

Legislative Council Panel on Transport
Subcommittee on Matters Relating to Railways

Light Rail Incident on 17 May 2013

Purpose

This paper reports to the Subcommittee on the details of the Light Rail incident occurred on 17 May 2013, the findings of the investigation conducted by the MTR Corporation Limited (MTRCL), and the new measures implemented to enhance safety.

The incident on 17 May 2013

2. On 17 May 2013, when a Yuen Long-bound couple set Light Rail vehicle (LRV) on Route 761P was making a left turn enroute from Hang Mei Tsuen Stop to Tong Fong Tsuen Stop, the two sets of wheels on the first car and the first set of wheels on the second car came off the rail. 150 passengers were estimated on board at the time.

3. At 4:15 pm, the Light Rail Operations Control Centre (LROCC) received indication that power supply to the section covering Hang Mei Tsuen Stop, Tong Fong Tsuen Stop and Hung Shui Kiu Stop had been interrupted. It then got notified of this serious incident. MTRCL issued the “Major Incident” alert and Service Disruption notification (i.e.

Red Alert) at 4:22 pm to notify other public transport operators and request for their assistance to strengthen services in the affected region. Police and Fire Services were summoned to assist at site. Transport Department was also informed. Also, MTRCL informed passengers of the Light Rail service disruption through centralised public announcements at MTR stations, Light Rail stops and on LRVs, as well as through electronic displays, the MTR Traffic News smartphone app and the MTR website.

4. To facilitate rescue and recovery works, Light Rail service was suspended between Hang Mei Tsuen Stop and Yuen Long Terminus, affecting the services of routes 761P, 610, 614 and 615. The section of route 751 between Tin Shui Wai Stop and Hung Shui Kiu Stop was also suspended due to the disruption of power supply.

5. MTRCL followed procedures to activate emergency contingency arrangements by arranging free shuttle buses to operate between Tin Yat Stop and Hung Tin Road Emergency Platform, as well as between Yuen Long Terminus and Hung Tin Road Emergency Platform to carry passengers to and from the affected stops. The first shuttle bus departed 17 minutes after the declaration of “Major Incident”. More than 80 extra MTR staff were deployed to assist passengers during the incident.

6. MTR staff assisted about 1,600 passengers to detrain from 16 LRVs which were stopped within the affected section to take temporary bus services to their destinations.

7. The injured passengers were assisted off the concerned LRV by Fire Services personnel and were given medical treatment on site or taken to hospital.

8. Recovery works commenced at 5:31 pm after all passengers were assisted away from the scene. There was serious damage to the concerned Light Rail couple set and overhead line equipment with three overhead line masts knocked down. MTR engineers worked overnight to complete the necessary repair works with the aim of resuming Light Rail service in the affected section as quickly as possible. After the completion of recovery works, normal Light Rail service resumed at 8:09 am on 18 May 2013.

9. The major recovery works taken are as follows:

17 May 2013	
5:31 pm	Recovery works commenced
10:20 pm	A heavy duty crane removed the first car of the Light Rail couple set from the site, which was then taken back to the Light Rail Depot by road.
11:03 pm	The wheels of the second car were successfully secured back onto the rail and towed back to the Depot.
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2:45 am	The first damaged overhead line mast was re-installed
4:45 am	The second damaged overhead line mast was re-installed
5:00 am	The third damaged overhead line mast was re-installed
7:00 am	Damaged overhead line reconnected
7:53 am	Safety inspections completed and overhead line power supply turned back on in affected section for test run by non-passenger carrying LRV.
8:09 am	Normal Light Rail service resumed

10. During the incident, MTRCL deployed a total of 82 free shuttle buses, operating 551 trips and carrying about 21,300 passengers.

Results of investigation

11. On 22 May 2013, MTRCL submitted a preliminary investigation report to Transport Department and Electrical and Mechanical Services Department (EMSD). Findings from MTRCL's investigation have also been given to the Police. Police is conducting a comprehensive investigation on the incident. MTRCL will fully cooperate.

12. MTRCL has completed inspection of the concerned LRV,

including its braking system, to confirm its normal operation. MTRCL also inspected all LRVs which were manufactured during the same period. All were found to be in good condition.

13. A detailed inspection was carried out in the affected section to confirm its signalling system and the infrastructure equipment, including the track and overhead lines, were in normal working condition. In addition, no foreign object was found on site which might have affected safe Light Rail operations.

14. The on-board data recorder, also known as the “black box”, on the concerned LRV indicated that it was travelling at a speed of 40.9 kilometres per hour (kph) when it made a left-hand turn at the rail junction. The stipulated speed limit for all points of rail junctions in the Light Rail network is 15 kph. It is believed that three of the LRVs’ four sets of wheels came off the rails as a result of its travelling speed. The concerned LRV captain will not be responsible for driving duties, until the Police have completed their investigation.

15. The Railways Branch under EMSD, responsible for monitoring railway safety, has preliminarily inspected and tested the various Light Rail systems to ensure their safe and normal operation.

Enhancement measures

16. While the Police continue their investigation into the cause of the incident, MTRCL has implemented a number of safety enhancement measures. These include a more frequent reminder to Light Rail captains on the importance of safe driving, stepping up of spot-checks within the Light Rail network on the on-site speed of LRVs, and a pilot test of installing fixed speed cameras at appropriate locations.

17. Depending on the results of the Police's investigation into the cause of the incident, according to the service performance arrangement under the new Fare Adjustment Mechanism, MTRCL may be fined for this incident, the penalty amount reaching \$15 million. MTRCL will offer fare concessions through the "10% Same Day Second Trip Discount" scheme with the penalty it attracts due to service performance in 2013.

Conclusion

18. MTRCL is gravely concerned about the Light Rail incident on 17 May 2013, and would like to send its apologies to the inconvenience caused to passengers, as well as condolences to the injured.

19. Passenger safety is of paramount importance. MTRCL is committed to seeking continuous improvements to ensure continued safe operation of the Light Rail service.

MTR Corporation Limited

May 2013