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10 November 2021

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

Dear Andrew,

RAIB Report: Track workers struck by a train at Margam, Neath Port Talbot on 3 July 2019

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 12 November 2020.

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 - 10 is '**Implementation on-going**'. The status of recommendation 11 is '**Progressing**'.

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 on 11 November 2021.

Yours sincerely,

A handwritten signature in black ink, appearing to read 'Oliver Stewart', written in a cursive style.

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 11 recommendations were addressed to ORR when the report was published on 12 November 2020.
2. After considering the recommendations ORR passed recommendations 1 – 10 to Network Rail and recommendation 11 to the Rail Delivery Group 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. Additionally, we have been meeting with Network Rail regularly to gauge progress in its plans to address the recommendations for which it is the end implementer. Intelligence from these meetings has been incorporated into some of the 'ORR decision' descriptions where appropriate. This is to reflect that we have sometimes influenced Network Rail to do something additionally or differently to its original response – and these changes have not yet been demonstrated by means of amended written submissions.

Recommendation 1

The intent of this recommendation is that staff should only carry out maintenance activities that are strictly necessary.

Network Rail should undertake a thorough review of the types of routine maintenance activities undertaken on or near the track by its depots to check that all such activities are necessary for the reliable and safe operation of the railway and identify any that are not.

The findings of this review should then be used to inform the development of clear instructions to maintenance staff to prevent any unnecessary activities, and to develop a process for updating staff on new maintenance practices as new assets are introduced in the future

ORR decision

4. The overall aim of the plan Network Rail submitted to address the recommendation is to eliminate tasks that don't need to be done and to batch others together with the aim of improving efficiency. This was linked to an ambition to do some tasks more effectively.
5. ORR was concerned that Network Rail's original plan was overly ambitious – and potentially unnecessary, given the continuing and iterative reviews of maintenance tasks that are being carried out as part of its response to ORR's Improvement Notices requiring better planning of safe systems of work. We communicated this to Network Rail in June 2021 – as reflected in the subsequent submission attached to this paper.
6. Network Rail has committed to avoiding duplication of efforts that will contribute to achieving this recommendation's intent. Its June 2021 revised submission is more targeted. In particular, the proposed SIN has not been pursued.

In discussions in June Network Rail staff had revealed concerns that this formal approach might not necessarily unearth all relevant local practices. We agreed that the best focus would be the joint approach of continuing the formal review of tasks triggered by the workforce safety task force whilst also encouraging ‘soft’ approaches in suitable forums to tease out any culturally entrenched custom and practice.

7. We were expecting a further submission in October, but it hasn’t been received. Further, at a meeting with Network Rail to discuss progress with Margam recommendations, there was nobody directly involved in co-ordinating the response to this recommendation who could update us. Others at the meeting understood that delivery was progressing to plan. Safety task force representatives gave us some indication of where they thought activity had been taking place.

8. Network Rail acknowledge that some local arrangements will be more difficult to identify. Following our discussions Network Rail is seeking to identify futile work through ‘soft’ means. The communications team in the safety task force has developed effective media and feedback channels to solicit identification of potentially unnecessary maintenance activities from the front- line workforce, their supervisors and immediate line managers.

9. The review cycle that has been initiated in relation to compliance with ORR’s enforcement will become an iterative process. The second pass of scrutinising scheduled maintenance tasks in Ellipse is more than 80% complete and good progress has been made in the third pass. This gives confidence that there is a long-term mechanism to ensure that only required work is planned, whilst not stifling professional judgement or innovation. This has become business as usual.

10. 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 30 October 2023.

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

Information in support of ORR decision

11. On 1 February 2021 Network Rail provided the following initial response:

Action Plan

Action Plan (with milestones)

A SIN to be written and launched to review Asset Data Specification along with work practices and activities within the Ellipse management system to review:

1. Review and record all types of routine maintenance activities that are undertaken nationally, to include a review of any “local” work type practices with discipline engineers to lead talks and

reviews with frontline teams to check any work that isn't being recorded or not being carried out correctly. **October 2021**

2. Review of all recorded types of maintenance activities by relevant discipline Heads in conjunction with the local DEAM to ensure only necessary work is undertaken. **July 2022**
 3. Transferring of all current work over to recognised and prioritised work orders. **October 2022**
 4. Review of current risk-based maintenance regimes within each region to bring on board any necessary work activities that weren't covered and to also review where Risk Based Maintenance can be extended to cover any other work activities or assets. **March 2023**
 5. Review of one section's work bank per route along with asset technical head. **March 2023**
- Tie in the above to routine assurance checks by senior DU staff on an ongoing routine basis. **October 2023**

Evidence required to support closure of recommendation

SIN briefed and signed off within dates set in SIN to include:

- Briefing record to show that SIN and SIN brief has been cascaded through the organisation
- Downloaded work banks for each Section Manager with dated review
- Dated review with relevant Asset Heads to review work being undertaken
- Dated review with actions and plan of risk-based maintenance regimes
- Plan for each route's section managers to undertake a deep dive into the work bank with asset technical head
- 2nd LOD of Assurance (Engineering Verifications) to be amended to also routinely take in the deep dive of both RBM regimes and work bank reviews.

12. On 18 June 2021 Network Rail provided the following updated action plan:

Action Plan

Details provided to ORR at initial discussion:

- Ellipse exploitation has given each asset Technical Head the minimum Asset Data Specification
- Each Technical Head in TA's team to review all standard job to ascertain if activities are required on all asset's types (e.g. glued v dry IBJ's)
- Regions to review local practices to ascertain if all works are required per standard job per asset and report back to Head of Maintenance TA
- Future maintenance programme delivering full rollout of Risk Based Maintenance. Audit of process to see once a regime change has been agreed, it has followed through and reduced the work orders
- Also, lead a review at each Route, to deep dive 1 section with an expert from the Asset Technical Heads team and go through their work bank.

ORR Comments:

Concern over the definition of strictly necessary. How do we get boots on the ground information as review currently is Ellipse work only. How will we give instructions to staff? How do we keep this right and ongoing? Must be a BAU plan....cycle of review. Tie with the roll out of risk based maintenance. Be careful not to restrict innovation.

Action Plan (with milestones)

Context

Following discussions with ORR (3 June 2021) to set the response to the recommendation in context it has been agreed that other actions already in hand supersede the requirement to undertake “undertake a thorough review of the types of routine maintenance activities undertaken on or near the track by its depots” in a formal manner.

There are three principal mechanisms which contribute to this are: 1) a comprehensive review of maintenance scheduled tasks being undertaken as part of the safety task force to eliminate unnecessary work and check that all such works are appropriately protected; 2) organising “so that colleagues can do their work safely at the right time, in the right place, supported by the best technology” as part of the Modernising Maintenance initiative; and 3) reviewing the approach to work activity risk assessments and task risk control sheets as part of a safety risk assessment project.

Elimination of futile tasks (by April 2022)

Additional insight will be sought by taking a ‘softer’ approach of encouraging engagement, reflection and self-declaration.

The additional means by which “all such activities are necessary for the reliable and safe operation of the railway and identify any that are not” will be achieved will be by:

1. An opening communications exercise through various media (Yammer, Frontline Focus, website etc.) as a reminder / reinforcement that eliminating unnecessary exposure to hazards is the safest form of workforce protection;
2. Structured conversations supported by presentation material and a questionnaire through the team brief cascade; this will solicit identification of maintenance practices which are known or thought to be futile or of limited safety or performance value or which may be achieved more safely or efficiently by alternative means;
3. Collation of question set response and analysis at Regional level to support feedback consistent with the devolved organisation before national collation and sharing of findings and actions implemented across Regions;
4. Feedback of change identified and implemented through a “you said” / “we did” and a “copy and share with pride” approach to spread good practice;
5. A follow up communications exercise after six months via the same media highlighting improvements made – futile tasks eliminated and risk reduction on essential tasks;
6. Formal update of standard jobs and maintenance schedule tasks in Ellipse and review of work instructions will be managed under business as usual arrangements outwith this action plan

Preventing Unnecessary Activity (TBA)

The safety risk assessment project is set to address how work activity risk assessment and task risk control sheets and ad hoc risk assessments in connection with bespoke activities is undertaken. How work instructions are associated with standard jobs and how the implementation of measures to control and mitigate risks associated with work instructions will be addressed as part of this project.

Process for New Assets and New Maintenance Practices (June 2022)

Although this requirement is stated in a compounded sentence with the outcome of the prescribed review it is proposed to respond to the requirement independently.

There are three existing processes which set requirements for maintenance practices for new assets which are contained in three standards:

- NR/L2/RSE/0005 'Product Design for Reliability' (DFR)
- NR/L2/RSE/100/05 'Product acceptance and change to Network Rail operational infrastructure' (PA)
- NR/L2/MTC/089 'Arrangements for the exchange of asset data and the continuing maintenance of assets undergoing change' (AMP)

There is also a check that the introduction requirements have been met as part of: NR/L2/INI/CP0075 Entry into Operational Service.

The concern which underlies the requirement of clear and unambiguous work instructions associated with introducing new maintenance practices for new assets and will be addressed by:

1. Producing guidance to support the existing standards to reinforce maintenance system integration as part of introducing new assets and practices
2. Briefing material for maintenance engineers, project engineers and commissioning engineers
3. Checking that as well as delivering maintenance training, spares, tools and test equipment that ongoing training, competence and assessment requirements have been updated before entry into service
4. Checking that new or revised, standard jobs, maintenance scheduled tasks and associated work instructions and risk control measures have been implemented before entry into service
5. Updated check sheets / forms for project engineers, project managers, project interface coordinators and asset data managers to track and record implementation of items 3. and 4.

Evidence required to support closure of recommendation

- a) Material used to support the opening and follow up communications exercises;
- b) Declaration of any futile maintenance practices identified and eliminated or of practices where risks have been reduced by achieving the ends by alternative means;
- c) Records of implementation of the guidance associated with new maintenance practices for new assets;
- d) The guidance and associated briefing material supporting new assets and new maintenance practices;
- e) The check sheets produced to support the implementation tracking associated with new assets and new maintenance practices.

Recommendation 2

The intent of this recommendation is to improve the level of monitoring and supervision of planners and track workers so that safe planning and site behaviours are cultivated and maintained.

Network Rail should carry out a detailed investigation at delivery units and depots of how management is monitoring and supervising section planners and staff working on or near the track, to check that safe work plans are being generated, and implemented safely on the ground. It should then use the findings to develop and implement improved procedures on monitoring and supervision, and assess and address any related staff resource requirements

ORR decision

13. ORR found it difficult to identify what, precisely, would address the recommendation from the rather widespread activity Network Rail described in its initial submission. We expect the work being done to address this recommendation to be joined up with work to address recommendation 7 but we wanted clearer identification of relevant work streams for each recommendation.

14. Following meetings and discussions Network Rail submitted a revised plan. This has the potential to be more targeted, but we are still concerned that disproportionate effort might be devoted to trying to achieve the “detailed investigation” referred to in the recommendation, when there is abundant evidence already of how monitoring, checks and assurance require to be strengthened.

15. We did not receive feedback on this recommendation on October 15th. Subsequently we have been advised that the response to this recommendation is being reconsidered in conjunction with the response to recommendation 7. Southern Region have responded with evidence to demonstrate how their existing monitoring and assurance addresses the issues which motivated the recommendation. This evidence is being evaluated. If it is accepted as suitable and sufficient then similar evidence will be sought from the other Regions with a view to demonstrating that effective monitoring and supervision is now in place and that the recommendation has been superseded by events in the field.

16. 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 30 October 2023.

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

Information in support of ORR decision

17. On 1 February 2021 Network Rail provided the following initial response:

Action Plan

Action Plan (with milestones)

The intent of the Head of Maintenance Principles and Standards within the below action plan is to use our work streams in GRAI, RBC and Assurance to address the key components of the required action plan

1: Rewrite NR/L3/MTC/MG0221 Network Operations non-operations staff management self-assurance procedure to move management to confidently check and assure themselves that the necessary safe work planning is in place and being adhered too. The GRAI longform assurance assessments that are currently being undertaken in a separate work stream will be used in conjunction with the re-write to help improve our first line of defence of assurance. This will be rolled out with interactive and instructional briefing video content so that management and our people know what good assurance looks like and so that they understand their roles in the assurance regime and why it is important. **January 2022**

2: Role Based Capability to be rolled out to all planners and Section Managers within the organisation to provide necessary grading and upskilling through individual action plans designed to recognise an individual's weaknesses and then provide a tailored improvement plan to enable them to meet the requirements of the role. **October 2023**

3: Rewrite NR/L2/MTC/SE0117 standard to ensure that checks are carried out against the plan and the standard set out in 019, paying attention to the use of the hierarchy and questioning whether a different method of protections can and should have been used. Also include a check on the relevance of the work being undertaken. **October 2022**

Evidence required to support closure of recommendation

- Relevant standards mentioned are re-written to address the issues above, briefed out and implemented across the routes and regions
- Briefing of assurance standard to be in a video format detailing what assurance is and what good looks like
- Evidence of briefings undertaken and recorded
- All section managers and planners are to be recorded through the RBC scheme with action plans as required.

18. On 18 June 2021 Network Rail provided the following updated action plan:

Action Plan

Details provided to ORR at initial discussion:

- Maintenance TA to lead a review of the safety inspections at section level across the network for all disciplines in all regions
- Findings from review to inform best practice and shortcomings
- Lean methodology to be used to identify root causes and the implementation of control measures
- Standards framework to be updated to reflect additional / new ways of working
- Staff resources should also be considered as part of the review

ORR Comments:

Role based capability for planners is rolling out now. What level of supervision will this reach in the organisation? Adequate leadership supervision required to close out the enforcement notices. Need the different levels of management to understand their role in assurance. Resource requirements must be clear.

Action Plan (with milestones)

Undertake investigation and review findings before responding on how they will be implemented.

This is an underpinning action to achieve improving track worker safety. Implementation to be coordinated through national team and Regional leads. Field work should be lead through Workforce Health Safety and Environment Advisors working with Compliance and Assurance Advisors across DUs.

Reviews and reporting will be coordinated through the safety task force and implementation of its programmed activities.

Investigation requirements:

- i. A remit – evidence to be collected and how (needs consensus say 2 months)
- ii. A model of what good looks like to inform evidence collection and evaluation – to be informed by process development and current planning initiatives / programmes (3 months in parallel)
- iii. Evidence collection (3 to 6 months)
- iv. Any immediate actions to be implemented through close call system?
- v. Review of evidence, actions within the system to improve conformance implemented at Regional level (6 to 9 months)
- vi. Findings for systemic changes in standards, processes, systems, e.g. planning systems, training packages, monitoring and assurance arrangements for central action to be jointly agreed by Regions (for stuff they do not do themselves) (9 to 12 months) – implementation plan to follow

Evidence required to support closure of recommendation

To be determined once level of change identified and means to implement it agreed.

Recommendation 3

The intent of this recommendation is to prevent future confusion and misuse of the 'parallel working' facility in the SSOWP system.

Network Rail should define the term 'parallel working' in the SSOWP system and undertake a thorough review of how it is being used in the planning and implementation of SWPs on its network and decide whether to retain the facility in the SSOWP system. If the function is to be retained, Network Rail should train

relevant staff on how to use the facility correctly and consider measures to prevent its misuse

ORR decision

19. In relation to this recommendation, ORR has consistently stressed to Network Rail that it needs firstly to understand if there is any justification for continued employment of 'parallel working' – and if so, to provide unambiguous definitions and guidance.

20. To address the recommendation Network Rail sought to define the term parallel working and identify the circumstances where it was being used. A survey of staff involved in planning across Network Rail routes found there was not a consistent definition of the term parallel working and it was sometimes confused with a parallel component used in some Safe System of Work Packs (SSOWP). A clearer definition of parallel working has been agreed and work is being done to develop a communications strategy.

21. At our most recent meeting with Network Rail on 15th October we received a verbal update. Good progress is being made – training and guidance material is being produced to communicate the limited circumstances in which parallel components (for which there is an agreed definition) can be included in a SSOWP. The new Rail Hub system for work planning will assist by restricting the ability of planners to have a 'back-up' SSOWP. Further – the wider work Network Rail has been doing to reduce reliance on unassisted lookout warning has led to a significant decrease in such systems of protection. It has also introduced greater rigour and scrutiny by managers who are required to sign off such plans.

22. Network Rail has acknowledged that there is a significant cultural issue of staff being comfortable with having two SSOWPs for one task. That is why the recommendation will remain open until ORR is convinced there has been a meaningful and effective communication exercise to embed changes.

23. 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 December 2021.

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

Information in support of ORR decision

24. On 1 February 2021 Network Rail provided the following initial response:

Action Plan

Action Plan (with milestones)

- Corporate Workforce Safety to discuss the Parallel Working document that was produced and why & how it is used in SSOWPS – **11th January 2021**
- Consult SWP Planners/Line Managers and IMDMs to ascertain what they know or understand about the term Parallel Working, the volume of work planned using this method, and any general comments/concerns. – **26th March 2021**
- Compile feedback from the consultations and inform next steps with Head of Maintenance Principles and Standards, NHWSC, Industry groups including ISLG, Track Worker Safety Group – **16th April 2021**
- *If keep the terminology or* dispose or alternative decide what training will be required as part of the Section Planners competence which would include use in specific mileage, seek the support of the Head of Maintenance Principles and Standards to progress the changes – **28th May 2021**
- *If kept, removed, or alternative option* planners to be briefed and the component to be removed or changed from SSOWPS – **28th June 2021**
- Monitor and review any changes made by - **30 September 2021**
- Update report to be provided after the review to demonstrate effects of the interventions - **30th October 2021.**

Evidence required to support closure of recommendation

Minutes of meetings to be provided
 Evidence of interviews and consultation provided
 Evidence of support from CDG to proceed with chosen option
 Evidence of monitoring and review of the option chosen
 Update report demonstrating the effects of the option chosen

Recommendation 4

The intent of this recommendation is that Network Rail has a renewed and sustained focus on improving the non-technical skills of all its track maintenance teams, including their supervisors and managers, in those areas most closely associated with site safety. When addressing this recommendation, Network Rail should take into account actions taken in response to Recommendation 1 of RAIB's Egmonton investigation ([RAIB report 11/2018](#)) and Recommendation 2 of RAIB's track worker class investigation ([RAIB report 07/2017](#)).

Network Rail should review its processes and programme for developing the social, cognitive and personal 'non-technical skills' of those working on or near the track, with a particular focus on those areas that are linked to effective communication, cooperation, leadership and positive team dynamics. By means of this review Network Rail should ensure that it has in place all that is necessary for the timely provision of an ongoing and sustained programme of suitable, relevant and targeted training and mentoring that will influence the mindset and attitudes of everybody involved with planning and delivery of work activities, including managers, supervisors, site leaders and team members. Network Rail should also issue practical guidance on:

- a) ways of assessing non-technical skills and development potential when selecting future site leaders
- b) methods for evaluating and developing the non-technical skills of those already undertaking leadership roles

- c) how to intervene when concerned about the performance of a safety leader.

ORR decision

25. Network Rail has reviewed its provision of NTS training, including benchmarking against RSSB. We have asked Network Rail to take into account work that is already being done, map it against each point in the recommendation and be clear how each point is being addressed.

26. We have asked Network Rail for an updated action plan. The first 5 milestones have been completed. The options for review at the Capability Development Group (CDG) milestone is still relevant but needs reforecasting.

27. At our most recent update meeting in October, Network Rail reported good progress in this area. It has appointed new specialist support for NTS – and is drawing up a strategy for all the business, not just Maintenance. A NTS framework has been established, bringing together some previously separate work streams. The work being carried out in this area is wider than just providing training and is about helping people develop NTS throughout their career – not just selecting those with appropriate capabilities. Network Rail has been liaising with RSSB on the topic – to learn from other businesses but also to feed into industry-wide improvements.

28. 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 30 October 2023.

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

Information in support of ORR decision

29. On 1 February 2021 Network Rail provided the following initial response:

Action Plan

Action Plan (with milestones)

There needs to be a Gap analysis of all the different workstreams that has and is looking at Non-technical skills training, the list below is not a complete list but are known projects that are looking at the same thing. A National framework can then be established and reported into the outcome of Recommendation 5.

Please note: There are multiple projects addressing behaviours (not NTS) which we will list below, but we will ensure they are not addressing NTS, and we will not seek to amalgamate these.

1. Role Based Capability (RBC) programme
2. PA Consulting review that is being used as part of the proposed PiC Competence that is going to the ELT in January 2021 presented by the Safety Taskforce - **this will determine the guidance to meet a) and c) of the recommendation.**

3. Review of previous Track Safety changes and its impact such as Non-Technical skills for COSS and COSS Theory
4. Section Planner Training being developed by Maintenance
5. BeST and SCD Safety Culture Improvement Programmes (Southern) which is incorporated into the PTS training being launched in April
6. Benchmark training review (Southern)
7. Review of previous RAIB recommendations and closure statements around non-technical skills/behaviours to see if these have made a difference or have continued.
8. Signalling have developed their own NTS and training apparently in response to the Waterloo recommendation, so we need to investigate this too.
9. Consult with Operations on their NTS

Milestones

- Proposal to review all Non-Technical skills workstreams in order to start developing an outline plan provided to the Chief Health & Safety Officer – **28th February 2021**
- Inform, liaise and align with other interested parties; Company Capability Steering Group; NR Ops; NR Training; NR HR – **26th March 2021**
- NR to identify a single owner for NTS to potentially align with the owner of Behaviours – **28th May 2021**
- Benchmark against RSSB NTS - **26th March 2021**
- *If the proposal is agreed*, Project management and Subject Matter Expert (SME) resource to be obtained – **31st July 2021**
- Once this gap analysis has been completed, the results, *options to be taken to the Safety CDG for support to proceed*, then a time bound action plan will be developed and put in place – **30th September 2021**
- *If the proposal is not agreed*, the development of the PiC competence will continue should that be approved at ELT– **January 2023**
- Monitor and review any changes made – **30th September 2023**
- Update report to be provided after the review to demonstrate effects of the interventions - **30th October 2023**

Behaviours based projects that we will consult with, but not incorporate in this action plan:

- JMJ behavioural review (*linked to the outcomes of Recommendation 6*)
- New PTS, COSS, Lookout and Site Warden training that has been introduced that is more behavioural training and has assessment throughout the training on the behaviours of the delegates. This also includes challenge of un-safe behaviours or leaders.
- Review of other track safety competences such as ES and PC and embed behaviours content as required.
- Other Regions behavioural training such as the Risk Perception and Awareness training accredited by IOSH on Eastern Region.
- Other Regions behavioural training such as the Risk Perception and Awareness training accredited by IOSH on Eastern Region.
- Capital Delivery behaviour training
- COSS training changes 2017-19 which included the COSS training proposed changes from 2013 much of this is in the PiC Competence proposal
- ISLG report into COSS and behavioural training
- T02842 - Competency and Capability (*linked to the outcomes of Recommendation 6*)- **this will determine the guidance to meet b) of the recommendation.**

Evidence required to support closure of recommendation

Minutes of meetings to be provided
 Evidence of changes made to training and competence provided
 Evidence of support from CDG to proceed with chosen option
 Evidence of monitoring and review of the option chosen
 Update report demonstrating the effects of the option chosen

Recommendation 5

The intent of this recommendation is that Network Rail's future work on improving track worker safety is overseen and guided by an independent expert group at a sufficiently senior level, that provides continuity of vision over many years, peer review and an effective challenge function. When addressing this recommendation Network Rail might choose to expand the terms of reference for its newly formed 'Safety Task Force Programme Board' to enable it to perform all of the functions envisaged by RAIB.

Network Rail, in consultation with its main contractors and Trade Union representatives, should establish a permanent expert group, which comprises representatives from across the rail industry with sufficient seniority and recent front-line experience, together with external experts with relevant qualifications or background (including a behavioural scientist), to provide oversight of all track worker safety improvement programmes. Its scope, which should be formally documented, should include:

- a) providing independent advice, guidance and challenge to the Network Rail board and the SHE committee on matters related to the delivery of safety improvements (including those identified by the ORR improvement notices)
- b) checking that parallel and interdependent work streams are being properly co-ordinated
- c) monitoring the development and implementation of new or revised procedures and management processes
- d) ensuring that the need to address the impact on front-line track workers is not overlooked when implementing new technologies and work management processes
- e) checking that recommendations and lessons from accident investigations are being learned and fed into improvement processes
- f) providing a source of ongoing corporate memory and continuity of vision (particularly during times of organisational and personnel change).

ORR decision

30. Network Rail has established an expert group, made up of representatives from across the business and wider industry, including ORR and RAIB, to consider work force safety issues. The group meets every 12 weeks and is considering issues such as innovation, improving access and the future of refuges and line side walk ways. It has met in April, July and October. It has established Terms of Reference which reflect the requirements of the recommendation.

31. We discussed progress at our October 15th meeting with Network Rail. Everybody was positive about the group and its contribution – but had observations about what more might be needed to ensure it is sustainably embedded. These are described in the next paragraphs.

32. Although the establishment of the group largely meets the terms of the recommendation, it is not yet fully embedded to the extent that we consider the recommendation to have been implemented. Network Rail are considering how the group can effectively provide independent advice, guidance and challenge to the Network Rail board and the SHE committee.

33. Network Rail and ORR both consider that the role of the group in providing ongoing corporate memory and continuity of vision, particularly during times of organisational and personnel change, would be applicable for some time while GB Railways was being established.

34. 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 30 October 2023.

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

Information in support of ORR decision

35. On 1 February 2021 Network Rail provided the following initial response:

Action Plan

Action Plan (with milestones)

This recommendation was discussed on 5th Jan 2021 by the Safety Task Force programme board. Simon French, Ian Prosser, the TU leads and a number of NR senior staff are on the programme board. A number of suggestions and an approach was considered;

1. Week commencing 25/01, a paper will be submitted to the NR ELT suggesting the format for this group, the content, the chairman and approach. Providing that is endorsed, move to step 2;
2. A paper back to the Safety Task Force Programme Board on 03/02 to recommend this way forward;
3. By 1st March, draft terms of reference for group and invite prospective additional members (over and above the STF programme board i.e. RDG, RSSB, Suppliers, Route Services etc);
4. Proposed first gathering will be the 1 hour following the existing safety task force meeting on 01/04;
5. The gathering will then meet every 12 weeks through 2021. Martin Frobisher is likely to chair the meeting;
6. Through 2021, the group will form its agenda, focus and relationships and set direction;

7. By August 2022, as the STF programme board ramps down, the new group will be established and meet/function independently.

Evidence required to support closure of recommendation

Terms of Reference for group

Recommendation 6

The intent of this recommendation is that Network Rail has a proactive safety leadership and a culture which promotes an open and objective approach to the reporting and improvement of safety performance.

Network Rail should investigate different ways of promoting proactive safety leadership at every level of the organisation, to develop a culture that values and actively promotes the open and honest reporting of safety performance, the early identification of any weaknesses in management processes and open debate. The output of the investigation should be an active cultural change programme which is the subject of consultation with employees and stakeholders, and then widely disseminated

ORR decision

36. The safety leadership pilot had been run in Route Services and is considered by Network Rail to be a qualified success. Leadership was more visible and there has been good joint working with the trade unions. Results so far have shown that for change to be effective, initiatives need to be embedded and repeated, so not seen as a one off. Progress had been limited in Scotland due to challenges around staffing and COVID. Network Rail is considering which outcome measures will be used as the basis for a closure statement.

37. ORR's main concern with Network Rail's response in this area had been that there seems to be a great deal of latitude for the constituent Regions to adopt their own approach – or even do nothing at all – so it would be hard to judge when a consistently suitable improvement has been achieved across the network. We await a written response on this point. We also expect some revisions to the original timeline, which is now out of date

38. At a meeting in early November, we received verbal assurances that every Region is adopting a programme. Whilst the format, approaches and timelines may vary – all will be required to demonstrate that they deliver similar outcomes in improved safety leadership.

39. 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

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

Information in support of ORR decision

40. On 1 February 2021 Network Rail provided the following initial response:

Action Plan

Action Plan (with milestones)

Work already completed:

- Jan 2020 - We have contracted with JMJ to develop a safety culture and leadership programme. The focus is developing and safety and service culture (injury and incident free is the concept for safety).
- Feb 2020 - JMJ in conjunction with Network Rail, undertook independent analysis through workshops and interviews with senior leaders, middle managers and frontline staff. As a result, we analysed the safety leadership of the Company and undertaken a culture review down through the organisation to the frontline.
- March 2020 a significant culture session was held with senior leaders to kick start the programme. Unfortunately, this coincided with the National COVID lockdown
- June 2020, we picked up the programme and set about building two models to test the learning we gained from that initial analysis and workshop. Importantly this explores the leadership provided via our senior management as well as frontline leaders and supervisors.
- November 2020 The models blend both cultural requirements for improving safety and improving business service performance are operating within both Route Services and Scotland's Railways. The models have metrics built into their evaluations which were reported back to the Executive Leadership team to allow further evaluation

To do:

- Feb 2021, Network Rail are undertaking further injury and incident free workshops with our Senior Leadership Group whilst the two models are being evaluated. This will provide further learning from the current mood of our leadership to help shape our final programme
- The programmes have a blend of:
 - Commitment workshops
 - Coaching
 - Leadership meetings and forums
 - MSiA Skill development sessions
 - MSiA leadership forums
- April 21. OJEU tender will be issued
- September 21 Regions and Routes will be able to take up the benefit of full safety leaderships programmes. Our Trade Unions will be part of the programme for roll out. A full communications plan is currently being developed, now that the trials in Scotland and Route Services are developed.

Evidence required to support closure of recommendation

Network Rail report for cultural findings March 2020
 JMJ report for Route Services Sept 2020
 JMJ report for Scotland's Railway Nov 2020
 Project plan
 OJEU tender document
 OJEU tender conclusions

Recommendation 7

The intent of this recommendation is to improve the effectiveness of Network Rail's management assurance processes related to the safety of staff working on or near the track, so that it provides a more realistic assessment of the extent to which track worker safety arrangements are embedded, and being correctly applied, in practice.

Network Rail, in consultation with its main contractors and staff representatives, should commission a project to improve the way its management assurance system operates in areas directly affecting the safety of track workers. The review should include each of the following:

- a) the identification of improved systems for collecting reliable data on how mandated processes are being applied in maintenance depots, and within track worker teams (to supplement or replace the existing Level 1 management self-assurance)
- b) improved mechanisms for collating, analysing, tracking, and presenting the findings of audits, investigations and other management assurance activities.

The project should also consider ways of expanding the scope of management assurance activities to provide better intelligence on the underlying reasons for the non-compliances that are identified during audits, including consideration of the views of auditors and other relevant staff. The improved management assurance arrangements that are identified should be endorsed by the Network Rail board before implementation in accordance with a structured and validated programme for change (paragraphs 357a.iv, 357b.iii, 358c).

This recommendation may apply to other Network Rail management assurance processes.

ORR decision

41. We found the Network Rail initial response somewhat unfocussed. It proposed producing guidance on risk assurance by means of 5 sub work streams:

- Line of defence – GRAI maturity
- Governance and control – assurance manual
- Technology
- Competence – training for front line managers
- ELT endorsement

42. In our various discussions it became clear that the plans were, in fact, quite targeted. The apparent complexity arises from the work streams being part of a much wider assurance improvement programme. It has already delivered an Assurance Policy and Manual and the programme has the endorsement of the Executive Leadership Team

43. At our most recent progress meeting we learned that the plan is progressing to time. Several additional elements have been added as a result of work undertaken so far – but will not affect the timeline adversely. ORR has pressed Network Rail to describe how it will ensure that any change is ‘structured and validated’ as required by the recommendation. We were informed that the existing Change and Improvement Policy would ensure this. We were also assured that staff safety reps and the contractor supply chain have been included.

44. Network Rail expect to submit a closure statement once it has sufficient evidence that its management assurance systems are considered a BAU process. Consultation with staff reps and contractors is being done through safety council and ISLG.

45. 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 30 June 2022.

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

Information in support of ORR decision

46. On 1 February 2021 Network Rail provided the following initial response:

Action Plan

Action Plan (with milestones)

Overview

In line with the launch of the Network Rail Operating Model, the Governance Risk Assurance Improvement (GRAI) framework was designed to support the devolved structure in linking together a clear line of sight between business strategy and how to achieve it.



Through the assurance element of GRAI 5 key areas have been proposed to support enhancement of the way our management assurance system operates.

1. Full Review of the Assurance 1st & 2nd Line (Stakeholder engagement)

- A detailed review to be undertaken to better understand the effectiveness of the self-assurance process though engagement with the front-line track workers (including the supply chain and contractors), line managers, Trade Unions, auditors, Margam recommendation owners and safety managers to get their views on current state and what should be done to mitigate risks that are currently built into the process – ‘As Is’ assurance Assessment to be completed – **June 2021**
- Embed the Network Rail Three Lines of Defence Assurance Model to ensure a safe effective and adequate risk-based coverage of assurance activities with a focus on (1st Line – operational assurance & 2nd Line – corporate/functional oversight) – Outcome: Production of robust Assurance Plan – **Dec 2021**

2. Review and establish Assurance Governance and Controls

- Review the maturity of the lineside and track processes (as part of the wider GRAI framework) identifying the controls using Process Definitions – **Apr 2021**
- Working with safety process owners and regions to review assurance plans to ensure there is a clear line of sight with operational health and safety risk and controls, so reliable evidence-based assurance led-activities do provide confidence of operational controls and risk – **Sep 2021**
- Work with key stakeholders and Standards Steering Group to establish the Network Rail National Assurance Standard to define Network Rail corporate approach to all assurance, and to include best practice and sharing lessons learnt – **Mar 2022**
- Update and effective embedment of Standards 019 and 036 is to be scheduled with alignment to the national standard above to include assessment of the systems, methodology, safety non-compliance management, data and reporting – **Mar 2022**

3. Provide Assurance - Improve the data collection system

- Establish an Assurance Data Working Group with a focus to improve the assurance data collection for mandatory processes (i.e. 1st Line of Defence Assurance); Improve the data collection for all non-conformances arising from audits and other assurance activities (i.e. acting on findings from 2nd LoD), and have a system to investigate underlying reasons and root causes. Working Group to review and recommend a suitable assurance tool for effective data collection, reporting, analysis and root causes – **Dec 2021**
- Roll out preferred solution and provide report on benefit achieved – **June 2022**

4. Implement and Embed Improvement - People and Training

- Establish a training and awareness campaign (including supply chain) on any new methods proposed – **Dec 2021** & Develop a roll out programme to targeted personnel following the activities in this plan – **June 2022**

- Central Quality & Business Improvement Team to work with Safety Team to revise training of Section Manager & other key roles as identified to be included in the Role Base Capability programme with a focus on an assurance module to enhance competency on effective assurance (1st & 2nd Lines of Defence) – **June 2022**
- Establishing a best practice sharing mechanism/workshops with clear terms of reference to focus on sharing best practice and to include 'how to' carry out assurance for people in the role (with a focus on 1st & 2nd Line assurance) – **Dec 2021**
- Establish a measure/KPI to monitor the effectiveness of the steps described above – **Dec 2021**

5. Network Rail Endorsement at all levels

- Ensure effective Leadership and Board endorsement of all recommendations prior to implementation (as part of the combined response to Margam with Quarterly update reports and endorsement from the Executive Leadership Team (ELT) prior to implementation of each stage - **Quarterly**
- Define assurance stakeholder plan to ensure people are being engaged with for effective cascade of operational requirements; obtain feedback & gather ideas for recommendation for learning. To include supply chain and front-line workers with a focus to enhance in this area for greater efficiency with support from the Central Quality & Business Improvement Team. – **June 2022**

Evidence required to support closure of recommendation

Evidence will include:

- 'As Is' assurance Report
- Schedule of updated documentation (policy, process definition, process and procedures)
- GRAI Maturity Self-Assessments for lineside processes and associated assurance
- Assurance Plan with clear meaningful assurance activities to assess compliance to process (1st & 2nd Line of Defence)
- Report of Preferred technology solution for collating assurance data and analysing trends and data
- Reports (from the system) showing analysis, trends and recommendations for improvement
- Training and awareness material
- An assurance measure for the rollout and engagement (of the workforce and line management)
- Leading performance indicators on assurance effectiveness - KPI that records the number of assurance activities timely completed and followed up/closed out?
- Formal approvals from ELT at each key stage.

47. On 10 May 2021 Network Rail provided the following updated action plan:

Action Plan

Details provided to ORR at initial discussion:

Discussion was had with ORR in December, details provided on:

- Using GRAI to assess the maturity of our assurance processes.
- We have also launched a working group to review, page by page, the Maintenance Self Assurance process. This is with a view to improve the self-assurance process, while also making the standard relevant
- Consider awareness campaign for importance of line manager assurance focusing on the 'why'
- Include training of Section Manager to be included in the Role Base Capability programme
- Organise workshops annually for a best practice sharing and 'how to' carry out assurance for people in the role. Region assurance managers to support.

ORR Comments:

Concern over the scope which needs to include supply chain assurance. Do not allow scope to creep, it is about people on or near the line. Not too much bigger picture, specific plan. Roles of people to cover front line one assurance. Mapping every part of the process for buy in of ELT. Identify improved systems, including Safety Taskforce, and L1 assurance project. Utilise the assurance working group (steering/programme board).

Action Plan (with milestones)

Overview

In line with the launch of the Network Rail Operating Model, the Governance Risk Assurance Improvement (GRAI) framework was designed to support the devolved structure in linking together a clear line of sight between business strategy and how to achieve it.



Through the assurance element of GRAI 5 key areas have been proposed to support enhancement of the way our management assurance system operates.

1. Full Review of the Assurance 1st & 2nd Lines of Defence

- A detailed review to be undertaken to better understand the effectiveness of the self-assurance process through engagement with HSS/TA front-line track workers (including the supply chain and contractors), line managers, Trade Unions, auditors, Margam recommendation owners (including interfacing with recommendations 2, 4, 8) and safety managers to get their views on current state and what should be done to mitigate risks that are currently built into the process – ‘as-is’ assurance assessment to be completed – **December 2021**

2. Review and establish Assurance Governance and Controls

- Working with HSS/TA safety process owners and regions to review assurance plans to ensure there is a clear line of sight with operational health and safety risk and controls, so reliable evidence-based assurance led-activities do provide confidence of operational controls and risk. To include the assurance changes from recommendations 2, 4 and 8 – **September 2021**

3. Provide Assurance - Improve the data collection system

- To improve the assurance data collection for mandatory processes (i.e. 1st Line of Defence Assurance); Improve the data collection for all non-conformances arising from audits and other assurance activities (i.e. acting on findings from 2nd LoD), and have a system to investigate underlying reasons and root causes, establish an Assurance Data Working Group. Working Group (to interface with recommendation 7 ‘improve the data collection’ element interfaces directly as a precursor to recommendation 8) to review and recommend a suitable assurance tool for effective data collection, reporting, analysis and root causes – **March 2022**

4. Implement and Embed Improvement - People and Training

- Central Quality & Business Improvement to work with the HSS/Technical Authority and Margam recommendation owners to support the improvements in track worker safety training and awareness (including supply chain), including alignment with recommendation 4 and Level 1 Working Group assurance competence requirements workstream. 3-stage scope (1 competency front line workers; 2 Quality/Assurance Professionals; 3 All other roles requiring competencies for Quality/Assurance) – **January 2022**
- Establishing a best practice sharing mechanism/workshops with clear terms of reference to focus on sharing best practice and to include 'how to' carry out assurance for people in the role (with a focus on 1st & 2nd Line assurance) – **July 2021**

5. Network Rail Endorsement at all levels

- Ensure effective Leadership and Board endorsement of all recommendations prior to implementation (as part of the combined response to Margam with Quarterly update reports and endorsement from the Executive Leadership Team (ELT) prior to implementation of each stage & stakeholder management – **Quarterly**

Evidence required to support closure of recommendation

Evidence will include:

- 'As Is' assurance Report
- Schedule of updated documentation (policy, process definition, process and procedures)
- GRAI Maturity Self-Assessments for lineside processes and associated assurance
- Assurance Plan with clear meaningful assurance activities to assess compliance to process (1st & 2nd Line of Defence)
- Report of Preferred technology solution for collating assurance data and analysing trends and data
- Reports (from the system) showing analysis, trends and recommendations for improvement
- Training and awareness material
- An assurance measure for the rollout and engagement (of the workforce and line management)
- Leading performance indicators on assurance effectiveness - KPI that records the number of assurance activities timely completed and followed up/closed out?
- Formal approvals from ELT at each key stage.

Recommendation 8

The intent of this recommendation is to improve the quality of information being provided to senior management, relating to the safety performance of staff working on or near the track, to enable better monitoring and decision making.

Network Rail should extend the review undertaken in response to recommendation 7 to include the following:

- a) a more structured process for senior management review of safety assurance data
- b) mechanisms to ensure that the senior management team is provided with suitably independent and specialist advice when reviewing the outputs of the safety management assurance system, particularly when considering significant change

c) identification of additional leading indicators of safety performance designed to better inform senior managers on the underlying health of the safety management systems.

This recommendation may apply to other Network Rail management assurance processes.

ORR decision

48. At our most recent update meeting with Network Rail we learned that good progress has been made against the plan. Network Business Assurance Committee (BAC) has been established and is reviewing safety assurance data. Quarterly assurance report shared with ORR. The group has been exploring new ways of scrutinising intelligence to provide assurance – and this learning is being shared with Regional and Functional BACs.

49. There is a 'level 0' BAC for the Executive Leadership Team, which will provide topic-based assurance. We have asked for example material. Other measures taken to provide better information to senior management on workforce safety include Tactical Safety Group (TSG) taking learning from the National Recommendation Review Panel (NRRP) in relation to incidents investigated by Network Rail as well externally by bodies including RAIB and ORR.

50. 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 30 June 2022.

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

Information in support of ORR decision

51. On 1 February 2021 Network Rail provided the following initial response:

Action Plan

Action Plan (with milestones)

This recommendation will have strong links to the Level 1 Assurance Project and recommendation 7.

- A review of safety assurance and the associated output and reports is underway and a draft product available as part of the Q4 report in April 2021. Ongoing for continuous improvement.
- Identify leading indicators using – As part of the above report we will use plan v actual reporting but also more detailed analysis of the gaps in assurance and the findings/action of the more mature assurance areas. Oct 2021.

- Network Business Assurance Committee (BAC) to be created in March 2021, issues to escalate from regional/functional BAC to be discussed at a national forum to aid wider learning.
- Proposal for region/function to invite a suitably independent specialist to attend their meetings where safety assurance data is discussed to offer appropriate challenge and support. For example a representative from a different region/function.
- Challenge ineffective assurance via BAC, Safety Strategy Committee, Integration Group. Ensure all relevant groups have sufficient independent specialist as part of the core membership. Aug 2021

Evidence required to support closure of recommendation

ToR/Minutes from BAC, Safety Strategy Committee, Integration Group.
New Quarterly Assurance Report.

Recommendation 9

The intent of this recommendation is to improve the robustness of Network Rail's processes for assessing the impact of changes to working practices which affect safety of track staff.

Network Rail should review and strengthen its process for the safety assessment of significant changes to working practices that have the potential to affect the safety of railway staff. This review should identify the extent to which the existing process promotes an adequate consideration of:

- a) the conditions that apply before the proposed change (such as the ways of working and how these compare to mandated processes);
- b) the impact on resource and staff workload
- c) any organisational changes, working practices or work force behaviours that are needed for the changes to be fully effective
- d) safety risk and identification of control measures to mitigate or eliminate that risk.

This recommendation may be best addressed in conjunction with Network Rail's response to recommendation 6 of RAIB's report into the near miss with track workers and trolleys at South Hampstead.

ORR decision

52. Network Rail commissioned RSSB to independently review its processes for managing the assessment of safety change. The report has been issued and makes a number of recommendations aimed at improving Network Rail's processes for managing the assessment of safety change.

53. At our most recent meeting Network Rail indicated that the RSSB observations and recommendations were not of a very significant nature – but since then have decided that they are important enough that they should be addressed before closing the recommendation. Network Rail has therefore submitted a request to extend compliance to October 2022.

54. 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 October 2022.

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

Information in support of ORR decision

55. On 1 February 2021 Network Rail provided the following initial response:

Action Plan

Action Plan (with milestones)

The intention is to work with the RSSB for them to independently review our Network Rail processes for managing the assessment of safety change, proposal to be provided by:

- February 2021 Identify the key processes for change, for example standards and NRAP.
- April 2021 RSSB will undertake a review of those processes that impact significant changes to working practices that have the potential to affect the safety of railway staff, including:
 - the conditions that apply before the proposed change (such as the ways of working and how these compare to mandated processes);
 - the impact on resource and staff workload any organisational changes, working practices or work force
 - behaviours that are needed for the changes to be fully effective
 - safety risk and identification of control measures to mitigate or eliminate that risk
- Aug 2021 RSSB report received.
- Sep 2021 Review report for next steps/improvements

Evidence required to support closure of recommendation

Scope of work for RSSB to undertake work

Final report from RSSB having undertaken the review

A further date will be provided if the review concludes a requirement for process change.

56. On 28 October 2021 Network Rail provided the following timescale extension to 31 October 2022



Margam Rec 9.pdf

57. The reason Network Rail give for the extension is as follows:

The recommendation asked for Network Rail to review our organisational change process and its potential to affect the safety of railway staff following Margam. Further, Network Rail had undergone significant safety change during the Putting Passengers First (PPF) programme and our Trade Unions had expressed concern over how we undertook organisational change and importantly safety consultation – which is where this concern was raised. As a result of both Margam and the Trade Union PPF concerns the decision was taken to seek independent analysis and review of NR's organisational change. The RSSB were requested to undertake an independent review of Network Rail's organisational change. The RSSB conducted this review of Network Rail's organisational change during April and May 2021 focusing on the NR/L2/HSS/020 Safety Validation of Organisational Change Standard. This review was completed against RSSB's 'Taking safe Decisions Model' to enable benchmarking to be undertaken. The Director of Regulatory Liaison has reviewed progress and concluded that while the RSSB review is helpful, Rec 9 is not simply a 'do a review' rec. RAIB's investigation found clear evidence that the way we had rolled out 019 v9 hadn't managed the change effectively: we had not embedded the new requirements into normal business practice in maintenance (or arguably operations if we take into account the subsequent Rowlands Castle near miss). We had previously recognised the need to refresh the 020 standard in a new IMS format but abandoned the change. We will now strengthen the process change element in that standard.

Recommendation 10

The intent of this recommendation is to explore ways of reducing the risk to staff who work on or near the track by creating more opportunity for safe access to the track when trains are not running.

Network Rail, in consultation with the Department for Transport, relevant transport authorities, ORR and other railway stakeholders, should investigate ways of optimising the balance between the need to operate train services and the need to enable safe access to the track for routine maintenance tasks. Options for consideration should include:

- a) the provision of gaps in the train service, during daylight off-peak hours, to enable timely and safe access for maintenance staff
- b) greater use of alternative routes or bidirectional lines to achieve the above
- c) increased availability and utilisation of weekend and night time possessions for cyclical maintenance tasks.

Any reasonably practicable measures that are identified should then be implemented in accordance with a timebound plan.

ORR decision

58. Network Rail is making considerable progress in this area. It has engaged with DfT and secured some co-operation regarding strengthened requirements to collaborate being contained in Directly Awarded Passenger Train Franchises. Network Rail will provide a summary of the clauses as part of a closure statement.

59. The most important element of Network Rail's response to this recommendation comes in the form of its enhanced intelligence informing its annual bid for access – the Engineering Access Statement (EAS). Both EAS 2022 and EAS 2023 have resulted in substantially increased numbers of possessions – both in frequency and duration. This has been enabled by the continuing workbank reviews being carried out as part of the Workforce Safety Task Force. It is reported that work bank reviews are ongoing, with 83% through second pass and many MDUs on the third pass. This task must become business as usual in each route as the information becomes out of date once stopped. As well as bolstering bids for possessions, this work has led to many additional opportunities for Line Blockages being identified and exploited.

60. We consider the requirements of this recommendation to have been largely addressed. However Network Rail is ambitious to engage more closely with other service specifiers, such as Transport Authorities. For this reason it does not consider the recommendation is fully implemented yet. Further, we think it would be inappropriate to report it as implemented until it is clearer what the structure and powers of GB Railways will be as this could have a significant impact on these matters.

61. 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

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

Information in support of ORR decision

62. On 1 February 2021 Network Rail provided the following initial response:

Action Plan

Action Plan (with milestones)

The work to implement this recommendation was underway before RAIB published this report. There is a direct link to the work being undertaken between August 2019 and July 2022 to comply with an Improvement Notice covering arrangements for planning maintenance activity.

Step 1: Vitally important that we review the 28m maintenance tasks in detail to:

- a. Review if the task is still needed at the same frequency;
- b. Batch tasks more effectively so that we can optimise both resource and existing access;
- c. Align those batches with existing know safe access;

This review needs to be done iteratively and we have done 100% first pass and approx. 45% of second pass. In doing this, we can demonstrate to train operators that we have optimised our approach before we ask for more or different access to the railway. This 2nd, and potentially 3rd, pass of the maintenance work bank review is very well documented and will last until at least 31 July 2022. This action will ensure that we use existing access opportunities for maintenance as effectively as possible;

Step 2: We need to assess and publish accurate line blockage registers across the 700 signaller workstations nationwide (so that existing line blockage usage is optimised). We have undertaken all 700 signaller workload assessments between July and September 2020. We are now delivering the 700 signaller workload workshops and will complete this task by 30 April 2021. Then we will publish Line Blockage registers for each of the 700 workstations (a number of these are already in place and certainly on NW&C and Eastern). Finally, the new online Line Blockage planning tool is being trialled in NW&C in May 2021, and all of the Line Blockage registers will be held in this format to promote online booking of line blockages in an orderly fashion. The roll out of the online tool is currently scheduled between May 2021 and May 2022. This action will mean that we will have better visibility of line blockage opportunities so that scheduled tasks and rosters can be aligned effectively in advance of doing the work.

Step 3: Via existing company processes, in September 2020, The Safety Task Force made 350 revised applications for T3 possession access for the timetable year starting in December 2021. These applications are now going through the Evolution process and should be finalised (one way or another) by March 2021. We will do a second set of applications in September 2021 for the timetable year commencing December 2022. This will be a BAU process when STF finished, revisions for 18 months hence will need to be made every September. This action will ensure that, once we have refined our tasks and use of existing access, we have sufficient T3 possession access to maintain our railway.

Step 4: The BAU version of the above will be to repeat these cycles at least every 12 months. The more routinely you do it, the less the annual change impact. By March 2022, the Safety Task Force will issue a document that introduces business—as-usual responsibilities in each route to ensure that maintenance task, access and resource continues to be aligned.

We recognise the arrangements for negotiating and securing appropriate maintenance access may evolve depending on any changes to industry structure in response to the Williams report.

In August 2020, The Safety Task Force had an exploratory meeting with the DfT to discuss the ORR safety improvement notices. The DfT were supportive of our approach and offered assistance. Nick Millington acknowledged that, until more of the maintenance workbank reviews had been completed and the Engineering Access Statement for 2022 was signed of (April 2021), it was not possible to define the help we require. A further meeting will be set up in May 2021, involving other transport authorities as necessary. In addition, in Margam Rec 5, we will invite the 'Rail Delivery Group' to join the expert panel as a further mechanism to influence the importance of safe access alignment in the planning stage.

Evidence required to support closure of recommendation

Established core process for routinely reviewing and securing required access.

Sustained delivery of work in the safest protection arrangements that are feasible.

Recommendation 11

The intent of this recommendation is to better understand the practicability of providing an automatic means of improving the discernibility of audible warnings provided by trains when the driver applies emergency braking.

The Rail Delivery Group (RDG), in conjunction with Network Rail and RSSB, should commission research into reasonably practicable ways of enabling a train's horn to automatically sound when a driver initiated emergency brake application is made on a moving train (as is already done on some UK tram systems). The objective of any such change would be to offer the best opportunity of the audible warning to be discernible, while taking the responsibility from the driver for sounding the horn during situations that are stressful.

ORR decision

63. RDG has commissioned RSSB to research the benefits and disbenefits of enabling a train's horn to automatically sound when an emergency brake application is made. Initial findings are that it could be possible for some trains, although work is still at an early stage.

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

- taken the recommendation into consideration; and
- is taking action to implement it

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

65. On 23 February 2021 RDG provided the following initial response:

In our response dated 8 October 2020 to RAIB in respect of the draft report, we stated that we did not "believe an intervention like this would have affected the outcome of the incident and is potentially a very costly use of industry resources and funds at a difficult time. Tram systems operate in very different environments and we do not believe the read-across from light rail to heavy rail in this instance is well placed".

We believe that it is not yet proven that it is reasonably practicable for a train's horn to automatically sound on the mainline railway when the brake is in emergency when fully taking into account the costs and benefits, thus understanding what this means and coming to an agreed consensus about it has been explicitly included in the scope of the research requested. We have formally requested RSSB to undertake research on the high-level benefits/disbenefits quantification work which is to be sponsored by cross industry Asset Integrity Group. Once this work has reported back it would then provide a basis for deciding on potential research into reasonably practicable ways of enabling a train's horn to automatically sound when a driver initiated emergency brake application.

We cannot provide dates currently as is dependent on RSSB resource availability.

66. On 19 October 2021, RDG provided the following update:

We have reviewed progress with RSSB on stage 1. This shows that there could be as case for modifying some trains however this does not take into account risks and disbenefits which is stage2. The aim was to see if there was a case in stage 1 before moving on. An industry workshop to consider the disbenefits and risk will start off stage 2 but will take a while to organise due to RSSB priorie