

Oliver Stewart
RAIB Recommendation Handling Manager



28 October 2022

Mr Andy Lewis
Deputy Chief Inspector of Rail Accidents
Cullen House
Berkshire Copse Rd
Aldershot
Hampshire GU11 2HP

Dear Andy,

RAIB Report: Track worker near miss incidents at Camden Junction South, London on 28 February 2017

I write to provide an update¹ on the action taken in respect of recommendation 3 addressed to ORR in the above report, published on 27 November 2017.

The annex to this letter provides details of actions taken in response to the recommendation and the status decided by ORR. The status of recommendation 3 is **'Progressing'**.

ORR will advise RAIB when further information is available regarding actions being taken to address these recommendations.

We will publish this response on the ORR website on 31 October 2022.

Yours sincerely,

A handwritten signature in blue ink, appearing to read 'Oliver Stewart', written in a cursive style.

Oliver Stewart

¹ In accordance with Regulation 12(2)(b) of the Railways (Accident Investigation and Reporting) Regulations 2005

Recommendation 3

The intent of this recommendation is to reduce the exposure of track workers to risk arising from the need to be on track to place or remove possession limit boards and detonators.

Network Rail should, as part of its Track Worker Safe Access Strategy, critically review the possession management process and, where appropriate, reduce the need for staff to be on the track for the purpose of taking or giving back a possession (paragraph 102b). This review should include consideration of newly developed technologies such as remotely operated track circuit operating devices, and the scope for enabling track workers to protect themselves by interacting directly with the signalling and/or train control system.

ORR decision

1. Network Rail has reviewed existing and newly developed technologies to find a better solution for taking and protecting possessions that would reduce the need for staff to be on track to place possession limit boards and detonators. Radio Based Limited Supervision (RBLs) technology is being developed as the long term solution. TPWS signals are being investigated as a reliable interim measure that could be deployed quickly.
2. Network Rail is considering the risks involved with using TPWS on existing signals. There is a potential risk using TPWS in a way it was not originally designed for, such as when not fitted to a signal. AECOM has analysed the risks and produced a report and recommendations. Only around half of signals with TPWS are in an appropriate location to protect a possession. Test sites have been established at Doncaster station and MML south.
3. Funding the ongoing research is proving challenging, although the potential savings are significant. Network Rail has noted the system for taking possessions on HS1 is among the best in class, although as the whole railway was designed with that system in mind there are limits to what can be used more widely on the existing network.
4. Network Rail will fit OBP to 300 of the 600 trains used in possessions. ORR has witnessed the equipment being tested on the West Somerset Railway using a Class 150 fitted with TPWS. EVC is being fitted on yellow plant on the East Coast Main Line. Both OBP and EVC use the same language, so any conflict should be possible to resolve.
5. A significant challenge will be moving On Track Machines (OTMs) and engineering trains. The long term aspiration will be to use RBLs flex T3. To protect a possession TPWS and signal disconnection will be used.
6. We are encouraged by the significant work Network Rail has put into improving possession management and reducing the need for protection to be set up by staff on track and wanted to update RAIB on the progress made. As the work is

still ongoing, the status of the recommendation remains 'progressing' and we will aim to provide a further update once new technology and processes are implemented.

7. After reviewing the information provided ORR has concluded that, in accordance with the Railways (Accident Investigation and Reporting) Regulations 2005, Network Rail has:

- taken the recommendation into consideration; and
- is taking action to implement it

Status: Progressing. ORR will advise RAIB when further information is available regarding actions being taken to address this recommendation.

Previously reported to RAIB

8. On 28 November 2018 ORR reported the following:

Network Rail have provided information about the general approach and long term goals for improving the process for taking and giving back possessions. We are supportive of the approach being taken and expect to see a more detail plan developed in the coming months.

Update

9. On Network Rail provided the following timescale extension to 30 September 2023:



Camden Jn South
Rec 3_ v4.docx

10. Network Rail state the following

A review of existing and newly developed technologies has been completed. The project is taking these findings to develop:

- *undertake option testing*
- *potential solutions evaluation (CBA and timeline) and proposal development*
- *sufficiency of existing protection systems (as additional protection)*
- *review of 'protection zone' and the HoBC led rulebook changes*
- *benefits of RBLs (the system potentially offers significant opportunities either as a stand-alone solution or a supporting solution)*

Possession limit controls business case is being developed to secure funding in CP6 & CP7

Previously reported to RAIB

Recommendation 3

The intent of this recommendation is to reduce the exposure of track workers to risk arising from the need to be on track to place or remove possession limit boards and detonators.

Network Rail should, as part of its Track Worker Safe Access Strategy, critically review the possession management process and, where appropriate, reduce the need for staff to be on the track for the purpose of taking or giving back a possession (paragraph 102b). This review should include consideration of newly developed technologies such as remotely operated track circuit operating devices, and the scope for enabling track workers to protect themselves by interacting directly with the signalling and/or train control system.

ORR decision

1. Network Rail have provided information about the general approach and long term goals for improving the process for taking and giving back possessions. We are supportive of the approach being taken and expect to see a more detail plan developed in the coming months.
2. After reviewing the information provided ORR has concluded that, in accordance with the Railways (Accident Investigation and Reporting) Regulations 2005, Network Rail has:
 - taken the recommendation into consideration; and
 - is taking action to implement it, although a fully developed time-bound plan is not yet in place

Status: *Progressing*. ORR will advise RAIB when further information is available regarding actions being taken to address this recommendation.

Information in support of ORR decision

3. On 6 November 2018 Network Rail provided the following initial response:

Action Plan

Network Rail will critically review the possession management process with the intention of identifying opportunities to reduce the need for staff to be on the track for the purpose of taking or giving back a possession. The review will include consideration of newly developed technologies and the scope for enabling track workers to protect themselves by interacting directly with the signalling and/or train control system.

The general approach to this recommendation was presented and accepted at a meeting attended by the STE Safety Heads and Operations SMEs during February 2018.

Network Rail has agreed with RSSB that they will lead the cross industry workstream development for the review, guided by a Network Rail Senior Programme Manager. The remit for the Project Scoping Workshop is attached.

The workshop was held on during June 2018 with stakeholders from the ORR, the Trades Unions, the Trackworker Safety Group, ISLG and other with the following problem statement definition:

In order to protect track workers involved at the start (set up) and end of the possession (otherwise referred to as taking and giving back possession), work is required to identify the safest way of protecting those workers from the movement of trains.

This will require evaluation of the overall possession management process, focussing on the period of time:

- i (i) Leading up to the start (set up) of the possession through to the confirmed completion of protection of the line, and*
- ii (ii) Leading up to the end of the possession through to the return of control to the signaller.*

The workshop identified potential workstreams and the project team have progressed the development of workstreams, mapping out the risk profile, and preparing a follow-up workshop to review the outputs and to prioritise the workstreams.

A second workshop is planned for October 2018 to validate the draft risk profile, and to review the workstream scoping and priorities.

Following the second October workshop a paper will be presented to Network Rail's QHSE Integration Group to propose the workstreams including time, cost, industrial relations implications and safety benefits.

Timescale for this stage: 31 January 2019.

Implementation timescales will be determined following this initial stage.