

CONSULTATION QUESTIONS

1. Do you agree with our vision and approach? Will they help us to achieve the Scottish Government's purpose of increasing sustainable and inclusive economic growth?

By its very nature, a vision is typically expressed in a way that attracts broad support for its ambition hence the associated approach is often the key to determining its success. In general, we agree with the vision but would offer some comments on the approach since the good outcomes on rail infrastructure only come from an appreciation and skilful interplay of diverse but essential elements of a rail system including infrastructure, rolling-stock, cost control, integration and the overarching operational framework.

To elaborate our thoughts on the approach, we offer some comments based on the four headings (on page 9 of the consultation document):

improved services – faster journey times, strengthened commuter services and effective connections between cities and regions;

Faster journey times are a natural part of an aspirational vision and can help to attract new travellers from competing, less sustainable modes. With proper land use planning this can provide opportunities to connect new residential centres to employment centres supporting local investment and economic growth. However, it must be recognised that faster train services for a particular corridor should not blind us to providing a wider pattern of destinations or providing a consistently reliable service pattern for the network as a whole. The visionary dimension also requires we think about future travel patterns and the potential for changed working practices of commuters by thinking how to better exploit “off-peak” rail services. Also, it is worth remembering that poor reliability against an over-ambitious timetable leads to high levels of passenger dissatisfaction and promotion of “reliability” as a broad objective could prove more attractive and successful.

“Effective connections with regions is far too bland a statement”: while a perfectly laudable aim, we should be considering how we connect all communities with a combinations of public and private transport modes. This highlights the need for stronger alignment of local, regional and national transport policies and strategy. The current reality is that many rail passengers have lengthy journeys just to reach main line stations which requires integrated public transport systems and/or available road and car parking capacity. Part of the vision for effective connections would be to focus on the “network” (rather than corridors) as a more effective means of “selling” total integration. For example, road users are familiar with the concept for trunk roads/motorways representing the highest level in the hierarchy of road provision. A core network (with appropriate standards and expectations) connecting the “Seven Cities” affords such an opportunity to link directly the notion of transport connectivity and economic development.

improved capacity – greater utilisation of network and on-train capacity through investment and high levels of performance;

Greater utilisation of the network to increase capacity implies more trains and/or longer trains. Any measures that boost patronage but result in over-crowding could, however, prove counter-productive. Providing more trains can be accommodated by undertaking timetabling alterations, adding additional tracks and freeing up network bottlenecks at junctions and the like. However, the “fragility” of the operating standard of the (complex) Scottish rail network means that it is very susceptible to perturbations as well as having recognised potential maintenance issues in many locations.

The advent of the promised “Digital Railway” should present a step change in providing additional network capacity. We would encourage Transport Scotland and the Scottish Government to

actively lead the “Digital Railway Revolution” and provide leadership to the industry. It would be entirely appropriate for Scotland to be leading (and not just following) in the development and testing of this new and exciting technological opportunity.

We also believe that previously, too many investments have been undertaken to overcome short term solutions in relation to capacity, future projects need to consider longer term projections and either create capacity based on the forecast, or build in capacity upgrades on current schemes. This will require a potential change in mind-set in terms of business case preparation but, as with high speed rail, we can see there is recognition that capacity should not be ignored in the flight for faster journeys.

improved value - efficiency and value for money, for the taxpayer and the fare-payer and the rail freight customer;

Essentially, the franchise system is designed to maximise the value of the train operations under the ScotRail banner, but given the infrastructure context of this consultation, our remarks are focussed on the procurement and delivery of same. We believe that the efficient delivery of rail infrastructure works requires partnership working between client organisations, train operating companies and the supply chain. There are some ingredients that help create a lively and competitive market and we now refer to the most important factors.

Client organisations need to improve visibility of schemes in order that the supply chain can have visibility of the pipeline of potential work and to allow decisions to be made about investment in new staff, plant and practices. For credibility, clients also need to have a clearly articulated infrastructure requirements which are fully considered within the overall delivery strategy. Inevitably this requires a full project lifecycle understanding and strategy. As CP6 approaches, we are potentially heading towards a scheme development gap which will impact on the start of CP6 delaying improvements that should be commenced earlier in the control period. We also believe the interdependency of many CP6 schemes will require a much higher level of exemplar Programme Management processes and tools than previous control periods. Network Rail and Transport Scotland should collaborate with the supply chain on how to support this.

Lessons should be learned from CP5; to deliver real efficiencies in CP6 true collaboration across the industry is required, many CP5 schemes would have benefited from a deeper collaborative delivery, but, unfortunately, the industry still has “dividing walls” which cause delay and create inefficient working. If we take as a starting point that no single organisation has all the answers, then utilising a collaborative approach to bring the best solution will create higher values for the tax payer. There are concerns also that delivery costs often appear “excessive” and comparisons have been drawn with costs in other countries.

more effective integration - between rail services, and between rail and other transport modes.

Integration lies at the heart of every rail trip. The rail segment is only one part of a “door-to-door” journey that connects different modes to complete the chain of vital links. For that reason, an optimal railway needs to be purposely designed as part of the wider, real transport system. Public transport optimisation is currently impaired by the slow delivery of integrated ticketing which could facilitate multi-modal interchange across the nation.

In terms of integration, it is thought that many existing main line railway stations are not served well by other public transport modes, either due to limited service availability, or poor inter-modal timetabling. Applying the concept of Station Travel Plans to more stations could inform decisions around the potential for optimising station usage, including “badged” bus links and use of environmentally friendly buses. Car parking provision should also be reviewed along with the forecasting methods given the evidence of improved uptake of Park and Ride. We saw the impact of electric train services at, e.g. Livingston North and Uphall Stations where car parking is now over-subscribed, emphasising the potential to be derived from identifying such market trends and providing more parking at strategic locations.

Taking the four elements of approach together, we believe that these dimensions do provide a sensible basis on which to approach a vision for the broad functionality of the Scottish rail network and its infrastructural needs. The real challenge is how to achieve the vision in practical terms, undoubtedly requiring fresher and more responsive mechanisms to deliver better integration and in a reliable fashion. To that end, the timeframe for this forward look demands that flexibility and responsiveness exists to respond to technological and market changes, e.g. Uber impacts, sustainability of supported bus services and possible introduction of Mobility as a Service (MaaS).

2. How might we make trade-offs and prioritise between different types of investments, while ensuring that our actions are aligned with our vision?

Costs are a fundamental of any investment decision and, as already hinted our previous response, cost certainty remains a major issue with many rail projects. In the current period of budget austerity it is obvious that affordability will be a key consideration for decision-makers. Cost control and procurement methods should have a greater focus in this area and an investigation of comparative rail costs (and the reasons) drawn from other countries. Within our own country there may be lessons to learn from the roads industry where the taxpayer is benefitting from a mature supply chain and good partnership working. It is often claimed that rail projects are more complex than road schemes but fundamentally both are linear items of infrastructure and deploy largely similar skill sets; they both have control systems and regulations which are more sophisticated for rail, but the procurement approaches and costs of design development of rail could benefit from streamlining. Checking regimes are understood but the numerous GRIP stages (1-7) contrasts with only 3 DMRB stages for roads. Value Engineering could, and should, play a bigger role in rail scheme development.

In relation to potential trade-offs, there is a professional approach which suggests these should always be explored as part of option development. We have the benefit of a relatively mature STAG process which includes public engagement and third party consultations in the early parts of the appraisal. When seeking value for money and having to compare investment decisions, it is vital that transparency exists around both costs and performance outcomes. When the starting point is a heavily congested rail network, every change to the train operating pattern or infrastructure has (wide-reaching) knock-on effects. In examining scheme options and looking at trade-offs, the context for a project must be well-considered for its appropriateness to meet its agreed objectives. For example, faster journey times may have greater importance for longer strategic journeys between major business centres, whereas accessibility and reliability may be more important in a suburban or rural route. We are all familiar that the introduction of any new station has impacts on existing travellers and route capacity and revised stopping patterns may result in fewer communities being served where journey time is the priority. As already mentioned, capacity enhancement is a major objective and this can also be achieved through the creation of longer trains (as with EGIP).

Whatever approach is adopted in any case, it is important that early transparency of a scheme's need and objectives is well-ventilated so that optimum performance and public expectations are best served.

3. Do you support the move to a more flexible 'pipeline' approach to scheme delivery, that does not force us to make early decisions on a detailed specification prior to the commencement of the five-year regulatory control period, without receipt of a robust business case?

Yes, but more details would be needed to properly consider. Visibility of a project pipeline is a great assist to the industry and supply chain can plan their resources and ambitions accordingly with the help of that information. At face value the ability to break the connection between project delivery and defined project budgets within Control Periods seems sensible. However, from the limited details available, this could still allow projects to drift adding to cost and time. It could also present an uneasy position where projects could be delayed, or cancelled because of third party or political interference in response to a non-transport issue.

It is considered important that Network Rail moves to a nimbler and more proportionate regime for delivery of projects, but this does of course require to reside within the discipline of managing the

risk, especially on larger projects. Our established tools for STAG, HLOS, CPs and business cases lends the necessary stricture, but a proper identification (in its widest sense) and allocation of risks is crucial to achieving a business case that embodies the confidence of all the promoting parties. Historically, significant cost and time delays have been attributed to rail infrastructure projects that commenced with a poor scope or ill-defined strategic aim, and this must be avoided in the future.

4. What are your views on the retention or removal of individual ring-fenced funds?

The current practice of ring-fencing funds does not provide visibility of investment aspirations either to the industry or tax payers. If ring-fenced funds are maintained, they should have a clearly defined output. However, it can be difficult for promoters to understand the plethora of different schemes and their nuanced requirements, and some streamlining of these various funds would be beneficial for all concerned.

5. What alternative sources of funding could be used to help deliver the rail investment programme?

For new infrastructure, there are examples showing how private developments can support improvements to the rail network, e.g. the proposed new stations at Robroyston and Barrhead South. Also, proposed works at High Street Station have seen non-railway specific budgets being made available from the Glasgow City Deal to improve the station. This method of providing alternative funding streams from parties (via Section 75 planning agreements) where demand requires network improvements, should be encouraged. For rail, this approach would be aided with better alignment of Transport and Development strategies at Regional and National levels.

In the current climate, opportunities such as those afforded by City/Region Growth Deals should be pursued, particularly where the rail investment can be shown to boost economic development and job creation. One other possible area for further investigation is contractor-based finance and maintain models, potentially aligned to TOCs for route-wide investments or larger renewal schemes.

6. Do you agree with our approach to emissions reductions and climate change adaptation? What else should be considered?

In general, yes.

Strategic investment in rail freight improvements to reduce HGV traffic on the road network will require a mature and bold step change. Currently freight operators are in effect in competition with each other and with alternative modes of transport in some cases. In order to provide a cohesive freight investment strategy, these competitors require to be incentivised to pool resources and share assets whereby an increased shift to long distance rail freight from road can be created.

The strategy also requires to consider national, regional and local freight requirements and should include how use of hybrid vehicles can be encouraged for local deliveries from rail hub centres.

When considering CO₂ emissions and other key environmental metrics, we should carefully consider the impact of railway products and materials, and the manufacture, delivery, storage, construction/installation and maintenance. All too often, due to compressed project timescales, the benefits which can be extracted from considering these are often ignored. This situation is not aided by the prolonged approval timescales within the industry. Instead of these alternatives being considered at a project level, the industry should move to a concept where continuous improvement and use of new technologies and alternatives should be considered as an industry-wide investment via a mechanism for R&D. This may be worthy of a future ring-fenced fund with key industry advisory panel controlling and managing the initiative.

The consultation document states, "The Climate Change Plan will set out how the Scottish Government will continue to promote strategies to:

- reduce overall demand for transport
- facilitate modal shift to more sustainable forms
- decarbonize vehicles (including train rolling stock)
- make the transport network as efficient as possible".

While the details still have to emerge from the CCP, there are obvious dilemmas when transport is seen as a key driver in economic development and it is a well-blended array of those policy measures that has to be sought to deliver the necessary emissions reductions. To begin with improved modelling of future scenarios would be a good way to plan the way forward and deploying the models to test a blend of measures to get to that objective. The rail network, especially when increasingly electrified, can play a major role in the challenge of climate change but the policy should be wary of bland statements about available train capacity, which is obviously dealing with aggregate data and not the current over-crowded peak situations on several Scottish routes. Bad passenger experiences are unlikely to win over significant volumes to rail if the traveller experience is poor.

Also, our constrained and aged Scottish rail network is susceptible to adverse weather events which are likely to increase in number and severity in future years. Resilience planning will become a regular feature and which one which should be considered within every set of project design requirements. Once again reliability should be seen as a key factor in influencing the mode choices of travellers and it is worthy of greater attention in the development of not just the rail network, but total transport network strategy.

7. Do you agree with the proposed approach to specifying performance outputs?

The current PPM for train performance against timetabled times at terminating stations enjoys a high profile with the travelling rail public but it is apparent that this KPI can be abused, in that performance at intermediate stations can be compromised in order to maintain a high PPM for the route. Furthermore, this particular measure is not really measuring performance for passengers but the performance of a piece of rolling stock, regardless of the patronage on board. Also, without understanding how trains services maintain punctuality throughout their journey, any work on a truly integrated public transport system will be based on assumptions. It is well known that the choice of KPIs drives the behaviours of an operator so it is worth reconsidering if these truly align with not just current, but evolving policy directions. The PPM is often meekly defended as being imperfect but a well understand an industry standard of comparator. With integration high on the agenda, it is perhaps time to think these parameters through more broadly and do a proper comparison between modes, yes – car, bus, lorries and trains – and see how they would compare against equivalent PPM measures.

There appears to be scope, and some evidence of desire within the industry, for performance measures to be revisited to encompass a more relevant blend of features including those listed in the consultation document:

- rail performance and reliability
- service journey time reductions
- increased rail network capacity and capability.

By reporting these in the context of patronage, connectivity achieved and journey times, a fuller picture can be derived and presented in a performance dashboard graphic.

8. How should performance be balanced against the wider priorities for reduced journey times and the full utilisation of existing and new capacity?

The balancing of an integrated and intelligent timetable is key, as is acknowledging the current network constraints and identifying future interventions. For example, it has been recognised for some time that Glasgow Central and Edinburgh Waverley are capacity constrained, although difficult and potentially expensive and disruptive, if we are to secure real network improvements for future generations, tackling these, and other, complex constraints must be undertaken. We wonder if the current timetabling and train service models currently in use are sufficiently intelligent for the complex questions that need to be addressed, (including forecasting the impacts of the new digital Railway? Integration of data is important in order to identify the key constraints to free up capacity and improve journey times.

Given the apparent surprising traffic carryings on new routes and the inability to rapidly enhance the line design, it is suggested that an element of “contingency planning” is fed into the design process so that a modicum of “future proofing” may benefit the capture of unanticipated demand.

9. Do you have a view on our approach to safety? How can the closure of level crossings be better supported?

CIHT stands firmly behind the view that safety is paramount in transport of all modes and supports the substantial lengths that the rail industry takes to achieve the highest possible standards and this should continue to be reflected in the design and operation of rail-based transport.

With regard to level crossings, this (often emotive) subject requires very careful engagement with communities and affected landowners to listen to local feelings and views on the impacts of potential closures. There will be benefits and dis-benefits and transparent assessment of scenarios should aid decision-making through consensus building. Ultimately, the rail authority does have to decide a course of action having weighed up multiple factors including costs, disruption, safety and inconvenience or impact on livelihoods.

It is acknowledged that this a very challenging policy to pursue. It is suggested that the roads directorate may experience similar challenges when discussing new or changed local access arrangements (or accommodation works) on their many trunk road projects and there may be some scope for knowledge transfer between the roads and rail teams in Transport Scotland.

10. Do you support our approach to innovation and new technologies? Please explain your answer and provide any relevant evidence.

The proposed approach is logical although some of the new technologies are already quite mature but the delivery process for, e.g. smart ticketing seems to delivered at what might be described as a gentle pace. It is understood that the current franchise holder, Abellio, has an implementation programme but more transparency on what and when would help to manage public expectations. It is to be hoped that the good, early work (ITSO compliant) by SPT is adding value to the process. On the planning and appraisal side, there still remains work to be done to improve the forecasting of demand for new stations and services, as well as a deeper understanding of some the wider, micro-economic benefits that are not currently captured but which are pertinent to the business case for certain proposed opportunities.

As mentioned earlier the “Digital Railway” presents significant opportunities, and we encourage the Scottish Government to help position Scotland’s Railways as a potential leader in this field. Further roll-out of free wifi on all routes and upgraded real time passenger information should both be priorities. Generally, the commitment to technology should be maintained since many of the advancements in transport will rest on personal smart technology. It is very likely that Mobility as a Service (MaaS) – involving a travel integration service for all journeys - will appear during the coming planning period and it would be good to see Transport Scotland set the pace on this multi-modal opportunity.

11. Do you have any other views on how innovation could be better supported through the HLOS process and Network Rail’s broader management of the rail infrastructure?

Visibility of a pipeline of schemes is a good starting point since it instils confidence in the supply chain and potential innovators to take a long-term view and justify a degree of investment in new thinking.

During CP5 significant work was delivered through supply chain Frameworks, some of which were very limited in terms of organisations appointed in Scotland, thereby restricting the available supply chain resource pool in many instances. Lessons from this should be applied to CP6 procurement strategies and tenderers’ commitments to innovations ought through pre-qualification processes.

Historically there has been a tendency for Network Rail to appoint organisations to Frameworks, only for a defined work bank to not be in place, causing delay and frustration. The creation of a work bank (or Preparation Pool in the world of roads) in support of Frameworks is key for a collaborative environment. Having visibility of a work bank also allows organisations to invest

locally in support of that firm workflow and generally become engaged as part of the supply chain community.

A new feature of the current Scotland franchise is the creation of the Deep Alliance between Abellio and Network Rail. To date there is little public evidence of the merits of the current arrangement (commercially confidential) but the arrangement does offer a golden opportunity for the Scottish rail delivery bodies to present a highly integrated offering to the Scottish public which places the passenger at the centre of the rail revolution in Scotland. Such thinking suggests there would be merit in seriously considering the creation of "Network Rail Scotland" for reasons of public accountability and that fact that all its funding comes via the Scottish Government (except for cross-border services)?