

Newbury Park – Formal Investigation Report

Trap & Drag Incident – 17 May 2019

**HSE Info Exchange Reference Number: 001004688
and 001004681**



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Executive Summary

On Friday 17 May 2019, a trap and drag incident occurred at Newbury Park station at approximately 11:37am. Train 046 was involved in this incident and was headed in an easterly direction on the central line.

A customer ran down the stairs to board train 046 with a dog on a lead and entered the train while the train doors were closing. The customer boarded the train and the dog was left on the platform with the lead caught in the doors. Two male customers attempted to release the dog and alert the train operator without success.

A member of LU staff with a high visibility vest made an emergency signal to the driver to stop the train. This involved them waving their hands above their head. Whilst the driver did see this emergency signal, they still proceeded to depart the station platform.

As a result of the train departing the station, the dog was dragged for a distance of approximately 750 metres in an easterly direction towards Barkingside. Two emergency alarms were operated within car 4 and car 5 of the 8 car train. The Train Operator received an emergency call from the central Line service controller to immediately stop the train.

The Customer Service Supervisor ("CSS") from Barkingside accessed the track and removed the injured dog from the track. Whilst the dog was taken immediately to an emergency vet, it sadly died a short time later as a result of its injuries.

Platform train incidents (PTI) are the highest passenger safety risk within London Underground and various measures are put in place to mitigate against any such incident. Whilst strict guidance is detailed in the LU Rule Book 8, there is a range of proactive work that is regularly undertaken in an attempt to reduce and eliminate PTI events. This proactive work includes Planned General inspections, CCTV monitor checks, PTI forums and PTI hotspot notices.

The investigation team has taken a detailed and comprehensive approach during this investigation to ensure that all possible factors have been identified and considered. This includes review of relevant procedures, current management arrangements in place for dragging incidents, other similar associated hazards, LU guidance and protocol, frequency of other similar events, fatigue and operational communication.

There have been a number of recent high profile dragging incidents on the LU network. This has included a dragging incident at Notting Hill Gate in January 2018 and the trap and dragging of a dog in May 2019 at Charing Cross. In addition to this, it has also been established that other similar dog dragging incidents occurred at Borehamwood and Elstree Station on the Thameslink.

TfL has arrangements in place for the investigation of serious incidents and high potential near misses. Where these incidents are related to operational activities, they will initially involve the Duty Reliability Manager ("DRM") and are escalated as required. Other immediate work that is undertaken includes corrective action to make the area safe as well as collection of perishable evidence by the Customer Service Supervisor (CSS). This may include securing CCTV footage and taking statements from members of staff and the public. As part of standard protocol, the CSS is normally on the scene so that a duty of care check can be done for any persons involved. The steps taken and information gathered at

the incident scene will be recorded in an Electronic Incident Report Form (“EIRF”) and is reviewed by the line Service Manager. This is the process that is in place for the management of these events. TfL has established this process in an attempt to reduce and eliminate trap and drag incidents across the Network.

A good level of collaboration was noted from all members of staff who were involved in this investigation. This includes line managers, trade union representatives, technical experts and other relevant operational staff. The following information contained within this report explains the lines of enquiries undertaken, evidence gathered and the factors that caused this incident to occur.

1.0 Terms of Reference

The purpose of this investigation is to determine the causes of the incident and to identify any measures necessary to suitably minimise the risk of recurrence. It is not to establish blame or liability.

In accordance with approved TFL investigation procedures and instructions given by the Commissioning Director, the scope of this investigation is based on the following terms of reference.

- A. Establish the sequence of events that led to the incident.
- B. Identify why the incident occurred in terms of immediate cause, causal factors and root causes
- C. Identify any actions already underway to address the root causes
- D. Develop reasonably practicable recommendations to address the root causes.
- E. Consider previous or similar incidents.

The investigation should pay particular attention to:

- F. Communication of information between all parties involved during the incident.
- G. Decision making of those involved in managing the incident in developing a plan and how the plan was implemented and LUs approach to responding to incidents of dragging.



2.0 Investigation Methodology and Evidence

This investigation has been undertaken in accordance with TfL approved procedures. The methodology used includes:

- A. Investigation panel meetings held between June and July 2019
- B. Detailed consultation with trade union representatives
- C. Collection and analysis of evidence. This specifically involved:
 - a. Documentary evidence relating to training, fatigue and other human factors
 - b. Electronic data such as train data downloads and signalling information
 - c. CCTV footage, photographs and images
 - d. Staff interviewed with a focus on human factors
 - e. Site inspections and incident scene assessment
 - f. Functionality testing of the incident train
 - g. Assessment and advice from subject matter experts
 - h. Reconstruction techniques based on the above mentioned evidence

3.0 Summary of Incident

On Friday 17th May 2019 at approximately 11:37am, an east bound train on the central line arrived at Newbury Park Station. [REDACTED]

[REDACTED] No issues were detected as the train arrived at the station and the passenger loading of the train was low. Just prior to the train departing, a passenger with a dog on a lead is seen running towards the closing doors. Whilst the passenger only just made it onto the train, the dog was left on the platform connected by the lead that was being held by the passenger inside the train. Unfortunately, the train operator failed to act on various attempts by customers and staff to raise the alarm. This included an emergency stop signal being made by station staff. As a consequence, the train departed the platform and the dog was dragged several hundred meters along the track in an easterly direction towards Barkingside. The dog was retrieved from its trackside location by the CSS. It was found alive but was badly injured as a result of the incident.

4.0 Location of the Incident

The incident took place between Newbury Park and Barkingside Station. These stations are part of the central line and located in the county of Essex. The central line is open in this area and does not interchange with other LU lines. It is surrounded by various playing fields and farms. Set out below is a diagram that indicates the incident location.





(Above) Newbury Park Station – Incident location indicated by green arrow

5.0 Weather and Environmental Conditions

A review of weather conditions and the working environment has been considered as part of this investigation. This includes background noise levels, ambient temperature, lighting levels, site surface conditions and passenger levels. When these factors were taken into consideration, it is clear that these have not contributed to this incident. This is also consistent with the human factor interviews that were undertaken for the staff involved.

6.0 Pre-Incident Details

A review of CCTV footage shows a passenger with a dog entering Newbury Park Station. The dog is on a lead and is seen following the passenger as they tap in using what appears to be their oyster card. They proceed through the barriers and rush down the stairs towards the platform. Despite the fact that the train doors start to close, the passenger still attempts to board the train.

7.0 Time Line Of Events

Based on a review of all available evidence and information, the following timeline of events has been established. This is also supported by the CCTV footage contained in this section of the report.

11:37	The Customer was seen entering the Station with a small dog on a lead.
11:37:51	Train 043 fully birthed into the platform
11:38	The Customer is seen crossing the Bridge towards the Eastbound Platform at Newbury Park on the Central Line.
11:38:15	Customer seen going down the stairs towards the train.
11:38:22	Customer boards the train while doors are closing
11:38:24	Train 043 doors fully close with Customer on board and the small dog outside and still on the platform.
11:38:29	Two male passengers move towards the train in full view of the CCTV, they attempt to assist the dog.
11:38:33	Train 043 departs the platform.
11:38:34	Male passenger runs alongside of the platform while waving hand.
11:38:35	Customer Service Supervisor seen in camera image facing towards front of train waving arms above head as train moves out of the platform.
11:38:44	Train fully out of Station limits
11:38:46	First Passenger Emergency Alarm ("PEA") operated in car 4
11:38:50	Second PEA operated in car 5
11:39:29	Emergency brake applied half way into Barkingside eastbound platform on the Central Line.
11:49	Customer Service Supervisor Townsend removed injured dog from track
11:51	Train 043 departed towards Fairlop (eastbound).

The sequence of events during this incident can be seen in the CCTV footage below.



(Above) – Image No.1 - Train enters platform at Newbury Park Station



(Above) – Image No.2 - Train fully berthed



(Above) – Image No.3 - Train doors open



(Above) – Image No.4 - Passenger rushes to board train with dog on a leash.



(Above) – Image No.5 - The dogs lead becomes caught in the doors



(Above) – Image No.6 - Passengers attempt to free the dog from the doors



(Above) – Image No.7 - Station staff attempt to get the train to stop as train departs



(Above) – Image No.8 - Train departs platform without stopping

8.0 Incident Management and Recovery

The following steps were taken during the Incident Management and recovery. The timeframes here are quite short given the nature of the incident.

- A. 11:37 - Customer Service Supervisor at Newbury Park Station attempts to stop train
- B. 11:51 - Customer Service Supervisor Townsend removed dog from track
- C. 12:40 - Duty Reliability Manager attends Newbury Park Station

9.0 Immediate Actions Taken

- A. All relevant staff have been reminded about stopping a train under emergency conditions. This was also uploaded onto the LU Intranet.
- B. A reminder was also sent to staff about the importance of scanning. This is a term that is used to describe how a train operator monitors the platform and uses the monitors within their cab to view the platform in a systematic way. This ensures that the full length of the platform is covered and that the ability of the eye is not exceeded.

10.0 Incident Scene Reconstruction

On Thursday 9 July 2019, a reconstruction was conducted with the Trade Union representatives at the incident scene. This was undertaken at a similar time of day as the incident so that any observations made were reflective of the actual incident.

Whilst it was noted that the sun was at a slightly different height, this exercise was unable to reveal any additional information that was not previously known to the investigation team. For this reason, the incident scene reconstruction was able to eliminate site or equipment conditions as a causal factor in this incident. Based on this information, it is clear that the investigation team are likely dealing with circumstances that are related to human factors. This is discussed in further detail later in this report.

11.0 Investigation Undertaken**11.1 Time**

Whilst time of day was considered, the passenger flow was minimal with no oblique views apparent as only seven people were on the platform throughout the incident.

11.2 Speed

The speed of the train was not an issue as it was driven in Automatic train mode. In addition to this, a review of dwell time at previous stations suggests that arrival and departures from previous station were correct and consistent.



11.3 Station

Newbury Park and Barkingside are both non tunnel sections of the railway and have a canopy over the platform. An inspection of this area revealed that the platform is not subject to any adverse conditions. As such, the station can be ruled out as a contributing factors in this incident.

11.4 Cab Ride

A cab ride was undertaken by investigating staff on 17 June between 11:30 and 13:00. This was done under the same conditions as the incident occurred in an attempt to better understands the working environment and the suitability of equipment and One Person Operated (OPO) Camera quality. It also provided valuable information on human factor considerations as discussed in section 12 of this report. As a result of this exercise, the investigating staff noted that when the train reached countdown board four, the OPO seemed to cut out on part of the monitor. Whilst this is not a causal factor in this incident, this situation must be rectified so that similar incidents are prevented. The details of this work are set out in recommendation No. 1 of this report.

11.5 Maintenance Records

A review of maintenance and service records indicate that the incident train was operating in accordance with the prescribed maintenance schedule. Records also confirm that it was free of any known defects at the time of the incident. This included a review of train download data.

12.0 Human Factors**12.1 Communication**

A range of communications have been examined as part of this investigation. As a result of this work, several observations have been made. These are as follows:

12.1.1 Hand Signals

The station staff tried to stop the train by waving their hands above their head. This is a recognised emergency stop signal within London Underground. Despite this being seen by the driver, the train continued to depart the platform. This is the most concerning and significant finding in this investigation.

12.1.2 Passenger Emergency Alarms

Two alarms were activated from within passenger compartment of the train, to alert the driver about the situation. Whilst the driver attempted to contact passengers in the train, verbal communications were unable to be established. It is understood that this may be due to the noise from the train when the telephone is being used. The telephones were later tested by rolling stock staff and found to be in serviceable condition. The procedures regarding the use of these alarms must be reviewed. This work is set out in recommendation No. 3 of this report.



12.1.3 Verbal Communications

It is noted that the general standard of verbal communication was of a poor standard. This includes use of incorrect terminology and lack of phonetic alphabet. This is evident in communications that were transmitted just prior to the incident. This is not linked to a causal factor in this incident. It is however reflective of other poor communication standards that have previously been observed across the network.

12.2 Training Records & Competence

A review of training records was undertaken for the Customer Service Supervisor and the Train Operator in this incident. These records indicate that all relevant staff were fully trained and within date of their license in accordance with the current approved programme.

12.3 Platform Emergency Stop Buttons

Emergency stop buttons are located on platforms so that trains at stations can be immediately stopped in the event of incident or accident. Had any of these emergency buttons been used in a timely manner during this incident, it is likely that this incident would have been prevented. This has been identified as a causal factor in this investigation. Where station staff have attempted to assist the passenger and alert the driver, this has caused a distraction that resulted in the emergency stop button not being considered as an immediate action. This is also supported by CCTV footage. Due to the positioning of the emergency stop buttons and the location of the incident, pressing this button may not have been intuitive for staff involved. There is however a need to remind staff about this so that this action is second nature. This has been detailed in recommendation No.4 of this report.

12.4 Fatigue**12.4.1 Rosters & Working Hours**

Work rosters have been reviewed during the investigation and it was found that staff had worked the following number of hours and shifts. This information indicates that working hours and rostering patterns were not a factor in this incident.

Criteria	Supervisor	Train Operator
Intended finish time of shift	14:30	12:25
Time of incident	11:49	11:49
Any overtime worked on incident shift (yes/no)	No	No
Hours worked on that shift prior to incident occurring	6 hours	4 hours
Hours worked since last break during shift	3 hours	1 hour
Number of hours rest since previous shift	Over 12 hours	Over 12 hours

12.4.2 Health & Wellbeing

A significant concern identified during this investigation is that the train operator had not eaten for an extended period of time prior to incident. It is well established that insufficient quantities of food will adversely impact on energy levels and an individuals decision making ability. In this case, the train operator had not eaten for a period of 8 hours.

Although, this may generally be the case, however in this specific circumstance no evidence could be found of fatigue. We looked at dwell time to see if there was inaccuracy in his judgement and behaviours that may be able to help explain his actions. It turns out that he was on time at the other stations with no other erratic behaviour detected.

As part of a positive safety culture, staff must be encouraged to have safety conversations with their line manager where personal routines have the potential to adversely impact on the work that they do. It is however important to note that the train operator had been provided with meal breaks, but they did not consume any food due to religious practices and beliefs. TfL respects any such beliefs and guidance material is in place to remind staff and line managers about this. There may be a need to improve in this area. This is set out in recommendation No.5 & 6 of this report.

12.5 Medical Records

When periodic medical records were requested for staff involved in this incident, it was found that they were fully in date.

12.6 Operator History

The train operator involved in this incident commenced employment with LUL [REDACTED] [REDACTED] A review of their operator history clearly shows that they have been fully trained and have kept up with the train operator licence requirements. This is in line with the organisations expectation and is generally consistent with the performance of the work force.

An operator history check was also undertaken on the supervisor at Newbury Park platform. Their operator history also indicates that they are fully in license and with no previous safety related incidents.

12.7 Customer Behaviours

The obvious unsafe behaviours of the passenger involved in this incident cannot be ignored. This is a casual factor that must be carefully considered. Extensive reminders, warnings, posters and staff announcements are regularly used to remind passengers about the risk of running toward closing doors or door obstruction. This will remain a significant risk for the organisation and every attempt must be made to reduce these negative behaviours as much as possible.

12.8 Ergonomics – (Equipment & Job Design)

The cab layout is similar in nature since its design in 1996. The cab has undergone human factors examination and has been built to maximise the view for the train operator. The train monitors have been positioned in a manner that allow the train operators to stand or sit

whilst still having a full view of the platform via their train monitors. In relation to this incident, the member of staff changed their view to a single monitor, but this would not have impacted on their visibility of the incident area.

13.0 Other Similar Incident & Events

In accordance with the terms of reference for this investigation, a review of other similar incidents has been undertaken to help gain an understanding regarding the extent of these incidents and the risks that they may pose for passengers. For this reason, 5 years of historical records were reviewed for all known similar incidents across the network. This is important so that the effectiveness of the current controls and deterrence can be understood.

The findings indicate that there has been 3 noteworthy incidents. They were all on different lines and dates. So no similarities can be seen from this perspective. However, more concerning is that 2 of these incidents took place on the train operators last trip before completing their duty. It is important that supervisory staff and managers are aware of this.

Trap and drag incidents involving dogs or children is a significant risk for the organisation. This is because a harness or lead is firmly secured to the child or animal involved. Whilst it is possible that the lead may not be visible to the train operator, human reaction such as fight and flight, often does not lend itself to a safe reaction. This has been seen in a number of high profile incidents across the network where nature human reaction is not always the safest option taken. This is often driven by involuntary body movements which is part of natural human behaviours. With respect to trap and drags, the natural reaction may result in persons struggling with a force that is well beyond their physical ability to overcome. A communications campaign has commenced to alert train operators about the risk of customers having pets on a lead. This campaign will try and raise awareness about the need for staff to take a specific look to see that the animal has not been caught in the doors.

Specific Adverse Events – (Dragging Incidents)

Other similar historical incidents include the dog dragging at Charing Cross. This incident clearly identified that there was a need for the organisation to review how we check our camera scanning. Whilst this has been done, there is a need for the organisation to review the scanning documents to make ensure that they are still fit for purpose.

14.0 Consequences & Potential Consequences

The consequences of this incident are very clear. A dog sadly passed away as a result of injuries sustained during the dragging incident. However, the potential consequences are far more concerning. Had of this incident involved a parent and young child that were using a harness, it is quite possible that the same event may have taken place. Ultimately, this could have resulted in serious injury or a fatality. These potential consequences must be considered in light of the fact that the train operator departed the station knowing that an emergency signal had been raised. This is very concerning.

15.0 Safety Culture

A number of positive observations were made during the course of this investigation that are reflective of a positive safety culture. It is important that these are noted so that the organisation can build further on this. These include:

Duty Reliability Manager (“DRM”)

The DRM who was involved in conducted the human factor interviews during this investigation took a very detailed and methodical approach so that all facts about this incident were examined and documented.

Teamwork & Collaboration

A good level of collaboration was noted between all staff on the investigation team. This includes; HSE staff, line managers, trade union representatives and senior managers.

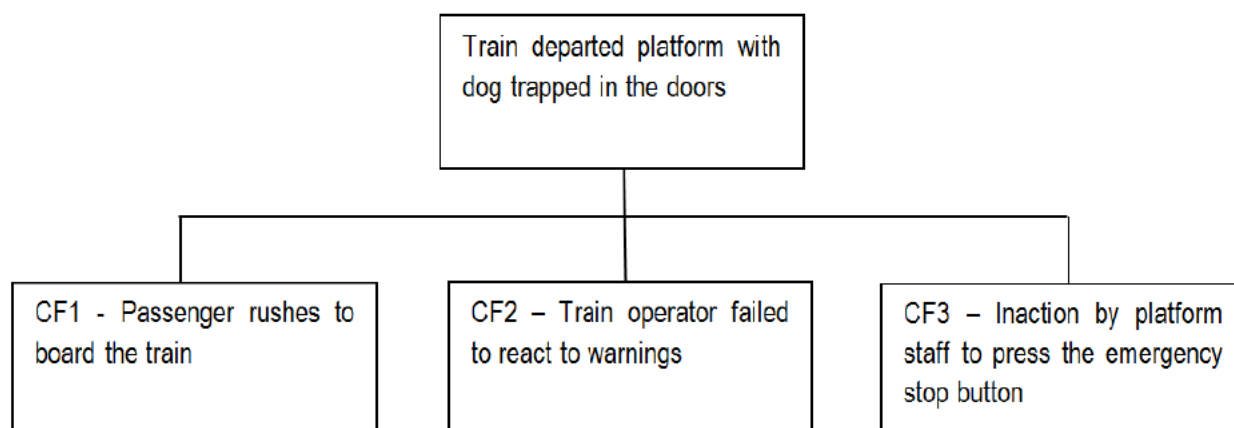
16.0 Root Cause AnalysisAnalysis of Evidence

The immediate cause of this incident is that a train departed the platform with the dog trapped in the door. There are 3 casual factors that have been identified. These are:

1. Passenger rushes to board the train.
2. Train operator failed to react to a warning that they had observed
3. Inaction by platform staff to press the platform emergency stop button

If either of these casual factors had not materialised, the incident would not have occurred.

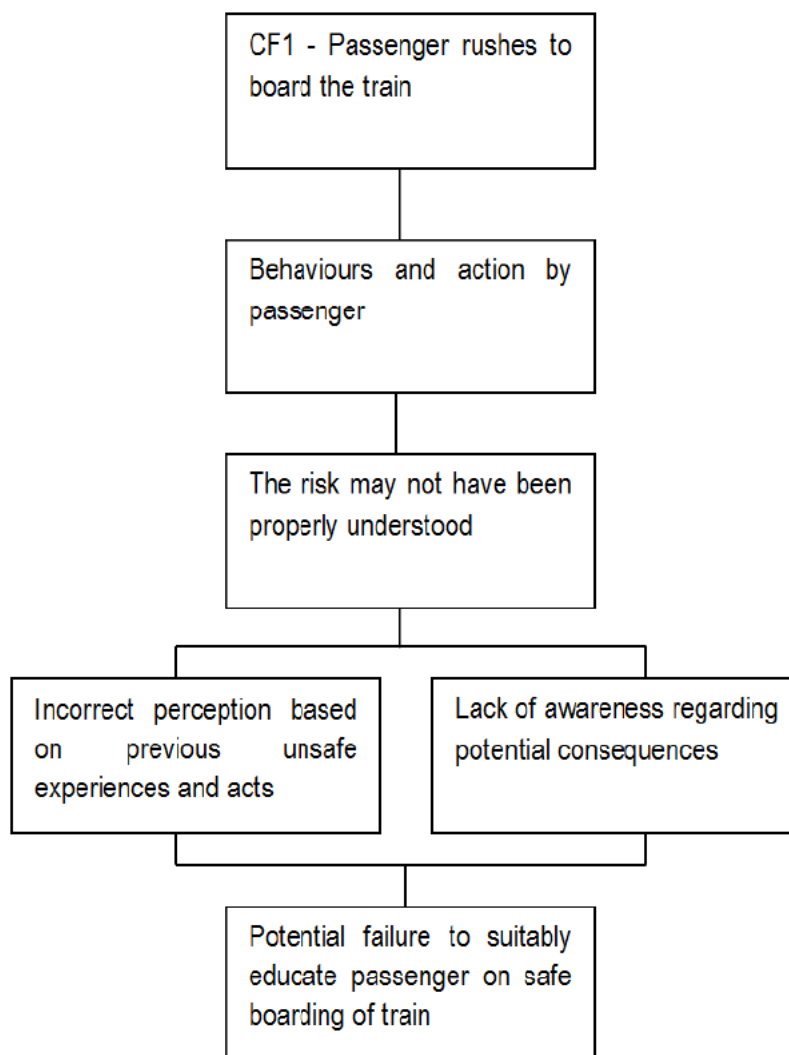
This is explained in diagram below.



(Above) – Diagram of causal factors

1. Causal Factor No.1 - Passenger rushes to board the train.

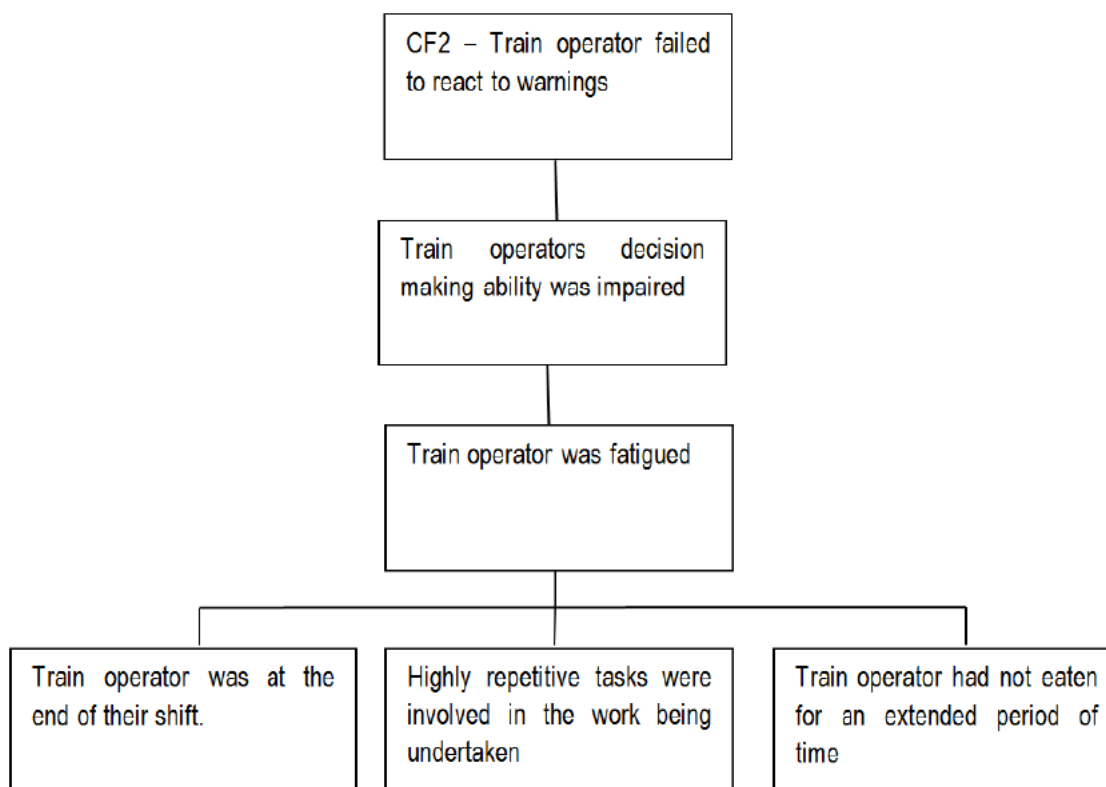
The diagram below deals with the actions and behaviours by the passenger. It also considers why the passenger may have acted in the manner that they did. Whilst the root cause suggests failures in education, this does not necessarily mean that the organisation has failed in its educational responsibilities, but instead it has potentially been unable to educate and influence this particular passenger in their behaviours. It is well recognised that LU invests extensive time and money on passenger safety programmes regarding boarding of trains.



(Above) – Diagram that sets out the factors relating to passenger actions and behaviours

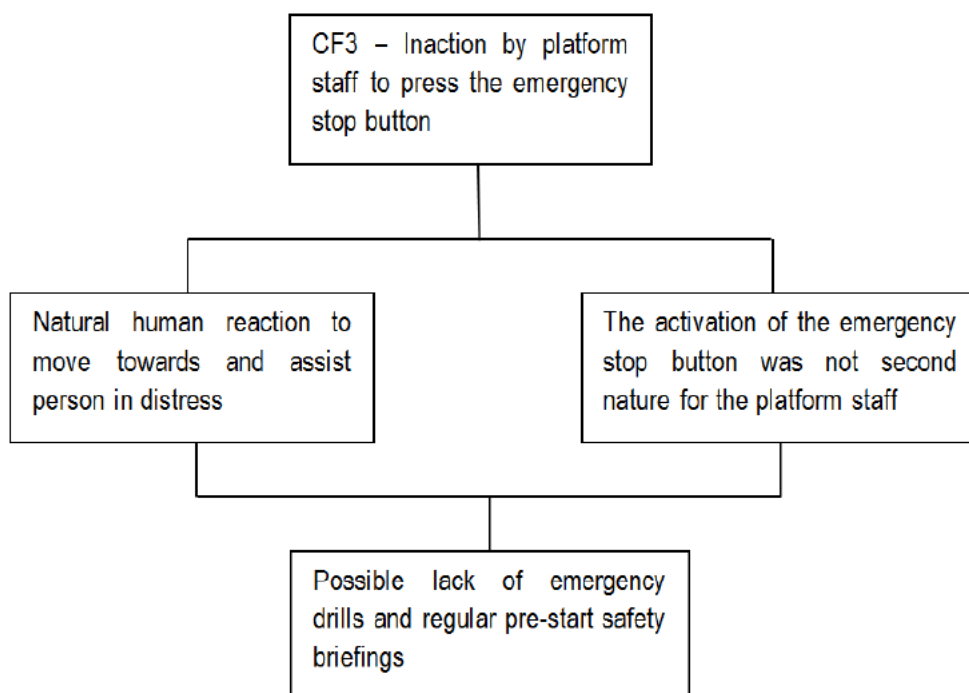
2. Causal Factor No.2 - Train operator failed to react to warning.

The investigation team has spent extensive time attempting to understand the actions of the train operator. This includes detailed review of CCTV footage and witness statements. It is of great concern that a train operator has failed to act on a known significant warning sign that was observed. However, their honesty in admitting this observation would suggest that they are likely fatigued to the extent that their decision making ability has been severely impacted. From an optimistic perspective, a wilful act can be ruled out given their honesty in admitting their failing. This is important to note as the investigation team would not have had knowledge of this if it was not for this honest admission. The underlying cause for this is likely to be fatigue caused by a lack of food and the fact that they were at the end of their shift. This can be substantiated by a variety of circumstantial evidence which includes trends in accident data. For staff who have ever been involved in highly repetitive work, they will better understand how this can effect a person's cognitive abilities. This causal factor is explained in the diagram below.



(Above) – Diagram that sets out the relevant factors relating to the actions by train operator.

3. Causal Factor No.3 - Inaction by station staff to use platform emergency stop button



(Above) – Diagram that sets out the relevant factors relating to the inaction by station staff to press the emergency stop button located on the platform. This has been discussed in section 13.3 of this report. Staff need a further briefing on this so that initial emergency response becomes second nature.

17.0 Conclusion

A range of evidence has been gathered and analysed during the course of this investigation. This included an inspection of the incident train, the station, CCTV footage and a cab ride to reconstruct the incident.

The findings of this investigation will serve as a critical reminder about how important human factors are in the prevention of accidents and incidents. This specifically relates to behaviours, fatigue, visual observations, communications and the correct implementation of emergency procedures.

Whilst it is very sad that a dog has passed away, the potential consequences in this incident could have been far worse. This investigation report makes 6 recommendations that will help reduce the likelihood of another similar incident from occurring.

18.0 Recommendations

Recommendation No.1 – OPO Camera Blackspots	
Purpose	<p>The investigation found that there are several OPO Camera blackspots on the central line. Whilst this is not a causal factor in this incident, these faults do have the potential to cause another similar incident to occur.</p> <p>As part of the Loughton LIR - The PTI group has completed a survey of the locations where this occurs and Telent the maintainer has carried out a survey of the TTTCCTV runout leaky feed at Loughton to ascertain the cause and make recommendations</p>
Action	<p>To provide a robust report from Telent and implement the recommendations from that report.</p> <p>A brief report must be submitted that sets out the findings of this work and how any follow-up action will be managed.</p>
Action Owner	Jim Redmond - Operational Delivery Manager
Action Target Date	12 weeks from the date that this report is published
Validation	Yes
Validator	Dale Smith – Head of Line Operations Central Line

Recommendation No.2 – Train Passenger Emergency Alarms	
Purpose	<p>To assist with all future incidents, it is imperative that London Underground identify the key risks and benefits from stopping the train in an emergency if multiple on-board alarms are activated. The current procedure does not require the train to be immediately stopped where multiple alarms have been activated.</p>
Action	<p>A review must be undertaken of the procedure that sets out the action to be taken regarding use of passenger emergency alarms. This specifically includes the most suitable course of action to be taken where two or more emergency alarms are activated within a train that is travelling between stations.</p> <p>A brief report must be submitted that sets out the findings of this work.</p>
Action Owner	Kieran Dimelow - Line Operations PTI Lead
Action Target Date	8 weeks from the date that this report is published
Validation	Yes
Validator	Mark Grey – SHE Senior Manager/Rule Book Manager

Recommendation No.3 – Platform Emergency Stop Buttons	
Purpose	The use of platform emergency response buttons must be second nature to station staff where an incident or emergency has occurred. However, this was not the case in this incident. Staff must be regularly briefed on this.
Action	A briefing must be rolled out to all relevant operational staff (on lines where this technology exists) on the use of the emergency stop buttons located on platforms at stations. This should include staff making reference to the location of all emergency buttons at the start of their shift so that their knowledge on this is at the forefront of their mind in the event that an incident does occur.
Action Owner	Mercillina Adesida - Head of Customer Services, Central Line
Action Target Date	4 weeks from the date that this report is published
Validation	Yes
Validator	Nicki Selling – Central Line SHE manager

Recommendation No.4 – Fatigue & Fasting (Staff Reminder)	
Purpose	Staff must be aware of LU guidance material that is in place regarding the impacts of fasting during ongoing religious ceremonies where there is a risk of fatigue.
Action	<p>A reminder must be sent out to all relevant staff about the guidance that is in place for staff when they are involved in ongoing religious ceremonies that involve fasting and has the potential to cause fatigue. This reminder should have a key focus on staff involved in undertaking safety critical tasks.</p> <p>For close out of this action, evidence must be provided that demonstrates that these briefings have taken place.</p>
Action Owner	Dale Smith - Head of Line Operations - Central and W&C Lines
Action Target Date	4 weeks from the date that this report is published
Validation	Yes
Validator	Nicki Selling – Central Line SHE Manager

Recommendation No.5 - Fatigue & Fasting – (Review of Policy & Guidance Material)	
Purpose	In light of this incident, and to ensure that fatigue is properly managed by staff who are fasting, the LU guidance material must be reviewed to ensure that it is effective.
Action	<p>A review must be conducted into the current LU guidance material regarding management of fatigue as a result of fatigue and fasting during religious ceremonies. The review must take into consideration the overall effectiveness of the programme for staff and must include:</p> <ul style="list-style-type: none"> A. The suitability of the guidance material B. The schedule for briefing staff on this C. Any improvements on how these could be communicated D. Any required clarity on roles and responsibility



	A brief report must be submitted that sets out the findings of this work and how any required follow-up action will be managed.
Action Owner	Samina Zaman - Diversity & Inclusion Specialist
Action Target Date	16 weeks from the date that this report is published
Validation	Yes
Validator	Emma Burton – SHE Senior Manager

Recommendation No.6 – Train Monitors

Purpose	<p>To reduce this risk of future incidents it is imperative that all Train Operators understand how to depart the platform safely by utilising their monitors.</p> <p>Following a RAIB recommendation from the Notting Hill Gate FIR in Jan 2018 – new training material for ‘scanning’ monitors has been recently developed.</p>
Action	The Head of Profession – Train Operators, must review and provide a summary report into the effectiveness of the new training material for ‘scanning’ monitors.
Action Owner	Margaret Waite – Supported by the Rule Book Team
Action Target Date	16 weeks from the date that this report is published
Validation	Yes
Validator	Kieran Dimelow - Line Operations PTI Lead

19.0 Appendices

19.1 Formal Investigation Panel Members

Name	Title	Organisation
Kieran Dimelow	Continuous improvement Manager	Transport for London
Mark Wasley	Specialist investigator	Transport for London
Ayo Adeyemi	HSE Manager	Transport for London
Sara Henderson	Leytonstone Train Operations Manager	Transport for London
David Miller	ASLEF Representative	Transport for London
Stuart Jennings	RMT Representative	Transport for London

19.2 Consultation

Title	Organisation
David Miller	ASLEF Representative
Stuart Jennings	RMT Representative
Jim Redmond	Operational Delivery Manager
Peter Tollington	Head of Modernisation, Line Operations
Paul Hatwell	Rule Book Manager
Emma Burton	HSE Senior Manager



19.3 References

Title	Reference	Revision
EIRF	A	1
Train downloads	B	1
CCTV from Newbury Park Station	C	1
Log Book entries	D	1
Advice of incidents of notification to the office of Rail and Road	E	1
Fact find interview with Train Operator	F	1
Scanning guide	G	1

