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21 August 2018

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

Dear Andrew,

RAIB Report: Dangerous occurrence involving track workers, near Roydon station, Essex, 16 July 2012

I write to provide an update[1] on the action taken in respect of recommendation 2 addressed to ORR in the above report, published on 27 June 2013.

The annex to this letter provides details of the action taken regarding the recommendation, the status of which is now '**Implemented**'. We do not propose to take any further action in respect of the recommendation, unless we become aware that any of the information provided becomes inaccurate, in which case I will write to you again.

We will publish this response on the ORR website on 22 August 2018.

Yours sincerely,

Oliver Stewart

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

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.

ORR decision

1.   Network Rail have revised their standard for people working on or near the line that is open to traffic ('019'). The revised standard should improve the quality and availability of information about particular locations to staff planning safe systems of work. For example, availability of GIS systems and upgrades to Network Rail's panning tool (SSWOPs) should assist the person in charge of a possession when planning work and identifying the most suitable type of protection.

2.   By involving the PIC more closely with possession planning by giving advice to the planner should help to provide the necessary assurance that at the site to be worked it will be possible to set up a warning system with a compliant sighting distance.

3.   ORR will monitoring implementation of the revised 019 standard through our usual inspection work.

4.   After reviewing the information provided 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

Previously reported to RAIB

5.   On 31 October 2013 ORR reported the following:

'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'

Update

6.   Following timescale extensions, Network Rail provided the following closure statement on 6 February 2018:

Network Rail has undertaken a comprehensive review of the planning of work on the railway infrastructure. The review determined that it was critical to bring together the control of work with the single controlling mind. This resulted in the Planning and delivery of Safe Work Programme (PDSW). The core module requires the Single controlling mind to 'direct' the plan for the safety of staff at work which is delivered by the work of planner.

By improving and updating the NR standard NR/L2/OHS/019 Safety of people at work or near the line with specific requirements for the Planner; Responsible Manager; COSS/SWL, person in charge (PIC) published with modules in July 2017, the Responsible Manager decides how work is to be prioritised; planned and delivered Section 5 of the standard (PIC) is now appointed who will be accountable for the implementation of controls to be put in place for operational, site and task risk controls associated with the work.

The person in charge, who will also be a competent COSS, needs to be involved with the planning of the work and where working with a warning system the most suitable is selected & they will need to agree the arrangement for the site. The use of GIS systems such RINM, Google earth and existing Omnicom coverage allows planners to get an appreciation of the topography, take measurements and ascertain the viability of the warning systems proposed.

The future introduction of a new planning system by ORBIS, from Ontrac, to replace SSOWPS is a more GIS based system which will improve topographic visualisation of the worksite being planned and improve the decision making on the viability of the warning system being planned.

The company planning system SSOWPs has been upgraded to cater for planning in accordance with the revised 019 standard Section 7 using Table 2 and Table 3

guides the planner via a series of stepped questions to select the appropriate protection or warning system for the work. Safe work plans are required to be verified by the PIC and further authorised by the Responsible manager before work is carried out which gives added assurance to the content and viability of the SWP. This is logged in SSOWPs.

019 tables 3 stipulates the hierarchy of warning systems which could be employed, and need to be considered in turn, for the planner and pic to consider utilising before resorting to unassisted lookout warning lookout. Areas that have restricted sighting distance and areas that do not provide adequate sighting for IWA or COSS working alone are listed in the Hazard Directory. By having the PIC involvement in the planning to advise the planner, this will help to provide the necessary assurance that at the site to be worked it will be possible to set up a warning system with a compliant sighting distance.

Previously reported to RAIB

Recommendation 2

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- 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

1.   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;
  (4) Provide scalable diagrams, which will include asset locations, etc., so the information available during the planning phase will be of better quality;
  (5) 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;
  (6) 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:
  g) Network Rail is developing a suite of interactive maps for the infrastructure, which show all asset locations (including bridges) to a verified scale/distance;
  h) 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;

i) *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;*

j) *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;*

k) *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;*

l) *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.*

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Timescale: 31 December 2014

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 26 of September 2014*