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

Dear Carolyn,

RAIB Report: Road vehicle incursion and subsequent collision with a train at Stowmarket Road, 30 November 2011

I write to provide an update¹ on the action being taken in respect of recommendation 3 addressed to ORR in the above report, published on 21 November 2012.

The status of recommendation 3 is 'Implementation on-going'. A desktop assessment should be completed by 31 July 2014. Once Network Rail has completed its desktop assessments ORR will ask for a time bound plan to carry out the site assessments.

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

Yours Sincerely,

Chris O'Doherty

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

Recommendation 3

The purpose of this recommendation is for Network Rail to validate its existing list of locations with significant RVI [Road Vehicle Incursion] risk.

Network Rail should review its current data on road vehicle incursion sites, possibly making use of recent internet tools (e.g. Google Earth / Street View); to determine whether its knowledge of all current road vehicle incursion locations is complete and to assess any that had not previously been considered.

Brief Summary on what was previously reported to RAIB on 4 November 2013

On 30 August 2013, Network Rail provided: *A summary of progress made to address the recommendation:*

Step 1 – Following a review of various potential data sources Network Rail has undertaken geospatial analysis using Geographic Information Systems (GIS) to identify potential RVI sites from neighbouring roads. Additionally, sources of non-civils data had been identified to assist in the risk scoring of sites in the event that Network Rail had identified sites that had not been previously assessed. (Complete).

Step 2 – Resources had been allocated within Asset Management Services to check the adequacy of identification of sites. (Complete).

Step 3 – The review and update of the current list of vehicle incursion sites had commenced to be completed by 30 November 2013.

Step 4 – Network Rail planned to complete the initial risk scoring of sites not previously assessed by 31 March 2014.

Update

1. On 21 February 2014, Network Rail stated that:

Stage 3 was completed using a three step methodology:

Step 1: Geospatial analysis undertaken to locate all known roads within 30 metres of the track. This led to an initial register of 34,001 potential Road Vehicle Incursion (RVI) sites.

Step 2: The initial register was then reviewed to remove underline bridges, level crossings, tunnels and any duplicated sites.

Step 3: The remaining sites were then reviewed to identify sites currently contained with the RVI register and therefore already managed by the applicable routes.

The remaining 9,817 sites were therefore new sites, not currently identified by the Routes, and therefore were subject to an initial appraisal of their RVI risk score.

These were subdivided into:

- *510 over-line bridge sites; and*
- *9,307 adjacent to road sites.*

The number of road sites includes both private and public road sites which is beyond the original scope of this recommendation, but has been included to expedite the additional works to address North Rode RAIB Recommendation 3.

Step 4, to risk score sites not previously assessed, was initiated in December 2013 using the following methodology to establish an RVI score:

Stage 0a: Using electronic data, the ELR [Engineer's Line Reference] risk score can be identified (including the permissible line speed, volume of rail traffic and type of rail traffic). With this information ELR's can be organised into priority order for initial scoring as some are unlikely to reach a score of 90 (e.g. follow up initial scoring commences for lines with a line speed > 100mph);

Stage 0b: Each site then had the site specific risk points scored, using MARLIN mapping (Network Rail's Geographical Information Portal) and internet sources. For other factors, worst case scores have been adopted.

To date Network Rail has completed the scoring of for 476 over-line bridges and 3,978 adjacent road sites. This leaves 34 over-line bridge sites and 5,329 adjacent road sites still to appraise.

At the current rate sites are being scored at approximately 100 per day over 10 days per 4-week period = 1000 sites per 4-week period.

Timescale: 31 July 2014

ORR Decision

2. Network Rail has carried out a review to identify all road vehicle incursion locations and is taking action to assess those not previously known.

3. The review has identified thousands of locations for assessment. To avoid the Routes becoming swamped, in what are likely to be lower scoring sites, ORR understands that, once the desktop exercise is completed a list of sites scoring above 90 will be provided to the Routes for review and scoring on site. Those sites with a score less than 90 will be considered low priority for Route site visits.

4. After reviewing all the information received ORR 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. *A desktop assessment should be completed by 31 July 2014. Once Network Rail has completed its desktop assessments ORR will ask for a time bound plan to carry out the site assessments.*