

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

Performance of the new Mass Transit Railway (MTR) trains from Korea

Purpose

At the meeting of the Subcommittee on Matters Relating to Railways on 20 December 2002, Members requested to be briefed on the performance of the new MTR trains from Korea. This paper provides the relevant information.

Background of the new trains from Korea

2. To prepare for the expanded MTR network, 13 new trains were ordered from a Japanese-Korean Consortium. The 13 new trains have gradually been commissioned and served on the Kwun Tong Line since April last year.

3. Testing of the key operational and safety features of the trains such as train door operation, door obstruction detection, emergency push-out detrainment and braking was conducted by the Mass Transit Railway Corporation Limited and witnessed by the Hong Kong Railway Inspectorate. It is accepted internationally that with modern complex train control systems, a period of fine-tuning is required in service in order to cover the full range of the dynamic characteristics of the train and trackside systems.

4. The new trains adopt the most advanced technology of international standard. They are equipped with Static Inverter, the auxiliary power supply to train car, which brings higher reliability and lower noise emission. Another new feature is the plug-in train doors, which prevent cool air from escaping away from the saloon and improve sound-insulating effect, making MTR journeys quieter and more comfortable. In addition, the improved ventilation system provides better air circulation. Train compartments and gangways are more spacious with enhanced design.

Performance of the new trains

5. During the initial period of service, some teething problems had been encountered for the new trains to migrate to the existing MTR network. As such, there were a number of train service incidents which had caused delays and inconvenience to passengers. However, passenger safety has not been compromised.

6. Those incidents relating to the new trains were mostly associated with the interfacing of the existing and new trackside and trainborne signalling systems. With continuous fine-tuning, the performance of the new trains has been improved. Reliability of these new trains has significantly improved and the number of train delay incidents has shown a declining trend over the last few months. There were about two delays of five minutes or more each day related to the new trains in August 2002, while in January 2003, delays happened only once or twice per week which is an internationally acceptable level.

7. In the initial period of introducing new trains to the operating line, there were some train door related incidents that were mainly due to the interfacing problems between the train-borne computer system and the electro-mechanical parts. Parts which caused problem to the train doors control circuit had been identified and replaced and the door control software had been upgraded. As a result, the number of train door related incidents has been reduced from 6 in July 2002 to 1 in January 2003.

8. The plug-in train door of these trains is similar to those on the existing Tung Chung Line. It was however observed that passengers required a period of adaptation to adjust to the different characteristics of these doors on the Kwun Tong Line. A publicity programme was introduced to communicate to passengers the different features of the plug-in doors, i.e., when the doors of the new trains close, they will slide toward the middle, and then plug in, making the doors completely embedded inside the train body. In-train broadcasting and warning labels have been arranged on all new trains from July 2002 to remind passengers of the new train door features. A video about safety tips on the new trains was broadcast at all stations of Kwun Tong Line and some major MTR stations from September to November 2002. New information has also been added to school talks to convey the message.

Conclusion

9. We are satisfied with the performance of the new trains. They are performing at the same standard as other MTR trains which is recognised internationally as one of the highest railway service standards.

10. New features of the new trains provide more comfortable travelling environment and journey for passengers. The Static Inverter and plug in door design makes their journey quieter. Improved ventilation system also provides better air circulation inside train compartments.

11. We will continue to improve service reliability and comfort of travel in MTR trains.

MTR Corporation Limited
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