

Report to Partnership Meeting 13 April 2017

RESEARCH AND STRATEGY DELIVERY

Rail Update

Purpose of the Report

This report provides members with information on the various rail workstreams being undertaken by HITRANS.

1. Train2Ride

Consultants Aecom have been appointed to carry out this piece of work. survey work. The consultant will carry out a study to establish current level of demand for on-train cycle carrying on ScotRail services on the West Highland Lines and on Serco Caledonian Sleeper services to Inverness and Fort William, to establish the associated benefits of rail/cycle visitors and to identify future trends and options for managing the demand.

Our funding partners are Transport Scotland.

The consultant will engage with VisitScotland, Sustrans, Cycling Scotland and other cycling organisations.

The project features in CAPS 2017- the Cycling Action Plan for Scotland:

Key Objectives

1. An understanding of current demand through the reservation system (data will be available from ScotRail) for Glasgow-Oban/Fort William/Mallaig
2. An understanding of current demand through the reservation system (data will be available from Serco) and Euston-Ft William/Inverness
3. An appraisal of cycle carrying conditions in the UK and Europe
4. An appraisal of the value to the area of cycle tourism

Surveys

On train surveys/observation of summer peak on two/three days, covering all WHL services and the sleeper services will be carried out under separate contract from HITRANS by UHI Fort William Travel and Tourism students. The consultant will liaise with Dr Steve Taylor, Centre for Recreation and Tourism Research, West Highland College University of the Highlands and Islands' and jointly formulate the survey methodology. A key output will be reconciling reservations with actual use.

2. Skyefall - Road Rail Solum Sharing on the Kyle Line

HITRANS has appointed consultants Mott Macdonald to investigate the feasibility of road and rail sharing the railway solum in the rockfall area of the Stromeferry bypass beside the Kyle railway. Options 5, 6 and 7 in the paper previously circulated are to be considered.

Key Outputs

1. An understanding of the current problem.
2. Recommendations on the management of demand for both road and rail traffic on the shared solum (including rail charter and freight traffic).
3. Reports on signalling, safety and operational implications.
4. A review outlining rolling stock options.

Background

HITRANS has been investigating the possibility of sharing the railway solum with road vehicles in the rockfall area west of the Stromeferry bypass. The rationale for this is:

- The 2012 experience may recur
- Increased interest in tram trains, with a Rotherham trial underway
- Evidence of UK corridor sharing
- A need to consider lower cost rural rail operations that are tourist friendly
- Increasing capacity and frequency of the route, currently constrained by a 45 minute section Strathcarron-Kyle

Options considered

The site visit identified that the delivery of geotechnical engineering works that are required to provide a full length, at grade interlaced rail and highway section, or a number of discrete interlaced rail and highway sections presents no significant engineering problems, other than the risk of rock fall and the requirement for the development of an appropriate rail and highway traffic management system. A number of options were identified for consideration to define the scope of a feasibility study, and 5,6,7 were selected for further investigation.

5. Permanent version of track sharing

Permanent version of the 2012 temporary track sharing arrangement would require similar barrier arrangements to enter the shared section with the use of modified signalling to replace the Controller of Site Safety (COSS).

6. Convert shared section to tramway

Convert the shared section to a tramway, using line of sight operation with an integrated tramway/highway interlocked traffic management system, designed to clear the section for the train within the RETB section which is activated by a treadle placed a sufficient distance ahead of the entry point to allow the section to be cleared of road traffic; rail vehicles would be fitted with track brakes.

7. Convert whole route to a tramway

Convert whole route to tramway operation and either operate as a dedicated service from Dingwall with trams, or operate from Inverness with tram train vehicles. This allows the RETB section to be replaced and operated as per 5 and 6 above, however only special

traffic vehicles designated to operate over tramways, or operated with special road closure arrangements would be allowed.

The shared options were originally not progressed by URS as it was believed that the safety risk would be unacceptable to Network Rail, in spite of all being significantly cheaper than the by-pass options. Recent developments in introducing tram trains to the network, and the now operational example on the Welsh Highland Railway (WHR) in Porthmadog, make revisiting these options realistic.

Historically shared operations for bridges have been used in the past, see <http://movingimage.nls.uk/film/5122>

Rotherham will see the UK's first tram train pilot in 2017. Also, a number of examples of heavy rail trains sharing roads still operate in the Americas and mainland Europe.

Additional Information

The rail option would require or benefit from the following:

- A retaining wall between the road and the cliff to catch falling rocks;
- A parapet on the lochside to prevent vehicles being pushed into the loch in the unlikely event of a collision;
- A segregated carriageway for non-powered traffic e.g. walkers, cyclists; and
- Splitting the current RETB section between Strathcarron and Kyle of Lochalsh at Stromeferry.

The option selection process should also take proposed growth into account. With the current ScotRail fleet of Class 158 vehicles approaching 30 years in service with an expected life of 40 a new fleet will be required. From the current franchise commitment this is likely to be a "scenic train" offering passengers better views of the route, potentially with an increased frequency, possibly up to 8 each way per day. Adopting the shared tramway options would strengthen the case for new rolling stock as the Class 158s are unsuitable for retro fitting magnetic track brakes, a requirement for tramway operation. A modern light rail vehicle that can operate as both a tram and a train could with a suitably designed interior meet the "scenic" specification. The improved performance (acceleration and braking) would deliver improved journey times with potential for increasing the line speed on some sections of the route. However special working arrangements will be required for conventional trains without track brakes.

3. Midnight Train to Georgemas MT2G

Scottish Internal Sleeper Pre-Feasibility Study

Systra have been appointed into the feasibility of running an internal Scottish overnight rail service from Caithness to Edinburgh/Central Belt and vice versa.

Key Outcomes

1. An investigation of current passenger and freight markets and connectivity from Orkney/Caithness to Central Belt.
2. An understanding of train pathing to permit MT2N to operate, including access to Central Belt for pax and freight, including Rules of the Route.
3. A review of possible rolling stock and traction.
4. An appraisal of freight opportunities.
5. A review of mixed train operations.
6. Indicative costings for the service.

Background

Some early discussions have been held with Serco Caledonian Sleepers about the feasibility of running an internal Scottish Sleeper service from Caithness (for Orkney) to Central Scotland, greatly improving connectivity for some of the remoter parts of the country. With the retendering of the Northlink contract in 2018, MT2G may provide an alternative way of planning public services.

Sleeper trends

As noted in Sleepers Uncoupled, while Western European sleeper services are on the decline, notably in France and Germany, the UK is bucking the trend with new investment.

Scottish sleeper operations

Northlink operator Serco hold the current 15 year sleeper franchise, from 1 April 2015. New vehicles from CAF are under construction in Spain, and refurbished locos provided by GBRF have been deployed. The Caledonian Sleeper is formed of two cross-border trains in each direction per night, the Lowlander serving Glasgow and Edinburgh, and the Highlander serving Aberdeen, Fort William and Inverness. All train convey seated portions in addition to berths. The current Mark 3 fleet of sleepers will be redundant in 2018 when the Mark 5 vehicles replace them. CS MD Peter Strachan has already expressed interest in serving Oban.

Scottish internal sleeper

What would a Caithness sleeper look like? An overnight service of perhaps 2 sleeping cars, 2 seated vehicles plus lounge car could leave 1930 from Thurso and call at Inverness 2330, Aberdeen 0230, arriving Edinburgh 0530. In the return direction it could leave Edinburgh at 2350, calling at Aberdeen 0300, Inverness 0600 and Thurso 1030 (removing the need for the 0702 Inverness-Wick ScotRail service).

Traffic would be not just be Orkney and Caithness visitors and residents, but also Easter Ross/Inner Moray Firth and Aberdeen City and Shire. Currently Invernessians needing to be in Edinburgh early the next day have a last departure at 2015 followed by an overnight. How does it compare to the West of England sleeper? The Thurso-Edinburgh rail journey of 328 miles takes 7h10, the road equivalent being 263 miles in 5h24.

Mixed views

A key advantage would be for the train to carry freight, providing baseline income for the service all year round. Intermodal traffic was conveyed to Caithness/Orkney for Safeway in the late 1990s/early 2000s. In 1984 containers were carried between Wick and Aberdeen on passenger trains. The ability to carry perhaps 4 x 40' and 2 x 20' boxes on twin wagons would provide welcome revenue with retail products and parcels north, locally produced food south. However freight needs terminals, and while Georgemas can provide crange, the train would have to get out of Waverley shortly after arrival to get to Grangemouth/Coatbridge for freight and somewhere else for sleeper carriage servicing. There would be no lounging about in berths after 0600!

RISK REGISTER

RTS Delivery

Impact – Positive.

Comment –These projects are likely to feature in the RTS Refresh

Policy

Impact – Positive

Comment –Optimisation of the rail network, mode shift and active travel

Financial

Impact – Neutral

Budget line and value – This item has financial costs.

Comment –This research/feasibility work is fully funded through the CP5 Rail budget line.

Equality

Impact – Positive

Comment –No equalities issues

RECOMMENDATIONS

1. Members are asked to note the report.

Report by: Frank Roach
Designation: Partnership Manager
Date: 4 April 2017