

22 October 2024

Mr Andy Lewis Deputy Chief Inspector of Rail Accidents

Dear Andy,

RAIB Report: Two trains in the same signal section at South Wingfield, Derbyshire on 26 October 2022

I write to report¹ on the consideration given and action taken in respect of the recommendations addressed to ORR in the above report, published on 23 October 2023

The annex to this letter provides details of actions taken in response to the recommendations and the status decided by ORR. The status of recommendations 1 & 2 is **'Closed'**. The status of recommendations 3-5 is **'Open'**.

ORR will advise RAIB when further information is available regarding actions being taken to address these recommendations.

We will publish this response on the ORR website.

Yours sincerely,

Oliver Stewart

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

Initial consideration by ORR

1. All 5 recommendations were addressed to ORR when the report was published on 23 October 2023.

2. After considering the recommendations ORR passed recommendation 1 to Bridgeway Consulting Limited, recommendation 2 to Randstad Solutions Limited, and recommendations 3, 4 & 5 to Network Rail asking them 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 ensure that the competence of all signal maintenance testing staff at Bridgeway Consulting Limited includes the attitudes and depth of understanding needed to effectively apply signal maintenance testing processes.

Bridgeway Consulting Limited should take steps to enhance its existing processes for the assessment, development and ongoing monitoring of those staff who undertake signal maintenance testing on Network Rail infrastructure. These steps should:

a. give signal maintenance testers the depth of understanding, attitudes and nontechnical skills that are needed to deliver their work safely

b. provide testers with the specific skills they need for effective communication, safe decision-making, and safe behaviours such as maintaining compliance with processes, particularly when placed under time or other pressures

c. implement measures to monitor and promote compliance with relevant processes, procedures and rules

ORR decision

4. Bridgeway Consulting Ltd (BCL) have provided evidence of measures taken to improve the assessment, development and ongoing monitoring of staff who undertake signal maintenance testing on Network Rail infrastructure. Those measures include non-technical skills training for all S&T technicians; the BCL management system for S&T staff has been independently reviewed and updated; and working with the wider S&T sector to improve and standardise training, mentoring and competence management. BCL have confirmed all staff have been issued with IRSE licenses.

5. After reviewing the information provided ORR has concluded that, in accordance with the Railways (Accident Investigation and Reporting) Regulations 2005, Bridgeway Consulting Ltd has:

- taken the recommendation into consideration; and
- has taken action to close it

Status: Closed.

Information in support of ORR decision

6. On 24 January 2024 Bridgeway Consulting Limited provided the following initial response:

Detailed below is an update on our Progress to close out the recommendation. Updates have also been provided to The Rail Accident Investigation Branch.

- All of our S&T staff have completed all seven NR/RSSB Non-Technical Skills Modules (See Attachment A). The NTS training will be refreshed as and when required and will be discussed at annual Authority to Work desktop reviews with our S&T staff. There is an opportunity to include NTS training in the proposed national syllabus for SMTH.
 - Our WorkSafe Procedure and Safety Behaviours Charter and HSQE Induction has been updated to include invoking it when being pressured to cut corners due to time constraints. This has been briefed out to all staff, not just S&T. We have also provided a number of communications to Frontline staff reinforcing the Worksafe procedure (See Attachment A).



 In 2023, we conducted a staff survey in relation to health, safety and behavioural culture with particular focus on questions related to the Worksafe procedure, cutting corners to get work completed and reporting of incidents. (See Attachment A).

• We have also helped NR facilitate the national SMTH workshops for Network Rail with objective of SMTH being included on the Sentinel system. We are attending the second round of workshops during February 2024.

• We have provided NR with an update on 19th January 2024 to their Level 3 Formal Investigation the Bridgeway and RAIB recommendations. (See Appendix A).



We have agreed to meet again in March to update each other of appropriate Bridgeway/NR actions to date.

• We have recently engaged an external Signal and Telecommunications Consultant (David Freer) in order to review/revise our S&T competence management system and assurance processes (including on site activities) to ensure that S&T works are delivered to the right standards, productively and safely. David's objectives will also be overseeing relevant IRSE licences for all Bridgeway S&T staff. We intend to conclude this review with appropriate SMART actions by the end of March 2024.

7. On 25 April 2024 Bridgeway Consulting Limited provided the following update:

• We met with NR in February as there was discussion in relation to the IRSE licensing that we had selected. I can confirm that NR are now in agreement with our IRSE licence selection which is based in the activities that we undertake.

• You will have seen from the NR update presentation that we provided that we had a number of IRSE Licence Assessment Providers identified and that we had selected Siemens as our preferred supplier, followed by Alstom. Resourcing issues at Siemens/Alstom meant that they were not able to fulfil what we required within our timescales. We have since secured the services of BK3 training (who have recently been awarded IRSE Licence Assessment status) and that all of our S&T Operatives have commenced the IRSE Licensing Process which includes collating training/competence information and evidence of works carried out.

• I will need to speak with our Head of S&T (who is on leave at present) and BK3 in relation to a new target date that we can submit the portfolios and then undertake the necessary workplace observations.

8. On 14 May 2024 Bridgeway Consulting Limited provided the following further update:

I have spoken with the Bridgeway S&T Manager and we are making good progress with our IRSE portfolios and as previously stated we now have BK3 onboard as our new assessing agency.

Given the fact that the portfolios need to be submitted to IRSE and that following the review, there may be additional information/evidence required. All individuals will then require workplace assessment in order for a decision to be made by IRSE.

Looking at the timescales -we think that the end of July 2024 will provide us with sufficient time -hopefully we can get them completed before then. I'll keep you updated.

9. On 7 October 2024 Bridgeway Consulting Limited provided the following further update:

Please find attached all the IRSE licences for Bridgeway S&T staff. There is one attachment for each member of staff, and it includes:

• The IRSE web check version

• An Image of their hard copy IRSE Licence

We are issuing revised Authority to Work certification for all S&T staff to make reference to IRSE Licencing.

We have also implemented a revised S&T competency management process and frontline assurance processes for S&T works.

We have reviewed and updated our S&T Competence Management process and also updated our frontline Assurance process.

We have another meeting scheduled with NR to discuss actions related to their report (which also included IRSE Licensing)

Recommendation 2

The intent of this recommendation is to ensure that the competence of all signal maintenance testing staff at Randstad Solutions Limited includes the attitudes and depth of understanding needed to effectively apply signal maintenance testing processes.

Randstad Solutions Limited should take steps to enhance its existing processes for the assessment, development and ongoing monitoring of those staff who undertake signal maintenance testing on Network Rail infrastructure. These steps should:

a. give signal maintenance testers the depth of understanding, attitudes and nontechnical skills that are needed to deliver their work safely

b. provide testers with the specific skills they need for effective communication, safe decision-making, and safe behaviours such as maintaining compliance with processes, particularly when placed under time or other pressures

c. implement measures to monitor and promote compliance with relevant processes, procedures and rules

ORR decision

10. Randstad Solutions Ltd (RSL) have provided evidence of measures taken to improve the assessment, development and ongoing monitoring of staff who undertake signal maintenance testing on Network Rail infrastructure. Measures include non-technical skills training for all S&T technicians; a revised authority to work (ATW) process; and involvement in the Network Rail SMTH to Sentinel working group.

11. After reviewing the information provided ORR has concluded that, in accordance with the Railways (Accident Investigation and Reporting) Regulations 2005, Randstad Solutions Limited has:

- taken the recommendation into consideration; and
- has taken action to close it

Status: Closed.

Information in support of ORR decision

12. On 13 February 2024 Randstad Solutions Limited provided the following initial response:

All of our staff were briefed following the incident, Signal Maintenance Testers and not just the staff that were on site. We realised the value in sharing this with everyone.

Before the RAIB issued this report, all our staff were briefed and we had already rolled out the NTS training that we had been granted access to form Network Rail, this is now complete.

We have started recording the NTS measurement form on our ATWs, so we are able to monitor each of our staff at least once a year when we produce their ATW.

13. On 17 October 2024 Randstad Solutions Limited provided the following update:

All of our staff have completed NTS training, this was done some time ago, following the initial findings from this incident. I have attached our certs as evidence. We believe that it is important for all staff to gain this understanding, not just the SMTH. We also briefed the team of the importance of always complying with the procedures and carrying out all steps.



Signalling Technical Brief December 2022.

We have amended our ATW process to incorporate annual assessments against NR/L2/SIG/50035/Mod 40 in order to continually assess existing staff and any new starters to allow us to address any potential issues or lack of understanding with communications as we review them. I have attached the template from May 2023, to evidence that it was done at the time. We also updated our procedures to reflect this, attached.

X



0 ATW Template May Competence and 2023 with Mod 40.xls:Authority to Work for

Randstad have been present in the working groups for introducing SMTH to Sentinel and have actively supported this. During the period of development and transition Randstad have made a point of only using training companies that have proved they have SMTH Assessors working to the new Network Rail material.

During the Network Rail investigation it was noted that Randstad were maintaining good ATW, surveillance and IRSE procedures and it was not our staff that carried out the erroneous signal testing. We believe the changes brought about have brought positive change to the safety of the railway and want to continue to implement them

Recommendation 3

The intent of this recommendation is to reduce the risk of pre-planned maintenance testing activities not being executed correctly due to the workload of staff who have the overall responsibility for the testing.

Network Rail should review the workload placed on signal maintenance testers who are given the lead tester role for pre-planned work under the signal maintenance testing handbook process. The review should consider suitable criteria to determine when a lead tester should focus solely on leading the testing, and not undertake other roles, by considering thresholds for workload factors such as:

• how many testing teams the lead tester will be managing

• how the tester and installer resources will be allocated to the work

• how familiar the lead tester is with the signalling equipment and location where the work is taking place

• how much time the lead tester will be given in advance to plan how the installation and testing work will be executed

• the number of people or organisations the lead tester will need to communicate with while the work is taking place

• what other non-testing duties the lead tester will be required to carry out, such as safety responsibilities for the team.

The findings of this review should be used as required to produce appropriately updated rules, guidance and training for staff undertaking the lead tester role for preplanned work under the signal maintenance testing handbook process.

ORR decision

14. Network Rail have provided a summary of changes to be made to the SMTH manual, the justification for doing so and progress to date (see table in attached slides at para 14).

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 close it by September 2025

Status: Open.

Information in support of ORR decision

16. On 19 March 2024 Network Rail provided the following initial response:

Action Plan

Please provide milestones with dates

- The definition of the role of Lead Maintenance Tester defined in NR/SMTH/Part01/Module/03 (particularly sections 1.2, 1.3 and 1.4) will be reviewed. The review will include whether there is the need for more alignment with the definition of Lead Tester in NR/L3/SIG/11235/G110.
- The criteria in NR/SMTH/Part01/Module/02 section 1.1 (when work is considered to be extensive and simultaneous and not permitted to be undertaken as maintenance testing) will be reviewed. This will include, but not be limited to, the present limit of three teams of three people in any one shift.
- NR/SMTH/Part01/Module/08 will be reviewed to determine whether more guidance needs to be given to the SM(S) planning the work. This will include the planning requirements for considering the complexity brought in by multiple testing requirements with separate test plans and might lead to having a consolidated test plan showing dependencies and priorities.
- The competence requirement for the role of Lead Tester / Lead Maintenance Tester will be reviewed, for example whether the Lead Maintenance Tester should also have the G110 Lead Tester competence.

Evidence required to support closure of recommendation

Results of the review. Updated to standards as appropriate following the results of the review.

17. On 3 July 2024 Network Rail provided the following update slide:



Recommendation 4

The intent of this recommendation is to reduce the risk of signalling assets being placed into service in an unsafe condition after high output track renewals work.

Network Rail should implement measures to assure itself that signal maintenance testing carried out on its signalling assets, by the testers it contracts to do this work on its high output track renewals project, is being completed in accordance with the requirements of its signal maintenance testing handbook. These measures should encompass checks on the technical skills of the testers and the quality of their testing work, as well as criteria which will allow it to be established if testers are displaying the required attitudes and non-technical skills needed to deliver their work safely and effectively.

This recommendation may apply to other parts of Network Rail's organisation that carry out project-based renewals or maintenance activities which use the signal maintenance testing process to test any affected signalling assets as part of their work.

ORR decision

18. Network Rail has provided a summary of work done to date and further actions aimed at reducing the risk of signalling assets being placed into service in an unsafe condition after high output track renewals work.

19. 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 close it by December 2024

Status: Open.

Information in support of ORR decision

20. On 20 December 2023 Network Rail provided the following initial response:

Action Plan

Please provide milestones with dates

 On going review of competence requirements for non-technical skills for signal engineering staff, and the creation or improvement of performance criteria and training to change behaviours. All staff who are to work on High Output sites shall be fully inducted before work. These inductions to include the Work Safe Procedure and the staff's right to invoke the procedure, without retribution. These inductions shall emphasise that any person working on High Output sites shall be empowered to raise any issues that they feel appropriate.

High Output supervisory staff shall coach site staff on the non-technical skills desired from our workforce. Skills such as Situational Awareness and Working Under Pressure to be discussed and personal experiences shared. The coach shall offer the capability to provide feedback to staff to encourage and develop good behaviours.

(Started – review completion June 2024)

- Review of the IRSE licence application requirements, particularly whether the complaints process is being used effectively, the management of staff under mentorship and the appropriate level of mentorship for safety tasks and review of mentorship capability. (Started – review completion December 2024)
- Construction Services will continue to review the practices for recording progress and completion of test activities defined in SMTH, the tools and media required to make those records. This will consider the opportunities to record improved levels of data quality, attributable to the individual, time, and place and if that is reasonable to gather for all or some *task* (Started review completion June 2024)

- Progressively review site surveillance, aimed to further enhance assurance of safe delivery of signalling engineering tasks. (*Started review completion June 2024*)
- Implement a Framework Contract that allows High Output depots to have consistent staff who hold relevant competencies, skills and IRSE licences needed to deliver their work safely and effectively. (Started – review completion December 2024)
- Construction Service has embedded a programme of onsite assurances for each High Output delivery unit. These assurances include, but are not limited to, SMTH testing specific Engineering Verification protocols. This is information is uploaded to Route Services IRIS (Incident Reporting & Investigation Software) system for peer review and trend analysis.

High Output shall consult with suppliers to second competent, IRSE licensed signalling staff, to provide a workforce with the requisite skills, knowledge, and competence. **(Started - Review completion December 2024)**

Construction Services will continually review how it can best achieve and monitor in small teams the required level of independence between the installation and testing roles when pre- planned renewal work is carried out under the processes described in its signal maintenance testing handbook.
 (Started – review completion March 2024)

Actions completed to date.

Prior to the RAIB Wingfield being published in October 2023 several initiatives were started:

- A review into maintenance testing activities focussing on why the errors occurred. (Lessons Learnt)
- A Safety stand-down aimed at project, contractors, and engineers to re-enforce the importance of project and requirement stability in preventing testing errors.
- The issue of Engineering Instructions raising awareness of technical/behavioural issues and lessons learned.
- Since Clapham disaster, emphasizing the importance of engineering processes developed since that time and the need to follow those processes to maintain safety.
- The education of existing staff and their managers, and future recruits, to promote a better understanding of industry processes, and an improved understanding of how the lessons learnt from previous accidents have shaped today's good practice.
- Construction Services (High Output) has produced a broader programme of Engineering Verification, which commenced in period one of 23/24 delivery year. This is intended to be an on-going, rolling programme scaled to the volume of work delivered by Construction Services. Within the broader programme are a set of Signal Maintenance Testing specific Engineering Verification protocols. These include signal aspect testing and wire count testing and are specifically mentioned in the investigations as failures.
- Increased the presence of site supervision and audit of testing activities by Tester in Charge prior to hand-back / Entry into Service
- Independent reviews conducted by Principal Route Engineering Team (S&T) on Western / NW&C of T&C resource, competencies, and plans.
- Interactive workshops & focus groups set up to re-brief on planning, safety, and sustainability assurance. (S&T orientation pack)

Improvements on-going:

- NR- Construction Services are investing to develop training capabilities including rail safety critical and IRSE technical training, mentorship, and assessment in-house to ensure a consistent high-level quality for its staff. *(Started review completion December 2024)*
- Network Rail's E-learning "non-technical skills for signal engineering" was made available to the supply chain in May 2023. Upon request, several suppliers have provided evidence of their implementation and there is an on-going action to ensure the remainder of the Construction Services supply chain comply with this requirement. *(Started review completion June 2024)*
- Quarterly staff business briefing days to share with all employees the business aspirations, performance, and areas of concerns to drive an ethos of continuous improvement. These days are supported by other significant improvements with regards to internal communications with all industry alerts and updates cascades. (Started & On-going)
- Cascading a tailored interactive briefing to leaders of HO track / signalling teams and staff, which
 includes leadership interventions and their impact, appropriate escalation practices, levels of selfawareness, levels of personal responsibility and a reminder of established good practice. *(Started review completion March 2024)*

Evidence required to support closure of recommendation

- Minutes of review meetings
- Where updated, published revised processes and guidance.
- Where updated, training course records
- Briefing records
- Where created, published tools and templates.
- Copies of presentations given
- EV Assurance Period Report

Recommendation 5

The intent of this recommendation is to reduce risk of a signal being placed into service when all steps in the defined maintenance test plan for testing signal aspects have not been carried out.

Network Rail should provide signal maintenance testers with a means of recording progress when carrying out NR/SMTH/Part 03/Test B07 'Defined Test: Aspect Test' so that they can record that all aspect permutations have been tested and that all test steps have been completed.

ORR decision

21. Network Rail are revising the SMTH standard and eSMTH app to facilitate more complete and accurate recording of the steps of a signalling test programme before a signal is placed back into service. Completion of that work is planned for

December 2024 with briefing being done in June to September 2025. Network Rail confirmed that briefing for contractors will be conducted through the STEF forum.

22. 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 close it by September 2025

Status: Open.

Information in support of ORR decision

23. On 20 February 2024 Network Rail provided the following initial response:

Action Plan Please provide milestones with dates

A means of recording that all aspect permutations have been tested will be produced and included in the SMTH standard and eSMTH app.

Evidence required to support closure of recommendation

Publication of the revised standard. Inclusion in the eSMTH app. Confirmation of briefings.

24. On 3 July 2024 Network Rail provided the following update slide:

