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GREEN LOGISTICS

Container Train Operations between Ports and their Hinterlands: a UK Case Study

Dr Allan Woodburn

Transport Studies Department

University of Westminster, London, UK

Mode shares:
Percentage of all freight tonne-kms

	1996	*1997*	*1998*	*1999*	*2000*	*2001*	*2002*	*2003*	*2004*	*2005*
Road	65	67	65	64	62	64	62	64	64	64
Rail	6	7	7	7	7	8	7	7	8	8
Water	23	21	23	24	26	24	26	24	23	24
Pipeline	5	5	5	5	4	5	4	4	4	4

(Source: Transport Statistics Great Britain, 2007)

Intermodal market trends: growth rates

- Growth in rail intermodal volumes:
  - 2002/03 - 2007/08: 52% increase in tonne-kms
  - growth rate = 8.8% per annum

  (Source: Office of Rail Regulation, 2008)

- Currently the biggest contributor to rail freight growth in Britain

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 75 mph (120 kph)
- 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”.

Peter Ulber, Chief Exec. Kuehne & Nagel (2005)

Lesson 3: Ensure high utilisation of capacity

Mean TEU capacity utilisation per maritime container train, by port and direction of flow

(Source: 2007 survey conducted by University of Westminster)

Port	Mean capacity utilisation per train (TEU carried as % of capacity)		
	Import	Export	Both
Felixstowe	81.82	78.74	80.27
Southampton	74.04	59.35	66.73
Tilbury	50.78	58.55	54.67
Thamesport	68.18	79.38	73.78
Total	75.07	69.32	72.20

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.