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14 March 2022

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

Dear Andrew,

RAIB Report: Collision between a train and a car at Jetty Avenue level crossing, Woodbridge, Suffolk on 14 July 2013

I write to provide an update¹ on the action taken in respect of recommendation 5 addressed to ORR in the above report, published on 15 December 2014.

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 5 is **'Implemented by alternative means'**.

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 on 15 March 2022.

Yours sincerely,



Oliver Stewart

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

Recommendation 5

The intent of this recommendation is for the Office of Rail Regulation to provide enhanced guidance relating to user worked crossings, including guidance about how the decision point is determined in order that the sighting of approaching trains is measured from an appropriate location.

The Office of Rail Regulation should provide duty holders with enhanced guidance which:

- reminds duty holders that, when determining the position of decision points at user worked crossings, they must take due account of the characteristics of vehicles likely to use the crossing and recognise that a minimum dimension of 3 metres from the nearest rail is insufficient for most vehicles; and
- takes account of outputs from the research and review undertaken in response to recommendations 2 and 4.

ORR decision

1. In June 2021 ORR published its new guidance for level crossings, 'Principles for managing level crossing safety'². This guidance followed a decision by ORR to move away from prescriptive guidance for level crossings, because we want the duty holder to understand the characteristics of each individual level crossing and the risks that need managing. It is for the duty holder to then decide what measures are needed at that level crossing, and balance out competing needs. This is a change in approach - encouraging the duty holder to assess the risks, rather than just reach for standard control measures - and is markedly different from our previous guidance RSP7, which adopts a more prescriptive approach and has been perceived as standard setting. RSP7 will be withdrawn shortly (it is still on ORR's website during the transition to the new guidance).

2. ORR's new guidance was therefore a substantial change from our previous guidance, taking a clear risk-based approach to managing safety at all level crossings. We also wanted to ensure there was thorough stakeholder engagement and input, for both the road and rail aspects of level crossings. Overall, this resulted in a lengthy but thorough project. The guidance was developed with the assistance of an external stakeholder steering group, there was also extensive consultation with a wide range of stakeholders. This has contributed significantly to the quality of the guidance and provided assurance that there is support for the move away from exhaustive prescription to assessing risk from first principles.

3. The new guidance does not use the term decision points, as the output of RSSB Report T984 showed that decision points are not the most effective way to measure and manage sighting at crossings. We have taken the research into account in the development of the guidance, which showed that users generally carry out a dynamic assessment of when to cross, instead of deciding while in a stationary position. We have not included a minimum dimension of 3 metres from the nearest rail as a requirement either, as we recognise that it is insufficient for most

² https://www.orr.gov.uk/sites/default/files/2021-06/principles-for-managing-level-crossing-safety-june-2021_0.pdf.

vehicles, and it is not ORR's role to set prescriptive requirements for level crossing design.

4. The new guidance is designed to be applicable across all level crossing types, including user worked crossings (UWC). We are not planning to produce specific guidance for UWCs only. This is because we no longer produce guidance based on specific level crossing types as we want duty holders to take a risk-based approach to identifying control measures, rather than just thinking about particular types of level crossings. We have set out the principles that need to be considered when designing or managing a level crossing. These are accompanied by factors which set out the principles may be achieved (this is covered in the update section). However, the new guidance does ask the duty holder to consider who uses the level crossing (including UWCs) and how they can cross safely, which includes making the decision to cross.

5. Recognising the significance of the change of approach in our guidance, we have developed a number of case studies to demonstrate the practical application of the principles and bring out how managers and designers of crossings might weigh competing factors in order to arrive at an optimal option for any particular crossing. We will continue to develop the suite of case studies and will consider how we can best incorporate the issues from Jetty Avenue into one of these.

6. There is no new guidance exclusively on UWCs produced by ORR, as discussed above, but the points raised in the recommendation are addressed in our new guidance for all level crossing types and the specifics will feature in a future case study. The action taken demonstrates that ORR has taken the recommendation into consideration and has taken action to implement it, in accordance with the Railways (Accident Investigation and Reporting) Regulations 2005, although not in the terms set out in the recommendation.

Status: *Implemented by alternative means.*

Previously reported to RAIB

7. On 10 December 2015 ORR reported the following:

This is subject to the outcomes from actions to address recommendations 2 & 4. The outcomes will be taken into account when Railway Safety Publication 7 'Level Crossings: A guide for managers, designers and operators' is revised.

In the interim, ORR recognises the work that Network Rail is doing in briefing its Level Crossing Managers.

Update

8. The ORR *Principles for managing level crossing safety* was published on 15 June 2021. The following extracts are applicable to the recommendation:

The User Principles ('Safe for the user') generally deal with the identification of hazards by considering the characteristics and needs of individual users at a level crossing. This includes vehicle drivers. In particular:

One of the factors in User Principle 1 (Understand all foreseeable level crossing users) highlights that the needs of vehicle drivers using the crossing need to be considered:

(g) types of vehicles using the level crossing and how their particular characteristics might impact on the safe use of the level crossing e.g. long slow vehicles or farm machinery;

User Principle 3 includes a factor on how the highway approach can affect awareness of a level crossing:

(b) highway approach angles, gradients and approach speed and how this affects awareness of the level crossing, particularly where the highway approach offers limited visibility.
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User Principle 4 ('Provide a safe and convenient waiting place for users at the level crossing and where necessary on the approaches to the level crossing') includes the following factors:

a) drivers of long, large or slow vehicles, farmers with livestock, or horse riders who may need a place to wait on the approach to the level crossing so they can communicate with the crossing controller;
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b) a safe place at the level crossing where the user can wait whilst a train passes or identify when it is safe to use the level crossing;
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c) depending on the crossing controls, users will need to undertake different actions at the waiting place, and their needs should be accommodated. Some level crossings require users to have good visibility of the track, which can be affected by the height of the user e.g. those in tractors and wheelchairs, and their distance from the track;

d) physical controls, e.g. gates, fencing, chicanes, vegetation, structures and their positive (but also negative) impact on the effectiveness of the waiting place.
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Factor (c) in particular is relevant to the recommendation, as actions can include opening and closing gates, and (d) relates to fencing potentially blocking visibility for users.

User Principle 6 also includes adequate visibility along the railway where sighting distances are used as part of the control measures as a factor:

(d) adequate visibility along the railway where sighting distances are part of the intended control measures e.g. vegetation management, the identification of lineside equipment that limits visibility and the impact of curved track;
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- takes account of outputs from the research and review undertaken in response to recommendations 2 and 4.

Decision

1. This is subject to the outcomes from actions to address recommendations 2 & 4. The outcomes will be taken into account when Railway Safety Publication 7 'Level Crossings: A guide for managers, designers and operators' is revised.
2. In the interim, ORR recognises the work that Network Rail is doing in briefing its Level Crossing Managers.

Status: *In progress*. ORR will advise RAIB when actions to address this recommendation have been completed.