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9 June 2014

Ms Carolyn Griffiths  
Chief Inspector of Rail Accidents  
Cullen House  
Berkshire Copse Rd  
Aldershot  
Hampshire GU11 2HP

Dear Carolyn,

**RAIB Report: Fatality at Johnson's footpath crossing near Bishop's Stortford, Hertfordshire, 28 January 2012**

I write to provide an update<sup>1</sup> on the consideration given and action being taken in respect of recommendations 2 and 3 addressed to ORR in the above report, published on 13 December 2012.

The annex to this letter provides details of the action taken in respect of each recommendation where the status of Recommendation 2 is '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<sup>2</sup> and Recommendation 3 is 'Implementation on-going'; ORR will advise RAIB when the next upgrade of the LXRМ-Toolkit is available.

We will publish this response on the ORR website on 27 June 2014.

Yours Sincerely,

Chris O'Doherty

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

<sup>2</sup> In accordance with Regulation 12(2)(c)

## **Recommendation 2**

*The intent of this recommendation is to prevent signage from obscuring approaching trains at crossings which are equipped with miniature stop lights, thus providing users with an additional warning of an approaching train.*

Network Rail should amend its guidance on risk mitigations to take account of possible improvements in the visibility of approaching trains at level crossings equipped with miniature stop lights, particularly where signage or other level crossing equipment may obscure the view of the line.

### **Brief Summary on what was previously reported to RAIB on 2 April 2013**

*The National Level Crossing Team will review and amend as necessary the guidance on risk mitigations to take account of possible improvements in the visibility of approaching trains at level crossings equipped with MSLs, particularly where signage or other level crossing equipment may obscure the view of the line.*

*The circumstances surrounding the incident at Johnson's crossing and the lessons learnt will be used to develop a case study briefing. This briefing will be delivered to the level crossing community.*

### **Update**

1. On 28 November 2013 Network Rail provided ORR with a copy of:
  - The Network Rail Recommendation Closure Form;
  - Johnsons footpath case study briefing; and
  - Johnson's recommendation 2 & 3 mapping document.
2. The closure statement advised that:

*The recommendation led the national team to review a number of the mitigations contained in the toolkit. In doing the review the team identified a number of other areas which will be submitted to RSSB for the next refresh review.*

*The national level crossing team created a case study from the incident at Johnsons, with a focus on the users' last opportunity to be aware of an approaching train and to consider this when making changes at level crossings. This has been briefed to the level crossing community. Guidance has also been submitted to RSSB to be included in the updates to the toolkit in the next refresh.*

*Briefing packs have been produced and Route Level Crossing Managers or LC ORAs [Level Crossing Operational Risk Advisors] have been asked to brief Level Crossing Managers. The toolkit will be updated with the team's changes at the next refresh.*

### **Extract from Network Rail's 'Johnson's footpath case study briefing'**

*Asset inspection & risk assessments*

*When making changes at level crossings such as;*

- *Installation of new signage*
- *Installation of new fencing or gates*
- *Upgrades such as MSLs*

Consider that a users' last opportunity to be aware of the approach of the train is by sighting alone. If this is obscured by level crossing infrastructure such as;

- 'Stop look listen signs'
- Sign posts
- Cabinets
- Fencing

Even where we have what we consider to be existing mitigations in place, such as MSLs, as was the case at Johnson's footpath. We should still seek to maximise sighting lines to the require distance for the line speed.

3. On 19 December 2013, ORR met with Network Rail.

4. It was confirmed that this recommendation will be incorporated in the proposed refresh to the LX Risk Management Toolkit (LXRMTK). It was noted however, that this will not happen until February 2015. Network Rail explained that RSSB has the lead on the Toolkit refresh and that RSSB up-grade the LXRMTK every four years.

5. RSSB state this enables it to cover two cycles of international conferences on level crossings and allows for Network Rail to get the necessary approvals for its proposed mitigation measures.

6. Network Rail can make simple changes to the Toolkit, such as changes to text for clarity, within two or three weeks. Such an amendment would not be suitable for the change associated with this recommendation.

7. As a result of Network Rail's discussions with RSSB, Network Rail has proposed to RSSB having a 'holding pen' in the toolkit for new risk mitigation ideas. This will make them visible to users even though they may still be under development. Users would then be aware of developments and can seek further information from the Network Rail central team if application might seem suitable to their particular circumstances.

8. This LX Risk Management Toolkit 'holding pen' idea is now being pursued jointly by Network Rail and RSSB.

Completion date: February 2015

9. On 6 February 2014 Network Rail stated that: ... *briefing packs were provided to Project teams who install MSL's on the need to avoid obscuring sighting lines with MSL equipment or signage – thus covering teams carrying out new installations. Route teams were also briefed on this – covering risk assessments for existing MSL locations.*

### **ORR Decision**

10. Network Rail has provided a briefing pack to Level Crossing Managers and Project Teams. In due course the Level Crossing Risk Management Toolkit will also be updated. However, it should be noted that, owing to the scale of the refresh of the LXRMTK, the lead time is relatively long. ORR will be checking on progress to refresh the LXRMTK.

11. After reviewing all the information received 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.** *ORR will write to RAIB if it becomes aware that the information above is inaccurate.*

### **Recommendation 3**

*The intent of this recommendation is to make a comprehensive set of risk reduction measures available to level crossing managers.*

Network Rail, in consultation with RSSB, should review the thirteen level crossing risk reduction options identified in RSSB's research report T730 [Understanding human factors and developing risk reduction solutions for pedestrian crossings at railway stations – June 2009], to determine whether or not each option should be included as a mitigation available to those responsible for managing the risk at level crossings (paragraph 75b). Network Rail should embed the findings of this review in its management of level crossing risks, and communicate these changes to all relevant staff. Guidance should be provided to the relevant staff on potential costs and benefits, as well as the specific circumstances in which each measure might be effective.

### **Brief Summary on what was previously reported to RAIB on 2 April 2013**

*The National Level Crossing Team, in conjunction with RSSB, will review the thirteen level crossing risk reduction options identified in the RSSB report T730 and determine whether or not each option should be included as mitigation available to Level Crossing Managers (LCMs).*

*The findings of the review will be communicated and embedded into the management of level crossing risks.*

*Guidance will also be reviewed to ensure that LCMs are provided with guidance on potential costs and benefits, as well as the specific circumstances in which each measure might be effective.*

*Timescale: 31 June 2013*

### **Update**

12. On 11 October 2013 Network Rail provided ORR with a copy of:

- The Network Rail Recommendation Closure Form; and
- Johnsons 3 mapping LCM brief and team brief.

13. The closure statement advised that:

*The national level crossing team reviewed the report in consultation with RSSB and the workings of the finding are contained in the PowerPoint document titled 'Johnsons 3 mapping 0.3'. These have been submitted to the RSSB and the JPG document confirms the updates will be made to the toolkit in the next refresh in February 2015. The proposed changes to the toolkit have been communicated to the route in a brief, slides titled 'Johnsons 3 update to LXRMTK brief and team brief.*

14. On 19 December 2013, ORR met with Network Rail.

15. In addition to the information provided above to address recommendation 2, RSSB stated that in relation to the next upgrade of the LXRM-Toolkit there needs to be close liaison between the supplier and various stakeholders in identifying all possible improvements, evaluating them and getting stakeholder support for those to be taken forward into the toolkit.

16. Also, as it is web enabled, there has to be close contact with the supplier, expected to be expert in human factors issues, and the IT consultant responsible for augmenting and testing the new version on the web. This IT work will add to the overall timescales.

17. RSSB estimate that the toolkit will be available in the first quarter of 2015.

### ORR Decision

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

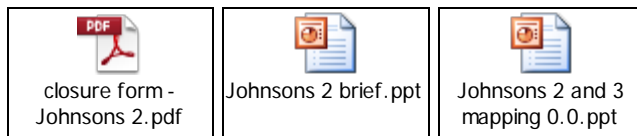
- taken the recommendation into consideration and
- is taking action to implement it.

**Status: Implementation on-going.** ORR will advise RAIB when the next upgrade of the LXRM-Toolkit is available.

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### Supporting Documents

#### Recommendation 2



#### Recommendation 3

