



# **Delivering Your Goods**

## **Benefits of using Rail Freight**



**TRANSPORT  
SCOTLAND**  
CÒMHDHAIL ALBA

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Examples of products which are transported by rail between Daventry and Scotland



## Delivering Your Goods

### A Guide to the Benefits of using Rail Freight.

Rail freight offers multiple benefits. The world's largest international shipping companies, supermarkets at the fore-front of supply chain good practice, UK-based manufacturers and others realise the potential of rail to deliver a reliable, cost-effective and sustainable service.

#### Bottom-line benefits

- Making use of rail can improve the quality of your logistics chain – in terms of **cost, reliability** and **environmental performance. Reliability and resilience** are key logistics requirements, providing certainty and reducing the risk of product shortages.
- Scotland and Great Britain have a strong, **competitive rail freight market**, with operators and logistics providers available to help embed rail freight in the supply chain, using hundreds of trains each week to deliver goods across Scotland and more widely across Great Britain.
- Rail freight provides **timetabled services** with a high level of reliability. The increased confidence in rail is demonstrated by the growing use of rail for time-sensitive deliveries by ASDA, Sainsbury's and Tesco.
- Rail freight services can also be **highly responsive** to changing demand and can be **flexible** and organised at **short-notice**.

- Rail operates within a competitive environment this ensures that rail freight operators continue to **drive down costs** and improve services for the benefit of all customers.

#### Corporate Social Responsibility

- Rail freight is **better for the environment**, typically generating around 30% of CO2 emissions of road haulage per equivalent journey – and nearly 90% less small particulate matter (PM10) and up to fifteen times less nitrogen oxide (NOx).
- Rail freight is also **better for local communities** with less visual and noise pollution, and fewer heavy lorries going through villages and small towns - railways are generally segregated from residential areas and take less land than roads. Rail freight has a much better safety record than road haulage.

#### The bigger economic picture

- Rail freight generates **over £1.5 billion of economic benefits** for the UK every year, is vital for the competitiveness of the economy, and is an intrinsic part of everyday life.
- Rail moves **one in four Deep Sea containers that enter the UK** reliably, safely and sustainably – a vital role in the national supply chain.



This short Guide gives an introduction to using rail freight and is aimed at companies and public sector organisations who may be unfamiliar with rail's capabilities, but who could benefit from the resilience of a rail alternative for their supply chain. The Guide sign-posts to other more detailed sources of information.



# Rail freight

## An introduction

Rail freight plays a significant role in everyday life, with a wide range of products – including supermarket supplies and high street brands – moving by train. Key Scottish exports – such as whisky, shortbread and bottled water – are also major users of rail.

One of rail's key strengths is the ability to move many hundreds of tonnes of freight in a single train load, making it an obvious option for high-volume materials going from one rail-connected location to another. But the minimum load size available to customers on multi-user long-haul services is typically just a **single container load** (a lorry load equivalent).

Rail is increasingly diversifying into new markets, but remains strong for traditional bulk and semi-bulk commodities such as aggregates, cement, metals and petroleum.

In the intermodal (container) sector (used by supermarkets and large stores), rail now has a firm presence in three distinct geographical markets, **Domestic**, **Deep Sea** and **European**.



## Domestic

Inter-urban services within Scotland; and Anglo-Scottish services to and from key distribution hubs south of the Border.



## Deep Sea

Direct trains to the major ports in England.



## European

Links to key East Coast ports, plus the Channel Tunnel.

### How rail freight operates

Rail freight is organised differently to passenger rail. Trains are run as 'open-access' operations (i.e. not through a franchise contract) but they have stringent controls. **Network Rail** is the owner and operator of Britain's rail infrastructure, including connections to major customers' own private sidings with many of its sites and depots leased to freight train operators.

Network Rail also has responsibility for finding suitable 'paths' (timetable slots) for both freight and passenger services to operate, and is committed to the development of rail freight.

Freight services across the network are provided by private sector **Freight Operating Companies (FOCs)** – see the list on page 15.

They provide the traction (locomotives) and the rolling stock (freight-carrying wagons), and in some cases the facilities to load and unload and transfer to other forms of transport such as road. FOCs have dedicated staff focused on the detail of moving freight. Each of these FOCs

operates under a licence granted by the **Office of Rail and Road (ORR)** ensuring high levels of safety and competence.

The intermodal rail sector normally involves a road collection and/or delivery to feed in and out of the rail trunk haul. Some of the FOCs can provide a complete door-to-door service – such as Freightliner, with its own in-house road haulage fleet – while in other cases Third Party Logistics companies will arrange a seamless road-rail package for their customers.

In some case FOCs own a terminal facility and in other cases terminals are independently owned. All FOCs can access any **terminal facility** – they range from the basic to the more sophisticated.

### Transport Scotland

(The Scottish Government's Transport Agency) has policy responsibilities for rail freight, including its promotion. Whilst the vast majority of rail freight activities are undertaken on a strictly commercial basis, without subsidy or government support, in some cases grant aid may be needed to tip the commercial balance from road to rail.



### Financial Support

In recognition of the environmental and social benefits of rail, the Scottish Government supports a range of grants to help the transfer of freight from road to rail. Freight Facilities Grants help companies with the capital costs, by offsetting the extra costs of providing freight handling facilities and Mode Shift Revenue Support helps companies with the extra operating costs. There is a dedicated team working in Transport Scotland to help companies make best use of the funding available. Call 0131 244 1526 to find out more about these grants. Mode Shift Revenue Support for cross border rail freight services may be jointly funded with the Department for Transport. Call 020 7944 6848 to speak to a member of its Freight Grants team.

# What moves by rail - snapshot



Illustrated here are snapshots of some current rail freight flows which travel into, within and out of Scotland. The types of services are varied, but journey times and reliability are always competitive.

You may be surprised at the variety of goods which travel on rail. No matter what goods are transported by rail, customers report satisfaction with cost and quality of service - the key logistics requirements.

# Case Study – Around the World



## Domestic

Inter-urban services within Scotland; and Anglo-Scottish services to and from key distribution hubs south of the Border.



## Deep Sea

Direct trains to the major ports in England.



## European

Links to key East Coast ports, plus the Channel Tunnel.

Freightliner's Coatbridge terminal is the busiest rail container facility in Scotland. Every day the terminal handles overnight container trains serving the UK's key Deep Sea ports of Felixstowe, Southampton, London Gateway, Tilbury and Liverpool to ensure the best of Scotland's products are transported to world markets.

Coatbridge also handles three domestic container services to and from Daventry in the West Midlands, loaded with goods for the rest of the UK and northern Europe.

Opened in 1968, Coatbridge has become a vital hub for the movement of containers to and from Scotland. In 2015 more than 80,000 containers were handled by the terminal – and demand is increasing.

The terminal plays a vital role in supporting Scotland's exports by connecting Scottish businesses with markets all over the world. **Between 20 – 25% of Scotland's exports pass through Coatbridge.**

Whisky and other major branded spirits exports destined for all parts of the globe, including North and South America, Africa, Australia and Asia, are transported on Coatbridge export trains. With rising demand around the world, whisky continues to be the largest single product moving through Coatbridge en route to Deep Sea ports.

Other major products transiting through Coatbridge include seafood, luxury textiles, iconic Scottish branded bakery items and many other everyday foods such as oats and seed potatoes to be grown and harvested overseas.

With customers and hauliers able to book individual slots on trains or as many as they require – and as often as they need – Coatbridge provides an entirely flexible rail freight solution for the circa 250 customers it currently serves.



There are a variety of goods which are moved in the intermodal/container sector. Frequent services leave and arrive at Coatbridge Lanarkshire, as well as regular services from nearby Mossend and Grangemouth – all in the Central Belt. The map on page 12 shows the major flows from each of these terminals to Domestic, Deep Sea and European markets.





# Case Study – flexibility

## Freightliner creates a service in six days

Freightliner's Project Team was tasked with creating an additional third service daily for logistics customer JG Russell in no more than six days.

From a standing start, the team arranged a 20-wagon train to operate daily between Scotland and the Midlands using the expertise of a team of select colleagues. The solution developed allowed the customer to achieve a 24-hour round trip between the Prologis terminal in Daventry and Freightliner's terminal in Coatbridge.

This had never been accomplished before using a single set of wagons.

Key planning staff were tasked with identifying suitable train paths in existing timetables **to start operations within six days of the request from the customer.**

This was particularly difficult to achieve given that the terminals at either end were already busy and the line of route is a consistently busy corridor for freight and passenger traffic.

Commercial Manager, Richard Mannion said: "Team members were selected in line with their specific skill sets so that we were able to tailor the solution to the customer's requirements, demonstrating, once again, our ability to develop an answer that both satisfies the customer and is delivered within a very short timescale."

In line with Freightliner's 'Zero Injuries' policy staff were deployed to both terminals to understand the implications and operational requirements. They collaborated with terminal operators to develop a safe system in the limited timescale.

From inception, the service has achieved a very high percentage of operation in terms of on-time arrivals at terminals, providing the customer with the high priority, on time service they required to meet the end user's needs.

The team's efforts prove that rail freight can be flexible and answer customers' needs even within a very short timescale. The project team was Highly Commended at the Institution of Rail Operators Golden Whistle Awards 2016 in the Outstanding Operating Team category.



Tailored solutions that both satisfy the customer and are delivered within very short timescales.



# Bulk Goods – by rail

## Royal Mail

DB Cargo operate a bespoke service based at Shieldmuir (North Lanarkshire) carrying both first and second class mail between London (Willesden), Warrington (Dallam) and Shieldmuir. There are two trains daily in each direction, (Monday-Friday), given equal priority to passenger trains on the West Coast Main Line.

They use Class 325 units that are owned by Royal Mail and operate at speeds of up to **100 miles per hour**. Additional services operate at peak times and at short notice according to mail flows.

## Slurry for the paper industry

DB Cargo operate a service twice a week from Aberdeen Waterloo, carrying slurry for the paper industry at Irvine and Warrington.

This uses bulk wagons owned by the customer, Omya. The slurry arrives in Aberdeen by ship from Norway.

GB Railfreight carry clay slurry from Antwerp once a week through the Channel Tunnel direct to Irvine. It is conveyed in bulk wagons owned by Imerys.

## Automotive

DB Cargo operate services from Portbury (Port of Bristol) and Dagenham five days a week to Mossend. These trains convey Honda and Renault cars (from Portbury), operating twice a week, and Ford cars (from Dagenham), five days a week.



# Case Study – service excellence

Colas Rail operate a service between Dunbar (Oxwellmains) and Aberdeen for Tarmac. Tarmac is a market leader in sustainable construction materials and uses rail across GB to transport building materials. In Scotland, Tarmac own a quarry and cement plant at Dunbar and from there bulk and packed cement is transported by rail to Aberdeen. Currently Tarmac has a variety of customers in and around Aberdeen, and is supplying the Aberdeen Western Peripheral Route.

Investment at both Aberdeen and Dunbar has helped this service, including funding for new rail wagons which can increase the amount of cement carried per train. **Each of these trains removes over 40 cement lorries from the roads.** As well as serving Aberdeen with cement from Dunbar, Tarmac also transports this material to Seaham, Carlisle, Uddingston and Inverness.



Tarmac uses a number of different freight operating companies across GB.



Service levels across the industry are excellent and have consistently improved over recent years. As a business Tarmac have confidence in using rail and in support of that confidence have invested in facilities and wagons.



# Rail in the supply chain

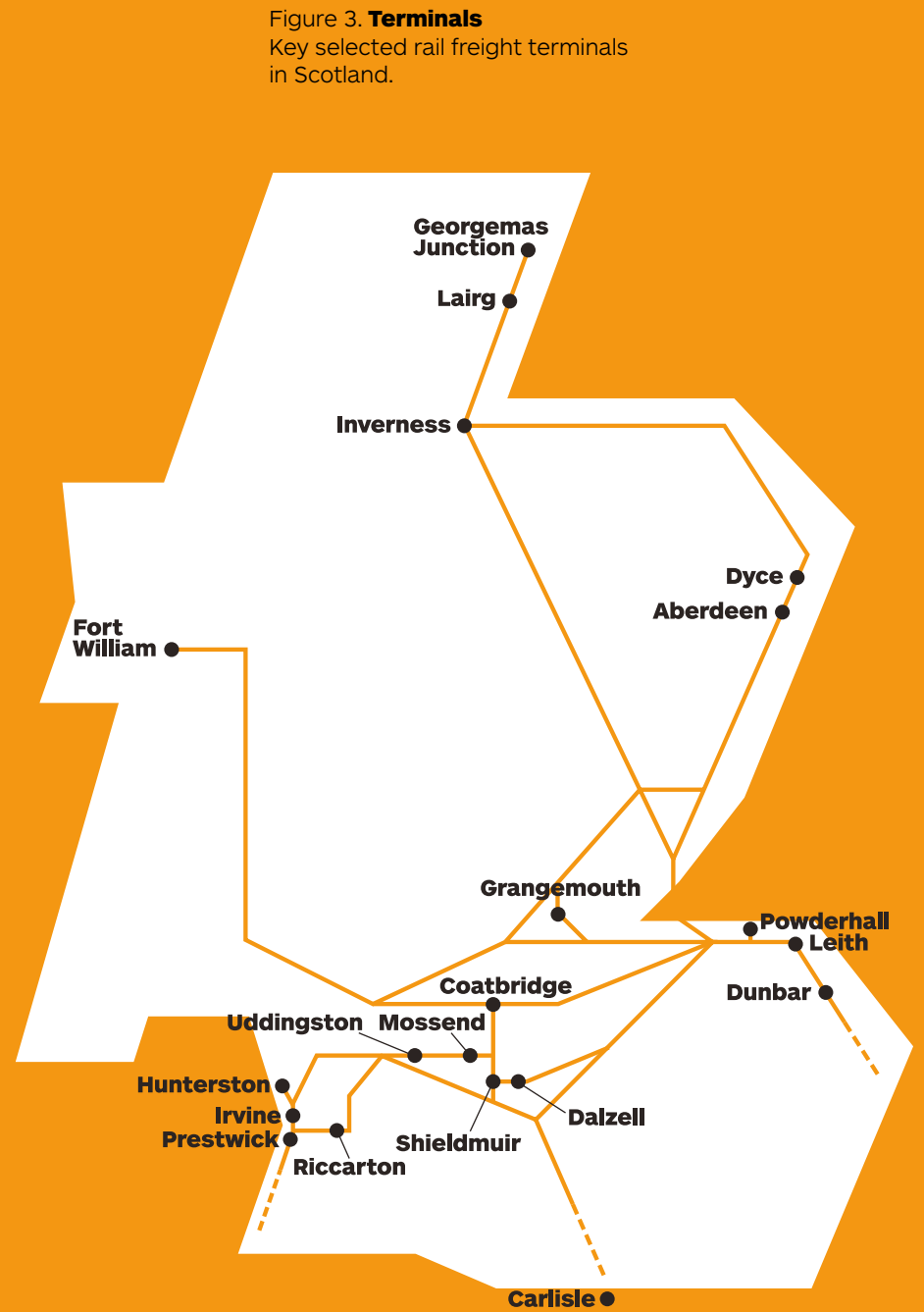
**Illustrated here are some current rail freight flows into and out of Scotland**

**Also illustrated are some of the main rail freight terminals in use**

Figure 1. **Intermodal Flows**  
Key intermodal rail freight flows colour-coded as per the key below:

- Mossend - Daventry
- Mossend - Tees Dock
- Mossend - Inverness
- Mossend - Warrington
- Mossend - Grangemouth
- Grangemouth - Aberdeen
- Grangemouth - Warrington
- Coatbridge - London Tilbury
- Coatbridge - London Gateway
- Coatbridge - Southampton
- Coatbridge - Liverpool
- Coatbridge - Felixstowe
- Coatbridge - Daventry
- Grangemouth - Daventry





## Getting more freight onto rail

### A step by step guide

To decide if rail freight is an option for delivering your goods – consider these factors:

- **Size** – volumes that fill a train are not always necessary, as individual customer containers can be accommodated by the bigger operators. It might be more economical to work through a logistics service provider in the case of individual loads – or Freightliner in the case of flows to the big ports in England.
- **Distance** – usually longer distances work best, but bulk rail services can be competitive over short distances where origin and destination are directly rail connected.
- **Type of shipment** – any special requirements: chilled/perishable and hazardous goods, for example, and how these can be handled.
- **Access** – location and access to the rail network need to be considered. You could use your own sidings or someone else's nearby or take your goods by road to the nearest rail freight terminal.
- **Regularity of transport** – rail can cope with irregular loads (both size and timing), but works best when freight movements are more regular and can be planned in advance.

## Unit Loads:



Identify exact load size



Identify route requirements



Identify requirements for transfer



Contact one of the freight operators or a logistics company to enquire



Move your goods by rail

## Multiple Loads:



Feasibility Study

Confirming service details and suitability of rolling stock and loading/unloading arrangements.



Identify Partners

Logistics service providers, FOCs, Network Rail. Consider investigating trials.



Assess Environmental Benefits

These are important as they may be the basis of a grant application.



Establish Business Case

Will using rail for your Goods work cost-wise?



Operate the new rail flow

## Rail freight Contacts

### Freight Operating Companies

#### Colas

w: colasrail.co.uk  
e: marketing@colasrail.co.uk

#### Direct Rail Services

w: directrailservices.com  
e: communications@drsl.co.uk

#### DB Cargo

w: uk.dbcargo.com/rail-uk-en/start  
e: sales.rail.uk@deutschebahn.com

#### Freightliner

w: freightliner.co.uk  
e: enquiries@freightliner.co.uk

#### GB Railfreight

w: gbrailfreight.com  
e: info@gbrailfreight.com

### Third Party Logistics Providers

#### Eddie Stobart

w: eddiestobart.com  
e: enquiries@eddiestobart.com

#### JG Russell

w: johngrussell.co.uk  
e: sales@johngrussell.co.uk

#### Malcolm Logistics

w: malcolmgroupp.co.uk  
e: webrail@whm.co.uk

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### Multi-modal Port Operators

#### Aberdeen Harbour Board

w: aberdeen-harbour.co.uk  
e: info@aberdeen-harbour.co.uk

#### Associated British Ports (Ayr)

w: abports.co.uk

#### Clydeport

w: peelports.com/ports/clydeport

#### Forth Ports

w: forthports.co.uk  
e: marketing@forthports.co.uk

### Key industry partners/ stakeholder groups

#### Network Rail Freight Development Team

w: networkrail.co.uk  
e: ScotlandRouteFreightTeam@  
networkrail.co.uk

#### Transport Scotland: Freight Grants Team

w: transport.gov.scot/freight-grants  
t: 0131 244 1526

#### Scottish Enterprise Team

w: scottish-enterprise.com

#### Highlands & Islands Enterprise

w: hie.co.uk

#### Freight Transport Association

w: fta.co.uk

#### Rail Freight Group

w: rfg.org.uk

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