LCQ13: Incident handling by MTR Corporation Limited

Following is a question by the Hon Carmen Kan and a written reply by the Secretary for Transport and Logistics, Ms Mable Chan, in the Legislative Council today (May 14):

Ouestion:

Regarding the incident handling by the MTR Corporation Limited (MTRCL), will the Government inform this Council:

- (1) according to the existing railway incident reporting mechanism (the mechanism), of the follow-up actions taken by the authorities upon receipt of an incident report; MTRCL's (including the heavy rail and the Light Rail) compliance with the mechanism in each of the past five years, and set out the following information in table form:
- (i) the nature, cause, delay time, recovery time, remedial measures taken and number of passengers affected for each incident; and
- (ii) the number of incidents of service disruption of 31 minutes or above caused by factors within the control of MTRCL under the Service Performance Rebate, and their percentage of the total number of incidents in that year;
- (2) given that the existing service performance rebate mechanism of MTRCL has been enhanced in 2023 (the new arrangement), whether it knows the cumulative number of incidents per year of train service disruptions, including all delays and suspensions, attributable to equipment fault or human error during peak and non-peak hours of MTR services (including the heavy rail and the Light Rail) after the implementation of the new arrangement, and the cumulative amount set aside by MTRCL in this regard, together with a breakdown in table form by disruption time (i) equal to or more than 31 minutes but less than or equal to one hour, (ii) more than one hour but less than or equal to two hours, (iii) more than two hours but less than or equal to three hours, (iv) more than three hours but less than or equal to four hours, and (v) each additional hour (or part thereof) exceeding four hours;
- (3) as there are views that it is unreasonable that the new arrangement only requires MTRCL to set aside an equivalent amount for service disruptions of 31 minutes or above caused by factors within its control, and that the maximum amount to be set aside per incident is merely \$40 million, coupled with the fact that the peak hour referred to in the new arrangement (i.e. between 8am and 9am and between 6pm and 7pm from Monday to Friday (excluding public holidays and except for the Airport Express)) is inconsistent with that of the road harbour crossings (i.e. between 7.30am and 10.15am and between 4.30pm and 7pm from Monday to Saturday (excluding public holidays)), whether the authorities will request MTRCL to review and enhance the new arrangement (including the definition of peak hour); if so, of the details; if not, the reasons for that;

- (4) given that there were engineering train faults at Tai Wo Station and Fo Tan Station on February 5 and the 27th of last month this year respectively, whether it knows the following information about the two faults: (i) the engineering train manufacturers, (ii) the spare parts suppliers, and (iii) the maintenance service providers involved; whether the same faults have occurred in other countries/regions using engineering trains of the same model; if so, of the details; whether the authorities have imposed any regulation on MTRCL to require it to establish a management and performance monitoring mechanism for the procurement of engineering trains and/or the contracts for the engagement of third-party suppliers; if it has, of the details; if not, the reasons for that;
- (5) as the Electrical and Mechanical Services Department (EMSD) has indicated that it will initiate a special audit on MTRCL to holistically review its maintenance emergency preparedness concerning engineering trains, whether EMSD has initiated special audits on similar incidents in the past five years; if so, of the details; if not, the reasons for that; and
- (6) given that MTRCL has undertaken to put in over \$65 billion between 2023 and 2027 in asset renewal and railway facility maintenance, whether it knows the scope of use of the sum and the amount to be put in each year; whether the Transport and Logistics Bureau (TLB) has formulated monitoring programmes to ensure that MTRCL renews and maintains its railway facilities in strict accordance with the plans vetted and approved by TLB; if so, of the details; if not, the reasons for that?

Reply:

President,

The Government has always attached great importance to railway safety. The relevant government regulatory authorities will maintain close collaboration with the MTR Corporation Limited (MTRCL) to regulate railway services, proactively audit the railway system, and monitor the MTRCL in putting in resources and applying new technologies to improve its asset management and maintenance work. In consultation with the Electrical and Mechanical Services Department (EMSD), the Transport Department (TD), and the MTRCL, my consolidated reply to the questions raised by the Hon Carmen Kan is as follows:

(1) and (2) According to the existing railway incident reporting mechanism, the MTRCL is required to notify the TD of any railway incidents that have caused train service disruption of eight minutes or are expected to cause disruption of eight minutes or more. Upon receiving the notification, the TD will work in close liaison with the MTRCL on train service adjustments, and co-ordinate with other public transport operators to enhance services as appropriate, as well as to disseminate the latest public transport information to the public through the media and various channels as soon as possible. In addition, the MTRCL is required to notify the Government of any occurrences or accidents on the railway under the Mass Transit Railway Regulations (Cap. 556A). The EMSD, as the statutory regulatory authority on railway safety, will immediately deploy personnel to the site for inspection

and investigation. It will also follow up with the MTRCL's investigation and follow-up work, and ensure that the MTRCL implements the improvement measures in an effective and holistic manner to prevent recurrence of similar incidents.

The MTRCL has been following the relevant requirements on notifying the Government of incidents that cause train service disruptions and accidents. It will also, at its best endeavour, maintain services while carrying out emergency repairs (including deploying additional staff for crowd management, making public announcements, issuing station notices and helping with passengers' ticketing issues at the concerned stations), so as to reduce the impact on passengers' travelling.

In 2024, the MTRCL operated more than 1.8 million train trips on its heavy rail network, making an average of over five million passenger trips every day. The level of Train Service Delivery and Passenger Journeys On Time maintained at a high standard of 99.9 per cent. Last year, there were five incidents of service disruption of 31 minutes or more on the heavy rail and light rail networks due to factors within the MTRCL's control. The number of heavy rail and light rail service disruptions (with breakdowns by causes and duration of disruptions) over the past five years, together with the respective amounts set aside by the MTRCL under the Service Performance-Linked Arrangement (SPA) and the enhanced Service Performance Rebate (SPR), are set out at the Annex.

The MTRCL adopts Passenger Journeys On Time as an indicator for reflecting the proportion of passenger journeys completed on schedule for its railway network. The higher the indicator reading, the lower the number of passenger journeys affected by service disruptions. The Passenger Journeys On Time of the MTRCL reached 99.9 per cent on average over the past five years. In other words, only once would a passenger be unable to complete a journey within five minutes of the scheduled time in every 1 000 train rides.

(3) Under the SPA and the enhanced SPR, the MTRCL is required to set aside an amount for serious service disruptions (defined as disruptions of 31 minutes or more) caused by factors within its control to be given back to passengers through fare concessions. Once the SPR funding pool reaches the pre-defined amount, the MTRCL will arrange a Special Fare Day on a specific weekend for returning the amount to its passengers in the form of half-fare concession to all Octopus or QR code ticket users travelling on all MTR lines during that day. The whole of the amount set aside under the SPR funding pool will be returned to passengers in full through the Special Fare Days.

The Government and the MTRCL have all along listened carefully and humbly to the views of stakeholders, and will regularly review the Fare Adjustment Mechanism, including the SPR arrangement. For example, in 2023, the Government and the MTRCL further optimised the SPR arrangement having regard the opinions from the public and stakeholders. To respond to public opinions, and to more duly reflect the impact of train service disruptions on passengers, the SPR arrangement was enhanced by increasing the amount to be set aside for incidents that have caused disruptions of more than three hours and the maximum amount to be set aside per incident, as well as introducing a

peak hour multiplier.

When reviewing the relevant mechanism next time, the Government and the MTRCL will, as in the past, take a holistic approach in considering various factors, especially the MTRCL's service performance, the public's views and concerns, lessons learnt from past incidents, etc. and carefully explore suitable options with a view to providing more effective impetus for the MTRCL to enhance its service performance and strengthen emergency response in handling incidents. We will also consider as appropriate the impact of an incident on passengers, and the emergency recovery arrangements of frontline railway staff to avoid affecting the emergency recovery work and jeopardising overall railway safety due to time pressure.

(4) According to the information provided by the MTRCL, the crane engineering vehicle and the overhead-line inspection vehicle are supplied by manufacturers in Germany and Italy respectively, and are within the normal asset life. In daily operations, the MTRCL has always made reference to the suppliers' recommendations in formulating corresponding maintenance regimes, including the provision of suitable spare parts and regular maintenance. The MTRCL also has stringent procurement procedures in place and will ensure that the arrangements and procedures for selecting engineering vehicle suppliers comply with the relevant procurement procedures. In respect of the engineering train incidents, the MTRCL is conducting joint investigations with the respective suppliers to look into the causes of the incidents.

The MTRCL has a regular asset management system (AMS), which includes a maintenance management system. The asset management process covers the entire lifecycle of assets, including the procurement, operation, maintenance and renewal of assets. The MTRCL's AMS has been certified to the ISO 55001 standard, indicating that its maintenance management has attained international recognition. To ensure the effective execution of asset management by the MTRCL, the EMSD will scrutinise the AMS and the maintenance management system of the MTRCL regularly, and conduct random/surprise inspections of its maintenance work.

(5) The EMSD has implemented the Comprehensive and Direct Assessment (C&DA) since 2019, which involves proactively auditing the MTRCL's AMS of the four major railway assets (namely the permanent way, power distribution, rolling stock and signalling system) as well as the safety management system of all operating railway lines. The EMSD will also conduct special audits as and when necessary on specific items such as trackside equipment and structural buildings, training for train captains, power supply systems, etc. in response to railway incidents. The EMSD completed the C&DAs on the AMS of the MTRCL's rolling stock in the first quarter of 2025, which also covered all engineering train assets. The EMSD has made a series of recommendations to the MTRCL for strengthening the assessment and monitoring of the service life and component condition of engineering trains. The MTRCL is implementing the relevant measures by phases. The special audit to be conducted by the EMSD this time will cover the maintenance and contingency procedures for engineering trains, as well as the implementation progress of the above recommendations.

(6) The MTRCL completed a comprehensive review of its railway asset management and maintenance regime in June 2023, and was set to enhance the above regime following five key directions, including putting in over \$65 billion during the five years from 2023 to 2027 for the renewal and maintenance of railway facilities as well as accelerating the application of innovative technologies in railway services and asset maintenance, with a view to strengthening the railway asset management and maintenance regime. A timeline for implementing each of the recommended follow-up actions has been set out in the MTRCL's review report. The Government has been closely monitoring the progress and implementation of the follow-up work by the MTRCL, and keep track of the effectiveness of the various recommended measures.

According to the information provided by the MTRCL, items that are covered by the \$65 billion committed resources include routine asset maintenance and renewal of assets, ranging from rolling stock, signalling systems, power supply systems to a variety of station facilities, etc. The Government will continue to closely monitor the MTRCL's performance in asset maintenance to ensure that the MTRCL provides sufficient resources for the completion of asset renewal on schedule, so that the railway assets will be operating well in a safe and reliable manner.