

Oliver Stewart
RAIB Recommendation Handling Manager



12 February 2025

Mr Andy Lewis
Deputy Chief Inspector of Rail Accidents

Dear Andy,

RAIB Report: Derailment of a tram at Bulwell, Nottingham on 12 June 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 27 March 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 all 3 recommendations is '**Closed**'.

We do not propose to take any further action in respect of the recommendations, unless we become aware that any of the information provided has become inaccurate, in which case I will write to you again.

We will publish this response on the ORR website.

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 3 recommendations were addressed to ORR when the report was published on 27 March 2024.
2. After considering the recommendations ORR passed all 3 recommendations to Nottingham Trams Limited 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. ORR also brought recommendations 1 & 2 to the attention of the attention of the LRSSB to share with their members as it was concluded that that there are equally important lessons for them. ORR did not ask them to provide a reply.

Recommendation 1

The intent of this recommendation is to improve the communication between control room staff and tram drivers when dealing with engineering faults.

Nottingham Trams Limited should review its operating rules and control room policies and procedures, with the intention that control room staff are given clear and complete guidance on how to respond to engineering faults. This should specifically consider when it would be appropriate for control room staff to warn tram drivers of arising issues, associated with such faults.

Nottingham Trams Limited should develop a timebound programme to make any appropriate changes identified to operating rules, policies and procedures.

Nottingham Trams Limited should ensure that control room staff and tram drivers are trained and briefed appropriately on any revised operating rules, policies and processes which result from these changes and should ensure that their staff have ongoing and ready access to the relevant documents

ORR decision

4. Nottingham Trams Limited (NTL) has review its operating rules and control room policies and procedures, specifically when responding to engineering faults. In response to the findings of the review, measures have been taken by NTL to reduce the number of alarms for non-safety related faults. NTL have put a procedure in place to contact all trams in service in the event of set of points being out of correspondence, as happened in the Bulwell incident.
5. After reviewing the information provided ORR has concluded that, in accordance with the Railways (Accident Investigation and Reporting) Regulations 2005, NTL has:
 - taken the recommendation into consideration; and
 - has taken action to close it.

Status: Closed.

Information in support of ORR decision

6. On 6 June 2024 Nottingham Trams Limited provided the following initial response:

In receipt of the RAIB recommendation 1, a briefing was sent to controllers that outlined the requirements for a full radio broadcast where any points on the system are out of correspondence. This broadcast must be acknowledged by drivers, and where receipt of the message has not been acknowledged, controllers are required to contact the driver by person to ensure the information has been received and understood. This change was with immediate effect and controllers have signed acknowledgement of the instruction.

We are now in the process of reviewing the SCADA alarms procedure, which is the system that alerts controllers to all engineering faults on the network. The procedure will be reviewed and updated to reflect the recommendations from the investigation into the derailment, alongside other improvements that will provide better clarity on roles and responsibilities. The revised procedure is currently under consultation and the following actions are planned:

- *Complete consultation and finalise the procedure (Completion 30 June 2024)*
- *Toolbox talks to take place with Controllers on the updated procedure, followed by electronic knowledge test (Completion 31 August 2024)*
- *Engineering team briefing to take place followed by electronic knowledge test (Completion 31 July 2024)*

There are no changes to the operating procedures for drivers, therefore no driver briefing is required in relation to the SCADA procedure.

A schedule of assurance activity has been built into the plan to test adherence to the procedure.

Further knowledge checks will be built into the standards monitoring for controllers and engineers. This change will be made as part of a wider competency management project that is scheduled to begin in July.

7. Nottingham Trams Limited provided the following update dated 10 January 2025:

NTL have undertaken a review of the procedure specifically related to how to respond to engineering faults. A recommendation from this review was to reduce the number of alarms within the control room setting, with emphasis on reducing alarms for non-safety related faults. Work has been completed with a third-party contractor to review and reduce alarms within the control room setting.

An Internal document review has taken place relating to the SCADA alarms procedure (REF: QP/OPS/0011). This procedure ensures that actions identified for safety critical alarms are clearly documented and are the most appropriate action to take given the severity of alarm. Network controllers, Network managers &

Engineers have received training relating to the new documentation and subsequent alarm actions taken.

*In addition, NTL are in the process of a restructure that will bring a clearer focus and accountability for the training and development of controllers, and ongoing performance management. This change will see the introduction of a 2 new Operations Training & Competency Managers, who will lead the development of the competency management system for controllers and ongoing assessment and development of all controllers. This change comes into effect from 1st January 2025. NTL now consider all actions within this recommendation to be **'Closed'**.*

Recommendation 2

The intent of this recommendation is to improve Nottingham Trams Limited's understanding and control of the operational risks relevant to this accident.

Nottingham Trams Limited should review and update its risk assessments to ensure that the risks highlighted by this accident are effectively assessed and that appropriate measures are implemented to control them.

The review should take into account any work already completed in response to recommendation 2 of RAIB report 15/2018 and should specifically consider:

- the risk of trams approaching points which are in an unsafe condition
- the limits of relying on the line-of-sight principle and the correct action of tram drivers as risk controls
- the role of control room staff
- risk modelling and risk profiling data, such as that provided by the Light Rail Safety and Standards Board
- relevant industry guidance and good practice.

Nottingham Trams Limited should develop a timebound programme to review and update its risk assessments and to identify appropriate risk controls.

ORR decision

8. In response to the recommendation, NTL has reviewed and made changes to its risk assessment processes and associated management procedures. The risk assessments relevant to the Bulwell incident have been reviewed and changes made to risk controls.

9. The recommendation refers to RAIB report 15/2018 *Pushchair trapped in tram doors and dragged, Nottingham*. In response to recommendation 2 from that report, NTL have arranged bowtie analysis training with LRSSB, before conducting their own analysis.

10. After reviewing the information provided ORR has concluded that, in accordance with the Railways (Accident Investigation and Reporting) Regulations 2005, NTL has:
- taken the recommendation into consideration; and
 - has taken action to close it.

Status: Closed.

Information in support of ORR decision

11. On 6 June 2024 Nottingham Trams Limited provided the following initial response:

In January 2024, NTL commenced a project to improve the quality of our risk assessments across the business. This is an 18-month project and will deliver the following improvements:

- *Improved Risk Management Procedure and associated documentation*
- *Upskilling of Managers in risk management through IOSH training*
- *Creation of Route Risk Assessments across the full network*
- *Improved tracking of risk assessments and associated controls*
- *Creation of a suite of generic risk assessments*
- *Development of an accessible SharePoint site for a single point of access for all risk assessments*
- *Development of a risk management governance process and risk assessment tracker*
- *Audit and Review of all risk assessments, to be moved onto an improved template*
- *Clearer oversight of our risk profile with the identification of our 'main killers' and the controls*

In relation to specific risk assessments for the risks highlighted by this incident, there are 3 areas of focus for us:

- Points out of correspondence

This risk assessment will be completed by 30 June 2024 and any associated controls and methods of work will be implement and briefed by 31 August 2024.

- Incident Management

A Hazard Identification workshop will take place in July 2024. This will subsequently feed the review and rewrite of the Incident Management Procedure. This will also input into the development of a new control manual, which will be launched by April 2025.

- Driver Training Programme

Full Route Risk Assessments have been completed to understand network operational risks as a 'route story'. Further assessment will take place in July 2024 to look at specific high-risk locations or tasks. Following this a full review

of the driver training programme will take place to complete a 'Risk Based Training Needs Analysis'. The driver training programme will be refreshed to reflect these changes by the end of 2024.

NTL sit on multiple industry working groups and play an active role in the LRSSB and UK Tram forums at an exec level and within sub-groups which provides a good insight into industry best practice and other operator lessons learned.

Our QHSE Manager sits on the working group for the development of the TAIR system that, once fully developed will provide industry level risk profiling and better oversight of industry trends, alongside company specific data.

Since the Derailment incident, NTL have made organisational improvements and introduced a robust governance structure that incorporates the scrutiny of safety performance, risks and the delivery of safety improvements.

These changes include:

- An improved organisational structure to strengthen safety accountability in the business, with*
 - o the introduction of a new Service Delivery and Safety Director role within NTL*
 - o the introduction of a Network Resilience and Security Manager, who is responsible for NTL's incident management and emergency planning*
 - o the introduction of a permanent Compliance Manager to lead the audit programme*
- The introduction of the RM3 Risk Maturity Model for self-assessment and benchmarking of our safety culture*
- Monthly Safety Leadership Group attended by the Senior Management Team and NTL Executive Board Members*
- Improved Safety Committee, with more focus on risk management and safety performance*
- Increased Field Engagement visits, now featuring in management objectives*
- Planned Joint Safety Inspections*
- Better use of 'Toolbox Talks' to share safety information*

12. Nottingham Trams Limited provided the following update dated 10 January 2025:

As identified within our letter dated 6 June 2024, NTL began an 18-month Risk Management Improvement project in January 2024. Risks highlighted by this accident have been re-assessed and appropriate measures have been implemented, these measures are reflected in improvements to the infrastructure, improvements to the driver and controller training programme and procedural changes.

As a result of the Points Out of Correspondence hazard contained within RA-DR-008 Signals and Points NTL have installed an 'OOC beacon'. This beacon is programmed into the signal head, with a warning light flashing once the points fall to

'out of correspondence'. This beacon provides an additional control measure to identify to drivers of a hazard ahead.

The Risk Management Improvement Project is set to deliver the following outcomes:

- A full review of the Management Procedure (REF: SP/QHSE/009)*
- A full review of risk assessments & associated control measures*
- IOSH Managing Safely training for managers*
- An updated master risk assessment log with improved tracking of review dates*
- The introduction of Route Risk Assessments that have a direct feed into training and competency management*

This project continues to make good progress and is approximately 75% complete. The project is currently on track for completion in July 2025.

NTL continues to work with the LRSSB and industry professionals surrounding the use of the light rail sector risk model. NTL have implemented the use of the TAIR system, used to directly feed the sector risk model through identification of event types and any existing precursors/causation.

*NTL consider any immediate actions relating to the risk assessment and subsequent controls to be **'Closed'**.*

NTL consider two actions to remain open within this recommendation.

- Action 1 – Risk management Improvement project completion – Due End July 2025*
- Action 2 – Review & relaunch of Incident Management Procedure – Due 30 April 2025*

Recommendation 3

The intent of this recommendation is that Nottingham Trams Limited ensures that its management of change includes appropriate consideration of human factors.

Nottingham Trams Limited should review its 'request for change' process to ensure that it includes appropriate consideration of environmental, organisational and job factors, and human and individual characteristics, which influence behaviour in a way which can affect safety.

ORR decision

13. NTL has reviewed its request for change process and made to the risk assessment template component. As per the recommendation, NTL reviewed the inclusion of Environmental, Organisational and Job factors and Human and Individual characteristics within the request for change process and concluded it would be more appropriate to include them in the risk assessment process instead.

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

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

Status: Closed.

Information in support of ORR decision

15. On 6 June 2024 Nottingham Trams Limited provided the following initial response:

NTL have made changes to the Request For Change (RFC) process by incorporating a new risk assessment template to be completed as part of the process. The template incorporates the hierarchy of controls to ensure that consideration is given to all elements of control measures, including human factors.

Further work is ongoing to amend the procedure to specify that assessment of environmental, organisational and job factors, and human factors should be made as part of the process. An in-person briefing will inform managers of this change and provide guidance in completion of an RFC assessment. This work will be completed by 31 July 2024. The RFC process will be audited as part of the annual audit programme to ensure this change is fully embedded and there is compliance.

16. Nottingham Trams Limited provided the following update dated 10 January 2025:

As outlined within previous correspondence NTL have made changes to risk assessment template included within the Request for Change (RFC) process. This has ensured that all assessments completed as part of RFC are consistent with assessments completed across the business.

Furthermore, NTL have reviewed the inclusion of Environmental, Organisational and Job factors and Human and Individual characteristics with the RFC process. NTL did not feel as though a stand-alone inclusion within the RFC process was enough to ensure consideration throughout the business.

Therefore, during the previously discussed Risk Management procedure and documentation review, NTL have included the above-mentioned factors. By including the factors within Risk Management NTL believe we have taken a higher approach to identifying any such factors within assessments.

A toolbox talk has been conducted with relevant management and personnel within the business to ensure changes to risk management procedure are read and understood. Comments have been received from individual management within the business surrounding the assessment of the included factors, with NTL QHSE identifying the individuals and addressing locally.

*NTL consider this recommendation ‘**Superseded**’.*