Promoting Modal Shift: The Logistics Challenge

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Key elements of presentation

• The need for rail to succeed in higher-value logistics segments
• What should we be measuring?
• Intermodal market trends
• What lessons can we learn and transfer from the recent intermodal experience (most particularly from the maritime container market)?
What should we be measuring?

- Over-dependence on headline numbers such as *tonnes, tonne-kilometres* and *gross freight train kilometres* may give the wrong messages
- Overemphasise that rail freight is at the mercy of the power generation, steel and aggregates industries
- Suggest that longer hauls are better than shorter hauls
- Growth in ‘non-bulks’ tends to get lost in the detail
- Other measures such as *modal shares* may be better
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*Transport Statistics Great Britain, 2007*
The need for rail to succeed in higher-value logistics segments

- Reduce dependence on a narrow customer base
- Reduce dependence on sectors prone to industrial rationalisation and/or significant cyclical fluctuation
- Reduce dependence on more price-sensitive markets
- Spread rail freight (and the road traffic reduction) over wider areas
- The need for more diversification into a wider traffic base has been long understood, but;
  - It is clearly difficult to achieve
  - Too many technology-driven failures?
  - A lot of traffic has to be transferred / generated to register significantly on the traditional measurement scales
Intermodal market trends: growth rates

• Growth in rail intermodal volumes:
  1998/99 - 2006/07: 29%
  2002/03 - 2006/07: 33%

• 2002/03 - 2006/07:
  annual growth rate = 7.5%

• 2006/07 Q2 – 2007/08 Q2:
  growth = 17.0%
## Intermodal rail freight volumes
(1998/99-2006/07)

<table>
<thead>
<tr>
<th>Year</th>
<th>Tonne-km (bn)</th>
<th>% of total tonne-km</th>
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<tbody>
<tr>
<td>1998/99</td>
<td>3.53</td>
<td>20.4</td>
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<tr>
<td>1999/00</td>
<td>3.92</td>
<td>21.5</td>
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<tr>
<td>2000/01</td>
<td>3.84</td>
<td>21.2</td>
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<td>2001/02</td>
<td>3.54</td>
<td>18.3</td>
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<td>2002/03</td>
<td>3.38</td>
<td>18.3</td>
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<td>2003/04</td>
<td>3.53</td>
<td>18.7</td>
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<td>2004/05</td>
<td>3.96</td>
<td>19.5</td>
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<tr>
<td>2005/06</td>
<td>4.33</td>
<td>20.0</td>
</tr>
<tr>
<td>2006/07</td>
<td>4.56</td>
<td>20.6</td>
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Source: ORR (2007)
Sectors of the intermodal market

Deep-sea containers
- **Key corridors** - Southampton/Felixstowe – inland container terminals (North West, Midlands, Yorkshire)

Domestic intermodal
- **Key corridor** - Anglo-Scottish (Midlands – central Scotland) for containers/swap bodies

Channel Tunnel
Reasons for considering the use of intermodal services

• Potential economic benefits
• Potential performance benefits
• Corporate Social Responsibility agenda
• ‘Future-proofing’ transport options
Lesson 1: ‘On-rail competition’ seems to work

- Freightliner
- EWS
- First GB Railfreight
- DRS
- Fastline

are all active in the rail intermodal market, but not necessarily in direct head-to-head competition with each other.
Lesson 2: Attention to performance pays dividends

- Dedicated intermodal ‘shuttles’
- Timetabled service: good punctuality
- High carrying capacity: 60-72 TEU
- High speed operation: max 75mph.
- Fast terminal-to-terminal journey times
- New reliable and low-emission locos
- Lower labour requirements
- Increasingly customer focused
Shipping line experience

“Rail to and from the UK's major ports is proving more reliable than road. Dedicated K&N rail services from Southampton and Felixstowe are recording 95% reliability levels, compared with 'low-mid 80%' for comparable road haulage”.

Lesson 3: Ensure high utilisation of capacity

Mean TEU capacity utilisation per maritime container train, by port and direction of flow (2007 survey, University of Westminster)

<table>
<thead>
<tr>
<th>Port</th>
<th>Import</th>
<th>Export</th>
<th>Both</th>
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<tr>
<td>Felixstowe</td>
<td>81.82</td>
<td>78.74</td>
<td>80.27</td>
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<tr>
<td>Southampton</td>
<td>74.04</td>
<td>59.35</td>
<td>66.73</td>
</tr>
<tr>
<td>Tilbury</td>
<td>50.78</td>
<td>58.55</td>
<td>54.67</td>
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<tr>
<td>Thamesport</td>
<td>68.18</td>
<td>79.38</td>
<td>73.78</td>
</tr>
<tr>
<td>Total</td>
<td>75.07</td>
<td>69.32</td>
<td>72.20</td>
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</table>
Lesson 4: The need for regular base-load volumes

• Regular base-load volumes, e.g. for a major shipping line or a retailer, reduce dangerous dependence on spot markets

• The spot market, or a mix of smaller, less frequent traffics, can then help to fill any spare capacity

• Need sizeable flows in both directions
Lesson 5: Logistics partnerships are important

- Successful services include those where rail operators are working in partnership with shipping lines, forwarders, retailers, distribution and storage operators, rail terminal operators.
- There are various models as to who takes the lead in putting the package together.
- There is much more scope for 3PLs to get involved in the rail freight market.
Lesson 6: Consider rail at the supply chain planning stage

• Rail is not road!:
  – It is generally less flexible
  – Its route and terminal networks are less extensive
  – Its access and operations are more highly regulated
• So rail’s use in the supply chain needs to be evaluated carefully
• If companies are to embark on supply chain reconfiguration, that is the time to consider the rail option and build it in as an integral part
Lesson 7: Constraints need to be eased

• Port investments, terminal developments, rail network capacity and gauge enhancements are all helping the rail intermodal market, but significant constraints remain

• Strategic planning is important:
  – Development of Strategic Freight Network
  – Further gauge enhancement (incl. diversionary routes)
  – Implementation of Planning Reform Bill – potentially easier provision of new terminals

• are all helpful to the rail case, both in a material sense and in helping to boost confidence in the future for rail.