

Board



Date: 15 December 2016

Item: Tram Derailment at Sandilands, Croydon on November 9 2016

This paper will be considered in public

1 Executive Summary

Decision required	The Board is asked to note the paper
Previous Consideration	On 17 November 2016, the Safety, Sustainability and Human Resources Panel considered a presentation on the Tram Derailment at Sandilands in Croydon
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Information classification	Public.
Summary	
<ul style="list-style-type: none">On 9 November 2016 a tram on the TfL Tramlink network derailed. This tragically resulted in seven people losing their lives and 51 requiring hospital treatment.This paper and attached presentation describes the incident, the investigations underway, the actions taken to resume services, the support being given to the families of those who lost their lives and those injured, and the next steps.	
Safety, Sustainability and Human Resources Panel Considerations	
<ul style="list-style-type: none">Following a minute's silence in memory of those who lost their lives, the Panel considered a presentation by the executive team giving details of the derailment. Senior representatives from First Group, the operator of the tram, also addressed the meeting. The Panel heard details of the timeline of the incident, our immediate response and the actions taken by us and First Group before services recommenced on the affected lines. The Panel commended the response of the emergency services and our own operational response staff to the incident and discussed the support being given to the families of those who lost their lives, those injured and operational staff from TfL and First group. The Panel further discussed our support for the investigations by the British Transport Police, Rail Accident Investigation Branch and Office of Rail and Road, and discussed our own investigation. The Panel noted the presentation.	

2 Recommendation

2.1 The Board is asked to note the paper

3 The incident

- 3.1 On November 9 at 06.07 a tram travelling in the direction of Sandilands Tram stop from New Addington derailed whilst turning left on a bend and turned onto its right side.
- 3.2 The emergency services - London Ambulance Service, London Fire Brigade and the British Transport Police (BTP) – were contacted and responded swiftly.
- 3.3 Tragically, this derailment resulted in seven people losing their lives and 51 sustaining injuries requiring hospital treatment. The BTP family liaison officers, TfL including its Sarah Hope Line, and First Group are providing every assistance to the families of those who lost their lives and those injured, including financial and other practical support. Our thoughts remain with all those affected by this tragic event.

4 Investigations and resumption of services

- 4.1 The BTP, Rail Accident Investigation Branch (RAIB) and the Office of Rail and Road (ORR) have launched investigations, as have we and First Group who operate the tram on our behalf. The incident tram was removed and taken to a RAIB site for further investigation. The driver was arrested by the BTP and has been bailed. Extensive damage was caused to rail and electrical power supply equipment, which has been repaired. The Coroner's inquest has been opened and adjourned whilst these investigations continue.
- 4.2 The RAIB issued an interim report which summarised their initial finding that the tram was travelling considerably in excess of the speed limit when it derailed. In light of their initial findings and advice issued we have imposed a number of additional temporary speed limits, and First Group have increased their speed checking regime and associated driver briefings. These arrangements were peer reviewed by an independent panel of experts.
- 4.3 Following these additional safety precautions and a rigorous assurance process, tram services from Croydon to New Addington and Elmers End resumed on Friday 18 November 2016.

5 Next Steps

- 5.1 We will continue to support the families of the people who lost their lives and those injured for as long as necessary. The Sarah Hope Line, staffed by trained TfL staff has been operating 24 hours a day 7 days a week to provide a single contact point for anyone affected by the incident. Support to date has included financial hardship payments, travel arrangements for family members, costs for funeral and other event expenses, access to counselling and personal support services and a range of other personal and practical support actions. First Group have continued to provide local personal support through their care team in Croydon alongside the BTP family liaison officers.
- 5.2 Work continues to support the BTP, ORR and RAIB investigations alongside our own investigation. Arrangements are in hand to ensure financial and other assistance remains available, as the necessary processes are in place to ensure claims and other legal processes are dealt with as quickly and proactively as possible.

- 5.3 Notwithstanding the immediate temporary speed restrictions and other steps taken before re-commencement of services, we are reviewing a number of other potential permanent infrastructure and operational enhancements to respond to this incident.
- 5.4 An updated version of the presentation given to the Safety, Sustainability and Human Resources Panel, attached as Appendix 1, will be discussed at the meeting.

List of appendices to this report:

Appendix 1: An updated version of the presentation given to the Safety, Sustainability and Human Resources Panel

List of Background Papers:

None

**Tram Derailment
at Sandilands,
Croydon on
November 9 2016**

What happened

At 06:07 on Wednesday 9 November, tram 2551 was travelling from New Addington to Sandilands

As it came out of the tunnel section, it began to follow the turn in the track but as it did so it derailed and subsequently turned onto its right side

Emergency services – London Ambulance Service, London Fire Brigade and British Transport Police – were contacted and responded swiftly

Tragically, this resulted in seven people losing their lives and 51 injuries requiring hospital treatment

Rails and electrical equipment in the area suffered significant infrastructure damage

Location



Our immediate response

Following major incident protocols, all initial action and communication is led by the emergency services:

- Notifications began across TfL through, Surface Strategic Co-ordination and LU Control Centre
- Planning for Command and Control structures activated rapidly and TfL Command and control structure was established at 07:07
- Additional TfL staff were quickly deployed to the site
- Bus and traffic diversion routes were implemented with comms support
- Media statements issued by BTP, TfL and the Mayor over the course of the morning

Operation and Regulation (I)

- The infrastructure and tram maintenance is now undertaken by TfL, following acquisition of the PFI company in 2008
- The operation of the network is undertaken by First Trams, part of First Group, the operator since opening in 2000
- Tram vehicles operate on a mixture of on-street and segregated rail environments
- Vehicles are classified as road vehicles
- Operated on a 'line of sight principle'
- Tram signals have the same status as traffic lights
- Motion of the tram, including speed, is controlled by the driver as in a bus or other road vehicle

Operation and Regulation (2)

- The Office of Rail and Road (ORR) has responsibility for health and safety of tramways
- Both rolling stock and infrastructure safety are assessed using the same criteria as for heavy rail but tailored for lightweight, lower speed operation
- Regulatory regime is via the Rail and Other Guided Systems (Safety) (ROGS) Regulations 2006
- Rail Accident Investigation Branch (RAIB) has responsibility for investigating accidents on Rail and tramways in the UK
- British Transport Police (BTP) has responsibility for policing

Support to those affected

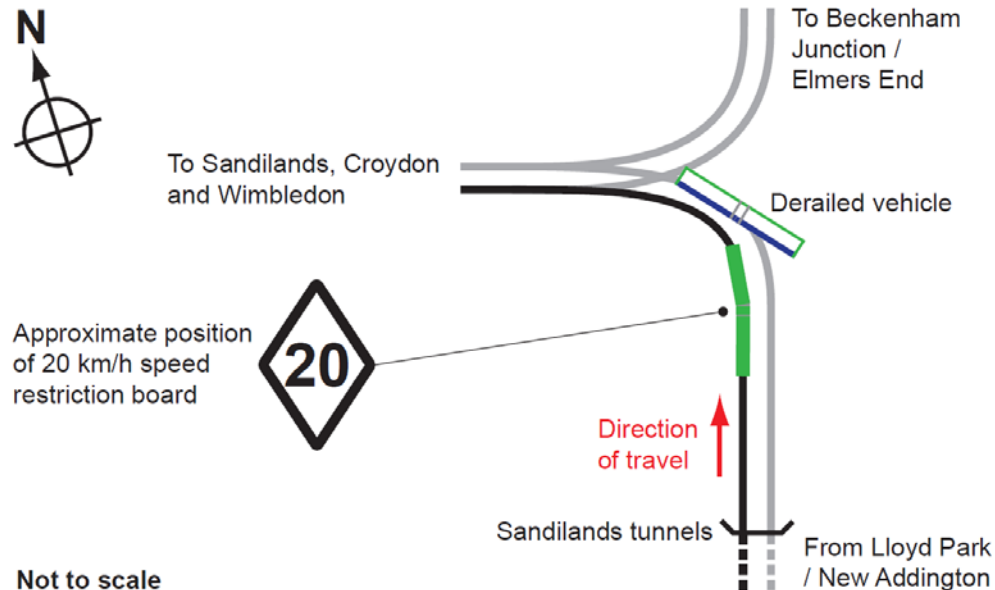
- The Sarah Hope Line, operated by trained TfL staff has been operating 24 hours a day to offer support for those affected, supported by a specialist organisation. Support arrangements will be in place for as long as is needed.
- The majority of the families of those who lost their lives and those injured have been given support through this service
- Assistance has included practical help such as flights for family members to visit the UK, financial hardship payments and personal support including access to counselling
- Care teams are on site in Croydon, and liaison with affected individuals is via BTP liaison officers
- Croydon Borough Council has been leading the local community response including future plans for an appropriate memorial

Investigations & legal & data support

- The driver has been arrested, cautioned, and bailed. BTP investigation continues. The Coroner's Inquest has been opened and adjourned
- Tram was righted, covered and transported from site to the RAIB facility at Farnborough for investigation
- RAIB interim report issued on 16 November 2016 (see next slide)
- TfL and First Group staff have been interviewed by the RAIB and every assistance is being given to their investigation in terms of provision of documentation and other data. A dedicated team has been established in Croydon to facilitate this.
- The ORR is conducting its investigation into Health and Safety aspects.
- We have commissioned specialists from SNC Lavalin to conduct our own review
- Arrangements have been put in place through TfL's insurers and legal team to ensure all claims are dealt with quickly and efficiently

RAIB Interim report

- RAIB issued their interim report on November 16
- Initial findings from analysis of the tram data recorder are that the tram was travelling at 70 km/h as it entered the curve, in excess of speed limit of 20km/h
- No evidence has been found of track defects, or obstructions on the track that could have contributed to the derailment
- Detailed examination of the tram is yet to occur, but RAIB's initial examination has not indicated any malfunction of the tram's braking system



Returning to service

- A Senior TfL Assurance Oversight Panel met three times to oversee the return to normal service:
 - Assurance that infrastructure has been returned to applicable engineering standards
 - Assurance that appropriate temporary measures has been put in place following the advice issued by the RAIB
- Additional temporary speed restrictions and signage have been put in place by TfL
- The operator has put appropriate driver briefings in place
- The operator has enhanced their speed monitoring arrangements
- These arrangements were peer reviewed by an expert panel from UK Trams, independent UK industry body prior to recommencement of services on November 18
- Longer term infrastructure and operational enhancements are being reviewed and a project team established.

Next Steps

- We continue to support the RAIB, ORR and BTP in their investigations
- We are collating evidence, and have processes in place to manage enquiries from media, members of the public and investigators
- We continue to support London Borough of Croydon as they lead the local community recovery process
- The TfL staffed Sarah Hope Line will continue to offer support for those affected by the incident