

Oliver Stewart
RAIB Recommendation Handling Manager



5 February 2026

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 provide an update¹ on the action taken in respect of recommendations 1 & 3 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 '**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

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

1. TfL has reviewed the Rule Book, operating procedures and associated training material in response to this incident. The use of the Mayday Button on the Connect Radio to make an emergency call to the controller is now mandated and the change briefed to train operators. The rules and guidance for use of the ODOD by station staff in an emergency has also been updated. Briefing of the changes to staff is planned to be completed by June 2026.

2. 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.

Previously reported to RAIB

3. On 4 April 2025 ORR reported the following:

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.

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.

Update

4. On 27 November 2025 LUL provided the following update:

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

As detailed in my previous letter of August 2025, we updated our rules and train operator training and issued 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. This addresses:

- I. The prioritisation of responding to the Passenger Emergency Alarm (PEA). This means that from 7th April 2025, all PEA responses, where a train is stalled part way out of the platform, are responded to as an emergency call and are at the top of the Service Control call stack. This ensures that Service Control (or train operators) will be able to respond quickly.*
- II. The timely provision of customer information. The TfL Human Factors review that was undertaken after the incident concluded that the absence of any authoritative voice made the self-detrainment more likely. Train operators are now required to make an announcement to the train and repeated announcements every 3 minutes to ensure that customers are informed of operational actions.*
- III. We have reordered the sequence of actions undertaken by train operators to ensure that service control is informed of incidents first and that customers on the train are informed second. This will ensure that we can respond to incidents appropriately, in context of the specific incident.*

We have undertaken train operator briefings on this change which have now been completed along with an assurance check on a sample of train operators to check for awareness and understanding of the new rule.

Station Staff Response

TfL carried out an independent HAZID (Hazard Identification) exercise to assess the balance of risk between allowing station colleagues to use the Outside Door Opening Device (ODOD) without the permission of a train operator or service control and the unintended consequences that this might lead to.

The findings of the HAZID concluded that the risks between customers self-detraining in an incident scenario and unintended train movement are delicately balanced. The safety benefit of a change which may mitigate the impact of a customer self-detrainment, or prevent it from happening at all, is counter-balanced by the probability of disbenefit and likelihood of the emergency use of the ODOD

going wrong. This might include increasing the likelihood of a train operating with door open which is an unmitigated safety risk. In addition to this station colleagues are unlikely to be aware of the detail of an incident or what is happening on the rest of the network which means they are not able to make real-time, risk-based decisions in the same way that service control would be able to.

We do recognise however that there may be some emergency scenarios where it would be beneficial for platform staff to operate the ODOD without prior authorisation from service control or the train operator. Therefore we have reviewed and will be updating our rules to reflect some additional safety precautions and guidance when for when an ODOD is operated (by station colleagues) in an emergency. A copy of the rules is included as Appendix 1 to this letter but in summary they include:

- **A new safety precaution:** which states that the ODOD can only be operated when the train is stationary and the doors to be operated are aligned with the platform.
- **New mitigation to provide further clarity:** which requires that if the ODOD has been operated in an emergency the following must be undertaken:
 - Operate the on-train passenger emergency alarm to prevent the train from moving with the doors open
 - Attempt to contact the train operator so that they are aware that the ODOD has been operated
 - Contact the controller as they will have oversight of the incident as a whole
- **New guidance on what may constitute an emergency** which include:
 - Fire and smoke
 - Customers self-detraining
 - Assault with a weapon
 - Assault on a vulnerable customer
 - Risk of serious injury or risk to life
 - Customer panic that could give rise to self-detrainment

Specific rules are detailed in the LU Rule Book which are applied during the incidents outlined above as well as for other on train incident scenarios. These ensure that incidents are managed appropriately. The introduction of the new rules on use of the ODOD will supplement these to reduce the potential for customer panic and subsequent self-detrainment arising from such incidents.

Consultation on these proposals is underway and we anticipate that this will conclude by the end of December 2025. Following this the changes to the rules will be distributed across London underground Customer Operations via an Operational Standards Notice (OSN) by 31 March 2026. The rules will be briefed over a period of 12 weeks and as part of this station colleagues will be shown the location of the ODOD and have its operation explained by 30 June 2026. This briefing will include a mandatory knowledge check. In addition to this, TfL Skills Development will undertake a risk-based training needs analysis to ensure that competence in these rules is maintained.

We are confident that the changes we have already made to the rule book combined with those that are further proposed (as detailed above) will deliver a safer, more robust system response.

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

5. TfL has reviewed its risk management processes and identified a gap relating to self-detrainment events. In response to the findings of the review, TfL has done a HAZID and engaged consultants to develop a bowtie analysis for self-detrainment incidents.

6. We are content from our inspection work that TfL management of out of course incidents involving trains in stations are effectively risk assessed. TfL have rightly focused on the risk of self-detrainment where a gap in risk assessment process was identified. TfL have provided a 5-step action plan to implement the changes identified in the review, some of which have already been completed.

7. 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.

Previously reported to RAIB

8. On 4 April 2025 ORR reported the following:

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.

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.

Update

9. On 27 November 2025 LUL provided the following update:

TfL's initial response to this recommendation (in July 2024) was that we would work with a consultancy to develop a quantified risk assessment for self-detrainment events, and this was the objective stated in our Services Specification when the procurement for this work was carried out. Following the initial scoping conversations with the consultancy and internal subject matter experts we concluded that there was insufficient data around self-detrainment events, as a result of how rarely they happen, to build something quantified. Instead, the work was split into two workstreams.

One workstream was an independent HAZID exercise to assess the balance of risk between allowing station colleagues to use the ODOD without the permission of a train operator or service control and the unintended consequences this might lead to. This was quantified and is outlined fully in response to RAIB recommendation 1 above.

The second was that we commissioned Risktec, a specialist modelling consultancy, to develop a qualitative bow-tie which aims to explore the potential circumstances leading up to and following self-detrainment events on the LU network. This was finalised in October 2025.

The bow-tie is structured with a central Top Event of 'customer-initiated multi person uncontrolled self-detrainment out of cab in LU' with the associated central Hazard of 'passengers exposed to an unsafe environment'. The left-hand side of the bow-tie (example included as Appendix 2) explores three scenarios – and their associated threats and barriers – under which a self-detrainment event could occur:

- 1. Passenger in actual/perceived immediate danger from objects (developed in a short time frame)*
- 2. Passenger in actual/perceived immediate danger from other people*
- 3 Stalled train over a long duration (with no immediate perceived danger)*

The right-hand side (included as Appendix 3) of the bow-tie explores two consequences representing the environments that passengers could end up in following a self-detrainment event, and the types of injury that could be sustained:

- 1. Injuries/fatalities following self-detrainment onto a platform (cuts from broken glass windows, crush/trampling injuries, slips/trips/falls onto platforms)*
- 2. Injuries/fatalities following self-detrainment on track (electric shock, moving train, slips/trips/falls, entrapment in points, cuts from any assets)*

On both sides of the bow-tie, escalation factors have been identified, which were deemed to contribute to the likelihood of the Top Event occurring, or to the severity of the outcome.

The next steps for this is to use the LU bow-tie to analyse the sufficiency and effectiveness of the associated controls. This will include the following priority actions:

- 1. A review of the LU bow-tie against the recommendations made in TfL's Formal Investigation into the Clapham Common incident, to determine if the bow-tie has revealed any additional considerations*
- 2. A review of the LU bow-tie against the LU rule books, to ensure that they cover the range of circumstances identified in the bow-tie*
- 3. Identifying particular locations on the LU network that may be at higher risk if self-detrainment events as identified by the escalation factors within the bow-tie*
- 4. Reviewing the associated Customer Risk Assessments to ensure any location specific risks are reflected in these*
- 5. Updating the LU Rule Book and associated training to ensure that where the need for changes to made to these have been identified that these are reflected*

This work will be completed by the end of June 2026.

RAIB Recommendation 3 is broad in that it relates to the review of the risk assessment processes associated with out-of-course incidents involving trains and stations to ensure that these are effectively identified and assessed. Our existing rules cover the majority of foreseen operational scenarios, the risks associated with which are detailed in existing risk assessments. Therefore, the approach that TfL took to addressing this recommendation was to review our existing risk assessment processes relating to the risk of self-detrainment as outlined in this letter. The same approach will be applied in the future in the event of any unforeseen out-of-course involving trains and stations arise in the future.

Previously reported to RAIB

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

1. 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.
2. 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.
3. 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

4. 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.

5. 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 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

6. 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.

7. 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.

8. 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

9. 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.

10. 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.