

**Legislative Council Panel on Transport
Subcommittee on matters relating to railways**

**Review of the Light Rail Service and
the incident that occurred on 18 December 2002**

Purpose

The Kowloon-Canton Railway Corporation (KCRC) presented a paper to the Subcommittee to provide an overview of the Light Rail services and report on the outcome of the investigation into the derailment incident occurred on 18 December 2002. This paper provides the Administration's views on Light Rail services and the investigation of the incident.

Light Rail Services

2. Light Rail is a modern tramway system operating mostly at-grade. It has been providing safe and reliable services over the years. With the concerted efforts of KCRC and relevant Government departments, Light Rail has attained a high safety record when compared with other road-based transport modes. For instance, according to the road traffic accident statistics by class of vehicles involved in 2002, Light Rail vehicles accounted for only about 0.1% of the total number of accidents. KCRC also maintains close contact with the community in order to tap their opinions on the performance and services of the Light Rail Transit. Appropriate changes and improvements are continuously made by the Corporation having regard to the community's needs and suggestions.

3. With the increasing traffic demand due to population growth in North-west New Territories and the expected change in transport pattern with the opening of West Rail, Light Rail will continue to be an important local transport service provider and serve as a major feeder to West Rail.

Derailment Incident on 18 December 2002

4. A detailed account of the derailment on 18 December 2002 including a full investigation report has been provided in KCRC's paper to the

Subcommittee. Based on the information provided by the Corporation and the assessment of the Hong Kong Railway Inspectorate (HKRI), the Government considers that KCRC has correctly identified the cause of the derailment, i.e. the excessive wear of the switch blade of the track. If KCRC's maintenance team had been more vigilant and were able to pick up the rapid wear of the switch blade as a sign requiring immediate attention, timely remedial action might have been taken and prevented the incident.

Actions taken by the Government after the Incident

5. Upon report of the derailment on 18 December 2002, staff of HKRI inspected the incident scene immediately and initiated action with KCRC to investigate the cause of the incident. The Environment, Transport and Works Bureau also requested KCRC to take immediate action to ensure the normal operation of Light Rail, and to submit a report on the incident as soon as practicable.

6. During the course of the investigation, KCRC has, under the monitoring of HKRI, taken precautionary measures on operation and maintenance, and completed a system-wide check on the condition of all track turnouts in the network; the condition of the wheels of all light rail vehicles (LRVs); and the automatic point machines and the associated signalling system. Through this inspection, KCRC was able to confirm that the Light Rail system is in good condition and is operating safely.

7. KCRC is not allowed to use the incident turnout to route LRVs to Platform 6 of Siu Hong Stop until HKRI is satisfied that sufficient measures have been taken to prevent the recurrence of any incident.

8. HKRI monitored the investigation conducted by KCRC and received its preliminary report in mid January 2003. HKRI then sought further information and clarification from the Corporation to ensure that all possible factors contributing to the incident were properly examined and all necessary measures would be carried out to prevent the recurrence of such incident.

9. The Transport Department (TD) and KCRC have also conducted a joint review meeting in light of the 18 December 2002 incident. With a view

to minimising the adverse impact on passengers due to Light Rail incidents, both parties agreed to strengthen communication and coordination when incidents occur, and to review the contingency plan and emergency bus arrangement from time to time.

Recommendations for Improvement

10. KCRC has proposed a number of recommendations to avoid the recurrence of derailment, improve service recovery efficiency and enhance information dissemination and assistance to passengers. The Government considers that these recommendations are in the right direction and has asked KCRC to implement the appropriate recommendations immediately. The Government has also provided the following additional recommendations below to KCRC, which have either been incorporated into the Corporation's investigation report or agreed with the Corporation by correspondence :-

Safety and maintenance management

- (a) KCRC should review their maintenance standard and seek advice from the manufacturers of Light Rail equipment and components;
- (b) KCRC should engage an external expert to review their maintenance management system, including benchmarking maintenance practices with other light rail operators;
- (c) KCRC should explore possible modifications at the incident location to increase the separation between the two consecutive left turns;

Alerting procedures

- (d) KCRC should ensure that all relevant parties are alerted promptly in the case of Light Rail incidents. KCRC has agreed to strengthen communication with the Transport Department and provide clearer messages according to the Amber/Red Alert system;

Dissemination of information to passengers

- (e) KCRC should review the sound level of the Public Address System at Light Rail stops and consider if the sound level could be raised under emergency situations;
- (f) the Corporation should consider ways to provide better information to passengers at platforms and on board LRVs;

Emergency bus services

- (g) in case of rail emergencies, KCRC should promptly re-deploy its LRT buses and East Rail feeder buses to provide emergency services for the stranded rail passengers. Other bus operators should be called for help where necessary; and
- (h) KCRC should review the emergency bus routes regularly to suit the changing operating environment and conduct periodic drills with relevant parties such as TD and other bus operators.

Conclusion

11. KCRC is required under the KCRC Ordinance to operate the railway in a safe and efficient manner. Light Rail has been operating to high safety standards, and the derailment on 18 December 2002 was a rare and isolated case. Both KCRC and the Government have carefully examined the root cause and all relevant factors contributing to the incident. Immediate and long-term improvement measures have also been identified. The Government will monitor the Corporation's implementation of the recommended remedial and improvement measures.