MEETING: RSSB Board Meeting
DATE: 08 May 2014
SUBJECT: Platform-Train Interface (PTI) strategy: update
SPONSORS: Neal Lawson and Colin Dennis
AUTHORS: Emma Pickard and Helen Costello

1. Purpose of paper

1.1 This paper provides the board with an update on the progress being made with the development of the Platform-Train Interface (PTI) strategy for the GB mainline railway. The board is asked to endorse the terms of reference for the PTI Strategy Group (PTI SG) and note the progress being made with the development of the strategy.

2. Background

2.1 At the September 2013 board meeting, the board approved the proposal for the development of a PTI strategy for the GB mainline railway and endorsed the creation of a cross-industry PTI SG to support in its production. Available to view at: http://www.rssb.co.uk/Library/about-rssb/2014-proposals-development-of-gb-strategy-managing-platform-train-interface.pdf

2.2 The PTI SG has been established chaired by Neal Lawson, Director of Maintenance and Operations Services, Network Rail and has full cross industry representation including LUL, ORR and DfT. The PTI SG has now met twice in December 2013 and March 2014.

2.3 The core aim of the PTI strategy is to reduce safety risk and optimise operational performance and availability of access in a manner that promotes the long-term best interests of the mainline railway system. The strategy aims to identify both short and long term deliverables for the mainline railway system as a whole for:

- New railway developments/major renewals, and
- Existing stations and rolling stock

3. Progress to date

3.1 The programme of work includes all the aspects of engineering, operations and passenger behaviors necessary to deliver a coherent PTI strategy for the industry.

3.2 The terms of reference for the PTI SG is presented in Annex A which the board is asked to review and endorse as the basis for the continued development of the PTI strategy.

3.3 The proposed plan for the development of the PTI strategy is presented in Annex B.
3.4 Detailed data analysis and research undertaken to better understand what factors affect safety risk and operational performance at the PTI in terms of both the causes of events and the most effective mitigations.

3.5 Development activities

3.5.1 It has been recognised that a number of theories identifying causal factors to risk at the PTI exist across industry. To understand these and build confidence in the causal factors we have taken the following approach:

- Developed hypotheses to identify contributory factors affecting risk at the PTI.
- Designed a number of trials at a small number of stations to support the development of the hypotheses and test the workstream outputs. Ten stations have been selected and trials will commence on 6 May 2014.
- Started collecting **good practice** from around the industry. This is alongside, the proposal TOM SC is sponsoring to create a new document to set out operational good practice guidance.
- Updated and reissued the RSSB Special Topic Report on Risk at the platform-train interface, first produced in 2011. The same data that formed the basis of this report was subject to a SMIS narrative coding exercise.
- Undertaken a series of workshops to identify contributing factors to PTI risk; including generation of hypotheses that will be tested against the data and information collected. The operations workstream particularly focused upon the impact upon performance, capacity, cost and accessibility.
- Completed the SMIS narrative coding exercise and first findings of the passenger behaviours workshop. Both recommend that the strategy should focus upon the following behaviours:
  - Physical mistake (e.g. misjudges step, loses balance and illness or collapse leading to physical mistake)
  - Rushing behaviours
  - Lack of awareness
  - Too near the edge
  - Multiple trips on/off train for luggage

3.5.2 Activities taking place to support the strategy development at the trial sites are aiming to improve the information and data available to better understand the risk these trials include:

- Close call. An expansion of the existing Network Rail system.
- Post-incident review. Detailed review with station staff following an incident to obtain quantitative incident data.
- Observational review. Observation of public and passenger behaviours in stations and on platforms including interviews with passengers to better
understand interactions and associations with station environment.

- Good practice comparison. Using the information gathered from all TOCs, work will be carried out to compare various mitigations employed at the trial stations.
- In conjunction with project T1037, see below, detailed work at each of the trial stations will take place on passenger stepping distances and gauging constraints.

3.5.3 A number of associated RSSB Research and Development projects have been initiated or brought into the work of the PTI SG:

- T1037 - Train passenger footsteps investigation to support research into the reduction in passenger stepping distances and gauging constraints. This project examines the range of passenger footstep positions for vehicles in GB in order to inform options for how to best improve stepping distances in terms of infrastructure works, vehicle fleet deployment/cascade/modification and new vehicle design.

- T1029 – Train dispatch tool. This project will provide a train dispatch risk tool that will be adopted by passenger train operators and widely utilised. Work is underway with Network Rail to establish whether completed risk assessments can be fed into a national database to establish an overview of total dispatch risk.

- T1063 – Platform recess. An investigation into whether the minimum recess of 300 mm for new or altered platforms is suitable for people to move into and be clear of a train.

- T1053 - Evaluating platform gap fillers.

- R595 - Evaluating the use of on-train DOO monitors during station departures.

3.6 Further development activities

3.6.1 An innovation workshop will take place in mid-June.

3.6.2 The operations and engineering workstreams will now focus on development of a target engineering and operations system for the long term future of the railway.

3.6.3 Options for the delivery of media campaign are being examined; it is felt that there would be value in developing an industry approach to run a media campaign. The focus for this activity is around the use of social media and the opportunity to ‘sell’ safe behaviour and improve awareness amongst the public of both risk and mitigations. A scoping exercise is currently underway.

4. Communications

4.1 A road-show industry briefing will take place between July and September 2014. This will be a key opportunity to gain industry buy-in and comment upon the first high-level outline of the strategy.
4.2 The presentations will be delivered by members of the strategy group and will update industry on the key activities and outputs to date.

5. Recommendations

5.1 RSSB board members are asked to:

- **NOTE** the update contained within this paper
- **ENDORSE** the Terms of Reference
- **NOTE** that a further update will be provided to the board at the November 2014 meeting.
ANNEX A

Proposed Terms of Reference

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<tr>
<th>TITLE:</th>
<th>Platform Train Interface Strategy Group (PTI SG) Terms of Reference (ToR)</th>
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**GOVERNANCE AND ADMINISTRATIVE ARRANGEMENTS**

**GOVERNANCE:** The PTI SG ToR will be approved by the RSSB Board (to be presented at May 2014 meeting).

**FREQUENCY:** Quarterly - 3 hours (Maximum), up to 1 year

**CHAIR:** Neal Lawson, Network Rail

**DEPUTY CHAIR:** Mike Carr, Network Rail

**MEETING MANAGER:** Helen Costello (Programme Manager) RSSB

**Core Members:** Network Rail (Emma Pickard [Sponsor], Louise Ward, Colin Newsome), TOCs (Lesley Heath [East Coast], Sharon Vye-Parminter [South West Trains], Des Lowe [CrossCountry]), ATOC (Peter Lovegrove), RSSB (Steve Roberts, Bridget Eickhoff) ROSCOs (Andy Course [Eversholt]), LU (David Canham), DIT (Tim Kendell), ORR (Donald Wilson)

**Alternate Members:** TOCs (Nick Hortin [First], Colin Morris [Southern], Peter Bowes [Virgin]), RSSB (Colin Dennis)

**[External guests: Where appropriate, PTI SG may invite external guests to contribute to specific topics to further the work of the group]**

**Location:** RSSB offices, Angel Islington, London

**CONTEXT**

- The PTI SG was established following the decision of the RSSB Board in September 2013.
- The PTI SG will be disbanded once the strategy has been created and supported by the RSSB Board.
- Subsequent delivery of the strategy will be governed and overseen by the cross-industry System Safety Risk Group (SSRG).
- The PTI Programme Group, created by RSSB and Network Rail, will support the PTI SG during the development of the strategy and subsequently SSRG during delivery. The PTI Programme Group will consult with / include rail industry specific subject matter expertise as required to support the activity.

**PURPOSE of the PTI SG**

The purpose / objective of the PTI SG shall be to develop an industry agreed strategy for the PTI that:

- reduces safety risk and optimises operational performance and availability of access in a manner that promotes the long-term best interests of the mainline railway system
- reflects the wide range of performance and engineering issues surrounding the PTI
- accounts for both the short term and long term needs of the industry
- defines the research, where appropriate, needed to develop and deliver the strategy
- has industry buy-in for the implementation of the strategy

In delivering this objective RSSB Board has requested the group to specifically consider:

- proposals for developing and implementing a national media campaign designed to influence public behaviour on stations and at the PTI

The funding arrangements or proposed funding arrangements for any actions that are recommended should be identified.

**SCOPE**

- The strategy will:
  - Focus on safety, performance and access issues that impact on the PTI.
  - Address fatalities and weighted injuries (FWI), which includes: fatalities, major injuries, minor injuries and shock and trauma. The current risk associated with PTI incidents is 10 FWI per year on average.
  - Address the issues relating to the continued compatibility of freight vehicles with the stations on the network
- Events in scope:
  - Person trapped in train doors
  - Slip, trip or fall across the platform-train interface
  - Contact with train exterior while on platform
### RELATIONSHIPS

PTI SG will have relationships with:

- The RSSB Board
- RSSB (RSSB will be the joint delivery resource for the PTI SG and the meeting manager)
- Network Rail (Network Rail will be the joint delivery resource for the PTI SG)
- RSSB will ensure that other relevant parties who are concerned with the management of the PTI system are updated as required during the strategy development. These parties will include:
  - Freight and other non-passenger train operators
  - Other industry groups as necessary
- DfT for the PTI specification for new/upgrade projects

### OPERATION

**Administrative support**

- Produce the draft minutes and action list for approval by the chair 1 week after the meeting – Mtg Mgr.
- Send out chair approved minutes and action list to members 2 weeks after the meeting – Mtg Mgr.
- Prepare draft agenda to be approved by chair using template 4 weeks before the meeting - Mtg Mgr / Chair
- Request inputs for pack 4 weeks before the meeting: deadline for submission, 2 weeks before meeting – Mtg Mgr.
- Review action list and follow up actions 5 weeks before the meeting - Mtg Mgr.
- Compile meeting pack 2 weeks before meeting – Mtg Mgr.
- Send out meeting pack 1 week before meeting - Mtg Mgr.
## Proposed timeline for the development of the PTI strategy

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<thead>
<tr>
<th>March</th>
<th>April</th>
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<td>5 March PTI SG</td>
<td>16 April PTI Call</td>
<td>3 June PTI SG</td>
<td>8 May Update to RSSB Board</td>
<td>15 July PTI SG</td>
<td>3 Sept PTI SG</td>
<td>15 Oct PTI Call</td>
<td>4 Dec PTI SG</td>
<td>15 Jan PTI Call</td>
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### Drafting of strategy

- **Start** 17 April
- **Industry engagement**
  - 8 April SMIS Data analysed
  - 11 April Prioritised hypotheses, data & mitigations - First stage complete
  - 26 May Deep dive at stations begins
  - 25 April Engineering & Operations Target systems workstreams start work
  - 7 June Consultation starts
  - 3 Sep Engineering and Operations update to SG

- **26 June** 1st draft (high level outline) strategy complete
- **21 Oct** Deep dive work streams complete
- **30 Oct** Detailed scope agreed
- **18 Nov** 2nd draft strategy complete
- **30 Jan** Final version strategy complete

### Events
- **26 March** Reports published from Footsteps project (T1037)
- **26 June** Industry engagement begins
- **8 April** Deep dive at stations begins
- **11 April** Prioritised hypotheses, data & mitigations - First stage complete
- **25 April** Engineering & Operations Target systems workstreams start work
- **7 June** Consultation starts
- **3 Sep** Engineering and Operations update to SG
- **18 Nov** 2nd draft strategy complete