1. RFG is grateful to the Committee for the opportunity to submit evidence.

2. The Rail Freight Group is the representative body of the rail freight industry. Its purpose is to increase the volume of freight carried by rail.

Present contribution of rail freight (in Scotland)

3. In the last full year for which statistics are available (2003-2004), rail freight traffic lifted in Scotland was 8.3m. tonnes, (in addition 1.56m. tonnes was delivered to Scotland from other parts of the UK and Europe) this was a decrease on the previous year (9.6m. tonnes lifted) and may be considered as a temporary blip in the steady rise in rail freight tonnage since an all time low of 5.0m. tonnes lifted in 1993. Examination of tonnage trends in 2005 suggest rail freight will reach its highest level since 1979 (12.0m. tonnes lifted).

4. The tonnage of freight moved by rail is occasionally compared with the substantially greater tonnage moved by road (8.3m. tonnes by rail in 2003-2004 compared with 153.4m. tonnes by road) to the detriment of rail, it is important to note that such ‘broad-brush’ comparisons are invalid and misleading as guides to policy development.

5. In the road freight market in the order of 60-70% of freight movement is traffic for which rail is completely unsuited, could not and would not compete for; e.g. local multiple deliveries, deliveries to and from locations remote from any railhead, very short distance movements etc. The contestable freight market is not 161.7m. tonnes (road 153.4m. tonnes plus 8.3m. tonnes on rail) but in the order of 54.2m. tonnes-69.5m. tonnes so a 10 or 20% shift of traffic from road to rail is much more achievable in tonnage terms.

Commodities currently carried by rail.

6. The range of commodities currently carried by rail is: coal, container or inter-modal traffic, parcels, chemicals, cement, steel, waste, aviation fuel, oil, timber, new cars and china clay plus a modest amount of general merchandise.

7. Carryings are dominated by coal which flows from Scottish open-cast sites (mainly but not all in Ayrshire) and Clydeport at Hunterston to Scottish power stations (Longannet and Cockenzie) and to English power stations mainly in Yorkshire.

8. Container traffic moves between Scotland and ports in England, to the West Midlands and the North-West, whilst this forms the bulk of the traffic there are significant movements within Scotland.

Potential contribution of rail in the Freight market.

9. Before going into detail about possible enhancements to the network to increase the potential contribution of rail freight it may be helpful to recall: what is the purpose of freight movement? Characteristics of the rail freight industry and which markets rail will serve in future.
**Purpose of Freight movement.**

10. The purpose of freight movement is to move goods reliably and efficiently from where they are produced or imported to where they are wanted for use or export. The keys to reliability and efficiency include time, price, freedom from damage etc. Reliability and efficiency are particularly important for Scotland to overcome the disadvantages of peripherality.

**Characteristics of the Rail freight industry**

11. **Competition** Experience since privatisation indicates competition between Freight Operators is the best way to ensure competitive prices and quality of service to customers. Network Rail has facilitated the entry of competitors into the market by awarding contracts for infrastructure trains to new entrants, this is something Scottish Ministers should bear in mind given their new powers with regard to rail.

12. **Access to the network** Without access to the network in the form of a train path(i.e. time to depart, times to run and time at destination which meets the customers requirements)rail freight is hampered in its competition with ‘free access’road, hence the need for even-handedness in dealing with the demand for paths between rail freight and rail passenger business.

13. **Terminals** Rail freight needs terminals to load and discharge traffic, Scotland is not over blessed with rail freight terminals Although the Scottish Executive through its Grants regime has helped to improve the situation. The implementation of EU Open Access Directives in 2006 will also help(terminal operators will not be able to claim exclusive use of a terminal unless it is already working at full capacity)but will require close liaison between the Office of the Rail Regulator, the Scottish Executive and Transport Scotland.

14. **Gauge** It is essential that the main routes in the Scottish network are cleared to allow them to carry the increasingly pre-dominant 9foot 6inch high containers which are rapidly becoming the international norm on conventional wagons. On some routes it is possible to carry these containers on special wagons but only at additional cost. Scotland has this clearance on the West Coast Main Line to Coatbridge/Mossend and the Executive has funded clearance on wards from Coatbridge/Mossend to Elgin via Aberdeen. for 8foot 6inch containers. Further work, detailed later, needs to be done to ensure Scottish industry remains fully competitive.

15. **Competition with road** Whilst rail and road compete for traffic particularly in the Anglo-Scottish market there is a clear realisation in both modes that their purpose is to help Scottish industry remain competitive, without a thriving Scottish economy there will be less traffic for either to move.

16. **Fuel costs and other trends affecting Road Haulage** Current trends with regard to fuel costs have a greater adverse effect on road compared to rail. Other trends making life more problematic for the road haulage industry are : limitations on Drivers’ hours ; an increasing shortage of HGV Drivers ; increasing road congestion on main routes ; competition from other European countries with lower costs competing for traffic originating in the UK.
17. In the past the road haulage industry has proved to be adaptable, flexible and responsive and no doubt will be so again but these emerging factors tend to work to the advantage of rail and to the disadvantage of road.

18. Grants Unlike England Scotland has retained the powers to award Freight Facilities Grants and Track Access Grants to ensure that rail and road compete on an even basis, these grants have been instrumental in moving traffic from road to rail or starting new flows of rail traffic, it is essential that they are retained.

**Future Markets**

19. The Rail Freight Group in conjunction with the Freight Transport Association have prepared forecasts of future rail freight traffic, based on extensive consultation with members of both organisations. These will be sent separately to the Committee and are also available on www.rfg.org.uk. Scottish specific forecasts and routeings are also being developed.

20. As national government has not yet developed a comprehensive energy policy by default there will be a continuing and increasing reliance on coal over the next 15-20 years for electricity generation, this has clear implications for the enhancement of parts of the Scottish network.

21. Container movement, both Anglo-Scottish and within Scotland will increase, clearance to 9foot 6inches (known as W10 Gauge) will facilitate this. Road congestion in Central Scotland has resulted in the introduction in 2004 of a daily container train Grangemouth-Elderslie-Grangemouth(41 miles a distance over which rail is not supposed to be competitive) which has run with 100% reliability and punctuality in excess of 90% - better than the passenger railway! It is likely that more of these ‘tactical trains will be introduced, in early 2006 another service will be introduced from Grangemouth.

22. Timber, both as a stand alone commodity and as fuel used in bio-mass plants for electricity generation will lead to increased traffic on rail away from main routes but near where the timber is located, i.e. the Highlands and the Southwest. This will require careful consideration of the siting of bio-mass generating plants and access to them by rail or perhaps water.

23. Other markets are likely to be subject to incremental growth or remain static.

**Current network Capability**

The capacity, i.e. the ability of the network to accommodate trains, is being produced by Network Rail Scotland in its Route Utilisation Strategy (RUS) which will for the first time make a detailed assessment of the capabilities of the network, where constraints exist and what can be done to remove them. This Scottish RUS will be facilitated by a nationwide Freight RUS, these two strategies will assist in decision making and setting priorities.

**Enhancements on stream.**

25. Reopening of the line from Stirling to Alloa will facilitate the movement of coal to Longannet taking it off Glasgow-Edinburgh routes and the Forth Bridge creating
paths for more passenger trains between Fife and Edinburgh, improve the punctuality of Edinburgh-Glasgow services and reduce delays to coal trains.

26. Gauge enhancement Mossend-Elgin will allow through movement of 8foot 6inch containers between the North East and South and East coast UK ports.

Desirable freight enhancements.

27. In considering enhancements to the Scottish network to improve current freight movement and fit the network to handle increased volumes of freight we summarise below a list of enhancements that would benefit freight and, alongside that passenger traffic as well.

Former G&SW route and access to it.

28. The former Glasgow and South Western route runs from Glasgow to Carlisle via Kilmarnock and Dumfries. An important ‘feeder’ line for Ayrshire and imported coal traffic through Hunterston runs from Newton-on-Ayr via Annbank joining the G&SW route at Mauchline.

29. The route is working close to capacity from Mauchline south, constraints are: a long single line section from Annan to Gretna (13 miles) and long block sections (distance between signalboxes). The ‘feeder line is also single and capacity constrained.

30. If, as seems likely, coal traffic increases it will have to be diverted to other longer busy routes e.g. the East Coast Main Line or capacity on the G&SW route improved south of Mauchline. Options, not mutually exclusive are redoubling the Annan-Gretna section or putting in additional loops and some resignalling to increase capacity.

31. If Hunterston is developed as a container port and capacity is increased on the ‘feeder’ line and the G&SW container traffic could be routed, all or in part via the G&SW route rather than Kilwinning-Paisley-Shields Jctn. on to the West Coast Main Line (WCML).

32. The main route for container traffic is the WCML. If that route is closed, planned or unplanned, the effect on transit times of this traffic is severe. It is most desirable that the G&SW route is cleared throughout to Glasgow to accept 9foot 6inch containers on convetional wagons, access to the key freight hubs, Coatbridge and Mossend is good. Apart from clearance work it would be necessary to provide at least one additional loop between Kilmarnock and Glasgow and consider the length of the existing loop at Lugton.

33. The above two options are not interdependent, the route could be improved south of Mauchline only but the RFG considers the route should be improved throughout.
Development of Hunterston as a container port.

34. If this happens about 55% of the traffic will never leave the port but transfer ship to ship. Of the remainder there will be substantial movement by rail to the West Midlands, NW and NE England.

35. This leaves the problem of traffic destined for Scotland. The road network serving Hunterston north and south is completely unsuited for heavy lorries and is the main cause of local objection to development of the port, construction of a suitable road network would be difficult, expensive and raise further objections.

36. The RFG proposes that all Scottish destined/originating traffic should be moved by rail between Hunterston and the cluster of freight terminals located Coatbridge/Mossend where most companies have their Regional Distribution Centres.

Freight terminals Central Scotland

37. Whilst the Freightliner terminal at Coatbridge has capacity for expansion and good access the terminals at Mossend are more difficult to access, more difficult to work and some are working near to capacity limits. There is a strong case for examination of these terminals with a view to redevelopment.

Further Gauge Clearance

38. The WCML is cleared for the movement of 9 foot 6 inch containers from Carlisle to Mossend/Coatbridge, the proposed Gauge Clearance to 8foot 6inches from Mossend to Elgin is very welcome but eventually Scotland needs to be able to move 9foot 6inch containers preferably on conventional wagons to and from other locations. The RFG would recommend the clearance of at least one East-West route in Scotland, i.e. from the West Coast to the Edinburgh area and clearance of the Highland main line to Inverness these works to be done in stages overtime taking every opportunity to improve the clearance situation with the ultimate goal of achieving 9foot 6 on conventional wagons.

Bill Ure.
Introduction

Under the new structure of the railways led by the Department for Transport, the DfT has to provide to Network Rail a high level output statement of the railway services which it wishes Network Rail to be funded to provide.

Whereas the DfT will specify the passenger services, and let franchises to passenger operators, it has indicated that it wants the rail freight industry to provide the expected future demand for rail freight on the network.

Such figures for rail freight demand are also required by Network Rail for their own planning purposes and as an input into the Route Utilisation Studies/Strategies.

The DfT, NR and Office of Rail Regulation have indicated that they would like the rail freight forecasts to be for the years 2009 and 2014 to fit into the timings of the ORR’s Periodic Reviews of Network Rail’s Access Charges.

This paper provides the rail freight industry’s first forecasts of future demand, together with a short description of the methodology used to prepare them. It is emphasised that such figures for demand are based on a number of economic and other external factors, but are not constrained by any rail capacity or capability restrictions.

If it is found that demand on any route exceeds the availability of paths, then it is up to Network Rail and the rest of the industry to discuss ways of dealing with the problem, generally through the RUS process.

It is expected that this rail freight forecasting process will be updated annually, as well as when a major new rail freight development is announced as going ahead.

Methodology

The forecasts of future demand for rail freight have been produced in two parallel workstreams, by the FTA/RFG and the RFOA.

FTA/RFG used the GB Freight Model, operated by MDS Transmodal, supported by extensive consultation.

A series of seminars were held at which over 50 companies and representative groups from various sectors using rail freight were able to comment on the assumptions used in the GB Freight Model and the forecasts it produced. This was supplemented by confidential information from
companies about their own particular plans. Feedback was then used to help ensure the model delivered robust outputs.

The RFOA approach was based upon specialist knowledge identifying the market served rather than the commodity carried and by factoring in known and anticipated changes in current flows as well as adding new ones. A third party, Ove Arup, was employed to deal with the confidentiality issues between operators.

On completion of this work, the results from both workstreams were brought together and have demonstrated a very close correlation, to the extent that, within the accuracy of any such forecasting exercise, it was agreed to provide one set of figures for each market segment.

These results are therefore the best estimate of FTA/RFG and RFOA.

**The Results**

The forecasts for future demand for rail freight provided by FTA/RFG/RFOA are as follows:

<table>
<thead>
<tr>
<th>Commodity</th>
<th>2003</th>
<th>ARUP</th>
<th>GBFM</th>
</tr>
</thead>
<tbody>
<tr>
<td>Coal</td>
<td>46.0</td>
<td>52.9</td>
<td>52.9</td>
</tr>
<tr>
<td>Ore</td>
<td>6.1</td>
<td>6.0</td>
<td>5.7</td>
</tr>
<tr>
<td>Other minerals¹</td>
<td>19.7</td>
<td>23.6</td>
<td>24.9</td>
</tr>
<tr>
<td>Metals</td>
<td>10.5</td>
<td>12.5</td>
<td>12.1</td>
</tr>
<tr>
<td>Petroleum and Chemicals</td>
<td>6.8</td>
<td>7.6</td>
<td>7.2</td>
</tr>
<tr>
<td>Waste</td>
<td>2.2</td>
<td>1.8</td>
<td>2.0</td>
</tr>
<tr>
<td>Auto</td>
<td>0.4</td>
<td>0.5</td>
<td>0.4</td>
</tr>
<tr>
<td>Network Rail own haulage</td>
<td>7.4</td>
<td>7.4</td>
<td>6.5</td>
</tr>
<tr>
<td>Maritime containers</td>
<td>11.1</td>
<td>20.3</td>
<td>21.1</td>
</tr>
<tr>
<td>Channel Tunnel²</td>
<td>2.0</td>
<td>6.0</td>
<td>7.2</td>
</tr>
<tr>
<td>Domestic Intermodal/Wagonload³</td>
<td>0.9</td>
<td>2.5</td>
<td>4.7</td>
</tr>
<tr>
<td>Total</td>
<td>113.1</td>
<td>141.1</td>
<td>144.7</td>
</tr>
</tbody>
</table>

The table below gives a more detailed break down of the forecast tonnages prepared by the RFOA:

**Assumptions used in the forecasting**

A number of UK-wide economic or other assumptions have been incorporated into the forecasts produced by the FTA/RFG and RFOA.

---

¹ Other Minerals includes construction traffic and china clay.
² Channel Tunnel traffic includes intermodal and wagonload.
³ Domestic Intermodal/Wagonload includes forest products, nuclear, mail and ‘distribution flows’ for many retailers.
The use of an assumption does not necessarily indicate that FTA/RFG or RFOA agree with the policies on which it is based; in many cases we may actively press government for changes to policies in order to grow further the volume of rail freight carried.

There may also be changes in demand forecasts due to a new development being proposed or given planning permission.

While it is understood that in either case a development may not actually proceed, Network Rail and Government will need to allow for some precautionary forward planning and development work on particular routes where major schemes connected with rail freight are planned.

This is particularly important since for developments where demand for rail freight is likely to increase significantly, such projects can often be completed much more quickly than a major rail upgrade achieved.

However in many cases growth comes from existing business and most of the forecasts, although not constrained by existing network capacity, do not require substantial new developments.

The key assumptions used by FTA/RFG and RFOA include:

- No Lorry Road User Charging (LRUC).
- No change in HGV maximum weights.
- Thames Gateway Project proceeds.
- No increase in mean train length or other productivity gains.
- Coal traffic expected to remain at 2004/05 levels due to oil prices and therefore gas prices remaining relatively high.
- A significant reduction in charges to use the channel tunnel.
- Maritime container tonnes expected to increase from 2003 to 2014 at 5% per annum.

Other assumptions used by FTA/RFG in the GB Freight Model include:

- No further enhancement in rail network except some intermodal routes assumed to be upgraded to at least W9 standard to permit cost effective carriage of 9’6” units.
- Company Neutral Revenue Support for rail reduced to £11m in total for intermodal traffic.
- Extra 1.5m square metres of warehousing on rail-connected sites.

---

4 The Government has issued a letter that it is ‘minded to permit the development to take place subject to certain conditions being met’.

5 This is consistent with the ‘Strategic Rail Freight Interchange Policy’ published by the Strategic Rail Authority, March 2004.
The RFOA does not reject these assumptions but has not used them in its forecasting work.

A more detailed briefing on the assumptions used in the GB Freight Model is available from MDS Transmodal.

**Conclusion**

This document is being sent to the Secretary of State for Transport as the rail freight industry’s input to the High Level Output Statement process. It will also be sent to Network Rail as part of our input into the Route Utilisation work, and of course to the Office of Rail Regulation.

Since these forecasts are the first done by the industry under the new railway structure, there are clearly opportunities to improve the coverage, detail and therefore the usefulness of this work, not only to the DfT, Network rail and the ORR, but to others in the industry with an interest in this work.

We welcome comments, which should in the first instance be directed to:

Freight Transport Association: Andrew Trail Andrew.trail@fta.org.uk
Rail Freight Group: Tony Berkeley – tony@rfg.org.uk
Rail Freight Operators Group: Graham Smith – graham.smith@ews-railway.co.uk
Freight Transport Association, Rail Freight Group, Rail Freight Operators Association

Forecasts of future demand for rail freight.

Introduction

Under the new structure of the railways led by the Department for Transport, the DfT has to provide to Network Rail a high level output statement of the railway services which it wishes Network Rail to be funded to provide.

Whereas the DfT will specify the passenger services, and let franchises to passenger operators, it has indicated that it wants the rail freight industry to provide the expected future demand for rail freight on the network.

Such figures for rail freight demand are also required by Network Rail for their own planning purposes and as an input into the Route Utilisation Studies/Strategies.

The DfT, NR and Office of Rail Regulation have indicated that they would like the rail freight forecasts to be for the years 2009 and 2014 to fit into the timings of the ORR’s Periodic Reviews of Network Rail’s Access Charges.

This paper provides the rail freight industry’s first forecasts of future demand, together with a short description of the methodology used to prepare them. It is emphasised that such figures for demand are based on a number of economic and other external factors, but are not constrained by any rail capacity or capability restrictions.

If it is found that demand on any route exceeds the availability of paths, then it is up to Network Rail and the rest of the industry to discuss ways of dealing with the problem, generally through the RUS process.

It is expected that this rail freight forecasting process will be updated annually, as well as when a major new rail freight development is announced as going ahead.

Methodology

The forecasts of future demand for rail freight have been produced in two parallel workstreams, by the FTA/RFG and the RFOA.

FTA/RFG used the GB Freight Model, operated by MDS Transmodal, supported by extensive consultation.

A series of seminars were held at which over 50 companies and representative groups from various sectors using rail freight were able to comment on the assumptions used in the GB Freight Model and the forecasts it produced. This was supplemented by confidential information from
companies about their own particular plans. Feedback was then used to help ensure the model delivered robust outputs.

The RFOA approach was based upon specialist knowledge identifying the market served rather than the commodity carried and by factoring in known and anticipated changes in current flows as well as adding new ones. A third party, Ove Arup, was employed to deal with the confidentiality issues between operators.

On completion of this work, the results from both workstreams were brought together and have demonstrated a very close correlation, to the extent that, within the accuracy of any such forecasting exercise, it was agreed to provide one set of figures for each market segment.

These results are therefore the best estimate of FTA/RFG and RFOA.

The Results

The forecasts for future demand for rail freight provided by FTA/RFG/RFOA are as follows:

<table>
<thead>
<tr>
<th>Commodity</th>
<th>2003</th>
<th>ARUP</th>
<th>GBFM</th>
</tr>
</thead>
<tbody>
<tr>
<td>Coal</td>
<td>46.0</td>
<td>52.9</td>
<td>52.9</td>
</tr>
<tr>
<td>Ore</td>
<td>6.1</td>
<td>6.0</td>
<td>5.7</td>
</tr>
<tr>
<td>Other minerals¹</td>
<td>19.7</td>
<td>23.6</td>
<td>24.9</td>
</tr>
<tr>
<td>Metals</td>
<td>10.5</td>
<td>12.5</td>
<td>12.1</td>
</tr>
<tr>
<td>Petroleum and Chemicals</td>
<td>6.8</td>
<td>7.6</td>
<td>7.2</td>
</tr>
<tr>
<td>Waste</td>
<td>2.2</td>
<td>1.8</td>
<td>2.0</td>
</tr>
<tr>
<td>Auto</td>
<td>0.4</td>
<td>0.5</td>
<td>0.4</td>
</tr>
<tr>
<td>Network Rail own haulage</td>
<td>7.4</td>
<td>7.4</td>
<td>6.5</td>
</tr>
<tr>
<td>Maritime containers</td>
<td>11.1</td>
<td>20.3</td>
<td>21.1</td>
</tr>
<tr>
<td>Channel Tunnel²</td>
<td>2.0</td>
<td>6.0</td>
<td>7.2</td>
</tr>
<tr>
<td>Domestic Intermodal/Wagonload³</td>
<td>0.9</td>
<td>2.5</td>
<td>4.7</td>
</tr>
<tr>
<td><strong>Total</strong></td>
<td>113.1</td>
<td>141.1</td>
<td>144.7</td>
</tr>
<tr>
<td><strong>Index</strong></td>
<td>100.0</td>
<td>124.8</td>
<td>127.9</td>
</tr>
</tbody>
</table>

The table below gives a more detailed break down of the forecast tonnages prepared by the RFOA:

Assumptions used in the forecasting

A number of UK-wide economic or other assumptions have been incorporated into the forecasts produced by the FTA/RFG and RFOA.

---

¹ Other Minerals includes construction traffic and china clay.
² Channel Tunnel traffic includes intermodal and wagonload.
³ Domestic Intermodal/Wagonload includes forest products, nuclear, mail and ‘distribution flows’ for many retailers.
The use of an assumption does not necessarily indicate that FTA/RFG or RFOA agree with the policies on which it is based; in many cases we may actively press government for changes to policies in order to grow further the volume of rail freight carried.

There may also be changes in demand forecasts due to a new development being proposed or given planning permission.

While it is understood that in either case a development may not actually proceed, Network Rail and Government will need to allow for some precautionary forward planning and development work on particular routes where major schemes connected with rail freight are planned.

This is particularly important since for developments where demand for rail freight is likely to increase significantly, such projects can often be completed much more quickly than a major rail upgrade achieved.

However in many cases growth comes from existing business and most of the forecasts, although not constrained by existing network capacity, do not require substantial new developments.

The key assumptions used by FTA/RFG and RFOA include:

- No Lorry Road User Charging (LRUC).
- No change in HGV maximum weights.
- Thames Gateway Project proceeds\(^4\).
- No increase in mean train length or other productivity gains.
- Coal traffic expected to remain at 2004/05 levels due to oil prices and therefore gas prices remaining relatively high.
- A significant reduction in charges to use the channel tunnel.
- Maritime container tonnes expected to increase from 2003 to 2014 at 5% per annum.

Other assumptions used by FTA/RFG in the GB Freight Model include:

- No further enhancement in rail network except some intermodal routes assumed to be upgraded to at least W9 standard to permit cost effective carriage of 9'6" units.
- Company Neutral Revenue Support for rail reduced to £11m in total for intermodal traffic.
- Extra 1.5m square metres of warehousing on rail-connected sites\(^5\).

---

\(^4\) The Government has issued a letter that it is ‘minded to permit the development to take place subject to certain conditions being met’.

\(^5\) This is consistent with the ‘Strategic Rail Freight Interchange Policy’ published by the Strategic Rail Authority, March 2004.
The RFOA does not reject these assumptions but has not used them in its forecasting work.

A more detailed briefing on the assumptions used in the GB Freight Model is available from MDS Transmodal.

**Conclusion**

This document is being sent to the Secretary of State for Transport as the rail freight industry’s input to the High Level Output Statement process. It will also be sent to Network Rail as part of our input into the Route Utilisation work, and of course to the Office of Rail Regulation.

Since these forecasts are the first done by the industry under the new railway structure, there are clearly opportunities to improve the coverage, detail and therefore the usefulness of this work, not only to the DfT, Network rail and the ORR, but to others in the industry with an interest in this work.

We welcome comments, which should in the first instance be directed to:

Freight Transport Association: Andrew Trail Andrew.trail@fta.org.uk
Rail Freight Group: Tony Berkeley – tony@rfg.org.uk
Rail Freight Operators Group: Graham Smith – graham.smith@ews-railway.co.uk