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31 October 2013

Ms Carolyn Griffiths  
Chief Inspector of Rail Accidents  
Rail Accident Investigation Branch  
Block A, 2nd Floor  
Dukes Court  
Dukes Street  
Woking GU21 5BH

Dear Carolyn,

**Dangerous occurrence involving track workers, near Roydon station, Essex,  
16 July 2012**

I write to report<sup>1</sup> on the consideration given and action taken in respect of the recommendations addressed to ORR in the above report, published on 27 June 2013.

The annex to this letter provides details of the consideration given/action taken in respect of each recommendation where recommendations 1 and 2 are in progress.

- 1. ORR will update RAIB by 27 February 2014*
- 2. ORR will update RAIB by 26 of September 2014*

We expect to publish this response on the ORR website on 15 November 2013.

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

## Initial Consideration by ORR

The two recommendations contained in the report were addressed to ORR when it was published by RAIB on 27 June 2013.

After considering the report / recommendations, ORR passed both recommendations to Network on 25 July 2013, asking it to consider and, where appropriate, act upon them.

Details of consideration given and any action taken in respect of these recommendations are provided below.

### Recommendation 1

*The intent of this recommendation is to improve the means by which controllers of site safety assess both the required and available sighting distance at sites of work.*

Network Rail should review, and then improve as appropriate, the methods by which controllers of site safety assess both the required and the available sighting distance when at sites of work. The review should include:

- the accuracy, availability and presentation of information concerning the available sighting distances at sites of work (particularly in those areas where sighting is limited, or too short to permit a sufficient warning from one or more lookouts);
- identification of recommended methods of assessing sighting distance when on site (including the use of special equipment); and
- the adequacy of existing training and assessments of competence related to the assessment of sighting.

### Details of steps taken or being taken to implement the recommendation

1. Network Rail in its initial response on 25 September 2013 advised that:

*Actions already being undertaken to improve the adequacy of lookout warning include training the lookout to be able to calculate warning times in order to challenge the COSS. This will also include information on using assisted lookout protection (LOWs) to encourage its use.*

*The track training review group (6 August 2013) which included a safety improvement specialist, industry track safety trainers/training managers, a training delivery specialist and trackside safety specialist discussed the different options available to the COSS for assessing sighting distances. Their effectiveness was mapped against the cost of their usage to indicate where efforts could be focused to improve the accuracy of information and methods available.*

*The conclusion of the exercise pointed to training and awareness on distance perception. It is clear that as human beings, most people exaggerate distances and cannot accurately guess a distance over about 100m.*

*Presenting this information to a COSS/Lookout and making them aware of this could help them compensate when judging distances.*

*Mile posts were also discussed as being one of the most effective ways of being able to judge distances, with the added benefit that they would also aid other duties, such as strapping out and placing worksite protection. It is also worth exploring if fixed points can be mapped out for fixed worksite positions in a similar way to the mapping for LOWs is being done, although the time cost of this may be prohibitive.*

*Other effective methods are site visits and pacing the distance out. However, it is acknowledged that this is time consuming and therefore less likely to be used.*

*Following the review, the following work streams were considered to be reasonably practicable and will therefore be pursued:*

- 1. Include calculating sighting distances, awareness on distance and perception and methods for measuring distance into the Lookout initial and recertification courses in line with current review of Lookout training (December 2013);*
- 2. Add awareness on distance, perception and methods for measuring distance into COSS initial and recertification training (December 2013);*
- 3. As per work already being undertaken on NTS for lookouts, add distance awareness and perception and methods for measuring distance to AiTL questions (December 2013);*
- 4. Review feasibility of improving the placement of mile posts on a national basis and of mapping fixed lookout points in consultation with the Routes (December 2013).*

*Timescale: 31 December 2013*

*On 29 October 2013 Network Rail advised that ‘...the lookout NTS work will be early 2014, rather than December 2013’.*

## **ORR Decision**

2. After reviewing information received from Network Rail, 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: In-progress - ORR will update RAIB by 27 February 2014**

## **Recommendation 2**

*The intent of this recommendation is to improve the planning of work on lines that are still open to traffic (‘Red Zone working’) such that the controller of site safety is provided with an adequate safe system of work pack.*

Network Rail should review, and then improve as appropriate, the methods by which planners assess the suitability of 'Red Zone working' when selecting an appropriate safe system of work. The review should include:

- the availability and presentation of information on sighting distances and warning times;
- an assessment of when and how the available information is generally used by planners and any barriers to its use;
- the means by which planners establish locations at which multiple lookouts or special equipment are needed in order to provide sufficient warning; and
- the means by which planners are informed of locations at which it is impossible for lookout(s) to provide sufficient warning without the use of special equipment.

### **Details of steps taken or being taken to implement the recommendation**

3. Network Rail in its initial response on 25 September 2013 advised that:

*Network Rail has undertaken a comprehensive review of the planning of work on the railway infrastructure. The result is a new Control of Work system, based around a permit to work for high risk tasks being introduced from December 2013 and this will fundamentally change the role of the person currently assigned as planner. The person carrying out the work, known as the "Performing Authority" will now be responsible for the planning of the work and will be required to have both task and local knowledge. The planner will become a 'scheduler' in the future process, and will co-ordinate the plans under the Performing Authority's direction.*

*In summary, the Control of Work project will;*

- (1) Provide scalable diagrams, which will include asset locations, etc., so the information available during the planning phase will be of better quality;*
- (2) move away from an office planner – the person doing the work should now specify the plan and the necessary resources required to deliver this plan;*
- (3) require a site visit when the person doing the work does not have recent local knowledge – so this will be the time to plan and identify sighting distances.*

*This is a fundamental change in approach to planning safe work. The Performing Authority will now develop and be accountable for the plan as well as its execution. To ensure good planning there are some fundamental differences in approach, and we are taking consideration of each of the following:*

- a) Network Rail is developing a suite of interactive maps for the infrastructure, which show all asset locations (including bridges) to a verified scale/distance;*
- b) These new, easy to read maps will be used by the Performing Authority as part of the pre-work site visit to ensure sighting distances for example, are more accurately predicted/calculated and planned for;*
- c) The interactive planning tool enables the Performing Authority to visualise the plan and associated hazards on the map. This includes placing the location of all lookouts needed to execute the works;*
- d) As we move to a Permit to Work process the Performing Authority will undertake a 'Take-5 Risk Assessment' at the point of work to ensure that the*

*plan is still fit for purpose and the environmental conditions such as weather haven't altered so as to affect safe work execution;*

- e) An independent Issuing Authority is responsible for issuing the Permit to Work to the Performing Authority, only once they have had a Safety Conversation to understand and challenge that all risks have been suitably considered;*
- f) The permit is cancelled at hand back, and at this point the system collates any learning or changes that had to be applied to the permit in operation. This could include learning related to limited or reduced sighting distances.*

*As part of the change in planning safety work, there is a real clarity in accountability and ownership of the plan through to execution.*

*The System is currently under design/development and will be live in one Delivery Unit by Christmas 2013. The intent is to have the full systems designed and ready for rollout nationally and across the contractor workforce (including the revised roles negotiated with the TUs) by September 2014.*

*Timescale: 31 December 2014*

#### **ORR Decision**

4. After reviewing information received from Network Rail, 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: *In-progress*** - ORR will update RAIB by 26 of September 2014