Oliver Stewart RAIB Recommendation Handling Manager



28 March 2024

Mr Andy Lewis
Deputy Chief Inspector of Rail Accidents

Dear Andy,

RAIB Report: Pedestrian struck by a train at Lady Howard footpath and bridleway crossing, Surrey on 21 April 2022

I write to report¹ on the consideration given and action taken in respect of the recommendations addressed to ORR in the above report, initially published on 14 February 2023, and a revised report published on 6 February 2024.

The annex to this letter provides details of actions taken in response to the recommendations and the status decided by ORR. The status of recommendation 1 is **'Closed'**. The status of Recommendation 2 is **'Open'**.

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.
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Yours	sincer	ely

Oliver Stewart

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

Initial consideration by ORR

- 1. Both recommendations were addressed to ORR when the initial report was published on 14 February 2023. A revised report was published on 6 February 2024.
- 2. After considering the recommendations ORR passed both recommendations to Network Rail asking them to consider and where appropriate act upon them and advise ORR of its conclusions. The consideration given to each recommendation is included below.
- 3. This annex identifies the correspondence with end implementers on which ORR's decision has been based.

Recommendation 1

The intent of this recommendation is to reduce the risk at footpath and bridleway level crossings of a second train approaching being hidden from the view of crossing users by a previously passing train.

Network Rail should:

- use its existing risk assessment data to identify those footpath and bridleway crossings that present the highest risk to users of a second train approaching being potentially hidden by another train
- at those crossings identified as presenting the highest risk, implement appropriate measures to control the risk to users of a second train approaching
- in deciding what measures to implement, specifically consider technological solutions, as well as user awareness campaigns. It should also consider good practice elsewhere in the rail industry (including internationally) and the predictable limitations of human performance.

ORR decision

- 4. Network Rail has reviewed if there is technology to reduce the risk of second train coming at level crossings and has not identified anything beyond the technology it already has available to manage this risk. Network Rail has, as an interim solution, designed a sign to highlight the risk of a second train approaching, and has rolled it out using temporary signs across its network. The sign is included in the new Private Crossings (Signs and Barriers) Regulations 2023 and permanent signs will be placed as part of Network Rail's CP7 roll-out of the new signs.
- 5. 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 close it.

Status: Closed.

Information in support of ORR decision

6. On 16 May 2023 Network Rail provided the following initial response: Network Rail partially accepts this recommendation subject to the observations below.

Bullet point 1: The scenario of one train being hidden from view by another train remains a possibility at any level crossing on railway with greater than a single track. Whilst it is true that train frequency and user moment can influence opportunity for incident, the targeting of 'high risk' locations in isolation is contrary to our legal obligations under the Health and Safety at Work etc. Act 1974.

Bullet point 2: In the same spirit as the response to bullet point 1, we are proposing an interim and longer-term solution that targets all relevant level crossings, as outlined below. Further risk-based decisions and risk mitigation will follow, as appropriately evaluated by Routes and Regions, as part of BAU risk management protocols. This approach better fulfils our legal duties.

Bullet point 3: In regard to technology, Network Rail are committed to the continued rollout of MSLs through normal risk management protocols, where they are demonstrated to manage risk so far as is reasonably practicable. There are no immediate technology advances internationally within the industry that can be reasonably installed to better manage another train coming risk, beyond our current and in development, suite of MSLs (Overlay or Integrated). To develop and introduce more complex solutions for deployment on our rail network, will only increase costs and reduce the number of active warning systems that can be deployed. Safety awareness events have and continue to be used successful to promote awareness. Our 'Beware the bubble' campaigns focus on behaviours, distractions, physically and cognitively, and heighten public information and understanding.

In response to recommendation 1, we have agreed to design and develop a new sign to heighten awareness of 'another train coming' risk. This new sign will be deployed at all footpath, bridleway, and user worked crossings with greater than a single line. This new sign will be incorporated within the revised PCSBR legislation currently in flight.

As an interim measure to legislative change, the new sign design will be laminated and rolled out across the network at the aforementioned locations. It is anticipated that this will be achieved within 4 weeks of the finalised design being approved, which is expected to be no later than mid-July.

Once the newly designed signage has been adopted into law, and the physical signs are available for manufacture, the laminated signs will be replaced by more robust materials. In effect, the 'another train coming' signage will be a core part of our introduction of the new PCSBR signs, at those locations already outlined.

Our approach to this recommendation follows a review of our current risk management process and incorporates good practice decision-making based on a systemic review of level crossing safety. It recognises that there are no other reasonably practicable controls to afford mitigation toward 'another train coming' risk, with closures or MSLs being the only other alternatives. The focus on signage therefore accounts for the fact that closures and MSLs are not viable economic options that can be progressed across the affected estate with immediate effect.

It is proposed to close this recommendation once the laminated signage is deployed across the appropriate assets, with rollout of the permanent signs to be part of Route and Regional risk-based deliverability thereafter.

It should be noted that signage is not considered a substitute for technology deployment, as required to manage risk so far as is reasonably practicable and following our normal BAU risk management process. It is accepted, however, that the introduction of signage is a reasonably practicable measure to undertake in our management of level crossing safety.

Closure: 31st July 2023

7. On 23 January 2024 Network Rail provided the following closure statement:



Recommendation 2

The intent of this recommendation is to ensure that appropriate interim shorter-term risk mitigations are identified and implemented in a timely manner at level crossings that are awaiting long-term solutions to reduce the risk.

Network Rail should review its existing processes for level crossing risk management and include:

- explicit provision for considering a wider range of short- and medium-term risk mitigation options than is currently the case
- steps to ensure that those responsible for implementing risk controls are aware of all the options available, including those that might offer only incremental reductions in risk or interim mitigation pending implementation of preferred long-term solutions
- documented details of short- and medium-term risk controls, including both technical and non-technical options.

ORR decision

8. Network Rail will address the recommendation by updating the level crossing risk management toolkit, http://www.lxrmtk.com/. The work is expected to be completed by the end of March 2024.

- 9. 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 close it.

Status: Open.

Information in support of ORR decision

10. On 16 May 2023 Network Rail provided the following initial response: Network Rail partially accepts this recommendation subject to the observations below.

Bullet point 1: The scenario of one train being hidden from view by another train remains a possibility at any level crossing on railway with greater than a single track. Whilst it is true that train frequency and user moment can influence opportunity for incident, the targeting of 'high risk' locations in isolation is contrary to our legal obligations under the Health and Safety at Work etc. Act 1974.

Bullet point 2: In the same spirit as the response to bullet point 1, we are proposing an interim and longer-term solution that targets all relevant level crossings, as outlined below. Further risk-based decisions and risk mitigation will follow, as appropriately evaluated by Routes and Regions, as part of BAU risk management protocols. This approach better fulfils our legal duties.

Bullet point 3: In regard to technology, Network Rail are committed to the continued rollout of MSLs through normal risk management protocols, where they are demonstrated to manage risk so far as is reasonably practicable. There are no immediate technology advances internationally within the industry that can be reasonably installed to better manage another train coming risk, beyond our current and in development, suite of MSLs (Overlay or Integrated). To develop and introduce more complex solutions for deployment on our rail network, will only increase costs and reduce the number of active warning systems that can be deployed. Safety awareness events have and continue to be used successful to promote awareness. Our 'Beware the bubble' campaigns focus on behaviours, distractions, physically and cognitively, and heighten public information and understanding.

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Our approach to this recommendation follows a review of our current risk management process and incorporates good practice decision-making based on a systemic review of level crossing safety. It recognises that there are no other reasonably practicable controls to afford mitigation toward 'another train coming' risk, with closures or MSLs being the only other alternatives. The focus on signage therefore accounts for the fact that closures and MSLs are not viable economic options that can be progressed across the affected estate with immediate effect.

It is proposed to close this recommendation once the laminated signage is deployed across the appropriate assets, with rollout of the permanent signs to be part of Route and Regional risk-based deliverability thereafter.

It should be noted that signage is not considered a substitute for technology deployment, as required to manage risk so far as is reasonably practicable and following our normal BAU risk management process. It is accepted, however, that the introduction of signage is a reasonably practicable measure to undertake in our management of level crossing safety.

Closure: 31st July 2023

Network Rail accepts this recommendation subject to the observations below.

We are satisfied that our level crossing standards, notably NR/L2/XNG/001, Provision and risk management of level crossings, and NR/L3/XNG/308, Risk assessing level crossings, appropriately identify the requirements for interim, short and long-term control measures as necessary. We also acknowledge that guidance is also available on the level crossing hub entitled 'Managing interim risk at level crossings', targeted toward and available for level crossing managers. Finally, we are also satisfied that our level crossing manager training package underpins the need for interim control measures.

In response to recommendation 2, we consider that there is an opportunity to review and update as appropriate, our level crossing risk management toolkit, http://www.lxrmtk.com/ to bolster interim controls and address the recommendation. Accordingly, we have set aside a plan and a budget toward this objective. We will commence this work within the next few months, continuing throughout year 5 of CP6 and culminating the update by 31/03/2024.

Closure: 30th April 2024