part of a network of railheads operated by Aggregate Industries to serve the capital and its surrounding region, which include facilities at West Drayton, Brentford, Greenwich, Harlow Mill and Bow.

Wembley is supplied by rail with construction materials from Croft and Bardon Hill hard rock quarries in Leicestershire, and Warmwell sand quarry in Dorset.

In addition, stone for supply of proprietary asphalt products is transported from South Wales, also by rail.

The site was previously used as a coal depot and the necessary rail infrastructure, although in need of restoration, was already in place when the company began developing the facility.
European Examples

The use of rail for freight movement across Europe is greater than in the UK for a combination of reasons including length of haul, geography and different operational models of infrastructure, freight operations, regulation and financial support.

Public sector support for terminals differs significantly between countries in the EU as does the planning framework they are delivered within. The availability of suitable interchange capacity has been shown to increase the ability for freight to switch to road though, and below are examples of the type of facility available.

The freight village concept is a popular model and broadly reflects the type of Strategic Multi-modal Interchange outlined in this policy.

The Europlatforms Consortium' have the following definition for freight village:

'A freight village is a defined area within which all activities relating to transport, logistics and the distribution of goods, both for national and international transit, are carried out by various operators.

These operators can either be owners or tenants of buildings and facilities (warehouses, break-bulk centres, storage areas, offices, car parks, etc,...) which have been built there.

Also, in order to comply with free competition rules, a freight village must allow access to all companies involved in the activities set out above. A freight village must also be equipped with all the public facilities to carry out the above mentioned operations.

If possible, it should also include public services for the staff and equipment of the users.

In order to encourage intermodal transport for the handling of goods, a freight village must preferably be served by a multiplicity of transport modes (road, rail, deep-sea, inland waterway and air).

Finally, it is imperative that a freight village be run by a single body, either public or private’.

C (x) Cargo Centre Graz, Austria

Picture courtesy of Cargo Centre Graz
Cargo Centre Graz is a new development opened in 2003. It was financed as a PPP with a consortium of private transport companies and forwarding agencies, the three largest Styrian banks, the Styrian Provincial Government and the Federal Government of Austria. In this respect its development financing structure is different to those in the UK.

The terminal is operated on an open access basis and is the general contractor of the goods terminal, responsible for all the logistics and co-ordination as well as for leasing and renting. Consulting and developing logistics concepts are further focal points of the CCG.

The immediate road connection is to the southern freeway (A2); the direct access to the railways and its proximity to the Graz-Thalerhof airport ensures that the Cargo Center Graz is a logistics centre with a good location for industry and commerce.

Facilities on site include storage warehouses with possibilities for office space, container-repair and container depot service, as well as the hiring of equipment for combined transportation.

Key details:

- 500,000 sqm total area
- 63,000 sqm halls
- 11,000 sqm office space
- 130,000 sqm uncovered space
- 25,000 sqm area for storing containers, swap bodies and trailers
- 4 craneable tracks, 700 m each
- 2 team tracks, 750 m each
- 1 main track
- 1 track for rolling road, 610 m
- 2 gantry cranes
- 1 mobile lifting equipment with front spreader
- 80 transshipments per hour
- Reefer service
- Interim storage for containers with dangerous goods
- Connections for power supply for heating and cooling of tanks/refrigerator containers
‘Interporti’ interchanges in Italy

The Interporti style terminals were developed to address the growing traffic concerns in Italian cities during the late 1960’s and have developed into a strategic network in the intervening years. There are now Interporti terminals at Bologne, Verona, Marcianise, Padova, Rovigno and Parma.

The principle of an Interporti terminal and a Strategic Multi-modal Interchange have similarities by drawing together, encouraging and providing the infrastructure for focused freight activity making available multiple modes.

The financing, development and marketing of an Interporti terminal is different to those in the UK with an operations company being established. For example, Interporto Di Padova SpA, which comprises significant shareholdings from local, regional government, state railways and logistics operators responsible for the terminal’s overall development

The Padova freight village covers, as an example, 200 Ha, and includes a rail terminal, rail connected warehousing, general warehousing and associated management and service activities. It is home to 75 companies, employing up to 3000 people.

While Interporto di Padova owns the infrastructure, the management of the container terminal is through an operating company, in this case Nord-Est Terminal SpA.
Relevant research

Much research has been commissioned by the European Commission and other public sector bodies into freight, intermodality and how to deliver sustainable distribution across Europe.

Although none address the content of this paper exactly, the following research does touch on areas relevant to Rail Freight Interchanges, particularly with respect to increasing the efficiency and modal share of rail in a Pan-European environment.

- Freight Intermodality, Results from the Transport Research Program - EXTRA consortium for European Commission, Energy and Transport (2001)
- National Policies towards Shifting Freight form Road to Rail, a case of Switzerland, the UK and France - European Council of Ministers of Transport (Jan 2003)
- TERMINET - Technische Universiteit Delft, NL; European Commission Transport RTD Programme (2000)
- A jump forward in intermodal freight transport: are hub terminals and alternative for shunting?, TRAIL Research School, Delft University of Technology, YM Bontekoning (Dec. 2000)
- IMPULSE - European Commission 4th Framework Programme
- EMOLITE - European Commission 4th Framework Programme
- REFORM - European Commission 4th Framework Programme
- Strategic Rail Research Agenda 2020, European Rail Research Advisory Council (Sept. 2002)
- Freight Logistics and Transport Systems in Europe, Euro-CASE, 1999

Other research

- Future trends in the demand for warehouse property, Cranfield University, April 2003
- EU Enlargement — European Distribution Centres on the move?, Cap Gemini Ernst & Young, September 2003
Appendix D: Summary planning policy background

Policy background

The Government is committed to the development of rail freight and the achievement of modal shift from road. This is very clearly expressed in the 10 Year Plan which sets bold targets for increasing the amount of freight moved by rail and also in the Government’s strategy for Sustainable Distribution. In particular, the latter document includes the Strategy for Major RFIs, which are considered vital, inter alia, to promoting, rail freight and in maintaining efficient trading links.

The Sustainable Distribution Strategy recognises that central and local government have a ‘crucial strategic role’ in helping to determine the future development of transport infrastructure via the planning system. In particular, land use planning is noted as having a significant impact on distribution via the provision of major transport infrastructure and also through policies and decisions on patterns of development.

The Strategy explains that the Government will promote its policies on sustainable distribution via PPG13, which was revised following the issuing of ‘Sustainable Distribution’, to incorporate its recommendations.

In addition, the Government will encourage Regional Planning Guidance to consider the scope for promoting the carriage of freight by non-road modes, including rail. The Government also expects Local Transport Plans to take full account of the needs of freight traffic.

With particular reference to Major RFIs, the Government’s Sustainable Distribution Strategy explains that intermodal terminals represent major investments and have environmental and wider implications, some of which can make it difficult to find acceptable new sites for development and which necessitate careful, long term planning. It is recommended that this forward planning for freight interchanges must develop from a local and regional consensus within the national framework.

The Strategy recognises that, in setting this national framework for major RFI the Government has a key role to play in achieving a fair balance between conflicting interests. This is identified as a balance between the environmental impact of excessive development relative to the promotion of unnecessary traffic generation and the loss of investment and jobs to neighbouring countries with associated longer distance haulage by road, which would arise from an unduly restrictive policy approach to RFIs.

The Government’s national policy framework within which the future development of Major RFIs should be planned and considered has four key objectives, as follows:

- To promote the contribution of major RFI to national and regional competitiveness, by pursuing policies of fair competition in the UK and throughout Europe; by giving due weight to the need for efficient trans shipment between the different transport modes; and by providing efficient access to and from major interchanges - not only by road, but also by rail and, where appropriate, by coastal shipping or waterway;

- To improve the operational and environmental performance of existing RFI, by promoting greater use of less damaging modes for onward distribution and through regulation, monitoring and enforcement to control noise and pollution and safeguard habitats;

- To encourage full and efficient utilisation of existing interchange facilities in preference to expansion in cases where suitable spare capacity exists or can be created, for example by improving access or by encouraging regeneration of under-used sites, to minimise new land take; and

- Where new facilities or expansion involving new land take are required, the criteria for appraising transport projects will be rigorously applied. These criteria are set out in ‘A New Deal for Trunk Roads in England’.
PPG13 Transport

PPG13 issued in 2001 emerged, as explained above, at least in part as an expression of the Government’s policy for rail freight. PPG13 not only outlines the Government’s policy support for the movement of freight by rail, but also sets requirements upon local planning authorities to be proactive in planning for rail freight and major freight interchanges.

PPG13 clearly recognises that the land use planning system can help to promote sustainable distribution, including the movement of freight by rail. In preparing development plans and in carrying out their development control function, local authorities are required to:

- Identify and, where appropriate, protect sites and routes (both existing and potential) which could be critical in developing infrastructure for the movement of freight, including interchanges and facilities allowing road to rail transfer. Planning authorities should also ensure that any disused transport sites and routes are not unnecessarily severed by new development or transport infrastructure. In relation to rail use, the identification and protection of sites and routes should be carried out in liaison with the SRA which is recognised as being best placed to advise on factors which are important in delivering wider transport objectives;

- Where possible, locate development generating substantial freight movements such as distribution and warehousing away from congested central areas, residential areas and ensure adequate access to trunk roads;

- Promote opportunities for freight generating development to be served by rail by influencing the location of developments and by identifying and, where appropriate, protecting realistic opportunities for rail connections to existing manufacturing, distribution and warehousing sites adjacent or close to the rail network; and

- On disused transport sites, authorities should consider uses related to sustainable transport before other uses.

PPG13 is accompanied by ‘A Guide to Better Practice’ which provides practical guidance on the implementation of the PPG and on the use of the land use and transport planning systems to achieve a reduction in the need to travel. The Guide advises that the movement of freight is an important consideration in reducing the need to travel. Whilst recognising the operational advantages of road over rail and the consequential likelihood that road haulage will continue to dominate domestic and international freight markets for the foreseeable future, wherever possible the movement of freight by other options, including rail, should be encouraged.

The Guide provides a framework for the integration of land use and transport which is directed at using spatial planning to effect a reduction in the need to travel, particularly by car/road. Its advice in respect of warehousing, distribution and industrial activities is that they should be located adjacent to key highway links and to main rail/water links.

Such locations would facilitate the movement of freight by rail and allow the intermodal movement of goods from road to rail.
PPG11: Regional planning

The Government’s Sustainable Distribution Strategy sets Regional Planning Guidance the role of assessing the scope for promoting the carriage of freight by rail. Regional planning is also identified as important in developing the local and regional consensus seen as necessary to take forward the Government’s Major RFI Strategy.

Regional Planning Bodies (RPBs) are required to ensure that Regional Transport Strategy (RTS) policies for freight are consistent with the principles in the Sustainable Distribution Strategy (paragraph 25 PPG11). RPB’s are required to work closely with the SRA, freight operators and other relevant interests and to provide regional strategic advice on an integrated freight distribution network. In particular, Regional Planning and Transport Guidance is required to look at the siting of rail/road terminals and port and airport links to the railway network. Indeed, the RTS is required to provide a ‘strategic steer’ on the role and future development of railways for freight movement, consistent with national policy. This is a required element of RTS if it is to provide the long term regional framework for structure plans, Part 1 UDP’s, Local Transport Plans and for transport operators.

A review of PPG11 has recently been issued, but is not referenced here in detail due to its first draft status. However, it is important to recognise that draft PPG11 continues to place emphasis on the achievement of sustainable distribution.

Regional Transport Strategies are required to provide advice on the promotion of sustainable freight distribution. Regional Planning Bodies should have regard to the principles set out in the Government’s paper ‘Sustainable Distribution: a Strategy’. Particular consideration should be given in Regional Transport Strategies to identifying the broad location of new Multi-modal freight interchanges and major distribution centres. RPB’s are required to work closely with freight operators and other relevant interests, including the SRA.

Draft PPG11 confirms that the RTS will be an integral element of the Regional Spatial Strategy and that the status of regional planning is to be raised via its statutory position as part of the new form of ‘development plan’. The requirement to plan for sustainable distribution and freight interchanges is, therefore, a key element of the statutory planning process.
Appendix E: Interchange map

The map is not an exhaustive list of interchange facilities in the UK as there are numerous locations where freight can and is moved between road to rail on a modest scale.

Those terminals marked are defined as:

- **Intermodal only** - those facilities dedicated to the movement of intermodal units between road and rail; and
- **Combined terminals** - those facilities that offer intermodal handling and additional services on site, including handling product in conventional rail wagons and providing warehousing activities.

The map does not include the ports, other than those which offer a rail connected landside service for the region that they are located within, as a separate activity to their core maritime related activities.

The Gauge detail highlighted includes the committed work ongoing at the time of writing. It will be the position as at December 2004 when the work is complete.

It should be noted that while London and the South East is the largest area in terms of consumption and population density, both significant factors in the generation of freight demand, it is also the most poorly served by facilities to enable modal shift from road to rail.
Appendix F: Main road freight movements, international and domestic

Map One illustrates international traffic using the UK’s roads to and from the ports and the Channel Tunnel. It is colour coded to demonstrate where this international traffic impacts on the road network most heavily, at between 200,000 and 500,000 movements per year and 500,000+ movements per year.

These are the flows which are the most likely to be attracted to trains serving rail linked distribution parks, thereby relieving heavily congested lengths of the national trunk road network.

It should be recognised that the map does not demonstrate the overall congestion of the UK road network and does not include any domestic road freight. The map represents 2002 data.

Map One: Key corridors used by international freight flows.
Main freight routes - county to county distribution of goods traffic lifted by road

Tonnes lifted (‘000), county to county 1997 GB lorries only
- 68,300 to 84,600 (2)
- 51,800 to 68,300 (5)
- 35,300 to 51,800 (10)
- 18,800 to 35,300 (18)
- 2,300 to 18,800 (28)

Appendix G: The need for rail connected warehousing in the UK

Modelling the overall picture.

The forecasts of an 80% growth in rail freight made in the Government's 10 Year Transport Plan were based upon output from the GB Freight Model.

That growth was predicted on the implementation of a number of measures, including:

- The wider provision of an enhanced loading gauge;
- More efficient use of railway equipment and terminals;
- The implementation of the Company Neutral Revenue Support scheme; and
- The provision of more rail linked distribution buildings.

Of these initiatives, Company Neutral Revenue Support has been launched, market forces and ongoing competition are seeing continued efficiency from operators and terminals and the industrial property and development market is responding to provide new interchange capacity.

The SRA has already started to deliver increased capability for larger gauge traffic and diversionary capability. These schemes include the key freight routes between Felixstowe and the West Midlands, via London; access to the ports of Tilbury, Purfleet and Barking Container Terminal; and diversionary capability off the West Coast Main Line into the North West.

Development work continues on other schemes, most notably Southampton to West Midlands, although implementation will be dependent on criteria including those of affordability, value for money and business case.

The level of modal shift in this model is based on the provision of the facilities, infrastructure and financial support tools necessary to accommodate the traffic. It also assumes that commercial factors, beyond the control of the public sector such as service level provided by individual Freight Operating Companies to a customer and pricing are competitive to the road alternative.

The forecasts by region of non bulk rail traffic shown in the table demonstrate a series of scenarios, all based on the assumption that there is sufficient network and interchange capacity available to accommodate the demand and the tools above are effective.
### Non bulk rail tonnes (m)

<table>
<thead>
<tr>
<th>Inland Terminal Region (NUTS 1)</th>
<th>2002</th>
<th>2015 - No further buildings</th>
<th>50% delivered</th>
<th>100% delivered</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td></td>
<td></td>
<td>Additional warehousing ('000m²)</td>
<td>Non bulk rail tones (m)</td>
</tr>
<tr>
<td>South East</td>
<td>2.5</td>
<td>11.7</td>
<td>200</td>
<td>16.5</td>
</tr>
<tr>
<td>North West</td>
<td>2.7</td>
<td>7.1</td>
<td>275</td>
<td>10</td>
</tr>
<tr>
<td>East Midlands</td>
<td>0.5</td>
<td>2.2</td>
<td>200</td>
<td>3.7</td>
</tr>
<tr>
<td>West Midlands</td>
<td>1.2</td>
<td>4</td>
<td>183</td>
<td>5.5</td>
</tr>
<tr>
<td>East of England</td>
<td>0.1</td>
<td>0.6</td>
<td>150</td>
<td>1.3</td>
</tr>
<tr>
<td>Yorkshire &amp; Humberside</td>
<td>1.6</td>
<td>4.1</td>
<td>150</td>
<td>5.6</td>
</tr>
<tr>
<td>Scotland</td>
<td>1.6</td>
<td>3.3</td>
<td>150</td>
<td>7.6</td>
</tr>
<tr>
<td>South West</td>
<td>0.6</td>
<td>1.9</td>
<td>110</td>
<td>3.5</td>
</tr>
<tr>
<td>Wales</td>
<td>0.9</td>
<td>2.2</td>
<td>50</td>
<td>2.8</td>
</tr>
<tr>
<td>North East</td>
<td>0.9</td>
<td>1.8</td>
<td>25</td>
<td>2.5</td>
</tr>
<tr>
<td><strong>Totals</strong></td>
<td></td>
<td></td>
<td><strong>1493</strong></td>
<td></td>
</tr>
</tbody>
</table>

| | 12.6 | 33.9 | 59.0 | 66.3 |

### Impact of rail linked buildings - 2015

#### 2002 - Existing volume in the regions

#### 2015 - No further buildings:

The table demonstrates the demand for rail capacity in the regions, assuming there is no additional direct rail connected warehousing and all additional traffic requires an onward journey to its final destination by road.

#### 2015 - With rail connected buildings:

The figures for additional buildings are based upon explicit investments in rail linked buildings indicating the amount of rail connected warehousing being proposed by interchange development projects at the time of writing.

There are two scenarios:

- 50% of the capacity delivered by 2015; and
- 100% of the capacity delivered by 2015.
The rail tonnes columns then demonstrate the demand for rail capacity in the regions under each scenario of project delivery.

The increases over and above the ‘no further buildings’ demand scenarios indicate the increased commercial viability of rail freight, where no additional road journey is necessary to reach an end destination.

The table shows that the implementation of 50% of the total currently being proposed (a further 1.5 million m² of rail linked distribution buildings), would allow c.20 million additional tonnes of road freight to divert to rail, and play an important role in facilitating c.80% growth in rail freight nationally by 2015.

If the entire volume of warehousing being proposed, a total of c.3 million m² of buildings (or the equivalent thereof in schemes as yet unknown to the SRA) were implemented the modelling indicates a further 7.5 million tonnes is forecast to shift from road freight to rail.

The interrelationship between suitable rail connected facilities in different regions should be noted. If the additional warehousing anticipated in one region, the South East for example, were not provided, then this would have an impact on demand for capacity provided elsewhere. This is because there would be less scope for rail services from Scotland, say, to serve the South East.

The analysis demonstrates the case for a much wider provision of rail linked facilities and distribution buildings; the higher the proportion of goods warehousing adjacent to rail, the greater the volume of rail freight that will result.
Appendix H: SRA rail freight studies used to inform the SRA Strategic Rail Freight Interchange Policy

- Radical consultants on the location of and need for freight interchanges - reference to SRA Freight Strategy

The work analysed 95 million individual collection and deliveries between 65,000 individual origin and destination couples. These were mapped onto a digitised road network using CAST-DPM, a logistics industry planning tool. A digitised rail network and terminal data were overlaid to identify potential locations of modal shift. Comparison with existing and planned capacity demonstrated the general location and need for new interchange capacity. The results of this analysis formed the basis for the Interchange Strategy contained within the SRA Freight Strategy, May 2001.

- W S Atkins on 11 regional and national subsets of freight strategy, now informing SRA Regional Planning Assessments.

The work captured comprehensive information on all freight within the regions including existing flows of traffic, existing rail interchange facilities, known traffic, interchange developments and drivers of change, together with a literary review of regional studies and relevant planning frameworks.

- Nathaniel Lichfield and Partners on analysis of the LIFE planning decision

An in-depth analysis of, and advice on, the planning inspector's decision on the London International Freight Exchange (LIFE). This was in order to understand the basis for the decision and to get an independent view of the decision and the evidence to assist in appreciating the issues surrounding Strategic RFI in the planning system.

- Steer Davies Gleave and Logistics Consulting Partners on the need for freight interchanges

Review of various freight demand models, in response to the LIFE planning inspector's view that 'need' was not sufficiently demonstrated at the Colnbrook site proposed for the development. Reviewed the GB Freight Model, SKM Freight Model and Radical study, reporting that none by itself provided sufficient granularity to allow a site specific 'need' case to be demonstrated. However the work confirmed the original outputs on the high level location of, and need for, a limited number of large strategic Rail Freight Interchanges to accommodate long term growth in rail freight.

- Faber Maunsell - SRA-ORR Rail Freight customer survey

Survey of customer perceptions of rail freight, its ease of use and the ability to transfer cargo between various modes of transport.

- Steer Davies Gleave and Logistics Consulting Partners on convertibility of general freight to rail

A market study on the general freight and logistics sector that identified and analysed the sub-sectors that offer the best opportunity for modal shift. It looked at the nature of each product group, such as the volume and configuration of transportation, and its intrinsic characteristics and suitability for rail. The work then quantified the opportunity for modal shift and any long term trends in the sector.
Logistics Consulting Partners on analysis and convertibility of logistics supply chains to rail

Qualitative analysis of the potential for modal shift in the retail supply chain, specifically for packaged food and non food goods. Analysis of volumes and flows by considering typical supply chains, routes to market, prevailing perceptions of rail freight and assessing how and where supply chain re-engineering could integrate rail freight to commercial advantage.

Mouchel Faber Maunsell on funding mechanisms for Rail Freight Interchanges

Analysis and assessment of options for the provision of SRA financial support to developments, should the private sector not be able to deliver the necessary projects commercially.

Market studies with various consultants on the coal, aggregates, waste, metals, petroleum products and automotive sectors.

The market studies identify changes and trends in each of the markets. Identifies areas of growth and decline as well as areas where there are rail constraints. Provides market assessment for up to 15 years. This is work in progress.

MDS Transmodal, forecast of maritime containers by rail

Detailed extent of shift towards the use of 9’6” containers transiting UK ports. Also assesses the impact of new container ports in the South East of England on the rail network.

MDS Transmodal on regional need for rail connected warehousing, ex GB Freight Model.

The GB Freight Model.

- Indicates SRA in-house research, which, whilst not currently publicly available, it intends to publish in the future. This may be as synopses or in amended form where there are issues of commercial confidentiality or sensitivity

Acknowledgement

The SRA Strategic Rail Freight Interchange Policy was produced with advice and drafting assistance from Littman & Robeson, Planning Consultants.