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# Inhibitors to the Growth of Rail Freight

RESEARCH PROJECT CARRIED OUT FOR THE SCOTTISH EXECUTIVE BY THE ROAD HAULAGE ASSOCIATION LTD

September 2007



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## **Disclaimer**

The views expressed in this report are those of the researcher and do not necessarily represent those of the Directorate or Scottish Ministers.

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## FOREWORD

This report outlines the findings of a research study into the opportunities for multi-modal shift of freight from our roads and onto rail. The study was funded on the basis of its potential to support Scottish Ministers' policy of transferring freight onto more environmentally friendly rail, or waterborne, alternatives.

In particular, the study sought to establish how easy or difficult it might be for any of the small companies (with fleets of less than 50 HGVs) that predominate Scotland's road haulage industry to use rail as an alternative, and more environmentally friendly, mode of freight transport.

In this report of their study, the authors argue that by combining the strengths of the road haulage and rail freight industries, there would be advantages for road hauliers, rail freight operators and their customers, in addition to environmental benefit.

## INTRODUCTION

- 1 There is general agreement in National Government, Westminster, Brussels, Local Authorities and Community Councils, that rail should carry a larger share of freight transport. Most of this growth should come from a modal shift. Over the past few years, the de-coupling of freight transport demand from GDP growth has resulted in a static level of demand for freight transport.
- 2 Water borne transport, both inland (canal) and coastal shipping, is recognised as being the most environmentally acceptable form of transport. This is encouraged, is growing, and is not a target for modal shift to rail. Air freight is very specialised, and not significant in volume terms, but as over 90% of air freight in the UK actually travels by road, this is an excellent target for express parcel train services.
- 3 The vast majority of freight moves by road. This is the prime target that achieves the greatest environmental benefit by switching to rail. However, rail freight is growing steadily and in 2004/05 grew by 9.5% to 20.7 billion net tonne kilometres. This represents a 60% growth since 1995, and is the highest level of freight by rail in 30 years. The majority of this traffic is bulk, train load. The challenge is how to maintain this growth by developing the rail offer to be attractive to the vast majority of traffic that is still carried by road.

## THE HAULIERS' VIEWS

- 4 The Road Haulage Association in Scotland has encouraged its members to consider using rail, especially for the trunk haul. This would combine the strengths of both modes, and alleviate the severe cost pressures on road hauliers. As 94% of all road freight operators have 10 vehicles or less and less than 1% have 50 or more, it will be difficult for these operators to get the opportunity to use rail as an option. In fact how would a small operator go about trying to use rail?
- 5 At a November 2005 regional meeting, the hauliers present were asked if they would try a load by rail, or be prepared to investigate the possibility. The unanimous response was negative, as they all have short notice loadings, with variable destinations, and so could not commit to have a rail suitable load at any given time. Also, the majority of loads were multi-collection, and so they could not commit to having a load available at a specific time to suit an arbitrary train timetable.
- 6 The members were then asked whether they would consider forming a co-operative, along the lines of the Continental intermodal operators, and this joint company would charter train space, and between the members the space would be taken up by at least some of them every night. Again, the considered response was negative. They could not guarantee anything, as their customers do not, and so could still end up paying for unused rail wagon slots.



- 7 They cannot be expected to take this risk, to insulate the rail companies from the normal commercial risks inherent in freight transport, and the rail companies will not either, even though it is their business. As stated earlier, 94% of the UK's road hauliers in the "Hire & Reward" sector have 10 vehicles or less. Theirs is a dynamic business, and has daily variances in volumes and destinations. This volatility, and variety of traffic types and therefore trailers needed, makes it unsuitable for them to work to the fixed regimes of rail companies.



## RAIL'S CAPTIVE MARKET

- 8 The recent growth of rail freight has largely been a result of bulk long distance traffic, above all coal imports to power stations, replacing that from coal mines that were close to the power stations. In other words, traffic that would be impossible to move in any other way than rail – a captive market. Rail is not making any impact on the every-day freight traffic of the UK.

## FREIGHT GRANTS

- 9 There are four main Freight Operating Companies (FOCs) in the UK: EWS; Freightliner; DRS and GB-Railfreight. There are also some road/rail operators who "charter" trains from them, such as John G Russell, Potter Group, P.D.Stirling and the Malcolm Group. All the above companies named are privately owned. They receive, on behalf of their clients, grants that the Scottish government makes available to encourage transfer of freight for road to rail.
- 10 There are three different grants:
- The Freight Facilities Grant (FFG), which also applies to water borne traffic. This grant subsidises the facilities needed to make rail use possible, such as sidings, cranes, sheds, etc.
  - The Rail Environmental Benefit Procurement (Bulk) (formerly Track Access Grant) is specifically aimed at bulk movements that would otherwise go by road.
  - The Rail Environmental Benefit Procurement Scheme (Intermodal) (formerly Company Neutral Revenue Support Grant) is specifically aimed at intermodal movements that would otherwise go by road.
- 11 These tend to require several weeks of preparation, and thus are suited to constant, longer-term flows. The availability of these grants is a very positive message from Government. However, the forms are daunting; it takes around six weeks to decide whether a flow warrants a grant, and so are not attractive to the typical RHA member who has more immediate destinations and volumes to attend to.

## A PRACTICAL EXERCISE

- 12 In September 2004, an exercise was conducted with a major Scottish manufacturing company, to move a specific load from A to B, with quotes for prices and services to be obtained for road and for rail. The load concerned was not temperature sensitive, nor time sensitive, and would easily back-load containers that were coming to the North with other traffic returning empty. The destination chosen was the origination point for these containers.
- 13 The road price and details were obtained with one telephone call. The transport manager (senior man, 20 years experience) could not find whom to telephone for rail. There are no entries in Yellow Pages for rail freight, or any rail company. Directory Enquiries could not help. The significance of this is that most haulage work is still organised over the telephone and the Internet has yet to make a significant impact. With assistance from the researcher, the manager eventually found a number and telephoned a FOC. After two weeks of telephone calls a quote, which was higher than the equivalent road price, was obtained.
- 14 For one-off “spot” moves such as this, rail is not in the market. There is no “retail presence” at all – no visibility. An example is the forthcoming development of a new intermodal terminal at Raithes Farm, close to Aberdeen Airport. At an October 2005 air cargo meeting, it was reported that there had been no approach at all from the FOC concerned to explain what the development would be, or any marketing initiatives that would be coming along.
- 15 This lack of profile in the marketplace is because the rail companies are dedicated to running long block trains on set routes, underwritten by someone else taking the commercial risk. For example, one FOC has quoted that 60% of their trains are paid for by the customer, whether loaded or empty. In the case of shipping lines, they can guarantee to load the trains in both directions with deep sea containers to and from ports.
- 16 The major customer of all four FOCs is the railway itself, moving materials for Network Rail. The FOCs are risk averse, and will not run trains speculatively just to generate traffic or stimulate demand. This makes it difficult for them to break into the main general haulage market, where there is not the regularity of loads or destinations to make it attractive for the rail industry.
- 17 Another factor mitigating against running trains, for example to Elgin, is the cost structure of our complex rail system, where the FOCs have to pay heavily for running a train of any length.
- 18 Two other case studies of haulage companies trying to use rail for the delivery of freight are an extra to this report. Together with other evidence, they indicate a number of significant inhibitors to the growth of rail freight.





## INHIBITORS TO THE GROWTH OF RAIL FREIGHT

- 19 To encourage road hauliers to consider rail, a number of RHA member companies were specifically targeted between February and September 2005. The reasons for the lack of success are set out below. It must be noted that there is a will to make it work – the hauliers fully appreciate the potential benefits, but could not operate with the restrictions that are inherent with rail.
- In all cases bar one, the rail price was too expensive. Grants are available, but it takes a minimum of six weeks to obtain a decision, and requires a certainty of traffic flow.
  - Lack of response. The FOCs are incapable of providing a price, with all the details of POD return, pallet pick up and delivery/de-hire, over the telephone.
  - Difficulty in finding the “sales person” to talk to.
  - Lack of train services. It is not possible to obtain good utilisation of the load carrier, the container/swap body, with train services of, say, one per day only five days per week.
  - Lack of network. No FOC would quote for containers from Liverpool to Aberdeen, due to a lack of a service. A significant flow of scrap metal was priced prohibitively as there is no service between Aberdeen and Stockton on Tees.
  - Railway companies quote for moving a train, not door-to-door, which is the road and the forwarding industry norm.
  - Railway companies expect the customer to provide the container, in most cases.
  - Railway companies do not back load the container, leaving this to the customer, or expecting the customer to pay for round trip.
  - Lack of terminals. This generates deviation mileage and time. For example, Speyside whisky to Glasgow is around 180 miles. Via Aberdeen, Dundee and Perth by rail nearly doubles the mileage, and make it impossible to go down and back overnight. This, again, impacts on container utilisation.





- Lack of equipment. Around 80% of hauliers use curtainsider trailers. The FOCs are reluctant to carry such containers due to fears of damaged curtains flapping and damaging railway infrastructure with huge compensation payments, and the curtains are vulnerable to attack by thieves (such containers are commonplace on the Continent). The next most common road trailer is refrigerated. Neither of these types of container are freely available, or offered by the FOCs. Curtain-siders now have steel mesh inside the curtains to deter the thieves. They require gauge enhancement, as they are wider than standard shipping containers. There is no doubt that this type of container will soon be available in the UK in greater numbers. The current containers used for moving Asda products to their shops in Aberdeen and Elgin are not “pallet wide”. This means that two standard UK pallets cannot be loaded side to side. They have to be loaded side to end, this results in only 24 pallets being capable of being carried instead of 26 pallets, as is standard in road lorries.
- Loading gauge. Closely allied to the paragraph on ‘Lack of equipment’ above, the normal road vehicle cubic capacity requires very low platform rail wagons to carry equivalent containers on main rail routes. The road haulage industry makes continual improvements in productivity. It is noticeable how many double deck trailers are now on the roads to carry the increasingly lightweight products that are moved. This cubic capacity is just not possible with the UK loading gauge. It is not possible to double stack standard height pallets in containers, so a greatly reduced load price must be available to compensate for the extra loads generated to carry the same number of pallets. There are also a great number of “out of gauge” loads that are not suitable for rail. So many routes are restricted (including most of Scotland – with the Glasgow > Dundee > Aberdeen > Elgin route to be cleared, following the Transport Minister’s previous announcement, by summer 2007). If the equivalent capacity is not available in a rail container, there must be, at least, an equivalent reduction in price to compensate.
- Lack of “ownership”. Road hauliers – as a matter of course – cover insurance, full responsibility from door-to-door, return of POD, pallet note/pallet accountability, temperature recording, refuelling the fridge, automatically making alternative arrangements in the case of accident, delay or breakdown. Rail FOCs just do not do this.
- Pro-activity. Road hauliers approach customers with a knowledge of the customer’s traffic, and offer their services. Rail FOCs wait for customers to find them.



## CONCLUSION

- 20** There is no doubt that rail has a future role in any freight transport portfolio. However, there is a gap between the service offered by the road haulage industry and that offered by the rail industry. Railway companies are excellent at running railway trains. This is what they do, is their prime function, and is where all their effort is focussed. Road hauliers, on the other hand, are in the freight transport business – not just in the business of running trucks. To attract more traffic the rail industry has to be more pro-active in the market place, and work with the road haulage industry to make itself more “user friendly”. One intervention that would help to link the industries would be an intermediary. However, there is a distinct lack of a national intermediary.
- 21** The majority of the traffic that goes by road, and would be suitable for rail, is not of sufficient size, quantity, regularity of flow and destination to be attractive to the existing rail industry, so there would need to be a degree of consolidation. A good example of what is missing is Hupac of Switzerland. This company (formed 1967) is 78% owned by road hauliers, the rest by railway companies.
- 22** Hupac has 92 shareholders. The road hauliers have a vested interest in using the trains. Hupac own wagons and terminals. Its “members” provide the door-to-door service, a “one stop shop”. The rail companies provide the traction, paths, timetable, crews, etc., and make sure that the trains run reliably and accurately – which they do. This intermediary company, with road haulier/freight forwarder/freight transporter mentality is very successful. Other examples are Cemat in Italy, Kombiverkehr in Germany, Okombi in Austria, and so on.

- 23 It can be seen that the climate is right for a greater use of rail by road hauliers, but there needs to be a great degree of persistence to overcome the barriers involved. By the nature of the industry, rail needs a long lead-time to introduce new services, even if they involve full train loads. They are unable, and unwilling to undertake any commercial risk to help generate traffic or build up a flow by running trains at less than full capacity to allow flexibility. The steady reduction in manufacturing, particularly in NE Scotland, results in less regular traffic, and less volume. The remaining flows are highly variable and short notice. This applies even if the traffic does not need to be “just in time”.
- 24 An example is a haulier who was keen to use rail for export containers to Azerbaijan. He is informed today to pick up a container (in the central belt) today for loading tomorrow in Aberdeen. Clearly this traffic is planned in advance, but the call-off to the haulier is just in time, and is always successful. It also helps reduce goods in transit costs and risks. The router of these boxes is the shipping line. All shipping lines need to be convinced that rail can offer them as good a service, and preferably faster or cheaper or both, than their current road hauliers.
- 25 Of the bulk flows of containers from, say, Felixstowe, rail carries the minority of the boxes, so the shipping lines can guarantee to fill a train, with road taking up the rest of the volume. For collection and delivery to places like Dundee or Aberdeen, road is unbeatable, and rail companies are not canvassing the shipping lines to “sell” their service. This traffic, steady and predictable, would be good “base load” traffic for any service north of the central belt, but requires the rail companies to persuade the shipping lines, by a combination of price and service that they could provide an effective service. However, the growing number of 9’ 6” high containers, frequently used indiscriminately with 8’ 6” containers, is a restricting factor as not all routes are cleared for the higher gauge.
- 26 Rail offers high reliability cost effectiveness for full train load, sustainability and environmental acceptability. Road offers flexibility, adaptability, dynamism, vehicles more closely adapted to the specifics of the commodities carried, close attention to the customer, and price advantage.
- 27 The RHA has tried to show that by combining the strengths of both modes, there would be advantages for the road haulier, the rail companies, and the customer. Long term, a relationship needs to be built between the road haulage industry and the rail freight companies to work together!
- 28 So – there is a lot to do, and the impetus must come from the rail industry, to make itself more attractive and easy to deal with. It has no right to traffic, it must win it.





## CASE STUDIES

### CASE STUDY 1

- 29** A RHA member in Aberdeen was approached to try rail. He has 100 vehicles, and some regularity of traffic flow, and so agreed. This was in May 2005. All 4 FOCs were contacted to quote. None responded. After chasing them, a price was eventually obtained, and services identified. The cut-off times were tight, but could be achieved. The goods require curtain sided containers, as they are multi drop, and multi collection. Load restraints need to be inside the curtain sided containers to secure double stacked part pallets (which is normal practice for multi drop groupage traffic).
- 30** It took two months for the rail company to identify and price suitable containers. Then they decided that the slots on the train must be booked a week in advance, and paid for whether used or not. This is for one container per night Glasgow to Daventry and vice versa. The haulier would prefer to use services from Aberdeen but gauge restrictions prohibit curtain siders. The haulier undertook to obtain (hire) skeletal trailers to carry out the collection and delivery work both at Glasgow and Daventry, and to load the containers back to Scotland. In mid September the haulier reluctantly withdrew.
- 31** He could not risk paying for unused spaces on the train. He said, "I am afraid that at the moment I don't see a way to make this work as the service level we provide cannot cope with the inflexible nature of the rail system". This haulier had gone to Glasgow to see the terminal and discuss all the operational details. Even with all this goodwill, and five months of work, it could not be made to happen.





## CASE STUDY 2

- 32** A good traffic for rail is waste/recyclates. These are steady flows, guaranteed to grow, and are usually one-way trips as it is difficult to back load a waste container. Recyclates are usually carried in lorries that also carry other traffics. A flow was identified from Elgin to Alloa, of broken glass for recycling. On 18 October 2005 all FOCs were e-mailed with all the details of this traffic, and the whole volume of recyclates from the NE, to put it in context. No response. After chasing, one FOC had agreed to visit Elgin on 8 November 8 2005 to look at the sites, and follow up the traffic requirement. Road hauliers respond immediately.
- 33** During 2005 Phil Flanders, RHA Director for Scotland & Northern Ireland tried to get a small family run haulage business to try rail as an alternative. About 20 different companies were approached but unfortunately none was able for various reasons, to progress. Five were very keen to take part in a trial but could not go ahead for the following reasons:
- Loads collection and delivery varies week by week. In some weeks a late collection (after 3pm) and an early delivery (between 3 and 4am) meant that goods had to go as soon as it was loaded to ensure the delivery slot was met.
  - The load was bulky and although it fitted on a road trailer, it could not all fit in a container. This meant a second container would be needed to carry a part load and therefore cost increased above the rate the haulier was paid.
  - The extra journey to and from railheads adds significant costs.