

Minister for Transport and Veterans

## **ASSESSMENT OF RAILQWEST PROPOSALS**

### **Purpose**

As per your e-mail of 6 January 2014, to inform you of rebuttals to the points raised by RailQWest within their 'Glasgow Crossrail' proposal.

### **Priority**

Routine.

### **Summary of TS issues with RailQWest proposals**

1. RailQWest have cited various benefits of direct connections from Ayr to Edinburgh and other locations across the Central Belt. However, Transport Scotland's general view is that the benefits are overstated within the current evidence base and that the impact on modal shift of the Crossrail proposal and passenger congestion and safety at Glasgow Central and Queen Street, is likely to be low.

2. The electrification of the Glasgow to Edinburgh via Shotts line, planned for 2019, allows for the possibility of a direct, electrified service from Ayr to Edinburgh via Glasgow Central, depending on proposals put forward by the next Scotrail franchisee. Within the draft ITT, through the provision of a longer franchise, we are looking for the next franchisee to develop opportunities and strategies for delivering innovative enhancements to train services.

3. While RailQWest have made a series of statements about the benefits of the proposal, it is Transport Scotland's view that the evidence base is lacking in several areas. At the meeting of 18 December 2013, TS officials advised RailQWest that a STAG based appraisal will be required, and shared a copy of the guidance.

4. A point by point rebuttal of each issue raised by RailQWest with the STPR assessment of the Glasgow Crossrail proposal is contained at Annex A, divided into the following sections:

- **STPR rationale for not recommending progression of Glasgow Crossrail**
- **STPR objectives**
- **STAG criteria**
- **Key Strategic Outcomes**
- **Scottish Government Strategic Objectives**
- **General comments**

## **Network Rail meeting with RailQWest**

5. RailQWest met with Network Rail officials on 9 January 2014. Network Rail officials have provided a note of the meeting to Transport Scotland [Annex B]. The main comments from Network Rail are summarised below:
- With the introduction from May 2014 onwards of four trains per hour from Ayr, most of the route capacity created by the Paisley Corridor Improvements Project will have been utilised.
  - Network Rail works with industry to prioritise the delivery of the rolling programme of electrification [100 single track kilometres per year] specified in the HLOS.
  - Network Rail maintains the City Union line for the traffic that currently runs on the line (freight and empty rolling stock) in line with the specifications from Transport Scotland in the HLOS.
  - The City Union line would require significant additional investment, in terms of track, structures and signalling, beyond the proposed electrification. The existing line speed would not be satisfactory for passenger services.
  - Network Rail challenged the passenger growth figures used by RailQWest, which are higher than that published in Network Rail's Route Utilisation Strategy (RUS). The RailQWest figures are also higher than those figures within the analysis conducted through the RUS, suggesting that forecast growth in the Glasgow conurbation was less than other parts of Scotland due to the higher rail penetration in Glasgow.
  - The business case for Glasgow Crossrail must include the additional operating costs of the extra services proposed.
  - It would be important not to divert trains from Glasgow city centre if a Crossrail service were to be implemented.

## **Recommendation**

6. You are invited to:
- Note the content of this submission
  - Note that RailQWest have been in contact with your office recently to confirm a meeting of 11 March 2014 with you.

  
Rail Directorate  
Rail Policy 

19 December 2018

## ANNEX A      TS POINT BY POINT REBUTTAL OF RAILQWEST GLASGOW CROSSRAIL PROPOSALS

The views expressed by RailQWest are in response to the findings of the STPR in respect of the Glasgow Crossrail proposal. Below is a breakdown of the points raised by RailQWest in respect of the STPR assessment of Glasgow Crossrail, together with the TS view on the individual point raised.

### STPR rationale for not recommending progression of Glasgow Crossrail

#### Intervention Ref E3 – Construction of Glasgow Crossrail

1.1 Description of Intervention	1.2 Rationale for not recommending
<p>This intervention supports the objectives to address rail capacity issues in central Glasgow and increase public transport access to areas of economic activity. Glasgow Crossrail consists of a range of infrastructure measures that could be implemented in phases over time. For the purposes of this assessment, the intervention consists of the reopening of the Glasgow City Union Line over the Clyde to passenger trains, with two new spurs:</p> <ul style="list-style-type: none"> <li>• The Strathbungo Link from Muirhouse to the City Union Line allowing trains from East Kilbride and Kilmarnock to access the City Union Line; and</li> <li>• The High Street curve from the City Union Line to the North Electric Line heading west at High Street. Additional services would be provided, such as Ayr to Edinburgh and Croy to Barrhead, with a new turnback facility at Croy. Some services that currently operate into Central High Level would be diverted to Charing Cross via Queen Street Low Level, such as East Kilbride services, with a new turnback facility at Kelvinhaugh.</li> </ul>	<p>On balance, as a 'stand alone' intervention, Glasgow Crossrail performs reasonably well, however, it does not make best use of the rail network or integrate well with the menu of schemes required to satisfy the objectives of the STPR. The interventions set out in D25 (West of Scotland Strategic Rail Enhancements) <i>[now known as STPR Project 24]</i> offer better opportunities to enhance connectivity for the heaviest rail demand patterns in and around Glasgow, and could use elements of this intervention.</p> <p>The committed improvements on the rail network between Edinburgh and Glasgow also provide a 'step change' in the connectivity of Glasgow Central to Edinburgh, resulting in enhanced connections for those travelling to and from the south and south west of Glasgow. This is likely to negate much of the potential benefit of Glasgow Crossrail.</p>

	<b>RailQWest view</b>	<b>TS view</b>
1.	The objective described was very limited, as the intervention would have benefits across the whole of the Central Belt	No specific comments
2.	The intervention should be assessed for each phase in turn	The STPR sets out the Scottish Government's transport investment priorities over the period to 2032. The Glasgow Crossrail therefore must be assessed as a whole.
3.	Transport Scotland's enhanced connections have resulted in an Ayr-Edinburgh journey time of 2hr30-2hr35 mins on current timetables for a 73 mile car journey of 1hr30 mins-2 hours. Crossrail phase 1 could provide a sub 2 hour rail journey which would be attractive for car drivers.	Current timetabling gives a rail journey time of around 2 hours 15 minutes. Electrification of the Glasgow to Edinburgh via Shotts line, which will be completed by 2019, should bring the journey time close to two hours (given the current service pattern of four trains per hour to/from Ayr.
4.	The STPR interventions do not provide any improvements for connections between Gourock, Paisley or Ayr and Falkirk or Stirling that Crossrail Phase 1 would allow.	The STPR intervention could permit these links if so chosen. The links illustrated in the description of the intervention are illustrative only.
5.	Cost estimates are for the full three phases of Crossrail, the estimate for Phase 1 alone is £20 million to £80 million including the three new stations at West Street, Citizens (Gorbals) and Glasgow Cross. Electrification only is estimated as £7 million plus up to £13 million for any necessary junction, signalling etc. works	Electrification alone is likely to be around £10 million. Network Rail have confirmed that the Crossrail proposal would require a lot of additional investment beyond electrification, such as enhancement of the track, signalling and structures. The current infrastructure, which is currently maintained for low volume, lightweight traffic, permits a linespeed of 15 mph, which would not be sufficient for the proposed passenger services.

## STPR objectives

<p>STPR Objective A1: To increase the public transport access to and between areas of economic activity and regeneration with minimal need for interchange.</p>	<p><b>A1: Positive</b> – This intervention would contribute to the redevelopment of the Glasgow Cross area, Gorbals and the east end of the City Centre. Although the intervention would provide new journey opportunities, these would have limited impact across the city region. There would be improvements to connectivity from the south of Glasgow to the north west and connecting across a wider area but the intervention would not provide a direct link between Glasgow Queen Street and Glasgow Central.</p>
<p>STPR Objective A2: To improve the efficiency of the M8 motorway during periods of peak demand with a focus on reducing the conflict between longer distance and local traffic, increasing the people carrying capacity and freight carrying capacity of existing road, and demand management.</p>	<p><b>A2: Slightly Positive</b> - There would be the opportunity to serve some movements from the south to north west that may result in modal shift, but this would be limited.</p>
<p>STPR Objective A3: To address rail capacity and connectivity issues in central Glasgow.</p>	<p><b>A3: Slightly Positive</b> – The new infrastructure would allow the diversion of some existing services from Glasgow Central High Level to Glasgow Queen Street Low Level. However, it would increase the number of services on the North Electric Line through Glasgow City Centre. The level of relief that the intervention would be able to provide to Central High Level is limited and there would be no improvement for Glasgow Queen Street High Level.</p>
<p>STPR Objective A4: To promote continuing reduction in accident rates and severity rates across the strategic transport network.</p>	<p><b>A4: Neutral</b> – While the intervention provides for modal shift from car to rail, the level of impact of this intervention on accident rates would not be significant.</p>
<p>STPR Objective A5: To promote journey time reductions, particularly by public transport, between the Central Belt and Aberdeen/Inverness primarily to allow business to achieve an effective working day when travelling between these centres.</p>	<p><b>A5: Neutral</b> – This intervention would have no significant effect on journey times from the Central Belt to Aberdeen and Inverness.</p>
<p>STPR Objective A6: To promote efficient and effective transport links to support the development and implementation of the proposed national development at Glasgow Airport identified in the NPF2</p>	<p><b>A6: Positive</b> - This intervention would improve connections to Glasgow Airport from a number of locations. From Ayr, the intervention would facilitate an increase in the number of services to Paisley Gilmour Street, which would improve connections with trains from Glasgow to Glasgow Airport. From Edinburgh and Airdrie, it would provide a new direct service calling at Paisley Gilmour Street, resulting in a direct connection with services from Glasgow to Glasgow Airport.</p>

	RailQWest view	TS view
6.	<p><i>STPR objective A2</i></p> <p>The benefit should be positive as Crossrail provides viable rail routes paralleling the M80, M77 and M8, allowing a mode shift from road to rail and removing city centre M8 traffic</p>	<p>The number of vehicles removed is likely to be minimal compared to the total flows – slightly positive is the correct assessment.</p> <p>The RailQWest figures are also higher than those figures within the analysis conducted through the RUS, suggesting that forecast growth in the Glasgow conurbation was less than other parts of Scotland due to the higher rail penetration in Glasgow.</p>
7.	<p><i>STPR objective A3</i></p> <p>Crossrail will address connectivity issues within Glasgow by having a direct connection with the Underground at West Street and allowing passengers to travel from the southwest of Glasgow to the east/north east of Glasgow without changing station, reducing passenger congestion at both Central and Queen Street stations. Crossrail will allow service improvements on routes to Ayr, Cumbernauld, Edinburgh, Falkirk and Gourock without further congestions at either terminus station in Glasgow</p>	<p>The reduction in congestion at Glasgow Central and Glasgow Queen Street would be minimal in comparison to the station throughput.</p>
8.	<p><i>STPR objective A5</i></p> <p>This should be positive. Crossrail will allow passengers from the southern part of the Central Belt (Paisley, Ayr, Inverclyde) to travel to Aberdeen and Inverness without changing stations in Glasgow. Overall journey time savings will depend upon timetable adjustments to provide appropriate connections.</p>	<p>The assessment depends upon the definition of 'Central Belt'. There is a possibility of improving journeys for some people, but this is dependent upon the service pattern timetable. The most optimistic scenario would be assess this issue as <u>potentially</u> positive.</p>

## STAG criteria

STAG Criteria:	Assessment Summary:	Supporting Information:
Environment:	Minor Benefit/ Minor Negative Impact	<p>Improved services would promote modal shift from road to rail, though the overall level of impact would be limited. This would bring associated minor beneficial effects in relation to air quality, especially in light of the current air quality issues in Glasgow.</p> <p>However, there is the potential for impacts on several A-Listed buildings within Glasgow, however, the extent of these impacts is uncertain at this stage of the decision making process. There would also be increases in noise and vibration at some locations as a result of operating new or diverted services.</p>
Safety:	Minor Benefit	<p>The primary impact on safety would be as a result of modal shift away from road transport, which has higher accident rates. By achieving a reduction in trips on the road network it is anticipated that road accident numbers and severity are likely to decrease. The level of impact of this would, however, be limited. Providing new and improved station facilities within regeneration areas would have a positive impact on personal security.</p>
Economy:	Moderate Benefit	<p><b>Transport Economic Efficiency (TEE):</b> This intervention would remove the need for rail passengers to change between services and City Centre stations when travelling on some routes between stations to the north and east of Glasgow (such as Airdrie and Croy) and to the south and west of the city (such as Barrhead and Ayr). This would result in significant efficiency benefits for passengers travelling between these stations. Passengers travelling from north and east or south and west of Glasgow would benefit from more frequent services into the east end of the City Centre.</p> <p><b>Wider Economic Benefits (WEBs):</b> This intervention would provide wider economic impacts through improving public transport provision and accessibility, not just within Glasgow, but across much of the Central Belt. It would be possible to make long distance journeys such as Ayr to Edinburgh without the need to transfer between Central and Queen Street stations in Glasgow. However, the level and scope of the impact would be limited to quite specific movements and corridors.</p> <p><b>Economic Activity and Location Impacts (EALIs):</b> Construction of new stations at West Street, in the Gorbals and at Glasgow Cross would provide these areas with direct rail connection from stations between Ayr, Edinburgh, Barrhead and Croy. It would also support key economic regeneration areas in the East End of Glasgow. Similarly, service enhancements would improve rail accessibility to Airdrie, Barrhead, Croy and Glasgow, with a beneficial impact on employment and productivity in these locations.</p>
Integration:	Minor Benefit	<p><b>Transport Integration:</b> A new station at West Street would integrate with Subway services. New stations at Glasgow Cross and Gorbals would integrate with other local transport facilities. Some station interchanges would also be possible at locations such as Queen Street Low Level and Bellgrove.</p> <p>The benefits to integration with other routes and modes in the city centre would be limited by the lack of connectivity to Central station and extended journey times for diverted services to access the City Centre via Queen Street Low Level.</p> <p><b>Transport and Land-Use Integration:</b> The intervention includes the construction of a new rail station at Glasgow Cross with direct access to the regeneration area in Glasgow's East End and new rail stations in the Gorbals and at West Street. This would provide efficient rail links to support development at these sites, with benefits to transport and land-use integration.</p> <p><b>Policy Integration:</b> This intervention would provide new rail services, removing the need for some movements to require interchange, and encourage modal shift from car to rail. There would be some benefit to health and a positive impact on congestion and emissions from reduced car use. There would be a positive impact on accessibility and social inclusion. The new stations would be fully DDA compliant, thus having a positive effect on disability access. This intervention would also support regeneration in the east of the City Centre.</p>
Accessibility and Social Inclusion:	Minor Benefit	<p><b>Community Accessibility:</b> The proposed new stations and services represent improvements in rail network coverage. The intervention would provide improved access to employment opportunities across the routes being served, with improved access to the regeneration area in the East End of Glasgow and improved cross-Glasgow connections to cities and towns such as Edinburgh and Barrhead.</p> <p><b>Comparative Accessibility:</b> The intervention would provide greater accessibility for deprived and socially excluded regeneration areas around the Gorbals and East End of Glasgow.</p>

	<b>RailQWest view</b>	<b>TS view</b>
<b>9.</b>	<p><i>Environment</i></p> <p>This should be benefit/neutral.</p> <ul style="list-style-type: none"> <li data-bbox="319 380 778 817">I. Improved services and cross city connections would promote modal shift not only for local movements but also for longer distance movements on the M8. This would have a beneficial effect on air quality within the City Centre Air Quality Management Area.</li> <li data-bbox="319 817 778 1227">II. The effect on the few adjacent buildings will be marginal as the line is currently still in use for depot, freight and occasional steam or diesel hauled excursion services all of which generate more noise and vibration than the proposed electric powered services</li> </ul>	<ul style="list-style-type: none"> <li data-bbox="813 414 1356 526">I. The effect would be minimal given the scale of the flows (see point 6)</li> <li data-bbox="813 817 1356 974">II. This is unlikely to be confirmed by modelling work. Four or six trains per hour will contribute to local noise.</li> </ul>
<b>10.</b>	<p><i>Safety</i></p> <p>This should be marked as moderate benefit. In addition to the road safety improvements due to modal shift, the reduction in pedestrian traffic between the two termini stations within Glasgow having to cross Renfield Street, which has a poor pedestrian accident record, will further improve road safety and personal security.</p>	<p>The number of people involved is unlikely to make a noticeable difference. Minor benefit is the correct assessment.</p>



<p><b>11.</b> <i>Integration</i></p> <p>This should be marked as benefit. Under phase 1 there would be no loss of services to Central Station thus no change to current connectivity. The Airdrie/Bathgate re-opening allows the proposed Ayr to Edinburgh service to operate under electric traction immediately and the full EGIP electrification will enable the proposed Ayr to Edinburgh service to route via Edinburgh Gateway thus providing a direct service from Paisley, for example, to Edinburgh Airport via the tram link, or from Falkirk to Prestwick Airport or Cumbernauld to Glasgow Airport via the bus connection at Paisley. This would provide an almost direct connection between all three Central Scotland Airports.</p>	<p>RailQWest seem to be suggesting a service linking Ayr, Paisley, Cumbernauld, Falkirk, Edinburgh Park/Gateway (for the airport) and Edinburgh.</p>
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## Key Strategic Outcomes

Table E3.1.3 Key Strategic Outcomes

Objective:	Assessment Summary:	Supporting Information:
Improve Journey Times and Connections:	Moderate Benefit/ Minor Negative Impact	This intervention would have a benefit in reducing cross-Glasgow journey times by reducing the need to interchange between Glasgow Central and Glasgow Queen Street for some corridors and services. It would also provide a direct rail service connection between some areas currently requiring interchange. Journey times to access the City Centre for some services would be negatively impacted by the additional time taken for trains to cross from the south side of Glasgow to Queen Street Low Level compared with accessing Central High Level.
Reduce Emissions:	Minor Benefit	This intervention is likely to promote a modal shift from road to rail thereby reducing the number of private cars on the road, and so contributing to reductions in CO <sub>2</sub> e emissions. However, the overall impact of this would be limited.
Improve Quality, Accessibility and Affordability:	Moderate Benefit	This intervention would have a benefit in terms of improved access and quality of public transport for job seekers in socially deprived areas such as the Gorbals and provide better access to employment in the regeneration area in the East End of Glasgow. It is anticipated that the intervention would have a neutral impact on affordability.

	RailQWest view	TS view
12.	<p><i>Improve Journey Times and Connections</i></p> <p>This should be marked as moderate benefit/moderate positive impact. Under Crossrail phase 1, there would be no change to journey times to the City Centre on existing services. There would be additional services to the east of the city centre, improving overall accessibility. In addition, a single, same platform change at Bellgrove would provide direct access to the Charing Cross area and the West End.</p>	<p>RailQWest acknowledge here that their proposals involve new services, rather than simply electrification of the City Union Line. They must then complete a STAG based appraisal on the proposed service, including costs and revenues.</p> <p>Network Rail have also noted that any business case for the Crossrail proposals must include the additional operating costs of extra services. Network Rail have also noted that future implementation of the Crossrail proposal must not divert existing services from Glasgow City Centre.</p>
13.	<p><i>Reduce emissions</i></p> <p>This should be marked as moderate benefit. As longer journeys on the M8 through the city centre are likely to be reduced, the beneficial effects within the City Centre Air Quality Management Area will be greater than in other less critical areas.</p>	<p>It is TS' understanding that the air quality management area is a result of the M8 – the AQMA covers the city centre itself.</p>

## Scottish Government Strategic Objectives

Objective:	Assessment Summary:	Supporting Information:
<b>Safer and Stronger:</b>	Minor Benefit	The intervention would have a minor benefit for this objective by improving the quality and journey time reliability of public transport in Glasgow thereby increasing safety through promoting the use of public transport ahead of private car use. By removing traffic from roads, it is anticipated that this measure would also contribute to reducing road accidents in line with this objective.
<b>Smarter:</b>	Minor Benefit	This intervention would improve access to schools, colleges and universities.
<b>Wealthier and Fairer:</b>	Minor Benefit	This intervention would improve journey times, service frequency and journey time reliability on some routes, sustaining and promoting economic growth in Glasgow and the West of Scotland.
<b>Greener:</b>	Minor Benefit	This intervention would promote modal shift to rail, with improvements in air quality and reduced CO <sub>2</sub> e emissions. It would also promote the use of public transport. However, the level and scope of the impact would be limited.
<b>Healthier:</b>	Minor Benefit	This intervention would encourage modal shift from road vehicles to more sustainable rail trips for passenger and freight journeys. It is not likely to significantly affect trips to health services and community services.

	<b>RailQWest view</b>	<b>TS view</b>
<b>14.</b>	<p><i>Safer and stronger</i></p> <p>This should be marked as moderate benefit. Crossrail phase 1 would improve journey time reliability in Glasgow and across Central Scotland thereby promoting the use of public transport ahead of private car use.</p>	<p>Given the TS views raised at points 6, 9 and 10, an assessment of moderate benefit would be incorrect. The effect of Crossrail phase 1 would be minimal in the context of the overall passenger numbers and traffic flows.</p>
<b>15.</b>	<p><i>Wealthier and fairer</i></p> <p>This intervention would improve journey times, service frequency and journey time reliability on some routes, sustaining and promoting economic growth in Glasgow, the West of Scotland and across Central Scotland.</p>	<p>Given the TS views raised at points 6, 9 and 10, an assessment of moderate benefit would be incorrect. The effect of Crossrail phase 1 would be minimal in the context of the overall passenger numbers and traffic flows.</p>


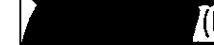
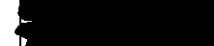
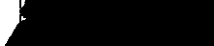
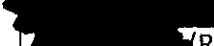
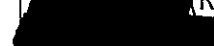

<b>16.</b>	<i>Greener</i>  This should be moderate benefit. This intervention would promote modal shift to rail, with improvements in air quality and reduced CO2 emissions. It would promote the use of public transport. The level of scope of the impact would be widespread across West and Central Scotland.	Given the TS views raised at points 6, 9 and 10, an assessment of moderate benefit would be incorrect. The effect of Crossrail phase 1 would be minimal in the context of the overall passenger numbers and traffic flows.
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**General issues raised**

	<b>RailQWest view</b>	<b>TS view</b>
17.	<p><i>General comments:</i></p> <ol style="list-style-type: none"> <li data-bbox="347 387 794 566">I. <i>The benefit to cost ratio for Crossrail phase 1 is 1.44:1 based on the Ayr to Edinburgh connection alone</i></li> <li data-bbox="347 566 794 936">II. <i>Routing two new services per hour from Ayr via Crossrail to Edinburgh bring the Ayr line services up to the 4 trains per hour – one of the aims of STPR Project 26 [Rail Enhancements between Ayrshire, Inverclyde and Glasgow]</i></li> <li data-bbox="347 969 794 1563">III. <i>The project 26 aim of doubling services to Kilmarnock cannot be completed until project 6 phase 2 is underway (further electrification of rail lines including East Kilbride, Kilmarnock, Paisley Canal, Whifflet, Maryhill and Shotts). The Whifflet line service would divert from Central High Level to Low Level thus releasing platform space for the enhanced Kilmarnock service.</i></li> <li data-bbox="347 1597 794 2031">IV. <i>The final aim of project 26 is to rebuild the Paisley Canal to Elderslie line to relieve the Central to Gilmour Street line. The capacity of the line has now been enhanced. As noted in the STPR, there may be difficulties reconnecting Paisley Canal to Elderslie due to development blocking the</i></li> </ol>	<ol style="list-style-type: none"> <li data-bbox="842 387 1353 645">I. RailQWest should provide the evidence base for this. Network Rail have noted that the RailQWest passenger growth figures are higher than published in the Network Rail RUS</li> <li data-bbox="842 678 1353 902">II. This benefit does not apply as the current timetable includes four trains per hour to/from Ayr. Extra Inverclyde services are planned as part of STPR Project 26.</li> <li data-bbox="842 969 1353 1081">III. This is a speculative assertion, which may require further explanation.</li> <li data-bbox="842 1597 1353 1664">IV. TS agree that the aim can be dropped.</li> </ol>

	<p>route. The aim may be dropped.</p> <p>V. <i>Crossrail phase 1 lays the foundation for phases 2 and 3, the Muirhouse Link to connect East Kilbride and Barrhead services to West Street for interchange with both Crossrail and Underground services, and the St John's link to provide direct services from the south Glasgow lines to High Street, Glasgow Queen Street, Charing Cross and the northwest lines</i></p> <p>VI. <i>Crossrail Phase 1 fits well with STPR projects 6 (further electrification of the strategic rail network), 15 (EGIP) and project 26 (rail enhancements between Ayrshire/Inverclyde and Glasgow)</i></p> <p>VII. <i>RailQWest is only currently pressing for the electrification of the City Union line as a first phase to allow through services although we consider that the case for the provision of the three additional stations will rapidly grow.</i></p>	<p>V. The Muirhouse link does not serve West Street so there is no connection with the Underground. It also does not serve 'Citizens', reducing the links with the proposed Crossrail station.</p> <p>The curve at High Street is too tight to have a platform with the necessary stepping distances. This would required to link the City Union (Crossrail) line to Glasgow Queen Street.</p> <p>VI. The fit with project 26 has not been proven as discussed at points I-III above</p> <p>VII. RailQWest are actually pressing for electrification and a range of additional services linking Ayr with various locations in the Central Belt and beyond. They have specifically stated that the Crossrail proposal does not involve any proposals to amend current services, therefore the services on the line must be additional to the current timetable. Network Rail have confirmed that the business case for Glasgow Crossrail must include additional operating costs of any extra services.</p>
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**ANNEX B NOTE OF NETWORK RAIL MEETING WITH RAILQWEST ON 9 JANUARY 2014**

<p><b>Meeting with RailQWest</b> 9<sup>th</sup> January 2014</p>	<p><b>Attendees:</b>   (NR)   (NR)   (NR)   (RailQWest)   (RailQWest)   (RailQwest)   (RailQwest)</p>
<p><b>Purpose of meeting:</b> RailQWest requested a meeting with Network Rail to inform on revisions to their proposal on their Glasgow CrossRail project.</p>	
<p><b>Background</b></p> <ul style="list-style-type: none"> <li>• RailQWest have held 51 meetings in last 18 months with local authorities, parliamentarians and key stakeholders</li> <li>• Met with TS before Christmas</li> <li>• RailQWest have 10 members with experience in planning, engineering, academia etc.</li> </ul>	
<p><b>RailQWest presented their analysis and proposals for a CrossRail service in Glasgow. The proposal includes:</b></p> <ul style="list-style-type: none"> <li>• Glasgow CrossRail would cost £20 million to electrify</li> <li>• It will introduce new services, not divert existing services</li> <li>• Would not need to strengthen viaducts and bridges</li> <li>• 15 mph speed limit</li> <li>• Revenue exists to justify electrification</li> <li>• A two phased implementation of CrossRail:- <ul style="list-style-type: none"> <li>• Phase 1 would include electrification of the City Union Line</li> <li>• Phase 2 would include constructing 3 new stations at West Street, Citizens, Glasgow Cross. RailQWest advised that Glasgow City Council have identified regeneration areas near the proposed stations.</li> </ul> </li> </ul>	

### Costing

Rail Qwest's costing for Glasgow CrossRail is based on comparisons with other projects

- On the basis of comparisons with other projects, an average cost has been identified
- The average figure is questionable – use of Windemere branch (£1.58m) which significantly reduced the average
- Rail QWest's cost benefit ratio 1.44:1
- This figure includes the cost of 3 new stations

After the RailQWest presentation [REDACTED] fed back comments on RailQWest's CrossRail proposals. These included:

- Most of the route capacity created by the Paisley Corridor Improvement (PCI) project will have been utilised from May 2014 as 4 trains per hour will run from Ayr.
- The electrification of the City Union line was developed to GRIP stage 3. The rationale behind developing the GRIP stage 3 electrification study was to provide another electrified route for "empty" EMUs travelling from the north routes to the ScotRail depots such as Corkerhill and Shields in the south. In general, it makes sense to electrify the route when all other routes round about are electrified.
- The City Union line is proposed to be electrified at some point in the future, however the delivery timescales of this project have not been specified. In CP5, Network Rail is required to electrify 100 STKs per year as specified in Scottish Ministers HLOS. Network Rail works with the industry stakeholders to prioritise the delivery of the rolling programme of Rolling Programme of Electrification.
- The City Union line would require a lot of additional enhancement investment (over and above the proposed electrification) to facilitate passenger train services to run over the line. In particular the track, structures and signalling would need to be enhanced to accommodate a regular (frequent) passenger service. The existing structures for example are currently maintained for low volume lightweight traffic. It was noted that freight traffic is currently diverted onto the line but this has resulted in monitoring the Structures after every freight train has crossed. The existing route is currently fit to run the existing traffic at 15 mph however this linespeed would not be satisfactory for a passenger services. RailQWest suggested the 15 mph was not a problem as the approaches to the main termini are already restricted to 15 mph and as the City Union Line is quite short 15 mph would be OK for them!
- Network Rail maintains the City Union line for the traffic that currently runs on the line as this is what Network Rail are funded



to do. Transport Scotland specifies what Network Rail has to deliver in the HLOS, Network Rail then price what has been specified. The ORR will then hold Network Rail accountable to deliver the outputs for the agreed cost.

- The RailQWest forecast for passenger growth for the Glasgow conurbation was higher than what was published in the RUS. The RailQWest passenger growth figure was challenged as the analysis undertaken for the RUS suggested that the growth in the Glasgow conurbation was less than other parts of Scotland as a consequence of Glasgow conurbation already having a higher rail penetration than the rest of Scotland. This means there is more opportunity for growth in other areas of Scotland.
- It was highlighted that if a CrossRail service was to be implemented it would be important not to take trains away from Glasgow City Centre.
- Any business case for the CrossRail proposals would need to include the additional operating costs of any extra services.
- Capacity is at a premium between Newbridge Jn and Edinburgh. There will not be any addition capacity at Newbridge Junction as a result of EGIP.