

## **Report to Partnership Meeting 27 November 2015**

### **RESEARCH AND DEVELOPMENT**

#### **BRANCHLINER**

##### **Purpose of Report**

This report provides Members with information on the Branchliner project.

##### **Freight Operations**

Deltix Consultants together with HITRANS have now reviewed all five Freight Operating Companies' submissions on expression of interest. See Annexe 1 below.

Discussions are ongoing with forestry owners in the Kinbrace area on the creation of an alliance or joint venture to permit a single customer interface with the rail industry. In the meantime, HITRANS will continue to fulfil the role of 'virtual customer', taking the dialogue and analysis forward towards a formal tendering process.

The aspiration is to operate the longest possible daily trains within the line's gross trailing load limits (and potentially with over-length working beyond 50 SLUs), using slip working at a full-length Kinbrace terminal with internal rounding facilities. Recent advice from NR suggests that freight service intrusion into night-time engineering possessions may be problematic, but this is an issue – amongst others, such as day-time pathing and the Inverness terminal availability – which will need to be talked through by FOCs and NR.

The ultimate aim is to install a conventional connection to the Kinbrace terminal sidings but this may not be achievable before 2018. Given the early demand for transport of substantial quantities of wind-blown timber to Inverness, this underscores the importance of establishing robust interim measures at Kinbrace – and the aspiration is therefore to secure completion of a NICS-connected terminal by mid-2016. The NICS kit has been endorsed by NR engineers, but awaits operational approval on the basis of site-specific safety cases. Details of the kit and concept are available on <http://nicsrail.com> and a working example can be viewed on London Underground by arrangement. If NICS did not get approval, then lineside loading would be a fall-back short-term contingency to bridge the gap until conventional connection.

##### **Network Rail**

A very useful meeting was held on 27 October with Network Rail's Scotland Freight Manager and the Branchliner rail team. Five areas were covered:

##### **Kinbrace**

Two main line connection options presented, with a single connection (which is suitable for the current plans) estimates cost £1.6m - £2.6m. The connection site is well clear of crossing strike in treadle. The timescale for delivery is 18 months to two years. It will need new signalling token sections to allow access to the ground frame, and may need a radio signal boost.

### Non-Intrusive Crossover System (NICS)

NICS is not Type Approved for use on the main line. (risk of derailment), however, there is not an issue within a blockade. The approval process is with NICs having been rejected in 2008. There are currently no “champions” within Network Rail for NICS.

### Lineside Loading

NR is not opposed in principle. There is concern about track fixity with the risk of constant lateral forces causing the track to move. Monitoring may be an appropriate mitigation, rather than fixed works. There are also concerns about staff safety, lighting and good underfoot conditions required.

### Inverness

Most of the yard is owned by NR Property having been bought from DBS, however we are assured that negotiations will be with NR Freight not Property. NR locally and National Supply Unit (NSU) use the hard standing we propose to use. The out of use sidings are available but will require relaying as removing the trees will wreck the existing track. There is a lot of space between No 6 road and the boundary. As they have been bought they are not part of the “network” so costs will fall to the proposer, but NR are keen to enhance the freight capability at Inverness. The Local Delivery Unit is concerned about staff safety with freight operations adjacent.

### Train Working

An issue will be running at night, with no erosion of the current night time closures deemed acceptable. So the need will be to run when passenger trains are running. This suggests the need to keep to RA5 to keep train speeds up (bogie wagon up to 76 tonnes). Most locos are RA6! 66s are RA7. Most of the higher RA speed restrictions are due to track rather than structures. We need to consider the shunting operations at Inverness, especially in view of the access changes to the Needlefield Yard.

### Next Steps

The project will require the preparation of a Client Requirements Document for Kinbrace. This establishes the client relationship with Network Rail, from then costs are incurred. This will need some funding need to consider the scope of the work to get to GRIP3. We can specify NR to deliver, or seek Asset Protection as a third party.

Further contact is needed with FOCs re train working: times of operation, line speeds, facilities at Inverness, as they will have their own and differing views.

### **Owners/Agents**

A meeting was convened on 28 September by Forestry Commission Scotland, attended by representatives of the landowners in the Flow Country and Cooperative Development Scotland. HITRANS presented on Branchliner, with Highland Timber Transport Group on the road situation. The prospect of weight limits was discussed.

The concept of an alliance of owners, pooling resources and interests in order to overcome the restrictions on the road network was considered for further discussion.

### **Highland Council**

HITRANS and HTTG are to present to Caithness and Sutherland councillors on 30 November and 7 December. This a key opportunity to brief members on the project and to explain the impacts on the road network if unconstrained access is to be permitted.

## Scottish Government Rail Freight Strategy - Delivering the Goods

Transport Scotland has started the public consultation towards a rail freight strategy for Scotland.

The consultation period will run until Friday 22 January 2016. Following this an analysis of the responses will be undertaken drawing on contributions and ideas, before publishing a final rail freight strategy.

<https://consult.scotland.gov.uk/transport-scotland/rail-freight-strategy/>

The consultation document primarily focusses on the opportunities and actions for growth in new and existing rail freight markets, making clear the positive contribution that the industry makes to Scotland's economic growth and social wellbeing. It also places an emphasis on the need for the rail freight industry, its partners, customers and the Scottish Government to work together to create the right environment for a sustainable, vibrant future for the industry.

Timber is mentioned specifically- there is an action "to work with partners including Forestry Commission Scotland to explore the potential opportunities around timber transport and rail"; and a desire to support innovation through a fund for pilot initiatives. Lifting the Spirit is noted as valuable case study.

### Recommendation

1. Members are asked to note the report and to consider HITRANS' role in the further development of the project.

<b>Risk</b>	<b>Impact</b>	<b>Comment</b>
RTS delivery	√	This project fits well with a number of RTS Horizontal themes.
Policy	√	This project has integration and environmental benefits.
Financial	√	This project is fully funded
Equality	-	No impact on equalities issues.

**Report by:** Frank Roach  
**Designation:** Partnership Manager  
**Date:** 18 November 2015

## Annexe1

### **Deltix: KINBRACE TIMBER TERMINAL: A SIGNIFICANT OPPORTUNITY FOR SCOTTISH RAIL FREIGHT**

Despite an annual harvest of seven million tonnes, no timber is carried by rail in Scotland. The market for the proposed Kinbrace terminal is some **100,000 tonnes pa** to Inverness and beyond, over a period of around **10-15 years**, conveyed on a **daily train service** over some 40 weeks pa – thereby avoiding significant road damage impacts. The forest industry in the Kinbrace area is being encouraged by HITRANS to innovate in order to facilitate rail haulage – by developing an alliance or joint venture of forest owners to operate the terminal and to contract with a rail haulier. The rail industry will also need to show flexibility, in line with Transport Scotland's (TS) observations in its current Rail Freight Strategy consultation document that "innovation will be the key to unlocking transportation of timber by rail" and "[we are] keen for the industry to come forward with proposals for pilot initiatives".

#### **Key project objectives:**

- highly efficient train working in order to achieve the lowest possible rate per tonne, thus minimising any need for ongoing Mode Shift Revenue Support grant from TS
- safe train operation and safe terminal operation.

#### **Key train operation principles:**

- the optimum train operation, recognising the limitations of the Far North Line (eg Gross Trailing Loads (GTL), loop lengths, and engineering access requirements)
- maximisation of train payload consistent with the loco capability, but also seeking to take advantage of, for example, over-length working to drive down unit costs
- facilitation of round-trip working from Inverness within one driver shift.

#### **Key Kinbrace terminal Issues:**

- terminal time to be reduced to the minimum by use of two rakes of wagons (empties in, loads out) and associated 'slip working'
- terminal designed to simplify train operations, with two double-ended loading sidings and an internal run-round loop
- sidings and run-round length of up to 400m+ each, to facilitate maximum train length within GTL limits, including possible use of intermodal wagons
- loading to take place during the day, providing safer terminal working, forest working and road vehicle movements.

#### **Rail industry response to date:**

- all five main rail hauliers responded to a questionnaire seeking further intelligence on their experience, expertise, and likely capacity and capability for this flow
- HITRANS has selected four of the hauliers with whom to continue the dialogue, moving towards an invitation to tender from the new forest industry alliance
- discussions are proceeding with Network Rail through Anne Mackenzie.

#### **KEY TIMESCALE ISSUES:**

1. A new ground frame connection at Kinbrace is required, linked to Inverness Signalling Centre, ideally for the 2017 season, but certainly no later than 2018.
2. The innovative Non-Intrusive Crossover System (NICS – [see overleaf](#)) is required at Kinbrace to enable rail to handle market requirements over the 2016-17/18 period, since 'lineside loading' has been ruled out as a core interim option, due *inter alia* to its requirement for night-time working and extra train crew resources.

## Annexe 2

### **Summary**

- *Windblow has created new problems for timber transport in the Flow Country.*
- *Voluntary limit of 10 trucks per day (6 south, 4 north), while demand rises to 50.*
- *Highland Council may move to protect the road.*
- *Timber needs to be extracted while it has value, and the economic benefits to the area are captured.*
- *New freight grant valuation for single track A roads can provide £8/t support.*
- *Landowners/Harvesters could form an alliance to manage operations co-operatively.*
- *Rail operations may well be lineside loading in the first instance, but other options will be explored.*
- *An alliance could provide a partnership for filling train space in conjunction with road space allocation.*
- *Branchliner 1 £30k funding can kickstart the process.*

### **Branchliner 1 Outline**

*Branchliner 1 received an STTS award of £20k matched with £5k from each of HITRANS and FCS in order to investigate rail from the Flow Country.*

*Over the next 10-15 years the timber industry needs to transport 4 million tonnes of timber from the wider Flow Country catchment to distant markets. This will have consequences for the fragile public road network, the environment and the neighbouring communities. The carrying capacity of the road network is a major constraint. The Highland Timber Transport Group's Flow Country Strategy 2014-16 highlights the still unrealised potential for rail to play a part.*

*This investigative study is a first phase which, if it proves positive, will lead towards a demonstrator project that will trial timber deliveries by rail.*

*HITRANS will bring together a high level strategic group to establish the importance of the issues at stake – the environmental peatland interest, the economic timber interest and the critical infrastructure constraints – and to ensure there is commitment to finding a viable solution. This group will set the context for and agree a brief for consultants to develop the options and make recommendations.*

*The consultants will gather existing knowledge and experience of timber transport by rail in the UK to see how it can be best applied to the Far North Line. They will establish gaps in knowledge and understanding of physical, cost, logistical, environmental and community issues and, where necessary, commission consultancy services to fill these gaps.*

*Suitably experienced consultants will investigate the optimum location and size of loading facilities, the cost of their upgrade or creation. It will take account of train lengths, terminal operation and train path metrics and consider the role of demountable ISO flatracks, conventional dedicated timber wagons and freight multiple units.*

*All options will be reviewed, to determine the costs and to identify any logistical barriers to delivery of Flow Country timber by rail to Inverness and beyond. The environmental benefits of mode shift to rail from the Flow Country will be calculated. A significant development occurred recently with the DfT decision to value the Mode Shift Benefit value of single-track A roads (with passing places), at £2.35 per lorry mile rather than the standard A road's £0.82 per lorry mile which are found in some parts of peripheral north and west Scotland. Timber moving by rail to Inverness from the Flow Country could attract £8 per tonne in support.*