

| Initial Appraisal | | Intervention 167: Roll-On Roll-Off Rail Freight Enhancements between Mossend, Grangemouth and Aberdeen/Inverness via Perth | | | | | | |
|---|---|--|----|---|---|--------|----|-----|
| 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 | + | ++ | +++ |
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| (Judgement based on available information against a 7pt. scale.) | | | | | | | | |
| Intervention Description: | | | | | | | | |
| A full upgrade of the route between the Central Belt, Aberdeen and Inverness to allow roll-on/roll-off freight trains to operate. This would require; extensive works to increase the loading gauge to enable a greater number of trains to operate; signalling improvements to allow for bi-directional running and 24 hour access to the route; new facilities in the Central Belt, Perth, Aberdeen and in Inverness to allow lorries to drive on and off; and new trains to carry lorries. It may also be necessary to electrify the route to allow services to be operated by electric locomotives. | | | | | | | | |
| Summary: - Rationale for Not Progressing | | | | | | | | |
| The infrastructure enhancements required to achieve the necessary clearances are likely to be significant and would require extensive station modifications. Costs are estimated to be very high and these are likely to outweigh any benefits associated with the intervention. | | | | | | | | |
| On the Highland Mainline route, the required improvements to infrastructure could also result in an adverse environmental impact. | | | | | | | | |

Table C167.1.1 STPR Objectives

| STPR Objectives | |
|---|---|
| <p><u>STPR Objective 1:</u></p> <p>To improve the public transport competitiveness between Aberdeen and Dundee (and hence onwards to the Central Belt).</p> <p><u>STPR Objective 2:</u></p> <p>To contribute to reducing both overall emissions and emissions per person kilometre through providing for alternatives to road freight movement on the corridor.</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><u>STPR Objective 4:</u></p> <p>To promote journey time reductions, particularly by public transport, between the Central Belt and Aberdeen primarily to allow business to achieve an effective working day when travelling between these centres.</p> | <p>1: Neutral - This intervention would not have any significant effect in improving the public transport competitiveness between Aberdeen and Dundee (and hence onwards to the Central Belt).</p> <p>2: Slightly Positive – These improvements would make it considerably more attractive for freight hauliers to move containers and other goods by rail, by reducing journey times, allowing freight to arrive at times suitable for the final receiver and allowing standard 9' 6" deep sea containers to be carried. This 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.</p> <p>3: Slightly Positive – Freight enhancements that could lead to modal shift from road to rail would potentially reduce the accident rate by removing HGVs from the road network.</p> <p>4: Neutral - This intervention would not have any significant effect in promoting journey time reductions, particularly by public transport, between the Central Belt and Aberdeen primarily to allow business to achieve an effective working day when travelling between these centres.</p> |

This intervention also addresses an objective in another corridor

| STPR Objective | Corridor, Urban Network or Strategic Node |
|---|---|
| To address issues of driver frustration relating to inconsistent road standard, with attention to reducing accident severity. | Corridor 6 |

Table C167.1.2 Key Strategic Outcomes

| Key Strategic Outcomes (KSO's) | | |
|---|---------------------|--|
| Objective: | Assessment Summary: | Supporting Information: |
| Improve Journey Times and Connections: | Neutral | This intervention would not have an impact on improving journey times and connections. |
| Reduce Emissions: | Minor Benefit | By making freight transfer by rail more attractive, there is the potential for modal shift from road to rail which could have an impact on reducing emissions. This impact would be minimal. |
| Improve Quality, Accessibility and Affordability: | Neutral | This intervention would not have a significant impact on improving the quality, accessibility and affordability of transport in this corridor. |

Table C167.1.3 Implementability Appraisal

| Implementability Appraisal | |
|----------------------------|--|
| Technical: | There are a number of technical issues associated with this intervention. There will be infrastructure works needed for the extensive electrification and loading gauge enhancements. Clearance assessments will need to be undertaken to ensure that OHLE can be accommodated. Roll-on and roll-off facilities would need to be provided along the route. Signalling improvements (i.e. for bi-directional running and 24 hour access to the route) would be required to permit the increase in services to be accommodated and make the most efficient use of available capacity. New rolling stock will be required to carry lorries along the route. |
| Operational: | During construction, the enhancement of the route is likely to affect current rail freight trains and may increase journey times. 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: | There is some support for this intervention from rail freight campaigners. |

Table C167.1.4 Comparative Appraisal

| Comparative Appraisal | |
|-------------------------|---|
| Intervention Hierarchy: | This intervention includes Level 1, 2 and 3 interventions. |
| Interaction: | This intervention does not interact or complement any other interventions. |
| Mutually Exclusive: | This intervention is mutually exclusive with intervention 145 (Rail Freight Enhancements between Mossend, Grangemouth and Inverness). |

Table C167.1.5 Environmental Appraisal

| Environmental Appraisal | |
|-------------------------|--|
| Assessment Summary | This intervention is likely to provide benefits to the local air quality and a reduction in CO ₂ e emissions through the potential for modal shift of freight from road to rail. Impacts on biodiversity, noise, water, soils / geology, cultural heritage and landscape are uncertain at this stage until more information is available. |

