

Tracy Phillips
Safety Regulation Manager
Telephone: 020 7282 3868
Email: tracy.phillips@orr.gsi.gov.uk

4 August 2016



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

Dear Andrew,

RAIB Report: Unsafe events at Heathrow Tunnel Junction

I write to report¹ on the consideration given and action taken in respect of recommendations 1 to 4 addressed to ORR in the above report, published on 16 December 2015.

The annex to this letter provides details of the consideration given/action taken in respect of these recommendations, where:

- recommendations 1 and 2 are reported as **'Progressing'**; and
- recommendations 3 and 4 are reported as **'Implementation ongoing'**.

We will advise you when further information is available regarding actions being taken to fully implement these recommendations.

We will publish this response on the ORR website on 5 August 2016.

Yours sincerely,

Tracy Phillips

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

Initial Consideration by ORR

1. All four recommendations from the report were addressed to ORR when the report was published on 16 December 2015.
2. After considering the report and recommendations ORR passed all four recommendations to Network Rail asking it to consider and where appropriate act upon them and advise ORR of its conclusions. The consideration given to each recommendation is included below.
3. This annex identifies the correspondence with end implementers on which ORR's decision has been based.

Recommendation 1

The intent of this recommendation is to achieve a more effective balance between audits of safety related paperwork and direct observation of on-site safety behaviour which would not be detected by a paperwork audit.

Network Rail, liaising with Principal Contractors, should review management systems for monitoring railway safety arrangements on major construction sites not separated from the railway by a permanent barrier. The review should identify any improvements needed to ensure that, in addition to appropriate auditing of paperwork after completion of shifts, the management systems promote sufficient direct observation of on-site activities and workgroup questioning to give adequate confidence that mandated safe systems of work are being correctly implemented throughout each shift. Network Rail should then implement any improvements identified by the review (paragraphs 134a and 135a).

ORR decision

4. ORR is content with the Network Rail action plan and awaits a decision by 31 January 2017 on whether Network Rail needs to amend its standard NR/L2/OHS/019.
5. 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
 - is taking action to implement it, but ORR has yet to be provided with a timebound plan incorporating the full implementation of the recommendation.

Status: Progressing. ORR will advise RAIB when further information is available regarding actions being taken to address this recommendation.

Information in support of ORR decision

6. On 20 May 2016 Network Rail provided the following initial response:

Network Rail, liaising with Principal Contractors, will review our management systems for monitoring railway safety arrangements on major construction sites not separated from the railway by a permanent barrier.

Network Rail's standard NR/L2/OHS/019 details the requirements for Safe System of Work (SSOW) Planning. Additionally there is a requirement for checking of paper work.

However the intention of this recommendation is to review and learn lessons from the effectiveness of site supervision. To evaluate the effectiveness of site supervision Network Rail will:

- a. Request Network Rail's Infrastructure Projects Western Assurance team to undertake 25 site visits to Principal Contractor operated sites.*
- b. The team will develop a short questionnaire to utilise with COSSs and team staff so they can gather feedback on the arrangements used.*
- c. The team will evaluate, by direct observation, the effectiveness of the Safe System of Work Plan arrangements that they monitor. In particular:*
 - Are SSOWP planned with suitable information?*
 - Are staff involved in developing the SSOWP they will utilise on site?*
 - How do planners and COSS identify the correct level of protection for the job being planned for?*
 - What action can be taken if the COSS does not like the arrangements contained in the SSOWP?*
 - How do and how frequently do teams feedback to the COSS and planners if arrangements could be improved upon?*
 - Are the COSS / planners / team aware of supervisors monitoring site activity to check arrangements work and protect the team*
 - Are the arrangements implemented effectively on site, if not what are the issues?*

This will be organised for the first quarter of 2016-17.

A Working Group (made up of Crossrail NR staff, Crossrail Principal Contractor staff and Network Rail safety specialists) will be formed to review the output findings of the site supervision and survey to identify improvement opportunities. The review will analyse:

- a. The observation findings of the site activity*
- b. The qualitative data feedback of staff regarding how they perceive the system works to provide the correct protection to them*
- c. How the findings of (a) and (b) above correlate to or against NR/L2/OHS/019 for site supervision*
- d. Make recommendations for the standard to be altered if relevant.*

Target Completion date: 31 January 2017.

Recommendation 2

The intent of this recommendation is to prevent non-conformance developing into normal practice within a possession management team. The wording acknowledges that Network Rail is currently implementing a process which will result in the engineering supervisor role being undertaken by a 'safe work leader'.

Network Rail should review the monitoring arrangements applying to engineering supervisors/safe work leaders managing engineering worksites. The review should establish:

- any improvements needed to give adequate confidence that the monitoring arrangements can identify where the actions of an engineering supervisor/safe work leader are not in compliance with the railway rulebook (for example when ensuring staff and equipment are clear of the line and concluding that the railway is safe to return to traffic); and
- how those actions can be corrected before they become habitual.

Network Rail should then implement any improvements identified by the review (paragraphs 132a, 135a and 136a).

ORR decision

7. Whilst the initial response identified the work being undertaken to review the ES/SWL standards and the way that this would feed into the SAS and SSA activities, ORR asked Network Rail to provide greater clarity regarding how the activities of the ES/SWL would be monitored to ensure that the specific bulleted items of the recommendation will be delivered, and asked who would perform that monitoring function. A response was received but did not provide the clarity ORR was seeking nor a firmer timebound plan.

8. 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
- is taking action to implement it, but ORR has yet to be provided with a complete timebound plan.

Status: Progressing. ORR will advise RAIB when further information is available regarding actions being taken to address this recommendation.

Information in support of ORR decision

9. On 20 May 2016 Network Rail provided the following initial response:

Network Rail will review the monitoring arrangements applicable to Engineering Supervisors and Safe Work Leaders and seek to implement the findings.

To undertake the review we will:

1. *Review the standards for Engineering Supervisor (ES)*
2. *Review the standard applicable to Safe Work Leader, however you may be aware that Safe work Leader is currently on hold pending full review by the new Programme Director. The principals of any omissions in the role of ES will be applicable here.*

The review will include the arrangements required by the SAS and SSA and will be completed by 31 July 2016.

We will feed this review into the planned mechanism for capturing on site staff competence.

The Skills Assessment Scheme is Network Rail's risk based approach to managing the competence of our people. The Scheme requires an annual capability conversation between a manager and staff.

Sentinel Site Access contains the functionality for staff to undertake reviews of their and colleague's use of safety critical competence during each shift. The functionality will be available to all Sentinel users and will be part of the standard operating functionality from 30 June 2016.

The findings of the review above will be incorporated into the e-learning that is currently in development for Sentinel Site Access, due for implementation across the rail industry from 30 June 2016.

The e-learning will be available from end of May 2016. Initially, this will be trialled in Network Rail's Swindon Delivery Unit, lasting for a period of 4 weeks.

The e-learning will be targeted at all Controllers of Site Safety (COSS) across the industry. By providing the training to all COSSs we will enable a greater population of safety critical staff to understand the functionality. It will also ensure we have trained all the Engineering Supervisors and Safe Work Leaders who are operating in East Midlands Area.

Lessons learnt regarding the functionality and ability to utilise the system will be examined and further lessons incorporated back into the e-learning and functionality of Sentinel Site Access.

All COSS will have a defined period to have undertaken the e-learning. Network Rail's proposal is that if the e-learning has not been undertaken by 30 September 2016, the COSS competencies will be taken down until such time as the training has been completed. Network Rail are currently consulting with the Infrastructure Safety Liaison Group (ISLG) with regard to agreement of this timescale before finalising the exact date for untrained COSS to be de-registered.

10. On 6 July 2016, Network Rail provided the following information after ORR requested that they provide greater clarity regarding how the activities of the ES/SWL would be monitored to ensure that the specific bulleted items of the recommendation will be delivered, and asked who would perform that monitoring function.

The activities of the Engineering Supervisor or the Safe Work Leader are supervised in the following way:

- 1. Sentinel Site Access has as described, in our original submission, the functionality for staff to record the date, time and description of the activities they are performing. This enables those staff to capture, on every occasion should they wish that they are utilising those specific competencies. They can record a brief summary of the duties they undertake including the complexity of the work, the types of activities and decisions they had to make, how the process went, what issues they encountered or how activities could be performed better.*
- 2. Staff have access to this recorded information through the Sentinel website and their personal login.*
- 3. Accessing the data enables the staff member to be prepared for their Annual Capability Conversation (ACC) that they undertake with their line manager. The annual capability conversation is where they can demonstrate to their line manager that they are performing their tasks correctly and learning as their work progresses.*
- 4. Feedback from our trials held in Western Route and Region during May and June 2016 identified that managers would like to be able see the recording of these activities on a frequency that is more than annually. We believe that it is possible for line managers to receive a period report on the recording of such competencies. This will allow the manager to review, verify and if necessary challenge the activities that are being logged by the individual are valid whilst the line manager has a recent knowledge of the work that is being performed.*
- 5. It should be noted that this functionality will be available to all staff when site access rolls out nationally. This had been planned for 30 June 2016. The trial in western detailed above encountered an IT glitch that resulted in the new sentinel app crashing. Our IT providers are currently analysing the causes of that issue and their solutions. Once resolved we will be able to identify a revised date for implementation of Site access.*

Recommendation 3

The intent of this recommendation is to reduce risks associated with a COSS being the only route by which railway safety information is provided to their workgroup. It applies only on relatively large construction sites on which it is practicable to provide such information.

Network Rail, liaising with Principal Contractors, should identify and provide a process for implementing, where practicable, improved arrangements for communicating safe working limits to all workers on large construction sites not separated from the railway by a permanent barrier. This communication, such as signage highlighting lines which have recently reopened, should increase the likelihood of staff recognising and then challenging the proposed safe system of work (paragraphs 134a and 135b).

ORR decision

11. ORR is content that the action plan presented by Network Rail will address the intent of the recommendation.

12. 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
- is taking action to implement it by 31 January 2017.

Status: Implementation ongoing. ORR will advise RAIB when actions to address this recommendation have been completed.

Information in support of ORR decision

13. On 20 May 2016 Network Rail provided the following initial response:

Network Rail will collaborate with the Infrastructure Safety Liaison Group (ISLG) to establish best practice arrangements for improved arrangements for communicating safe working limits to all workers on large construction sites not separated from the railway by a permanent barrier.

A good practice guide will be produced by Network Rail and issued by ISLG.

Review – Phase 1

Network Rail will collaborate with the Infrastructure Safety Liaison Group (ISLG) to undertake this review. This may involve creating a working group/focus group consisting of ESs, and COSSs. We will also get input for our ergonomics specialists and will research further what technological solutions, barriers, signage, revised RT3199 we can implement. This information will then be reviewed to evaluate the options and feasibility to develop an alternative improved working method/communication; introducing new or existing technology.

Develop Solution – Phase 2

With output of the Phase 1, we will produce a guide/instruction that will be issued by ISLG as a “good practice guide”.

Depending on the outcome of Phase 1, feasible solutions produced may include the use of existing and new technology for particular construction sites. The review will identify good practice solutions that can be issued across the industry.

Target completion date: 30 September 2016

Plan implementation and Trial – Phase 3

Although a formal trial plan will need to be developed (trial length and number of sites, etc) we aim to begin trialling the “new work method” on large construction site no later than September 2016. We will work with our IP colleagues and ISLG to identify worksites and businesses that can suitably resource the trial. ISLG and Network Rail (Rupert Lown Network Rail, and Stuart Webster-Spriggs; ISLG Chair will be accountable for the trial and producing the trial report with recommendations.

Target completion date: 1 November 2016 (TBC: approx. 8 weeks of trials)

Implementation – Phase 4

Implementation will be determined following the trial feedback and recommendations received. When implementing the ‘new method of control’ Network Rail and ISLG will consider what ‘priority’ it will have i.e. whether it should be mandated or under what situation should the new ‘guide’ be used, and how it should be phased into BAU. In doing this ISLG and Network Rail will need to consider training or briefing (to be considered in phase 3).

Target completion date: 31 January 2017

Recommendation 4

The intent of this recommendation is to consider possible solutions to the practical problems experienced by engineering supervisors when controlling access for numerous COSSs using multiple RT3199 forms. If practicable, an alternative method of control (possibly a matrix sign-in sheet operated within a robust process) should be introduced. The wording acknowledges that the engineering supervisor role will, in future, be undertaken by a safe work leader.

Network Rail should review whether the use of multiple RT3199 forms should be replaced by an alternative, risk assessed, process for engineering supervisors/safe work leaders controlling worksites which comprise both multiple lines and activities undertaken by several workgroups. If justified by this review, Network Rail should introduce an appropriate alternative process (paragraph 132b).

ORR decision

14. ORR is content that the action plan presented by Network Rail will address the intent of the recommendation.

15. 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
- is taking action to implement it by 31 January 2017.

Status: Implementation ongoing. ORR will advise RAIB when actions to address this recommendation have been completed.

Information in support of ORR decision

16. On 20 May 2016 Network Rail provided the following initial response:

Network Rail will collaborate with the Infrastructure Safety Liaison Group (ISLG) to undertake a review of use of multiple RT3199 forms.

A good practice guide will be produced by Network Rail and issued by ISLG.

Review – Phase 1

Network Rail will collaborate with the ISLG to undertake this review. This may involve creating a working group/focus group consisting of ESs, and COSSs. We will also get input for our ergonomics specialists and will research further what revised RT3199 we can implement. This information will then be reviewed to evaluate the options and feasibility to develop an alternative improved working method/communication.

Develop Solution – Phase 2

With output of the Phase 1, we will produce a guide/instruction that will be issued by ISLG as a “good practice guide”.

The review will identify good practice solutions that can be issued across the industry.

Target completion date: 30 September 2016

Plan implementation and Trial –Phase 3

Although a formal trial plan will need to be developed (trial length and number of sites, etc) we aim to begin trialling the “new work method” on large construction site no later than September 2016. We will work with our IP colleagues and ISLG to identify worksites and businesses that can suitably resource the trial. ISLG and Network Rail (Rupert Lown Network Rail, and Stuart Webster-Spriggs; ISLG Chair will be accountable for the trial and producing the trial report with recommendations.

Target completion date: 1 November 2016 (TBC: approx. 8 weeks of trials)

Implementation – Phase 4

Implementation will be determined following the trial feedback and recommendations received. When implementing the ‘new method of control’ Network Rail and ISLG will consider what ‘priority’ it will have i.e. whether it should be mandated or under what situation should the new ‘guide’ be used, and how it should be phased into BAU. In doing this ISLG and Network Rail will need to consider training or briefing (to be considered in phase 3).

Target completion date: 31 January 2017