

Initial Appraisal		Intervention 130: Rail Freight Enhancements between Glasgow and the Border via Dumfries						
Estimated total Public Sector Funding Requirement:		Capital Costs/grant					>£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:								
The intervention would include an increase in the number of freight paths on the Glasgow and South Western line between Glasgow and the border by measures such as:								
<ul style="list-style-type: none"><li>lengthening of loops;</li><li>removal of speed limits that are below 75mph for freight trains; and</li><li>increasing the loading gauge on the route.</li></ul>								
Summary: Rational for Not Progressing								
This would require extensive works to increase the loading gauge, the route availability, 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 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 in terms of cost and benefits.								

Table C130.1.1 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><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>	<p><b>1: Neutral</b> – This corridor currently suffers from congestion in peak hours on the M74 and other approaches to Glasgow. This congestion is likely to increase due to forecast traffic increases. Provision of an enhanced GSW rail freight service would not be anticipated to address congestion issues on the M74.</p> <p><b>2: Slightly Positive</b> – Increasing the number of available paths on the Glasgow &amp; South Western line would allow more freight trains to run and at more flexible times. Increasing the length of loops would allow longer freight trains to run as their length is limited by where they have to stop and allow faster passenger trains to pass. Increasing the loading gauge across the route would allow larger containers to be carried. All of these improvements would provide an attractive alternative for road freight and could be expected to encourage a mode shift from road to rail. This potential modal shift could lead to emission reductions in this corridor; however it will be limited by path availability further south in the network.</p> <p><b>3: Neutral</b> - The intervention is unlikely to have any significant impact on this objective.</p>

Table C130.1.2 Key Strategic Outcomes

Key Strategic Outcomes (KSO's)		
Objective:	Assessment Summary:	Supporting Information:
<b>Improve Journey Times and Connections:</b>	<b>Minor Benefit</b>	This intervention will act as a diversionary route for occasions when the WCML is closed; this is likely to help to improve connections between Glasgow and Carlisle. It is also likely to allow improved journey times for passenger services.
<b>Reduce Emissions:</b>	<b>Minor Benefit</b>	This intervention could encourage modal shift for freight transport and so there is the potential to reduce congestion and improve air quality. Reductions in congestion could also reduce CO <sub>2</sub> e emissions.
<b>Improve Quality, Accessibility and Affordability:</b>	<b>Minor Benefit</b>	Providing loading gauge enhancements on GSW would improve the quality of the rail freight service. The enhancement on GSW would improve accessibility of service and allow more loads to be carried by rail without disruption when the WCML is closed.

Table C130.1.3 Implementability Appraisal

Implementability Appraisal	
<b>Technical:</b>	There are a number of technical issues associated with this intervention. Infrastructure works will be required in order to implement electrification and the loading gauge enhancements. More powerful locomotives may be required. This intervention also involves the need to cross the A71. During construction, the enhancement of GSW is likely to affect current rail freight trains on this route and may increase journey times. Works to the crossing of the A71 may also cause delays for current road users.
<b>Operational:</b>	It is unlikely that any adverse factors will affect the operation of this intervention during its projected life.
<b>Public:</b>	This intervention has not been made public.

Table C130.1.4 Comparative Appraisal

Comparative Appraisal	
<b>Intervention Hierarchy:</b>	The GSW rail freight facilities enhancement contains Level 1 and 3 interventions.
<b>Interaction:</b>	Intervention 86 (Enhancements to Rail Freight between Glasgow and the Border via West Coast Main Line) would interact with this intervention and by combining these improvements with improvements on the West Coast Mainline, they would permit at least one of the routes to be open at all times, allowing freight to run during engineering works on the other routes. This intervention would also interact with intervention 150 (Roll-On Roll-Off Rail Freight Enhancements between Glasgow and the Border via Lockerbie/Dumfries) providing a transfer of freight traffic from road to rail by providing a roll-on/roll-off service for HGV's.
<b>Mutually Exclusive:</b>	The West Coast Main Line rail freight enhancement is likely to improve capacity and speed of the rail freight service between Glasgow and Carlisle, which will bring similar benefits as this intervention, and would be likely to remove the need for GSW rail freight enhancement.

Table C130.1.5 Environmental Appraisal

Environmental Appraisal	
<b>Assessment Summary</b>	This intervention will have potential slight minor benefits to air quality and CO <sub>2</sub> e emissions through reduced congestion. There is also the potential for impacts on biodiversity and noise, the exact impacts are uncertain at this stage of the decision-making process.