

LegCo Panel on Transport

Railway incidents and performance of the railway systems in Hong Kong

Purpose

This paper sets out the regulatory and monitoring arrangements for railway services, initial assessment on recent service incidents and remedial actions taken to prevent recurrence of similar incidents in future.

2. Separate papers provided by MTR Corporation Limited (MTRCL) and Kowloon-Canton Railway Corporation (KCRC) setting out details of their service performance, incidents and remedial and improvement measures will be issued separately to Members.

Regulatory regime of railway services

3. MTRCL and KCRC are required to maintain a proper and efficient service at all times in accordance with the Mass Transit Railway Ordinance (Cap. 556) and the Kowloon-Canton Railway Ordinance (Cap. 372) respectively.

4. Government attaches great importance to the maintenance of safety and reliability of our railway services. The Hong Kong Railway Inspectorate (HKRI) and Transport Department (TD) are responsible for monitoring respectively the safety and service performance aspects of railway services provided by the two railway corporations.

5. Under the existing regulatory regime, the following arrangements and requirements are in place to ensure that railway systems will be maintained to very high safety standards:-

- (a) the railway corporations are required to maintain and operate the railway at all time having full regard to the safety of the system to the satisfaction of the HKRI;

- (b) the railway corporations are required to establish a safety management system to review, control and minimise safety risks;
- (c) the respective governing legislation of the railway corporations requires the railway corporations to notify the Government all safety related incidents occurred on the railways or railway premises and empowers HKRI to investigate into these railway incidents;
- (d) should the railway corporations fail to take remedial action, Government could require them to take such remedial action and impose penalty if it does not comply with the requirement; and
- (e) the railway corporations should engage an independent expert to review their safety management system at a regular interval of not more than three years.

6. Under the existing governing legislation for the two railway corporations, there is an established mechanism for Government to impose financial penalty on the railway corporations for non-compliance with the provisions. For MTRCL, in case of failure to comply with the provisions of the Mass Transit Railway Ordinance (Cap. 556) (MTRO) or the Operating Agreement (OA) between the corporation and Government, or any directions given under the MTRO or the OA, the Chief Executive in Council may impose financial penalty on MTRCL.

7. For KCRC, under the Kowloon-Canton Railway Corporation Ordinance (Cap.372), if the corporation fails to comply with a direction given by Government under the ordinance to carry out works or take steps to ensure the safety of the railway, the corporation is liable to financial penalty.

Monitoring of railway safety and service performance by Government

8. HKRI monitors the safety of the railway systems and ensures

that the railway corporations have addressed all safety issues in the design, construction, operation and maintenance of the railway systems. For new railways, HKRI and TD will conduct inspections and monitoring to ensure that the railway is safe and sound before the railway can be opened for public service.

9. It is the responsibility of the railway corporations to demonstrate to the satisfaction of HKRI that their railways are safe for use and their design standards are in line with international standards in the railway industry and are appropriate for the situation in Hong Kong. Both MTRCL and KCRC are using risk-based approach to address safety in the design of their railways. They make use of safety cases and risk assessment in their design process. The principle is to mitigate the risk to a level as low as reasonably practicable. Currently, the design standards and safety management system of MTRCL and KCRC are compatible with international standards.

10. On service performance, under the existing regulatory mechanism of railway corporations, both railway corporations are required to meet a number of performance requirements. Amongst them, there are two requirements which measure train service levels and performance of railways:-

- (a) train service delivery which measures actual train trips against train trips scheduled in a month; and
- (b) train punctuality which measures punctual train trips against actual train trips in a month.

11. Other performance indicators include add value machine reliability, ticket issuing machine reliability, ticket gate reliability, escalator reliability and passenger lift reliability. TD monitors the railway corporations' compliance with these requirements and will demand the railway corporations to take remedial measures if the corporations cannot meet any of the requirements.

12. For each railway incident, TD and HKRI will follow-up with the railway corporations as appropriate and ask for an incident report.

For safety-related incidents, the HKRI will conduct investigation, provide advice to the railway corporation concerned on preliminary identification of cause, immediate actions required and other areas that the corporation needs to address, and monitor the progress of identification of root cause and implementation the rectification measures.

Initial assessment on recent railway incidents and remedial measures

13. HKRI is conducting investigations into the recent MTR and KCR incidents which are safety-related. HKRI's initial assessment is that most of these incidents do not have any safety implications although they have caused delays and inconvenience to passengers. For those which are related to safety, initial assessment is that they do not pose immediate threats to passenger safety. The railway safety level in Hong Kong is maintained at a high level.

14. For the recent incidents relating to the MTR, HKRI noted that the recent incidents are due to isolated and random failure of different parts of the system occurred in various railway lines. So far, there is no positive evidence to reveal any significant systemic safety defects of the railways. We will further examine the outcome of MTRCL's investigation on the incidents.

15. Record shows that our railway services are safe and reliable. The performance of our railways remains to be among the best by international standards when compared with other metro railways in major cities such as New York, London, Paris, and Tokyo. The two railway corporations have also achieved a high level of performance as illustrated by the figures below as at September 2004:-

| | MTR Lines | Airport Express Line | East Rail | West Rail | Light Rail |
|------------------------|------------------|-----------------------------|------------------|------------------|-------------------|
| Train Service Delivery | 99.9% | 99.9% | 99.95% | 99.5% | 100% |
| Train Punctuality | 99.6% | 99.9% | 99.75% | 99.4% | 99.77% |

16. On the other hand, in view of the recent spate of MTR incidents, we consider it important to review the existing systems in a vigilant manner. Following discussion with Government, MTRCL has decided to engage international railway experts to conduct an independent review on its entire railway system with a view to further enhancing its service performance and safety aspects. We welcome the decision of the Corporation and consider that the measure is in the right direction to help ensure the safety and reliability of the railway system. The HKRI will provide advice to MTRCL as necessary to facilitate the review and will study the review outcome.

17. KCRC has also been taking steps to further enhance its service performance and safety aspects. For this purpose, KCRC has recently completed an independent review on the West Rail signalling system in August 2004 and has commenced a safety audit of the entire KCRC network, which will be completed by early 2005.

Conclusion

18. Government and the two railway corporations attach great importance to the maintenance of safety and reliability of our railway services. Government will closely monitor the measures to be implemented by railway corporations to address the recent railway incidents. We will also study carefully the results of MTRCL's international expert study to consider if other measures are required to further enhance the performance of the railway services.

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