

**Legislative Council Panel on Transport
Subcommittee on Matters Relating to Railways**

**MTR Tung Chung Line Train that entered
the Airport Express track by mistake**

Purpose

On 13 March 2007, a Tung Chung Line (TCL) train travelling from the Hong Kong Station to the Kowloon Station (KOW) was routed to the track of the Airport Express Line (AEL) during a manual operation process. As a result, the train entered the platform of the AEL at KOW and was unable to stop at the Olympic Station (OLY) in accordance with normal procedure for boarding and alighting of passengers. This paper sets out the Government's assessment of the incident and the follow up actions.

Government's Assessment of the Incident

Investigation and the Results Thereof

2. The Government is very concerned about this incident. Apart from requesting the MTR Corporation Limited (MTRCL) to submit the incident report and remedial measures as soon as possible, the Transport Department (TD) and the Hong Kong Railway Inspectorate (HKRI) have respectively conducted investigations into the incident.

3. The investigation of the HKRI focused on whether the incident had any safety implications on the MTR train operation on the day of the incident. On the material day, the Operations Control Centre (OCC) at Tsing Yi was responsible for setting routes for the trains of the TCL. The HKRI deployed staff to the OCC to examine the computer records after the incident. It was confirmed that at the time, route setting was conducted under the protection of the Automatic Train Protection System (ATP), which can ensure operation of the trains under safe conditions.

4. In fact, the ATP is a safety critical system for train operations and its major function is to prevent trains from speeding and collision. Its functions include -

- (a) maintaining a safe distance between trains;
- (b) maintaining trains to run at under the allowable speed limits (emergency brakes will be applied immediately if the speed limit is exceeded); and
- (c) ensuring the system assigns safe routes for train operation.

In other words, although the Traffic Controller concerned had assigned an AEL track to the TCL train by mistake, the tracks ahead and behind were not used by other trains because the ATP had discharged its function to safeguard train safety. As such, the incident did not pose any hazards to the safety of the train operation.

5. The HKRI also examined the operation records of the Traffic Controller on the day of the incident and noted that after a test train had departed from KOW, he assigned an AEL track to the TCL train during a manual operation process by mistake resulting in the incident.

6. In addition, according to the information and records relating to the Traffic Controller, HKRI noted that he has been working at the OCC since 2000 after having completed training and passed the relevant test. He did not have any adverse operation record and was off duty the day before the incident. He resumed duty in the afternoon of the day of the incident according to the duty roster and was in good health. In accordance with the MTRCL's procedures, the Chief Controller confirmed that the Traffic Controller was capable of performing duty on the day of the incident. It has also been confirmed after the incident that he was not under the influence of alcohol or drugs.

7. In terms of service arrangements, TD noted that the OCC had immediately informed the driver of the train of the incident, who advised passengers through the public announcement system on the train that those who intended to go to OLY would be required to change train at the Nam Cheong Station (NAC). In addition, the MTRCL deployed station staff to assist the 20 or so affected passengers to board another train at NAC to travel back to OLY. Tung Chung-bound and Airport-bound passengers along the TCL and AEL stations were also advised that the train services might be delayed. As far as the incident is concerned, the MTRCL has duly notified TD and HKRI.

Government's Recommended Remedial Measures to the Corporation in relation to the Incident

8. Government's safety requirement on MTR's control room is that the Corporation has to ensure the operation of the control room is safe. These include the ATP system will have to first ensure that safe tracks are assigned for train operation. Even after tracks have been assigned, the ATP system will continue to monitor the safety of the train operation; when any abnormal situation is detected by the system, the system will immediately put a halt to all related trains by ensuring safe distances are kept between the trains and the train operation is safe. In addition, Government requires the railway corporations to ensure the controllers are competent and qualified.

9. Well-established procedures are already in place to monitor the work of control room and controllers. However, in the light of the incident being caused by human error, the Government has recommended the following remedial measures to the Corporation which also agrees to implement them with immediate effect :

- (a) controllers must apply a finger-pointing process, a commonly adopted method in the railway industry, for every manual train route setting. This can help to remind the controller of the command that he is executing, which can in turn minimize the chance of

human errors;

- (b) according to the existing procedures for manual route setting, when a train passes a bifurcated track section, the manual route setting carried out by the controller should be first verified by another controller. The Government considers that the Corporation should strengthen the communication between the controllers respectively responsible for route setting and verification prior to execution, so that the controller verifying the command will know in advance what he is going to verify. This will enhance the mutual reminding effect;
- (c) apart from sharing the lessons learnt from this incident with other controllers, the Corporation should incorporate the scenario of the route-setting of this incident and the method of handling similar occurrences into the simulated training programmes, so as to reinforce the controllers' understanding and practice of the correct operation procedures. This in turn will also help remind them to remain vigilant during performance of duty; and
- (d) the Corporation should minimize the running of unnecessary special test trains during service hours as far as possible.

10. In respect of the notification arrangement, although the Corporation had duly notified TD and HKRI of the incident, in view of the inconvenience caused to passengers intending to alight at OLY and the possible concern of the public on the safety of train operation, MTRCL has agreed to Government's request to improve communication with the media. For similar incidents in the future, the Corporation will notify the media as soon as practicable after they have notified TD and HKRI.

The Environment, Transport and Works Bureau

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