

**Oliver Stewart**  
**RAIB Recommendation Handling Manager**



3 June 2025

Mr Andy Lewis  
Deputy Chief Inspector of Rail Accidents

Dear Andy,

**RAIB Report: Unsafe movement of a train at Styal station on 3 May 2023**

I write to report<sup>1</sup> on the consideration given and action taken in respect of the recommendations addressed to ORR in the above report, published on 1 July 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**' and the status of recommendation 2 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

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<sup>1</sup> 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 1 July 2024.
2. After considering the recommendations ORR passed all 3 recommendations to Northern Trains 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. ORR also brought the recommendations to the attention of TOCs and FOCs as it was concluded that there are equally important lessons for them. ORR did not ask these organisations to provide a reply.
4. This annex identifies the correspondence with end implementers on which ORR's decision has been based.

## Recommendation 1

*The intent of this recommendation is to improve the management of risk resulting from the operation of trains in service with known faults.*

Northern Trains Ltd should establish a system to provide risk-based guidance regarding decisions to return trains into service with unresolved faults. This system should include specific criteria that will allow staff to differentiate between safety-critical and performance-critical defects and should also allow staff to record the basis on which trains have been released into traffic with known defects

## ORR decision

5. Northern Trains Ltd (NTL) is developing a process for managing unresolved defects for trains in service consisting of two documents covering safety critical and performance critical defects. Both documents are still in draft, with a completion date to be confirmed. We will consider closure of the recommendation once the documents have been published.
6. After reviewing the information provided ORR has concluded that, in accordance with the Railways (Accident Investigation and Reporting) Regulations 2005, Northern Trains Ltd has:
  - taken the recommendation into consideration; and
  - is taking action to close it.

**Status: Open.**

## Information in support of ORR decision

7. On 11 October 2024 Northern Trains Ltd provided the following initial response:  
*Work is underway to develop a process within Northern's engineering department to improve the management of unresolved train defects. This work will aim to*

*develop criteria to readily distinguish between safety critical and performance critical defects. The process will also provide for escalation where there is an unresolved fault that cannot readily be recreated through testing or fault finding at a maintenance facility.*

*The brake release fault that led to the Styal incident was difficult to diagnose and there were no significant shortcomings identified in the way the fault finding and engineering decision making process was conducted. This included the first instance of the fault on 24 April 2023 which self-rectified and again following the Styal incident of 3 May. The final appearance of the fault on 25 May occurred during shunting, where the fault finding conducted between the Maintenance Controller and driver identified that the fault did not lie within the door-brake interlock system but within the cab brake control system.*

*Once again, the fault cleared and could not be recreated later at the depot. However with the investigation now focussed on the cab electrical circuits for the brake control system, maintenance staff were able to identify the root cause. This was an intermittent brake fault affecting only one driving cab, caused by intermittent high resistance across relay contacts in the brake control system.*

*Progress - Developing an all-encompassing process involving different types of faults on a range of train systems is complex. The overall aim is to ensure there is consistent process guiding decisions to return trains back into traffic with intermittent and/or unresolved defects. It is anticipated that a draft process will be developed by the end of March 2025.*

8. On 9 May 2025 Northern Rail provided the following update:

*Further to your questions on Recommendation 1 of the RAIB Styal report, as follows:*

- *Recommendation 1: It would be helpful if you could please forward a copy of QMSP-2P-020 Engineering Performance Management System. In particular we are interested to see sections 9.3 and 9.4 containing the process to be followed for recurring and unresolved defects including no faults found situations. ORR would like to check that it meet the requirements of the RAIB recommendation and that it recognises that an assessment will need to be made to prevent the potential of sending trains out with safety critical faults. Otherwise like seen at Styal, a train can be sent out with a safety critical faults and later could potentially turned into a safety critical outcome/event.*

*I enclose Engineering's latest draft of QMSP-2P-021 (note that the number QMSP-2P-020 was quoted in error), and in particular section 9.4 on repeat defect management, with table 2 defining the unit release authority based on the repeat count. Accompanying this is the latest draft of QMSP-0Q-005, which details how the initial defect/incident is risk assessed, highlighting certain defects as safety defects or high risk.*



QMSP-2P-021 -



QMSP-0Q-005 - Rail

Engineering Performance Vehicle Safety Related

*QMSP-2P-021 clarifies the release authority for the defects - QMSP-0Q-005 is the document that outlines the guidance to the defect risk and the investigations that should be done before the release of the unit.*

*The two attached documents are both work in progress and the Northern engineering team would welcome ORR feedback and specifically in relation to recommendation 1.*

## **Recommendation 2**

*The intent of this recommendation is to manage the risk of safety isolations when applied to trains in passenger service.*

Northern Trains Ltd should undertake a risk-based review of the operating rules and procedures used to manage safety system isolations while trains are in passenger service. This review should consider how such isolations may affect dispatch as well as any related requirements for training, decision support aids and safety-critical communications.

Northern Trains Ltd should develop a timebound program to make any appropriate changes identified to operating rules, policies and procedures.

## **ORR decision**

9. NTL has conducted a review of the operating rules and procedures used to manage safety system isolations while trains are in passenger service. The output from the review has been rebriefing for staff on decision making and safety critical communication, and a revision of the Defective On-Train Equipment (DOTE) process to take account of the impact on train dispatch.

10. We asked NTL for any feedback from control staff on degraded despatch methods and the revised DOTE, specifically around the references made to check the sheet prior to isolating the TIS or EBS. NTL reported that they have not received any feedback from control staff on the specific aspects of the DOTE or degraded despatch methods.

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

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

**Status: Closed.**

## **Information in support of ORR decision**

12. On 11 October 2024 Northern Trains Ltd provided the following initial response:

The Northern-led investigation into the Styal incident reviewed operational rules and procedures in terms of future prevention of a similar incident. A number of actions were identified concerning training, decision support aids and safety critical communications, as follows:

- a) To train/retrain Maintenance Controllers and Duty Control Managers in safety critical communications, to ensure more effective and unambiguous communications between Control and traincrew during incidents.

**Progress** - As of December 2023, all Maintenance Controllers and Duty Control Managers are trained in safety critical communications, including any new appointees to these roles. Action completed.

- b) To review decision-making responsibilities and authorities in Control.

**Progress** - A review has been completed and the decision making process re-briefed to Control staff as of 30 June 2023. Action completed.

- c) Maintenance controllers to refer to the fleet database when dealing with in-service unit faults. This is to establish whether the fault being reported is a repeat defect on that unit, thereby informing and aiding their fault finding, based on the available information.

**Progress** - This requirement has been briefed to Maintenance Controllers and has been in place since 30 June 2023. Action completed.

- d) To review the isolation of safety systems and equipment as contained in Northern's DOTE (defective on-train equipment) process, against the impact on dispatch. Where dispatch is impacted, this is to be identified within the DOTE along with required action.

**Progress** – This work is underway with proposed revisions to the DOTE to be presented to Conductor and Driver Employee Councils prior to review at the next sub-Joint Safety Committee (sub-JSC) meeting to be held in January 2025. Introduction of the revised DOTE will then follow the sub-JSC meeting.

- e) To develop a generic fault handling process flow chart that could be used as a guide by Maintenance Controllers. This includes finding a suitable decision-making tool that meets the requirements of Northern's engineering department.

**Progress** - This work is underway, which to date has included discussions with a number of suppliers of decision making software. Further work is ongoing however to find the right solution for Northern's requirements. It is estimated that the work of finding this is likely to take until the second quarter of 2025.

13. On 9 May 2025 Northern Trains Ltd provided the following update:

*In response to your questions relating to recommendation 2 of the Styal report:*

- Recommendation 2: Since the DOTE has gone live at the end of Jan 2025, have you had any feedback on the revised DOTE specifically around the references made to check the sheet prior to isolating the TIS or EBS? Have

*you had any other feedback following any degraded dispatch methods of work in recent times?*

*Having checked, including Duty Control Managers in Control, who are directly involved in application of the DOTE, we have not had any specific feedback in either of the above respects.*

### **Recommendation 3**

*The intent of this recommendation is to provide train drivers and relevant operational staff with the necessary skills and strategies to effectively manage out-of-course situations.*

Northern Trains Ltd, building on the work that has already started in this area, should embed non-technical skills training into the ongoing competency monitoring of drivers. It should also review how it maintains and reinforces knowledge and confidence of its staff in dealing with out-of-course events and similar stressful situations. This review should consider the requirements of operational roles and look at methods such as simulations and exercises.

Northern Trains Ltd should develop a timebound programme to make any appropriate changes to on-going training, competency management and briefing arrangements.

This recommendation may apply to other transport undertakings.

### **ORR decision**

14. The information provided by NTL for the embedment and assessment of non-technical skills for new drivers is detailed and comprehensive. We have asked NTL to provide evidence to demonstrate how the ongoing competency of existing drivers is assessed.

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

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

***Status: Open.***

### **Information in support of ORR decision**

16. On 11 October 2024 Northern Trains Ltd provided the following initial response:

*Northern has been active in recent years in recognising the importance of non-technical skills for drivers, the role they can play in reducing incidence of operational safety incidents and how to embed these into the drivers' competency*

arrangements. The Styal incident has provided the opportunity to review the current approach in relation to out-of-course events and in particular where operational time pressures can lead to stressful situations that might affect real-time decision making.

As a result, the following actions have been identified:

- a) To review the psychometric testing arrangements during recruitment to establish if the ability to manage stressful situations is part of the process, and if it is how suitable is it in relation to the RAIB learning points. If it is not covered, testing should be amended to enable it to be one of the factors taken into consideration as part of the testing and recruitment process.

**Progress** - A review of psychometric testing arrangements is in its initial phase at present. This includes engagement with between the Northern's Operational Standards Team and Assessment Centre Manager on the ability to alter the testing process through adding fault finding abilities. This work will aim to reach a conclusion by the end of March 2025.

- b) To develop a training package that can be used in both drivers' off-train briefings and in driver training, which enables drivers to identify stressful situations, and provides them with strategies and techniques that can help manage them. It must also enable to drivers to understand the impact of not being able to identify and manage stress on their performance.

**Progress** - The training package is planned to be developed starting January 2025 with the aim of inclusion in the July to December 2025 drivers' off-train briefings.

- c) Other actions that have been identified and are being worked into a time-bound programme for delivery include the following:
  - i) To ascertain if there is any learning to be had from the emergency services in relation to their control rooms and management of stressful real-time situations, in support of Duty Control Managers.
  - ii) To look at opportunities for trainee drivers to reflect on any stressful situations they may have encountered. This would focus on how they managed those situations and how those experiences could be incorporated into driver training. The aim being to create a shared learning environment and opportunity for coaching on what went well and why, and what they could have done differently in such circumstances.
  - iii) To develop training for managing stressful situations which would have content and resources tailored for Duty Control Managers and the Control environment, designed to also act as a refresh resource. iv) To enable the management of stressful situations and degraded working to be conducted in a safe learning environment as part of the future operational training that will come with the introduction of driving simulators.

17. On 9 May 2025 Northern Rail provided the following update:

*In response to your questions relating to recommendation of the Styal report:*

- *Recommendation 3: NTL is delivering a number of work stream from recruitment to the training of drivers. NTL is also looking at opportunities for trainee drivers to reflect on any stressful situations they may have encountered. ORR would like to know whether dealing with stressful situations will also be included within the ongoing competences of qualified drivers. I noted that NTL is awaiting for the arrival of its simulators and that degraded scenarios will be built into the simulator training schedule to allow trainees to experience these events – will this also be used for qualified drivers?*

*The plan for the simulators is in development, but at this stage it is too early to say. We will be having degraded situation training for trainees on the simulators, but qualified drivers are an unknown at this stage of the project.*

*Ideally, we would ensure that all qualified drivers have simulator time for degraded situations – that will be dependent on how much simulator time there is and whether they can all be cycled through during their competency cycle. That is not to say it won't happen, we just can't say with 100% certainty at this stage.*

*What is certain for qualified drivers is the new assessment criteria that is coming online later this year (Quarter 3 2025/26). This has the following assessment criteria covering the Traction Interlock Switch (TIS) and associated non-technical skills (NTS), which captures the management of stressful situations. Some of the key markers for this are highlighted below in yellow.*

*The training going into the trainee programme will also be rolled out to qualified drivers as part of the off-train briefing cycle for July to December 2025.*

<b>23.7</b>	<p><i>Candidate explains circumstances when TIS would be operated, can describe how it is operated and requirements following operation as per GERT 8000 Rule Book module TW5. Candidate explains the hazards associated with failing to carry out TIS operation correctly.</i></p> <ul style="list-style-type: none"> <li><i>• Initial operation</i></li> <li><i>• Subsequent door release</i></li> <li><i>• When being relieved, berthed, disposed, secured, reversed or coupled to another unit</i></li> <li><i>• Reporting requirements inc EBS/TIS form.</i></li> </ul>
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*1.1 Attention to detail - can focus on details when needed and identify unusual or unexpected things.*

*1.2 Overall awareness - can step back from the detail to monitor and understand the overall situation.*

*1.3. Maintain concentration - uses techniques to stay alert and manage distraction.*

*1.5. Anticipation of risk - is alert to hazards, risks and errors traps, and responds.*

*2.1 Systematic and thorough approach - completes tasks using a logical and thorough approach.*



- 2.2 *Checking - checks actions and information rather than making assumptions.*
- 2.3 *Follows rules and procedures - complies with rules and procedures.*
- 3.1 *Listening (people not stimuli) - listens, understands and responds appropriately.*
- 3.2 *Clarity - communicates clearly and concisely.*
- 3.3 *Assertiveness - speaks up and challenges when needed.*
- 3.4 *Sharing information - shares information at the right time to the right people.*
- 4.1 *Effective decisions - weighs up information and options to make a decision.*
- 4.2 *Timely decisions - makes decisions and takes action at the right time.*
- 4.3 *Diagnosing problems - establishes the cause of problems.*
- 6.3 *Calm under pressure - uses techniques to remain calm under pressure.*
- 7.2 *Confidence and initiative - can work independently but asks for help when needed.*
- 7.3 *Maintain and develop skills and knowledge - keeps knowledge and skills up to date.*