Legislative Council Panel on Transport

Airport Railway Service Disruption on 27 July 2003

(Paper from MTR Corporation Limited)

Purpose

This paper provides information on the train service disruption which took place on the Airport Express and Tung Chung Line on 27 July 2003 and the remedial measures taken by the MTR Corporation Limited.

The incident

2. On Sunday 27 July, train service of Tung Chung Line and Airport Express was suspended from 8:10 a.m. to 10:10 a.m.

3. Train service on the two lines had to be temporarily suspended due to a malfunction in the data transmission system. This prevented the communication of information from the trains on parts of the system to the computers at the Operations Control Centre.

4. Having realised the potential impact of the problem and according to standard procedures, the Operations Control Centre declared a Major Incident and issued a Red Alert to Transport Department as well as other transport operators at 8:33 a.m.

5. To minimize inconvenience to passengers during the service disruption, six free emergency bus routes were operated to serve the affected area.

6. After emergency works and system restoration activities, train service was resumed on the Tung Chung Line at 10:00 a.m. and the Airport Express shortly afterwards at 10:10 a.m. (please refer to the <u>Annex</u> for the sequence of event).

Contingency arrangements

7. At around 8:20 a.m., the Operations Control Centre in accordance with standard arrangements called out emergency buses for operation on three routes between Hong Kong and Airport, Kowloon and Airport, and Tsing Yi and Airport. Emergency bus services between Tsing Yi and Tung Chung, Tsing Yi and Cheung Sha Wan, as well as

Tung Chung and Cheung Sha Wan were operated to serve Tung Chung Line passengers.

8. In the course of the incident, passengers throughout the MTR system were duly informed of the disruption to train service by public announcements transmitted at stations and on trains, supplemented by notices at stations. Electronic media were notified of the incident and the train service disruption shortly after the outbreak of the incident.

Findings on Cause of Incident

9. Investigations showed that the problem was traced to a failure in a data transmission equipment module installed at Nam Cheong Station on the Tung Chung Line in preparation for the opening of the station later this year.

10. The malfunctioning of the module affected the smooth and continuous transmission of train information to Operations Control Centre and this in turn affected the operation of trains and stations on the Tung Chung Line and the Airport Express, which run on shared tracks. As a protective measure, Operations Control Centre suspended service on both lines.

11. A detailed investigation is being carried out into the failure with a view to identifying the root cause of the module failure and to ascertain any actions which should be taken to prevent future re-occurrences.

Conclusion

12 During the incident, information was despatched to the public via electronic media and train and station public announcements. Information to Transport Department and other transport operators was despatched timely.

13. Based on the feedback from passengers, the Corporation will also be reviewing its handling of the incident in order to seek improvement for the future.

MTR Corporation Limited July 2003

Airport Railway Service Disruption on 27 July 2003 Sequence of Key Events

Time (hrs)	Events
0809	The signaling control and indications for all areas on the Airport Express and Tung Chung Line were lost at Operations Control Centre (OCC). Station Controllers on the Airport Railway were instructed to take over signaling control at the local workstations. Take over was successfully except for Nam Cheong.
0820	First Airport Express Shuttle arrived Kowloon Station to serve as emergency bus carrying passengers to the Airport.
0821	Airport Express Shuttle arrived Hong Kong Station to serve as emergency bus carrying passengers to the Airport.
0822	OCC requested emergency bus operators to operate free emergency bus service between Hong Kong and Airport, Kowloon and Airport and Tsing Yi and Airport.
0824	OCC informed Transport Department about the incident.
0825	The control and indications for signaling control at Tung Chung, Tsing Yi and Nam Cheong were lost.
0830	 Chief Controller decided to suspend all service on Airport Express and Tung Chung Line, and declared Major Incident with Red Alert issued to Transport Department and other transport operators about the service suspension at 0833 hours. Electronic media was informed of the incident.
0835	OCC requested emergency bus services for Tung Chung Line, between Tsing Yi and Tung Chung, Tsing Yi and Cheung Sha Wan, as well as Tung Chung and Cheung Sha Wan.
0905	First Tung Chung Line emergency bus arrived Tsing Yi and carried passengers to Tung Chung.
0943	Progress update of the Red Alert containing information of emergency bus routes was issued by the OCC to Transport Department.
0958	Signaling control was re-established.
1000	Tung Chung Line service resumed.
1010	Airport Express service resumed. Red Alert was withdrawn.