

Initial Appraisal		Intervention 150: Roll-On Roll-Off Rail Freight Enhancements between Glasgow and the Border via Lockerbie/Dumfries						
Estimated total Public Sector Funding Requirement:		<i>Capital Costs/grant</i>					£100m - £500m	
Summary Impact on Key Strategic Outcomes	Improve Journey Times and Connections Reduce Emissions Improve Quality, Accessibility and Affordability	---	--	-	0	+	++	+++
(Judgement based on available information against a 7pt. scale.)								
Intervention Description:								
A full upgrade of the route between the Central Belt and the border via Lockerbie/Dumfries to allow roll-on/roll-off freight trains to operate. This would allow standard lorries to drive on to a freight train at one end and drive off at the other, similar to the trains used in the Channel Tunnel.								

Summary: Rationale for Not Progressing

This intervention would require extensive works to increase the loading gauge, increase the route availability and allow for an increase in the number of trains operating, and signalling improvements to allow for bi-directional running. In light of further appraisal, it was found that this intervention would require similar improvements and operational enhancements south of the border to have a significant impact.

Other interventions aimed at providing more competitive rail freight opportunities in this corridor are considered to be a more effective alternative, providing a better value for money.

Table C150.1.1 STPR Objectives

STPR Objectives	
<p><u>STPR Objective 1:</u></p> <p>To make best use of the available road space and better manage peak demand taking into account the need to contribute to emissions reduction.</p>	<p>1: Neutral – This intervention is concentrated on improving rail freight services between Glasgow and the Border. It is unlikely to make best use of the available road space and better manage peak demand taking into account the need to contribute to emissions reduction.</p> <p>2: Slightly Positive – This intervention would allow lorries to drive on to a freight train at one end and drive off at the other, as on the trains used in the Channel Tunnel. This would discourage lorries from using the M74, which would lessen congestion on the road and contribute to emission reduction.</p> <p>3: Neutral – Rail freight enhancements are unlikely to promote continuing reduction in accident rates and severity rates across the strategic transport network. Improvements on rail freight would discourage lorries from using the M74, which would lessen congestion and may reduce accident rates.</p>
<p><u>STPR Objective 2:</u></p> <p>To contribute to emissions reduction by facilitating an increase in the proportion of freight passing through the corridor that is carried by rail.</p>	
<p><u>STPR Objective 3:</u></p> <p>To promote continuing reduction in accident rates and severity rates across the strategic transport network.</p>	

Table C150.1.2 Key Strategic Outcomes

Key Strategic Outcomes (KSO's)		
Objective:	Assessment Summary:	Supporting Information:
Improve Journey Times and Connections:	Minor Benefit	A full upgrade of the rail freight route is unlikely to have any significant effects on journey times; however, the enhancements would improve rail freight connections between Glasgow and the Border.
Reduce Emissions:	Minor Benefit	This intervention would make it possible to remove some HGV's from the trunk road network that travel between the Central Belt and northwest England. This would have a positive impact on reducing emissions.
Improve Quality, Accessibility and Affordability:	Minor Benefit	Rail freight enhancements including the enlarged loading gauge would improve rail access for lorries and would improve the quality of the rail freight service.

Table C150.1.3 Implementability Appraisal

Implementability Appraisal	
Technical:	There are a number of technical issues associated with this intervention. Infrastructure works would be required for the extensive electrification and loading gauge enhancements. Route alignment may need to be upgraded to suit larger loads travelling more quickly and frequently than present levels. Clearance assessments will need to be undertaken to ensure that OHLE can be accommodated. Roll-on and roll-off facilities will need to be provided along the route. Signalling improvements will be required to ensure that the increase in services can be accommodated and make the most efficient use of available capacity. New rolling stock will be required to carry lorries along the route.
Operational:	It is likely that there would be some disruptions to normal operations were these improvements to be carried out. In the future there could potentially be less disruption to passenger services. With more trains operating on the network, there would be a need to restructure timetables to allow optimum performance. It is unlikely that any adverse factors will affect the operation of this intervention during its projected life.
Public:	This intervention has not been made public.

Table C150.1.4 Comparative Appraisal

Comparative Appraisal	
Intervention Hierarchy:	This is a Level 2 intervention as it would require some improvements to existing infrastructure.
Interaction:	This intervention would complement interventions 86 (Enhancements to Rail Freight between Glasgow and the Border via West Coast Main Line) and 130 (Enhancements to Rail Freight between Glasgow and the Border via Dumfries).
Mutually Exclusive:	There is no mutually exclusive intervention for this intervention within corridor 18.

Table C150.1.5 Environmental Appraisal

Environmental Appraisal	
Assessment Summary	Potential benefits to air quality and CO ₂ e emissions as a result of a freight modal shift from HGV to rail. There is the potential for impacts on biodiversity, noise, water, cultural heritage, landscape and geology/soils depending on the location of the new infrastructure; however this is uncertain at this stage.