

Oliver Stewart
RAIB Recommendation Handling Manager



8 October 2025

Mr Andy Lewis
Deputy Chief Inspector of Rail Accidents

Dear Andy,

RAIB Report: Collision between on-track machines near Strood, Kent on 16 November 2023

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 24 October 2024.

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 - 3 is '**Open**'. The status of recommendation 4 is '**Closed**'.

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 4 recommendations were addressed to ORR when the report was published on 24 October 2024.
2. After considering the recommendations ORR passed recommendations 1, 2 & 3 to Network Rail High Speed and recommendation 4 to HS1 Ltd 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 that the risks of engineering vehicle operation on High Speed 1 are appropriately controlled.

Network Rail High Speed, working in conjunction with Balfour Beatty Rail and other relevant suppliers, should undertake a risk-based review of the design of on-track plant and machines, relevant rules, standards, procedures, and training material relating to the movement of on-track plant and on-track machines, including those relating to propelling movements.

Network Rail High Speed should develop a timebound programme for the implementation of any appropriate changes identified

ORR decision

4. Network Rail High Speed (NRHS) has begun a review of the design of on-track plant and machines, relevant rules, standards, procedures, and training material relating to the movement of on-track plant and on-track machines, including those relating to propelling movements. We have requested an update on progress with the action plan.
5. After reviewing the information provided ORR has concluded that, in accordance with the Railways (Accident Investigation and Reporting) Regulations 2005, Network Rail High Speed has:
 - taken the recommendation into consideration; and
 - is taking action to address it.

Status: Open.

Information in support of ORR decision

6. On 3 February 2025 Network Rail High Speed provided the following initial response:

Action Plan

Please provide milestones with dates

Already completed:

- Installation of emergency stop buttons to the MPVs (reported in RAIB report)
- Update of the HS1 Rule Book to include rules limitation of speed, requirement to communicate every 10 secs, use emergency push button, use of CCTV...
- Installation of open mic comms system to MPVs (reported in RAIB report)
- Update of the MC training to include practical MPV training
- Review and update of BBRail risk assessments (available from BBRail).

Left to complete:

- Hold HAZID workshop by **P10 – completed**
- Produce updated safe method of work for movements of works trains inside a possession, based on outputs of HAZID; draft a movement plan template **P11 - completed**
- Draft and consult a process detailing how mandatory documentation for high-risk activities will be identified and reviewed within the existing planning process and made more easily available to staff working on or near the line. **P12**
- Rule book change consultation – **P01 FY26**
- Rule book updated and issued as required – **P06 FY26**

Risk and interdependencies

- Engagement from internal and external stakeholders in the rules change process
- Agreement for changes reached amongst stakeholders
- Availability of contractor for printing
- Resource for maternity cover of Natasha Vincer (Lead)
- Other documentation required to be updated to facilitate any agreed changes

Evidence required to support closure of recommendation

- HAZID documentation
- Briefing material
- Rule Book update

Action Plan Checklist

Are resources in place to deliver this action plan and task allocated to the correct owner?

☐

Are the actions timebound and overall timescale appropriate to the risk?

☐

Have you considered and noted any overlap with other related safety initiatives in progress elsewhere in the business?

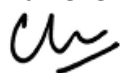
☐

Have you identified the risks and interdependencies of this action plan?	☐
Have you considered how you will track/monitor the delivery of this plan?	☐
RAIB Recommendations - I have included the output from the cost benefit analysis tool (if appropriate to use) and/or the benefits of delivering the recommendation	☐

Action Plan Approval

I as the Network Technical Head (or Band 1 or above equivalent with relevant accountabilities) approve the action plan for delivery of this recommendation. I confirm I have reviewed the action plan and I am satisfied that it meets the recommendation intent and the required criteria above.

Name: Charlie Usher



Role: Director Engineering
and Safety

Date: 20/11/24

Recommendation 2

The intent of this recommendation is that staff work within a robust procedural framework when on or near the line.

Network Rail High Speed should undertake a risk-based review of the relevant rules, standards, procedures, and training material to check that they provide an effective framework for staff to work safely during engineering possessions.

Network Rail High Speed should develop a timebound programme for the implementation of any appropriate changes identified

ORR decision

7. In tandem with the plan set out to address recommendation 1, NRHS has begun a review of the rules, standards, procedures, and training material to check that they provide an effective framework for staff to work safely during engineering possessions. We have requested an update on progress with the action plan.

8. After reviewing the information provided ORR has concluded that, in accordance with the Railways (Accident Investigation and Reporting) Regulations 2005, Network Rail High Speed has:

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

Status: Open.

Information in support of ORR decision

9. On 3 February 2025 Network Rail High Speed provided the following initial response:

Action Plan

Please provide milestones with dates

Primary Response to address the recommendation:

- Hold HAZID workshop by **P10 – completed**
- Produce updated safe method of work for movements of works trains inside a possession, based on outputs of HAZID; draft a movement plan template **P11 - completed**
- Draft and consult a process detailing how mandatory documentation for high-risk activities will be identified and reviewed within the existing planning process and made more easily available to staff working on or near the line. **P12**
- Rule book change consultation – **P01 FY26**
- Rule book updated and issued as required – **P06 FY26**

Long term response (for information only) – Our long-term plan is to implement a partially automated Safe Work Planning process which will see the compilation of safe work packs achieved in a similar way to that employed by NRIL. A software solution to create the safe work packs is currently being explored. When a software solution has been identified (early next year) a detailed plan will be compiled to map out implementation. High level milestones are provided below with an estimated completion date of Autumn 2026. It is not proposed that this long-term response is considered as part of the closure of this recommendation and is provided for information of our long-term ambitions.

- Research and development for the safe work pack creation tool
- Selection of tool (March 2025)
- Update of competence requirements for planners
- Input of data into the selected tool
- Training and briefing of the tool
- Aim to complete by Autumn 2026

Risk and interdependencies

- Availability of stakeholders to complete consultation on process
- Availability of SMEs to review and / or update documents
- Section planners

Evidence required to support closure of recommendation

- Written process and amended forms to be shared
- Briefing slides linked to the implementation of the process shared

Action Plan Checklist	
Are resources in place to deliver this action plan and task allocated to the correct owner?	☐
Are the actions timebound and overall timescale appropriate to the risk?	☐
Have you considered and noted any overlap with other related safety initiatives in progress elsewhere in the business?	☐
Have you identified the risks and interdependencies of this action plan?	☐
Have you considered how you will track/monitor the delivery of this plan?	☐
RAIB Recommendations - I have included the output from the cost benefit analysis tool (if appropriate to use) and/or the benefits of delivering the recommendation	☐

Action Plan Approval		
I as the Network Technical Head (or Band 1 or above equivalent with relevant accountabilities) approve the action plan for delivery of this recommendation. I confirm I have reviewed the action plan and I am satisfied that it meets the recommendation intent and the required criteria above.		
Name: Charlie Usher	Role: Director of Engineering and Safety	Date: 19/11/24

Recommendation 3

The intent of this recommendation is for Network Rail High Speed to ensure that recommendations and local actions are reviewed and implemented in a way that reflects their intent and that this process can be tracked and used to support safety decision-making.

Network Rail High Speed should review its procedures for handling recommendations and local actions from internal and external safety investigations. This review should specifically examine how recommendations are considered and implemented, and how the effectiveness of any measures taken to implement recommendations are assessed to ensure that the risk that the recommendation was designed to address has been sufficiently mitigated.

This review should also consider how the implementation of recommendations is recorded and how this can be used to support future decisions concerning safety.

Network Rail High Speed should develop a timebound programme for the implementation of any appropriate changes identified

ORR decision

10. NRHS has established a recommendation review panel (RRP) as part of the existing area safety committee meeting, which meets every two periods/eight weeks. We have observed one of the meetings and consider it to be a useful forum to consider the findings from safety investigations.

11. NRHS has issued guidance for the management of recommendations and local actions. It is providing a clear governance process for the acceptance / rejection and action tracking and closure of actions and recommendations. The RRP is a key part of the verification and approval of closure of actions and recommendations. We have requested an update from NRHS on the latest position with work to address this recommendation.

12. After reviewing the information provided ORR has concluded that, in accordance with the Railways (Accident Investigation and Reporting) Regulations 2005, Network Rail High Speed has:

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

Status: Open.

Information in support of ORR decision

13. On 3 February 2025 Network Rail High Speed provided the following initial response:

Action Plan

Please provide milestones with dates

Primary Response:

- Agree the definition of local action and recommendation **(P10 completed)**
- Pilot / trial a Recommendations Review Panel (RRP) based on best practice in NRIL **(P10 completed)**
- Publish and brief a guidance note for the management of internal and external recommendations in NR HS; this will detail requirements for responding to and closing recommendations, including action plans and a close out reports **(P13)**
- Publish a Terms of Reference for the NR HS Recommendations Review Panel **(P11 completed)**
- Schedule NR HS Recommendations Review Panels for 2025 **(P13)**

Long Term (for information):

- Update NR HS Accident and Incident Standards alongside NRIL updates
- Introduce new software for the management of recommendations alongside NRIL software roll out

Risk and interdependencies

- Collaboration at a regional and national level (how we define a rec / local action at a route level).
- Update of NRIL Accident and Incident Investigation standards
- Roll out of new software
- Acceptance of a new forum / meeting within the business.

Evidence required to support closure of recommendation

- Guidance note published on info center with a document number
- ToR for NR (HS) RRP in place
- Minutes and slide pack from RRP

Action Plan Checklist

Are resources in place to deliver this action plan and task allocated to the correct owner?	☐
Are the actions timebound and overall timescale appropriate to the risk?	☐
Have you considered and noted any overlap with other related safety initiatives in progress elsewhere in the business?	☐
Have you identified the risks and interdependencies of this action plan?	☐
Have you considered how you will track/monitor the delivery of this plan?	☐
RAIB Recommendations - I have included the output from the cost benefit analysis tool (if appropriate to use) and/or the benefits of delivering the recommendation	☐

Action Plan Approval

I as the Network Technical Head (or Band 1 or above equivalent with relevant accountabilities) approve the action plan for delivery of this recommendation. I confirm I have reviewed the action plan and I am satisfied that it meets the recommendation intent and the required criteria above.

Name: Charlie Usher



Role: Director of Engineering
and Safety

Date: 20/11/24

Recommendation 4

The intent of this recommendation is for HS1 Ltd to exercise more effective strategic safety assurance of its suppliers.

HS1 Ltd should review the findings from this investigation to establish if it can make improvements to the strategic safety assurance of its suppliers.

HS1 Ltd should develop a timebound programme for the implementation of any appropriate changes identified

ORR decision

14. HS1 Ltd conducted a review of its assurance framework, taking into account the findings of the RAIB report. The review identified areas for improvement around the handling of audit recommendations and change control for changes to the bowtie risk assessment. We are satisfied that HS1 has demonstrated that an appropriate review has been done and the actions from that review addressed.

15. After reviewing the information provided ORR has concluded that, in accordance with the Railways (Accident Investigation and Reporting) Regulations 2005, HS1 Ltd has:

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

Status: Closed.

Information in support of ORR decision

16. *On 6 February 2025 HS1 Ltd provided the following initial response:*

HS1 has undertaken an internal review of its strategic assurance of key suppliers including Network Rail High Speed Ltd. (NRHS). This review looked at the appropriateness of HS1's strategic assurance, focused on the responsibilities of HS1 and how they are discharged.

HS1 is not a duty holder under the Railway and Other Guided Transport Systems (Safety) Regulations (ROGS) for the infrastructure. This is subcontracted to Network Rail (High Speed) (NR(HS) through our Operator Agreement and hold the Safety Authorisation for the railway. NR(HS) are independently regulated by the ORR. Despite this HS1 still retain responsibilities under the Health and Safety at Work Act 1974.

HS1 discharge these health and safety responsibilities through strategic assurance of NR(HS). This is based on the principle that we have employed a competent contractor, who are also obliged by the contract to only subcontract to those who can comply with the relevant standards applicable to the services that they are providing. This is underpinned by the requirements in the contract for NR(HS) to deliver operations, maintenance and renewals in line with best practice.

HS1's assurance approach should not duplicate NR(HS)'s Safety Management System (SMS) or processes, but provide assurance to demonstrate NR(HS)' SMS

is effective in managing safety. HS1 do this through its Assurance Framework, which includes:

- *Using risk bowties to identify risk and understand effectiveness of controls,*
- *Using this understanding to drive targeted risk based assurance activity (including auditing, site assurance, setting of key performance indicators (KPI's)),*
- *Developing safety maturity within HS1 and its supply chain using the ORR's RM3 framework.*

In addition to this internal review we also sought external advice around the suitability of our assurance approach in terms of discharging our health and safety duties which we have used in informing the actions we have taken, and both internal and external review went through internal governance which included HS1's Board Safety Committee.

Considering RAIB's report, the external advice and our internal review we believe the assurance framework which we apply remains appropriate and we address risk in a structured way, however we have identified the following learnings to improve the effectiveness of our strategic assurance:

- *Process improvement to ensure rigour in the in the acceptance and subsequent close out of HS1 Audit recommendations/actions between HS1 and NRHS systems including Opportunities for Improvement.*
- *Introduce change control process for the bowtie control effectiveness to provide an audit trail of changes in effectiveness rating (what incident/KPI/evidence/assurance activity has caused this)*

Both of these improvement activities have been implemented and can be evidenced through the Periodic HS1/NRHS Assurance Review Meeting which provides controls on the acceptance, progress and closure of recommendations generated from HS1 Audits, and the 'HS1 Assurance Plan Tracker and Bowtie Change Log' which is used as part of HS1's quarterly assurance plan reviews as well as the guidance documentation developed for risk bowties. As such we believe that we have implemented the recommendation which was identified as applicable to HS1.

In addition to the improvements to our strategic safety assurance processes this incident has provided data to inform and drive the strategic assurance activity of our assurance plans. This has been discussed through the independently chaired HS1/NR(HS) Assurance Board meetings and has influenced in the following areas of HS1's assurance plans:

- *Core level 1 KPI's for NR(HS) on overdue actions from engineering assurance and safety.*
- *Audit of NRHS recommendation close out effectiveness included in HS1 25/26 Audit plan.*
- *Seeking assurance through HS1/NR(HS) Assurance Board and RM3 maturity of the effectiveness of NR(HS) external engagement and learning from best practice*
- *Focus for HS1 site assurance visits on the management of contractors and suppliers and supervision/assurance of works.*

We have discussed the response laid out in this letter with NR(HS) as well as reviewing their response to the recommendations applicable to them. We will monitor the close out of these recommendations through the HS1/NR(HS) Assurance Board. As suggested in your letter we have also discussed the actions we have taken with the ORR lead inspector to ensure that there is a clear understanding of how we have addressed the recommendation.