Legislative Council Panel on Transport Subcommittee on Matters Relating to Railways

Information Paper on Incident on Tung Chung Line on 13 March 2007

Purpose

This paper is to provide information, as requested by the LegCo Transport Panel Subcommittee on Matters Relating to Railways, on the incident of a Tung Chung Line Train using the Airport Express Platform on 13 March 2007.

The Incident

- 2. At 1549 hours on 13 March 2007, a Tung Chung Line (TCL) Train, Train L793, made an unscheduled move and entered the Airport Express Line (AEL) Platform instead of TCL Platform of Kowloon Station (KOW).
- 3. As the train stopped at the AEL Platform, special arrangements were made to escort the 20 passengers alighting at KOW to exit the paid area of the station.
- 4. From the AEL platform at KOW, the AEL track configuration does not allow the train to stop at Olympic Station (OLY) on TCL. Having gone beyond OLY, Train L793 was routed back to operate on TCL tracks and stopped normally at Nam Cheong Station (NAC) for passenger movements.
- 5. During the period, trainborne public announcements were repeated to advise passengers inside the train involved that the train would not stop at OLY and passengers intending to go to OLY should alight at NAC and travel back to OLY. Also, public announcements were made advising passengers on other TCL and AEL station platforms of the

possible delay.

- 6. About 20 passengers heading for OLY station alighted at NAC and were guided by station staff to take the first available train in the opposite direction to travel back to OLY. As a result, these 20 passengers experienced a 15-minute delay in their journey.
- 7. It should be noted that the incident did not have any safety implications and did not affect the working of other AEL and TCL trains.

Notifications to the Government

8. The incident was duly reported to the Transport Department and Hong Kong Railway Inspectorate.

Train Operations

- 9. Working of trains is under the control and monitoring of the Automatic Train Protection (ATP) system. ATP system is part of the signalling and train control system, and is a safety critical system governing railway safety, e.g. by limiting the speed of trains, by keeping trains at a safe distance apart, ensuring the system assigns safe routes for trains to go and giving permission for a train to proceed forward when it is safe to do so. The ATP system will stop the train and not permit it to proceed further if the platform ahead is occupied.
- 10. ATP system is of fail-safe design and provides safeguard during failure. Safety of passengers will not be jeopardized even when there is a component or device failure.
- 11. Train movements on AEL and TCL tracks are under the continuous control and monitoring of the ATP system. Rail crossings are provided to connect AEL and TCL tracks. The design of the system allows TCL trains to be operated on AEL tracks and vice versa.

- 12. Train movement is normally under automatic operation according to train timetable. In timetable mode operation, train route setting will be automatically carried out by the microprocessor-based train control system.
- 13. When the working of trains is required to be altered for operational reasons, the Traffic Controller in the Operations Control Centre (OCC) will have to manually set the train routes for the specific trains.
- 14. For manual route setting, a train route will be set after the Traffic Controller has operated two appropriate function keys in correct order at his workstation and when the signalling system has automatically checked and verified that the safety conditions are met. Train operators of the affected trains will be accordingly informed of the revised working in advance by the Traffic Controller.
- 15. All Traffic Controllers and Train Operators will have to undergo a long period of classroom and on-job-training before they are examined and tested for their competence. They are examined annually on their knowledge of the safety rules and procedures. They also need to regularly attend refresher training courses and knowledge sharing sessions.
- 16. Sufficient rest period is provisioned for between two work shifts.
- 17. The Corporation has placed very high emphasis on the benefits and well being of the staff. The Corporation has inculcated the importance of work-life balance to them and continually encourages them to maintain a healthy lifestyle through a variety of campaigns and programmes.

Investigation and Findings of the Incident

18. Subsequent investigation confirmed that prior to the working of TCL Train L793 to the AEL Platform of KOW at 1549 hours, the Traffic Controller manually set a route from the siding at KOW for a test train to

return to Siu Ho Wan Depot via the AEL tracks.

- 19. After that, the Traffic Controller intended to resume the automatic route setting function before the next train from Hong Kong Station was due to arrive. During this manual operation process, he inadvertently set up an AEL train route, and hence resulting in Train L793 to call at AEL Platform rather than the TCL Platform of KOW.
- 20. Under the ATP system with its fail-safe design, the incident did not have any safety implications. The working of Train L793 into AEL platform and its subsequent movement from KOW to NAC were in a safe condition. It should also be noted that if already there were an AEL train at the AEL platform of KOW at the time, Train L793 would not have been able to be routed to that platform.
- 21. It was confirmed that the incident was the result of an error during the manual route setting process.
- 22. The Traffic Controller concerned reported duty at 1530 hours in fit condition.

Follow-up Actions

- 23. While infrequent running of tests trains outside the depot amongst passenger trains cannot be avoided in the interests of fulfilling test schedules and requirement, the Corporation has strived to undertake measures to improve the existing procedures and operations.
- 24. After the incident, the Traffic Controller concerned was relieved from his normal duties. Extra coaching and guidance as well as counselling were rendered to him by his superiors. His performance will be closely monitored.
- 25. The lessons learned from this particular incident have been shared with all Traffic Controllers, and will be included in the refresher training courses in which simulation facilities will be used, and in the knowledge sharing sessions and table-top exercises, to reinforce the

correct process in manual route setting.

- 26. Operating procedures in the OCC have been strengthened and enhanced to enable the Traffic Controllers to help and remind each other of strenuous activities. Also an additional process safeguard has been introduced in which for every manual train route setting, Traffic Controllers must apply a physical finger-pointing process before executing the command at their workstations. Although this onerous process may cause inconvenience to the Traffic Controller's work activities and may have some downside effect to work efficiency, in light of high level of reliable passenger service, strict compliance of it by the Traffic Controllers will be enforced.
- 27. A series of sharing sessions has been arranged with the Traffic Controllers so as to remind them of their duty requirements and to reinforce their alertness in the delivery of a high level of reliable train service.

Conclusion

- 28. The Corporation extends its apologies to the travelling public for any inconvenience caused by the incident.
- 29. The Corporation takes the matter seriously and has conducted a review to seek improvements to prevent similar occurrences in future. The Corporation would also look into any possible improvements to the public announcement in which passengers would be better informed of any train incidents.
- 30. The Corporation would like to reassure Members that safety is the absolute pre-requisite in railway operations. The Corporation will continually review and assess its operations in the interest of the delivery of a high level of reliable service.

MTR Corporation March 2007