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27 October 2021

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

Dear Andrew,

**RAIB Report: Two incidents involving track workers between Clapham Junction and Earlsfield on 8 March 2011**

I write to provide an update<sup>1</sup> on the action taken in respect of recommendation 4 addressed to ORR in the above report, published on 27 February 2012.

The annex to this letter provides details of actions taken in response to the recommendation and the status decided by ORR. The status of recommendation 4 is **'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 has become inaccurate, in which case I will write to you again.

We will publish this response on the ORR website on 28 October 2021.

Yours sincerely,



Oliver Stewart

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

## Recommendation 4

*The purpose of this recommendation is to improve the competence of track maintenance staff in safety-critical roles, particularly when exposed to situations with which they are unfamiliar.*

Network Rail should review the adequacy of training and assessment of track maintenance staff to deliver practical competence, particularly in skills or situations which are encountered infrequently. Where necessary, improvements should be made to enhance current processes. Consideration should be given to:

- a. the extent to which it is appropriate to have detailed and complex rules for responding to infrequently-encountered situations;
- b. methods of providing experience in situations which an individual may encounter infrequently;
- c. identifying methods of assessment for situations which it is unlikely a line manager would normally be able to observe;
- d. reassessing safety-critical competences when there are significant changes in an individual's work pattern, e.g. changing from day patrolling to planned maintenance work on permanent night shifts; and
- e. reinforcing the need for regular face-to-face reviews of staff performance and competence by line managers

## ORR decision

1. This and related recommendations concerning staff competence in the Track discipline have a long history. We have provided some of the essential documents, but it is important to reflect that there is a lot more detail in our records. We have not provided it all as the volume would be overwhelming.

2. Network Rail's efforts to improve staff capability in track asset management have not always been successful. We were depending on the delivery of Business Critical Rules for some of these initiatives, for example, but this programme was not successfully realised. The concept of 'Role Based Capability' survived – but its achievement has been lengthy and troubled at times.

3. In addition to the formal submissions from Network Rail which are referred to here, ORR has maintained scrutiny of the topic by means of strategic central liaison meetings, inspection assignments and formal enforcement (June 2017 Improvement Notice "to demonstrate the competence of persons who carry out a role that impacts on the safety of the railway, in particular the role of Track Maintenance Engineer (TME)."

4. We believe we have now reached a point where Network Rail has defined through a track competency framework the required competencies for staff in track; developed training; introduced a process for routine assessment of TMEs and SMs

through a BAU process; and are monitoring the competence position of staff. Competency and assessment for occupational tactical track skills is now managed through the Skills Assessment Scheme (SAS) which links to the track competency framework.

5. Whilst there is still work taking place to complete assessments of all staff against the track competency framework, we would characterise this as a 'business as usual' (BAU) activity, whose completion does not need to be seen in order to determine that the recommendation has been addressed adequately. The work done and the ongoing BAU activity delivers the intent and requirement of the recommendation. We also note that training is being refined and updated on a continuous basis, managed by the Network Rail Technical Authority.

6. 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**

7. On 2 August 2013 ORR reported the following:

After reviewing all the information received from Network Rail, 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.

ORR wrote to Network Rail, 21 June 2013, seeking further information on progress being made, the outcomes of the reviews and any further action that may be taken.

**Status: *In-progress***

#### **Update**

8. Note:

- a. this recommendation and the work to address it is directly linked to the actions being taken by Network Rail to address recommendation 3 from the December 2014 RAIB report of the Derailment at Liverpool Street station, London, which addressed related track competency issues. (NB An associated RRC paper for Liverpool Street Station Recommendation 3 has been prepared for RRC consideration.)
- b. the Network Rail BCR programme, referred to in our previous report to RAIB, was closed in early 2018 with the competence elements being

retained and developed through the Role Based Capability Programme.

9. To confirm the detail, coverage and delivery the work described in the June 2013 closure statement from Network Rail ORR kept the recommendation open and held a number of meetings, to assess progress, with Network Rail Track Technical Authority (Formerly STE) and the leads of the RBC programme. From those meetings we have confirmed the detail and progress of the work set out by Network Rail, details summarised below setting out the position with Track competence framework and the SAS for occupational tactical competencies. The Technical Authority (TA) have developed and put in place the competence framework for Track Engineers and safety critical track staff. The Role Based Capability (RBC) programme develops and delivers the training necessary to support development of staff. Competencies have been split into two areas, Occupational and Technical/Professional, summarised as follows:

- a. Professional and Technical: These are monitored via the annual development plans used during the performance review process. There are a total of 39 professional competencies defined for Track Engineers, 16 of which are considered as applicable to Track
- b. Occupational Competencies: These are monitored through the Skills Assessment Scheme, and are ticketed competencies like TR11 (Opening line to traffic) and TR06 (Basic Visual Inspections). Maintenance Engineers (noting that 15 of the 39 are design specific).

10. For each professional competence, there are 5 levels, from Awareness to Expert (L1 – Awareness, L2 – Knowledge, L3 – Applying, L4 – Leading, L5 – Expert).

11. The TA have defined the desired competence level for each role with the professional competence framework (e.g. TME and SM). For Levels 1 to 3, the levels are self-assessed by the individuals. To achieve a level 4 or 5, the assessment must be validated by individuals granted with delegated authority from the Network Technical Head of Track.

12. Professional competencies are defined within Oracle, with specific behavioural indicators identified for each to help assign a competence level.

13. The process for assessing individuals against professional competencies is now built into the Business as Usual performance review process. A standard self-assessment form exists for each applicable role – an example TME self-assessment form can be found [here](#). There is auditability as regions enter results into Oracle (The NR competence recording system) – however this is not yet fully populated by all regions, this is ongoing BAU work. The TA use details entered in Oracle to monitor progress with competence development.

14. Occupational competencies are assessed through the skills assessment process (SAS) and form part of the annual capability conversation. The track competencies are defined within NR/SP/CTM/011. This includes the requirements for initial assessment and the re-assessment frequency and operate within the Skills Assessment Scheme (NR/L3/CTM/306 ISSUE 2) which has been operating in its revised form since 2016. We note that whilst the RBC programme is funded to develop new training materials, it is not funded to update existing materials. This is a

gap, acknowledged by the TA and is being actively reviewed to resolve. See meeting notes [here](#), from a discussion between the ORR and the TA.

15. Through subsequent meetings with both the TA and the RBC programme, we have evidence that TMEs and SMs are completing self-assessments and that both TME and SM training is being delivered. The TA are also monitoring the delivery of training and self-assessment for TMEs and SMs. As the recommendation required a time bound plan for assessing and addressing any shortfalls, the recommendation is being complied with as NR are delivering both assessments and training, and developing a means of monitoring competence through logging results from competence assessments on Oracle.

16. The Track Team will continue to monitor the ongoing delivery of this work through routine liaison meetings.

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#### **1. Brief Summary on what was previously reported to RAIB on 23 April 2013**

2. Network Rail identified that the volume of rules and standards together with task based prescriptive training regimes appear to have a negative impact on competence. Network Rail is therefore taking action to change its competence training regime from task-based to role-based, focusing on behaviours of safety critical staff and to equip them with the skills to make the right decision in circumstances they are confronted with.

#### **3. Update**

Network Rail provided further information on 8 May 2013 advising that:

*Extract from Network Rail's Closure Statement (3 May 2013)*

*A review of training and competence arrangements has been carried out as part of the Risk Based Assurance project – the methodology has been accepted by internal and external parties. Network Rail expects the changes to take effect from January 2014.*

*This is captured within the Business Critical Rules.*

*The Risk Based Assurance (RBA) projects will identify those tasks performed infrequently and most likely to be at risk from skills fade to determine what the minimum frequency of assessment is. RBA will also provide direction on how often the individual should practice the task. This will aid the line manager in their decision if the competence ought to be removed altogether; if mentoring is required; or if the individual needs to re-take the initial certification. The rating of an individual receives takes into consideration the different environments the individual will work in (e.g. night, difficult weather conditions). The increased use of emulations within Network Rail's training offering allows Network Rail to give individuals the opportunity to practice these infrequent tasks in a safe environment and is suitable for those situations which are difficult to recreate (e.g. High Voltage sub-stations e-learning tool).*

*Following implementation reviews will be undertaken at agreed key intervals to identify the effectiveness of the new system. Where required re-review and adjustments will be made to enhance the work already completed.*

### **ORR Decision**

1. After reviewing all the information received from Network Rail, 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.

ORR wrote to Network Rail, 21 June 2013, seeking further information on progress being made, the outcomes of the reviews and any further action that may be taken.