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20 April 2017

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

Dear Andrew,

# RAIB Report: Train struck and damaged by equipment case door in Watford tunnel, 26 October 2014

I write to provide an update<sup>1</sup> on the action taken in respect of recommendation 1 addressed to ORR in the above report, published on 13 August 2015. The annex to this letter provides details of the action taken regarding this recommendation, the status of which is now '**Implemented**'. We do not propose to take any further action in respect of this recommendation, unless we become aware that any of the information provided becomes inaccurate, in which case I will write to you again.

We will publish this response on the ORR website on 20 April 2017.

Yours sincerely,

Oliver Stewart

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

### **Recommendation 1**

The intent of this recommendation is for Network Rail to eliminate by design, or mitigate, the risk from lineside cabinets fouling the gauge.

Network Rail should mandate a requirement in its company standards for a design of cabinet that removes by design the risk of an open door infringing the gauge where the cabinet needs to be located in an area of limited clearance. Where this is not practicable, the design of cabinet should alert staff to an unsecured door.

#### **ORR** decision

- 1. Network Rail has made changes to relevant company standards to clarifying instructions for the selection of cabinet type and positioning. The revised requirements are in the standard NR/L3/SIG/11303/2G05. Section 3 covers positioning of lineside cabinets, including reference to maintaining structural clearances for the full movement of location doors.
- 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
  - has taken action to implement it.

Status: Implemented.

## Previously reported to RAIB

3. On 3 August 2016 ORR reported that Network Rail was taking appropriate action to implement this recommendation by addressing the risk of lineside cabinets fouling the gauge. ORR was concerned that Network Rail's initial response was addressing the recommendation by looking at the wider issue of cabinet siting, rather than focusing on cabinet design, as written in the recommendation. At a meeting on 13 May 2016, Network Rail confirmed that the revision of the appropriate standard (NR/L3/SIG/11303) will include requirements for the cabinet to have an open door that will not foul the gauge (module 2G05) when a cabinet must be located in an area of limited clearance. The updated standard – part of the installation handbook – was planned to be issued by December 2016. In the meantime, a 'Share with Pain' had already been circulated to spread awareness of the issue.

## **Update**

4. On 15 March 2017 Network Rail provided a closure statement containing the following summary:

The intent of the recommendation has been reviewed by cross discipline engineers to inform the most robust action to mandate design requirements to

mitigate risk of conflict between train and installed location cases. The outputs of this review are attached for information.

The conclusion of the review is that the design of location cases exist for general and specific application, and the designer selected a general application (slimline design) for use in Watford Tunnel. This led to a focus on the control of the application of designs, rather than prescribing design content of location cases over and above those already stipulated.

The review identified that improvements could be made to the clarity of instructions set out for the positioning of location cases. This has been reflected in the production of updated requirements in NR/L3/SIG/11303/2G05, with additional requirements included in section 3 positioning of apparatus cases, with particular reference to maintaining structural clearances for the full movement of location doors.

The intent is satisfied by mandating the maintenance of structure clearances for the movement of doors, which will preclude application of swing doors as provided in Watford Tunnel and promote designs which do not encroach on structure clearance. This is thought to encourage designers to find optimum solutions for the environment to be applied, prompting consideration of alternative designs.