

The Malcolm Group: An Award Winning Multi-modal Operator

Case Study



Organisations involved: The Malcolm Group
Rail Freight Group

Acknowledgements

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With special thanks to Asda Group plc.

Front cover photograph (by David Dockray): A DRS class 66 diesel locomotive hauling a Malcolm Group intermodal service south over Shap.

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Introduction

In this case study we look at the environmental and business benefits of shifting freight from road to rail. We then show how these benefits have been accessed by the Malcolm Group through a modal shift from road to rail for freight deliveries including those between Daventry and Grangemouth; details include the impact on fuel usage as well as the savings in greenhouse gas emissions.

The UK Climate Change Act commits the UK Government to a 34% reduction in greenhouse gas emissions by 2020 and 80% by 2050. Transport as a whole represents 31% of UK domestic greenhouse gas emissions of which freight transport is responsible for 30%. A major challenge for the UK freight industry is therefore to find ways to significantly reduce these emissions. As can be seen by this case study modal shift from road to rail offers practical solutions.

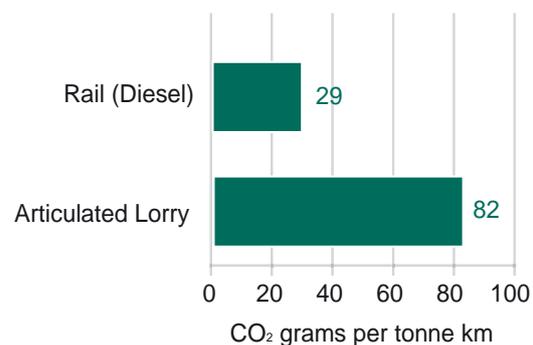
This case study highlights the support given by the Rail Freight Group (RFG) in facilitating the shift from road to rail and the range of advice and information available to other operators considering similar changes. The Malcolm Group is an active member of the RFG and is supportive of its activities. This case study also features the awards initiative introduced by RFG in order to promote and recognise best practice in the industry.

Finally, we also summarise the potential benefits to your business of switching deliveries from road to rail.

What Are the Environmental Benefits of Switching from Road to Rail?

To date the transport sector is the only sector in the UK that has increasing greenhouse gas emissions associated with the consumption of fossil fuels. As can be seen from the table below which looks specifically at CO₂ emissions, articulated lorries create nearly three times as many CO₂ emissions per tonne kilometre as does rail transport.

Figure 1 - The typical CO₂ emissions for different modes per tonne / km (2009 Guidelines to Defra / DECC GHGs Conversion Factors for Company Reporting)



What Are the Other Benefits of Switching from Road to Rail?

Modal shift to rail does not only deliver benefits in reduced greenhouse gas emissions but can also provide other benefits such as:

- Building resilience into your supply chain by increasing available options
- Improving delivery and collection reliability with less delays caused by road congestion
- An overall reduction in road traffic
- Minimising exposure to drivers' hours and working time directive issues
- Mitigating the impact of fuel price uncertainty
- Reducing the number of vehicles required within your fleet
- Improving overall road safety by reducing the number of vehicles on UK roads

Clearly the use of rail may not be practical for all freight deliveries but, as demonstrated by the example below, opportunities to switch to rail exist and can not only help the environment but have other business benefits. It should be noted that it is possible to use existing rail freight facilities and not have to develop your own; however if you want to consider new developments practical support and grants are available.

Who Is the Malcolm Group?

Originating as a family-owned business in the 1940s, the Malcolm Group has become a leading provider of logistics and construction services, employing assets of over 2,000 people, 500 trucks, 1,200 trailers, 200 items of heavy plant and over 4.5 million square feet of warehousing throughout the UK. The Malcolm Group operates three rail freight terminals including the largest UK domestic intermodal terminal at Daventry.

The Malcolm Group provides integrated logistics solutions to a range of 'Blue Chip' customers, incorporating warehousing and handling services, road and rail distribution and supply chain management. In 2001 it became one of the first logistics companies to 'rediscover' rail and the benefits it can provide. The group still offers a seamless door to door service to its customers but by using rail is able to control operating costs and reduce greenhouse gas emissions.

The Rail Freight Group, the Support They Offer and Their Awards

The Malcolm Group was able to obtain advice on modal shift through the Rail Freight Group (RFG) of which it is a member.

The RFG, a not-for-profit organisation, was originally formed in 1991 to represent the views of companies involved with the freight industry and provides members with a wide range of advice and information. The RFG now has more than 150 members including logistics companies, terminal operators, ports, rail operating companies, major retailers and local councils. The RFG provides a forum for potential suppliers



and customers. Any organisation is welcome to join.

In 2008 the RFG decided to highlight some of the good practice that occurs in the rail freight sector by creating its own awards. Awards can often be a useful medium for promoting and encouraging best practice, creating healthy competition and attracting media attention to an industry. An independent judging panel, made up of industry members and journalists, assessed the best submissions from a range of categories and the following winners and runners up were honoured (see Table 1 below).

Table 1 - Rail Freight Group Award Winners and Runners Up 2008

| Award | Winners 2008 | Runners Up (where awarded) |
|-------------------------------|--|----------------------------|
| Business of the Year | The Malcolm Group | W H Davis / SCT Europe |
| Excellence in service deliver | Victa Railfreight | Bircham Dyson Bell |
| Technical Development | W H Davis and SCT Europe | Lloyds Register Rail |
| Marketing Initiative | The Malcolm Group | |
| Environmental Innovation | Network Rail, EWS, DRS, First GBRf & Freightliner with the assistance of the DfT Rail Team | |

The reason for featuring this particular case study is that the Malcolm Group won both the Award for 'Business of the Year' and 'Marketing Initiative' and has been one of the successful logistics companies to achieve modal shift. The marketing initiative was particularly important in attracting new and existing companies to utilise rail capacity. This has been partly due to its marketing campaign which has included:

- ➔ New rail livery – highlighting the group’s involvement in the rail freight sector
- ➔ A rail simulator – a state of the art training tool that allows drivers / customers to test their train driving skills on a Class 66 locomotive in a virtual environment
- ➔ A promotional DVD – providing information on the benefits of using Rail
- ➔ Revamped signage – comprehensive rebranding
- ➔ Branded literature, graphic panels and promotional giveaways

Group stated that the Malcolm Group won the Marketing Initiative award because it “demonstrated a successful branding initiative in support of its marketing and sales strategy, focusing on the logistics and consumer goods markets, and this branding was complementary to new services for these challenging markets.”

“The high quality and number of entries received demonstrated the success, the customer service and innovation of many parts of the industry. We congratulate all the winners and their staff, and hope that these awards will encourage their businesses and projects to develop in the coming year. We thank the independent judges’ panel for their thorough evaluation of the entries and for putting so much time towards this work and to First GBRf for their sponsorship of the event.”

Lord Tony Berkeley, Chairman of RFG

What Initiatives Has the Malcolm Group Undertaken?

A number of reasons led to the Malcolm Group looking to shift some freight traffic from road to rail. These reasons included:

- Reducing its environmental impact including greenhouse gas emissions as part of the group’s Corporate Social Responsibility commitments
- Supporting its customers, such as ASDA, in the reduction of their environmental impact
- Improving customer service through increased delivery and collection reliability
- Minimising exposure to drivers’ hours and working time directive issues
- Mitigating the impact of fuel price uncertainty

Rail services offered by the Malcolm Group in partnership with Direct Rail Services (DRS) now include deliveries between:

- Grangemouth and Linwood
- Grangemouth and Aberdeen
- Daventry (DIRFT) - Grangemouth Service
*Detailed on page 8
- Daventry (DIRFT) and Mossend

How Can the Use of Rail Freight Benefit Your Business?

There are three widely held views among road hauliers, namely that:

- 1) Shifting from road to rail is not worth the effort because it is both inflexible and bureaucratic
- 2) Rail is only financially viable for long journeys
- 3) The rail freight industry has not done enough to attract freight away from road onto rail

As has been shown such views are changing. More information is available through the Freight Best Practice Programme and support is available through organisations such as the RFG which is actively helping businesses to make the shift.

It should also be noted that grants are available to companies considering building their own rail freight terminal. Further information is available through reading the Quick Guide Freight Facility Grants: What Can I Get?.



The financial viability of modal shift can only be determined by carrying out a detailed cost analysis; such analysis has led some businesses to switch even relatively short journeys from road to rail.

Finally it is worth noting that as well as significant operational savings there are the benefits of reduced greenhouse gas emissions.

Summary

As has been seen from this Case Study it is possible to provide a seamless door to door freight delivery service to customers whilst taking advantage of existing rail freight operations.

There are already significant financial and service benefits being enjoyed by logistics companies such as the Malcolm Group and major retailers through shifting from road to rail.

The reality is that there will have to be a further shift from road to more environmentally friendly modes of transport if the UK is to meet its targets for reduced greenhouse gas emissions.

Practical support is available from several organisations including the Rail Freight Group, the DfT Grants team and Freight Best Practice.

Daventry (DIRFT) - Grangemouth Service

In September 2001, the Malcolm Group started a trial with Direct Rail Services to deliver freight on behalf of ASDA. The trial proved so successful that by 2002 the service became permanent and expanded to a six day a week operation and finally to seven days a week.

This service connects the ASDA National Distribution Centre (NDC) at Magna Park to the ASDA Regional Distribution Centre (RDC) in Grangemouth.

The Magna Park NDC is 15km away from the DIRFT (Daventry International Rail Freight Terminal) and the Grangemouth RDC is about 600 metres from Malcolm's Rail Terminal in Grangemouth. The service takes an average of 25 containers northbound and to be economically viable required a similar number of southbound containers.

Although able to provide 25 northbound containers, ASDA were only able to provide a few southbound containers.

The challenge taken up by the Malcolm Group was therefore to market its rail operations and secure customers requiring regular southbound deliveries, which it has done with an average of 24 containers moving south on each service. (It should be noted that these customers may only require delivery of one or two containers.)

The distance between Daventry and Grangemouth is approximately 550km. The incremental road travel saving, allowing for movements from the rail terminals to the distribution centres is approximately 534km.

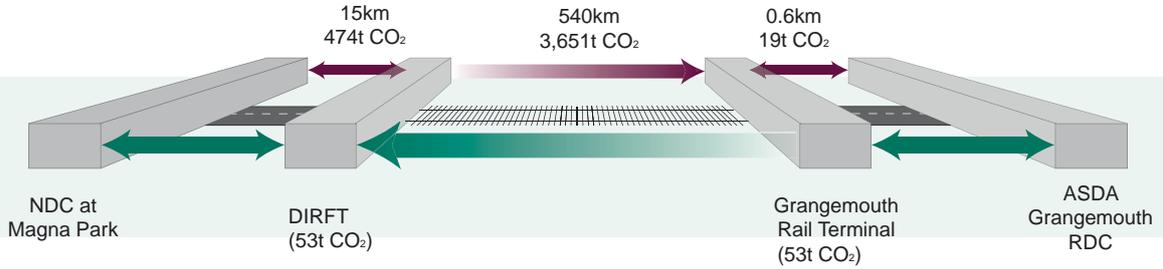
The total savings in terms of road journeys were estimated as:

- ↔ 25 northbound vehicles x 7 trains per week x 52 weeks = 9,100 journeys
- ↔ 25 southbound vehicles x 7 trains per week x 52 weeks = 9,100 journeys
- ↔ Therefore a total of 18,200 journeys (including empty return trips)
- ↔ 18,200 journeys x 534 km = 9,718,800 km per year

As a result of this initiative all parties have seen improved services and savings from modal shift from road to rail.

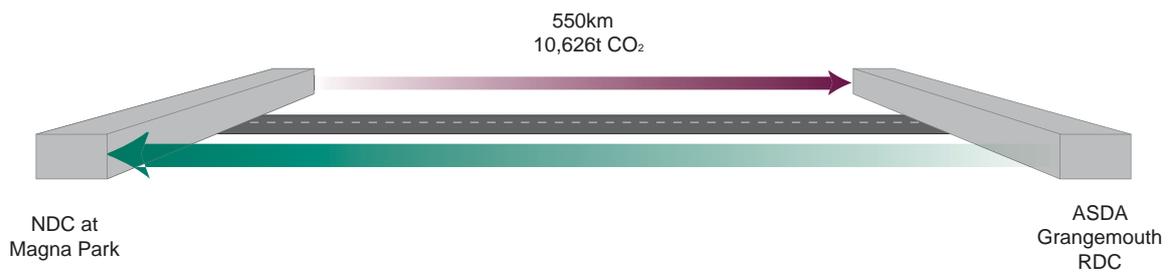
Road

Annual total = 10,626t CO₂



Intermodal

Annual total = 4,250t CO₂



Freight Best Practice publications, including those listed below, can be obtained FREE of charge by calling the **Hotline** on **0300 123 1250** or by downloading them from the website **www.businesslink.gov.uk/freightbestpractice**

Saving FUEL

Fuel Management Guide

This is the definitive guide to improving the fuel performance of your fleet. It gives step-by-step explanations of the key elements of fuel management, how to measure performance and how to implement an effective improvement programme.

Performance MANAGEMENT

Monitoring and Understanding CO₂ Emissions from Road Freight Operations

This guide provides step by step advice for creating a comprehensive CO₂ inventory and the benefits this can bring. It provides templates to enable the reader to monitor the amount of CO₂ produced by its Trucks, Vans, Warehouses, MHE and Company Cars.

Developing - SKILLS

Power to Your People

This case study provides examples of change management and motivational techniques employed to improve efficiency and morale in three transport operations.

Multi MODAL

Interactive Multi-modal Map

This map allows you to identify terminals that could be used to transfer loads from road to either rail or water (or both). The map provides details on where these terminals are located, who operates them and how to contact them. It should be your first port of call to transferring to alternative modes of transport.

Equipment & SYSTEMS

Make Back-loading Work for You

This guide shows you how to find and choose backloads in order to improve your fleet efficiency.

Case STUDIES

There are over 25 case studies showing how companies have implemented best practice and the savings achieved. Check out the following selection of case studies:

- Short Haul Rail Freight on Track for Profits in Scotland
- Switch for Sustainability
- Tesco Sets the Pace on Low Carbon and Efficiency