Oliver Stewart
RAIB Recommendation Handling Manager

4 April 2025

Mr Andy Lewis
Deputy Chief Inspector of Rail Accidents

Dear Andy,

RAIB Report: Uncontrolled evacuation of a partially platformed train at Clapham Common London Underground station on 5 May 2023.

I write to report[1] on the consideration given and action taken in respect of the recommendations addressed to ORR in the above report, published on 8 May 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

[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 8 May 2024.

2. After considering the recommendations ORR passed the recommendations to London Underground 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 the report, recommendations and learning point to the attention of Network Rail, TOCs, and Metro operators. as it was concluded that that there are equally important lessons for them. ORR did not ask these organisations to provide a reply.

Recommendation 1

The intent of this recommendation is for London Underground to review how it enables its staff to effectively respond to out-of-course events which may occur when a train is positioned partially in a platform.

London Underground should undertake a risk-based review of its current Rule Book, operating procedures and associated training material considering the findings from this incident. This review should seek to ensure that staff have clear guidance and instructions regarding the actions to be taken when dealing with out-of-course events, such as emergency evacuations, on trains that are partially positioned in a platform. The review should particularly examine how staff communicate with passengers during such events and if existing guidance and instructions enable staff to make effective decisions in the timeframes typically available during such events.

London Underground should make any changes to rules, procedures and training material identified as appropriate following this review. London Underground should also ensure that any changes are appropriately briefed and trained to relevant train operations, station and control staff. This training should, where appropriate, include practical elements such as simulation exercises

ORR decision

4. London Underground Ltd (LUL) has provided evidence of having undertaken a review and updated train operation guidance, instruction and training. Work is ongoing regarding the operation of the Outside Door Operating Device (ODOD). LUL recognise the potential serious safety consequences of inappropriate operation of the ODOD and have engaged external consultants to help fully understand the safety risk. LUL expect to have completed this work by 30 April 2025, and we have asked for an update at that time.

5. Further to the update provided by TfL in November, Operational Standards Notice (OSN) No. 176v2 Passenger emergency alarm activation on trains will be effective from 07 April 2025. The OSN mandates the use of the Mayday Button on the Connect Radio in all scenarios when a train is stalled part way out of the platform and the Passenger Emergency Alarm (PEA) is activated.

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

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

Status: Open.

Information in support of ORR decision

7. On 25 July 2024 London Underground Limited provided the following initial response:

We are taking the following steps to address this recommendation:

Out-of-course-events

With respect to ensuring that staff have clear guidance and instructions regarding the actions to be taken when dealing with out-of-course events, such as emergency evacuations, on trains that are partially positioned in a platform we are undertaking a joint exercise with experts from within LU (Skills Development, Fleet, Human Factors, Customer Operations, TfL Engineering) and the wider industry (Keele University, RAIB, DSTL/DFT) on the 31st July 2024. The aim of this will be to review the Clapham Common incident to better understand complex customer behaviours and the extent to which these impact on our standard response to incidents as set out in the LU Rule Book and how we equip our staff to manage these. We will also explore unintended consequences of not complying with the LU Rule Book.

Following the joint exercise we will review the findings, determine the action that needs to be taken and develop a timebound plan for implementing any improvement activities. We anticipate that we will need to change our Rules and our training and will aim for the following timelines:

By 30 September 2024 LU will issue an Operational Standards Notice with the Rule Change.

By 31 March 2025 LU will have completed any required updates to the relevant training arising from the rule change. Train Operator Communication with Passengers We are in the process of completing a risk-based review of the Rule Book and associated training. This includes reviewing the rules and training provided when multiple passenger emergency alarms (PEAs) are activated and the sequencing of driver PA announcements. Depending on the outcome of this review there are likely to be rolling stock technical changes that will be required with respect to multiple PEA activation. We have convened a working group to ensure that the technical implications and the risks associated with any changes are fully considered. The next steps will be determined on completion of this work. Any changes to the Rule Book and associated training will follow our normal

change control process and we aim to complete changes to the Rules by 30 September 2024 and associated training by 31st March 2025. Station Staff Response On the 13th May 2024 we incorporated this incident into station colleague training to ensure that the learning on operating the outdoor opening device and the evacuation of a train (including one partially in/out of the platform) is robust. This training has already been piloted and trainers are being upskilled on this.

8. On 29 November 2024 London Underground Limited provided the following update:

Out-of-course-events, immediacy of response and authoritative communication

On 31 July 2024, we undertook a joint exercise with experts from within LU (Skills Development, Fleet maintenance, Human Factors, Customer Operations, TfL Engineering and the SHE team) and the wider industry (Keele University, RAIB and Defence Science and Technology Laboratory (DSTL)/Department for Transport (DfT)). The aim of this exercise was to review the Clapham Common incident to better understand complex customer behaviours and the extent to which these impact on our standard response to incidents as set out in the LU Rule Book and how we equip our staff to manage these. During the exercise, we re-reviewed all the CCTV through each camera in detail and the human factor specialists at the workshop provided commentary on customer behaviours.

The main conclusion drawn from the workshop was that the action taken by our customers at the time were logical, measured and mutually agreed responses to a felt sense of danger. The response was the logical consequence of the absence of an operational authoritative voice, combined with the unusual smell of burning in some carriages. Importantly, the workshop also discussed the reasons why a driver might be anxious about making an emergency call to the controller and why the Customer Service Assistant (CSA) did not feel empowered to make the decision to use the Outside Door Opening Device (ODOD).

Following the joint exercise, we critically reviewed our Rules and drafted an Operational Standards Notice (OSN) which mandates the use of the Mayday Button on the Connect Radio to make an emergency call to the controller. To address the anxiety about making a wrong decision, we now make it very clear in the OSN that this is a rule for all scenarios when a train is stalled part way out of the platform and the Passenger Emergency Alarm (PEA) is activated – removing discretion, anxiety of getting it wrong and creating immediacy in controller response. We have also mandated that there must be an all-call to the whole train as the drivers' first action followed by regular updates.

This is a substantial change to our operational response to PEA activation. We have evaluated unintended consequences through a detailed operational peer review, twice with the Directors Risk and Assurance Change Control Team and Trade Union (TU) consultation at the LU Stations, Trains and Service Control Councils.

The OSN is now agreed by all TUs, and we will publish and implement this on 31 December 2024. The OSN will be briefed by Trains Managers to Train Operators to ensure that the updated rules are understood.

By 31 March 2025, LU will have completed all required updates to the relevant training arising from the change the Rule Book.

To confirm understanding and full implementation of the training, we will review the risk-based training needs analysis with the LU Customer Operations Head of Profession and will ensure that this specific issue is reassessed in the annual train operators training. That will give us confidence that this change is understood and will ensure that we sustain this learning. We will complete this review of the training needs analysis by 31 March 2025 and train operators will be assessed against the new criteria by that date. Following a 6-months period to allow for roll out of the new training to train operators as part of their annual training, we will carry out a validation exercise to ensure that changes made have been effective and that train operator understand the new rules. The validation exercise, which will include a sample check of train operators across the network, will be completed by 30 September 2025. We are happy to share the results of our validation exercise with you at that point.

Station Staff Response

We are currently reviewing our rules associated with the operation of the Outside Door Opening Device (ODOD) as well as the associated training following the completion of our Formal Investigation into this incident. As detailed in our response to RAIB Recommendation 1 above, on 31 July 2024 we undertook a joint exercise with experts from within LU (Skills Development, Fleet maintenance, Human Factors, Customer Operations, TfL Engineering and the SHE team) and the wider industry (Keele University, RAIB and DSTL/DfT). Part of the exercise specifically considered why the CSA did not feel empowered to make the decision to use the Outside Door Opening Device (ODOD). It also considered the potential unintended consequences of CSA unilateral operation of the device. A key potential unintended consequence, with clear safety risk, was identified - the potential for a train with a defective door to move with train doors open. There have been two recent incidents on LU where train operators have moved trains with open doors as a result of the incorrect use of the ODOD (as well as the incorrect application of other operational Rules associated with defects of this nature). One of these occurred at Canons Park in August 2024 and the other at Kennington in November 2024. Both incidents were notified to the ORR.

Given the potential serious safety consequences of inappropriate operation of the ODOD, we intend to ensure that, in making a rule change and updating any associated training, we fully understand the potential safety implications in other scenarios. To this end, we have engaged external expertise to help us understand this safety risk. This work has started and we plan to complete it in April 2025.

In the interim, the current rules associated with ODOD operation remain the same. We are confident that the work that we have done to prioritise addressing the importance of train operators making assurance announcements to customers during incident scenarios as well as updating the rules and training associated with mandating the use of the Mayday button on the radio when a train is part way out of the platform, and consider that this has reduced the potential for a similar incident occurring.

Recommendation 2

The intent of this recommendation is for London Underground to ensure that learning from previous incidents is not lost and that safety recommendations are captured and tracked through to implementation.

London Underground should continue its review of its processes for learning lessons from operational experience. This review should ensure that it is robustly applying and retaining the safety learning identified from accidents and incidents and using this information to enhance its understanding and control of risk.

ORR decision

9. LUL has explained the changes made to processes for learning lessons from operational experience, to ensure that learning from previous incidents is not lost and that safety recommendations are captured and tracked through to implementation. This work has included strengthening of the governance around internal investigations and the management and embedment of actions taken in response to recommendations.

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

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

Status: Closed.

Information in support of ORR decision

11. On 25 July 2024 London Underground Limited provided the following initial response:

We are taking the following steps to address this recommendation:

Learning from Previous Incidents

As identified by the RAIB we have recognised that the specific training scenario relating to a customer self-detainment incident at Holland Park in August 2013 was removed from train operator training following several years of inclusion. We have initiated a process review to ensure that any proposed changes to training materials are reviewed by Skills Development Governance in line with our risk-based training needs analysis approach; and for more substantial changes, by our assurance board – Directors Risk Assurance and Change Control Team (DRACCT) - to ensure relevant learning is retained as necessary. The terms of reference of DRACCT have been reviewed to ensure that changes to rules and training are subject to change assurance. This was completed on the 30th June 2024.

In addition to this we are re-reviewing the recommendations made in LU's FIR into the Holland Park August 2013 self-detrainment incident to ensure that any actions

implemented at the time remain in place and if they are no longer in place provide a rationale as to why they are no longer needed. Where actions need to be placed on the business, these will be included in the SHE Action Tracker with new delivery dates.

New action will be in the SHE action tracker by the 31st July 2024.

12. On 29 November 2024 London Underground Limited provided the following update:

Learning from Previous Incidents
In addition to the work completed and shared with you when I wrote to you in July, TfL is embarking on further changes in how we learn lessons from incidents.

We are changing our governance around Formal Investigation Reports (FIRs) to focus further on the effectiveness of TfL's FIRs and the recommendations from our reports. This will include the introduction of an "effectiveness review" of all TfL FIRs over the last 4 years, and on a 12-month rolling basis moving forward. This will be critically reviewed by a new Director group, the Corrective Action Review Group which will meet bi-monthly from January 2025 and be chaired by TfL's Chief Safety, Health & Environment Officer.

The effectiveness of actions arising from previous TfL Formal Investigation Reports will also be a key new feature of all investigations going forward.

We have also reached out to industry partners as well as organisations such as British Airways and EDF Energy to learn how they undertake effectiveness of corrective actions, and this is informing our next steps. We have also considered learning from recommendations in RAIB reports relating to the effectiveness of our FIR process.

The work on the FIR process and changes in governance arrangements is well under way and will be complete by 20 December 2024 in readiness for standing up our new governance from the new year.

Recommendation 3

The intent of this recommendation is for London Underground to review its risk assessment processes to ensure that the risks associated with out-of-course incidents involving trains and stations are effectively identified and assessed.

London Underground should review its risk management processes to ensure it is able to identify and effectively assess the risks associated with low frequency and potentially high-impact incidents involving trains and stations, such as passenger self-evacuation from partially platformed trains. As part of this review, London Underground should consider if the effect of factors associated with specific locations which could pose an increased risk to passengers, such as stations with narrow island platforms, is being appropriately considered within risk assessment processes.

ORR decision

13. A possible underlying factor in the incident identified by RAIB, was LUL not identifying the risk of passenger evacuation from a partially platformed train, in particular at narrow island platforms, such as at Clapham Common.

14. LUL have engaged a specialist consultancy to develop a self-detrainment Quantified Risk Assessment (QRA), which is expected to be completed by the end of April 2025. LUL have agreed to provide an update on recommendations 1 and 3 in May 2025.

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

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

Status: Open.

Information in support of ORR decision

16. On 25 July 2024 London Underground Limited provided the following initial response:

We are taking the following steps to address this recommendation:

Risk Assessment Review

Discussions with the RAIB identified that different components of customer self - evacuation events are modelled across different parts of the LU Quantified Risk Assessment (QRA). The RAIB are of the view that LU has underestimated the risk arising from these events in our modelling.

In response, we are planning to hold a hazard identification workshop with all relevant parts of TfL to identify the different ways customers might be hurt during or following self-evacuation events. Following this we will review the LU QRA to assess whether it needs updating to reflect the risk from self-evacuation events more accurately. We will write to ORR by 31 October 2024 to describe the conclusions of that work and provide a timeline by which we anticipate that any further required work will be completed.

17. On 29 November 2024 London Underground Limited provided the following update:

Risk Assessment Review
We have contracted specialist consultancy to build a self-detrainment Quantified Risk Assessment (QRA) for London Underground. We will complete this work by April 2025. This QRA will consider the events that could lead to a self-detrainment event, and the likely consequences, which will include incorporating the risk posed in the different environments that passengers could find themselves in following self-detrainment activity. We will consider how the modelled risk within this QRA compares with the modelling of other low-frequency, high-consequence events in our existing LU QRA, and review whether these events should be further developed within the LU QRA. We

will also consider whether the effect of factors associated with specific locations which could pose an increased risk to passengers, such as stations with narrow island platforms, is being appropriately considered within risk assessment processes. Where our assessment of risk identifies a need for further controls, we will identify and implement appropriate mitigations to ensure that we maintain a safe travelling environment for our customers.