Oliver Stewart
RAIB Recommendation Handling Manager

24 July 2025

Mr Andy Lewis
Deputy Chief Inspector of Rail Accidents

Dear Andy,

RAIB Report: Train driver struck and fatally injured by a passing train near West Worthing station on 1 February 2022

I write to provide an update[1] on the action taken in respect of recommendation 3 addressed to ORR in the above report, published on 16 February 2023.

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 **'Closed'.**

We do not propose to take any further action in respect of the recommendation, unless we become aware that any of the information provided has become inaccurate, in which case I will write to you again.

We will publish this response on the ORR website.

Yours sincerely,

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 increase the availability of CCTV systems on existing rolling stock, in order to facilitate the investigation of incidents and accidents.

The Rail Safety and Standards Board, working in conjunction with train and freight operating companies and rolling stock owners, should review the costs and benefits of retrofitting effective forward-facing CCTV to existing rolling stock not already fitted with such systems

ORR decision

1. In response to the recommendation RSSB has produced a report summarising the train fleets operating on the GB mainline network not fitted with forward facing CCTV and an estimate of the costs associated with fitment of that equipment. The report is endorsed by RDG, the National Freight Safety Group (NFSG) and the Joint ROSCO Technical Liaison committee (JRTL).

2. The benefit-cost ratio (BCR) on quantifiable benefits is estimated at 0.35 after five years if the equipment is 30% effective and all outstanding vehicles are installed with FFCCTV; however, this value does not include operational efficiencies that may be realised or benefits in other areas such as reducing slips, trips and falls, or consider the variable cost of machine vision and intelligence which is assumed to be zero cost in this report.

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

- taken the recommendation into consideration; and
- has taken action to close it.

Status: Closed.

Previously reported to RAIB

4. On 7 February 2024 ORR reported the following:

RSSB initially planed to address the recommendation with a project based on DfT analysis of fleets equipped with forward-facing CCTV. In October 2023 RSSB withdrew the project and decided to address the recommendation via a Limited Change Release. RSSB have been focussed on working with DfT to address recommendation 2. Now that the standard change has been completed, RSSB will focus on rec 3.

Update

5. On 29 May 2025 RSSB provided the following update:

I am writing in relation to Recommendation 3 in RAIB's report on the fatality at West Worthing. Recommendation 3 is worded as follows:

The Railway Safety and Standards Board, working in conjunction with train and freight operating companies and rolling stock owners, should review the costs and benefits of retrofitting effective forward-facing CCTV to existing rolling stock not already fitted with such systems.

Please find attached a report which addresses the above.

2025-01-13 Report for RAIB 02-23 REC 3

In brief, our knowledge search on existing rolling stock requiring fitment of forward-facing CCTV (FFCCTV) identified 1,667 individual installations being required for vehicles and locomotives with either no plans for FFCCTV fitment that are to remain in service, or where information was not provided by an operator. The costs associated with fitment, including engineering change costs, labour and associated parts is estimated to be between approximately £5.8m and £10.2m, depending on the number of outstanding vehicles that are fitted.

The benefits of installation were reviewed in seven areas including operational efficiency, safety and security, and infrastructure monitoring. Benefits are difficult to understand for operational efficiencies, as this metric is dependent on many factors, but an example is provided for where benefits can be realised in incident management. There are other benefits that will not be quantifiable until FFCCTV is introduced, such as for BTP and RAIB when conducting investigations, and the level of improvement FFCCTV will provide for infrastructure monitoring.

The benefit-cost ratio (BCR) on quantifiable benefits is estimated at 0.35 after five years if the equipment is 30% effective and all outstanding vehicles are installed with FFCCTV; however, this value does not include operational efficiencies that may be realised or benefits in other areas such as reducing slips, trips and falls, or consider the variable cost of machine vision and intelligence which is assumed to be zero cost in this report.

RSSB has addressed the recommendation insofar as is possible without determining the effectiveness of FFCCTV systems for the discussed benefits in section five. Industry will need to understand, in each case, how effective they believe the installation will be for their operation using the benefits that are applicable to them, where not all benefits are applicable for passenger or freight operators.

If industry decide to install FFCCTV systems to all currently in-service passenger and freight vehicles which do not have it installed already, a BCR of 0.35 may be expected after five-years if the equipment is used to improve on all areas considered in the benefits section excluding slips, trips and falls, but the 0.35 applies to the entire industry – some operators may have a higher BCR, and some lower.

With regard to working with train and freight operating companies, RDG has had the opportunity to review the report and returned some comments. These have been addressed. The National Freight Safety Group (NFSG) endorsed the report. For rolling stock owners, the Joint ROSCO Technical Liaison (JRTL) committee also endorsed the report.

We consider this recommendation now to be closed.

Previously reported to RAIB

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ORR decision

1. RSSB initially planed to address the recommendation with a project based on DfT analysis of fleets equipped with forward-facing CCTV. In October 2023 RSSB withdrew the project and decided to address the recommendation via a Limited Change Release. RSSB have been focussed on working with DfT to address recommendation 2. Now that the standard change has been completed, RSSB will focus on rec 3.

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

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

Status: Open.

Information in support of ORR decision

3. On 24 April 2023 RSSB provided the following initial response:

DfT have agreed to share its analysis of fleets equipped with forward-facing CCTV, on which we will be able to build. We envisage a (ghost) project being created to aid reporting and provide some resource, as we will need engagement with industry to gather the required information, which will then need to be collated and the response produced. However, we will finalise this plan once the DfT analysis has been received.

We will update the ORR in the usual manner from this point on.