Chris O'Doherty RAIB relationship and recommendation handling manager

Tel No: 020 7282 3752

Email: chris.o'doherty@orr.gsi.gov.uk



1 April 2014

Carolyn Griffiths
Chief Inspector of Accidents
RAIB
Cullen House
Berkshire Copse Road
Aldershot
Hampshire GU11 2HP

Dear Carolyn

RAIB Report: Fatal accident at Moreton-on-Lugg near Hereford

I am writing to inform you of the actions being taken in relation to recommendations 2 and 3 of the above report.

The annex to this letter provides an update on the actions being taken where both recommendations remain in progress. We expect to provide you with an update by 30 September 2014.

Yours Sincerely

Chris O'Doherty

Recommendation 2

The intention of this recommendation is that implementation of Network Rail's level crossing risk management process will identify and assess the risks from all aspects of the design, operation and maintenance of equipment and systems, including signalling, so that mitigation measures can be identified and implemented.

Network Rail should enhance its level crossing risk management process to include identification, assessment and management of the risk associated with:

- human error by signallers and crossing keepers;
- operational arrangements, in particular with regard to the ability of operators to cope with interruptions, such as telephone calls, and other out-of-course events;
- equipment design, in particular where it is not compliant with latest design standards; and
- maintenance and inspection arrangements, particularly where these are used to identify and remedy any equipment functional and performance deficiency.

The process should allow for sufficient liaison between the relevant engineering and operational departments.

When addressing risks identified by the implementation of the revised process, Network Rail should prioritise the implementation of required mitigation measures to level crossings where consequences of operator error are severe and not protected by engineered safeguards.

Previously reported

On 6 December 2013 we reported that we were aware that Network Rail was developing an enhanced level crossing risk management process which we were monitoring at bi monthly liaison meetings and through inspection and audit of the competence management system of level crossing managers

Update

Additional information was received from Network Rail on 11 December 2013 and is included below:

With regards to the Narrative Risk Assessment, the National Level Crossing Team has engaged with Network Rail's Principal Occupational Psychologist. Jointly we are considering how to incorporate a Signaller/Crossing Keeper Error Rating within our revised Level Crossing Risk Management processes. This will cover the first two bullet points but it should be noted that the final iteration might be a stand alone assessment carried out by a role more attuned with operational workload and error modes. This would then be shared with the respective Level Crossing Managers highlighting the error rating and main conclusions reached.

Equipment design and maintenance forms a part of the new Narrative Risk Assessment.

In terms of timescales, the aim is to carry out an initial trial by the development team during December 2013. This will then be followed by live trials using Route teams in January/February 2014. Note the date for introducing the final Narrative Risk Assessment will be determined by the results of the Route Trials.

ORR decision

- 7. ORR, having considered the information provided, has concluded that, in accordance with the Railway (Accident Investigation and Reporting) Regulations 2005, Network Rail has:
 - taken the recommendation into consideration; and
 - is taking action to implement it.

We continue to monitor the introduction of the Narrative Risk Assessment in relation to the last two bullet points in the recomemndation.

Status: In progress, we will update RAIB by 30 November 2014

Recommendation 3

The intention of this recommendation is to ensure that whenever signalling renewal or major maintenance work is planned, those responsible understand when it is necessary to formally evaluate the opportunity to improve compliance with the latest engineering standards.

Network Rail should develop and implement (paragraph 175a):

- criteria for when it is necessary to formally assess the need to bring existing signalling and level crossing assets in line with latest design standards; and
- a process to record the findings of such assessments.

Previously reported

On 6 December 2013 we reported that this recommendation would be closed out in the 'Means of Control' exercise that is scheduled to start in May 2014. In the meantime Network Rail was going to issue a Noticeboard,

Update

Network Rail published a Noticeboard in December 2013. It highlights the standard NR/L2/SIG/1121 ModX0 clauses 2.2, 5.1.5 AND 5.1.71. These are highlighted below

2.2 Alterations to a level crossing

When any alteration is considered at a level crossing It shall be considered whether the alteration provides a reasonable opportunity to bring parts or all of the crossing up to full compliance with this standard, or to achieve compliance with any other engineering discipline standards.

Normally where there is a substantial renewal of an existing level crossing, then it shall mean that the crossing is brought into compliance. However smaller alterations need not trigger a full upgrade.

The assessment of reasonability to undertake works shall be by documenting the costs of the additional works to update the crossing set against the realistic safety and operational benefits of the works. The results and recommendations shall be considered by the project and sponsor arranging the original alteration work.

- **5.1.5** For existing crossings the existing level crossing order may be in conflict with modern standards. Negotiations shall take place with the ORR where there is a conflict between the order and any sensible requirement to bring the crossing up to modern standards. Either the order must be amended, a new order produced, or the crossing work shall reinstate the crossing compliant with the existing order.
- **5.1.7** If closure or a bridge are not viable options, The decision on what type of level crossing is made on the road and rail usage, aided by a risk assessment process or tool.

The process to publish the Means of Control for level crossings is planned to conclude in April 2014. The process has already started with the definition of the "Bow Tie" diagrams. These diagrams map the barriers and mitigations that prevent the primary risk of collision on level crossings. Any arising specifications from this process will then be drafted, with the expected publication in September 2014. At this point the Noticeboard will be withdrawn, and in its place will be specifications and templates for recording processes mentioned above. The date of 31/10/2014 is the backstop to allow for compliance of the published material to come in to force.

ORR decision

- 10. ORR, having considered the information provided, has concluded that, in accordance with the Railway (Accident Investigation and Reporting) Regulations 2005, Network Rail has:
 - taken the recommendation into consideration; and
 - is taking action to implement it

Status: In progress, we will update RAIB by 30 November 2014