

# **EMSD announces technical investigation results on train derailment incident at Hung Hom Station on MTR East Rail Line**

The Electrical and Mechanical Services Department (EMSD) has completed an independent investigation into the train derailment incident at Hung Hom Station on the MTR East Rail Line on September 17, 2019, and released the technical investigation report today (March 3).

The investigation revealed that the cause of the derailment was track gauge widening. The track gauge widening was due to the deteriorated condition of the sleepers, which supported and fixed the rails in the incident location. The deterioration had reduced the strength of the sleepers such that they were unable to effectively retain the rails in the correct position. The track gauge under the dynamic loading of trains would be even wider, and this excessive gauge widening caused the train to derail at the time of the incident.

The investigation confirmed that the incident did not involve a train equipment failure, a signalling system failure, external objects or a cyber-attack. The broken rails and rail cracks at the incident location were caused by the derailed train wheels hitting the rails, but were not the cause of the incident.

The EMSD has reviewed the investigation report submitted by the MTR Corporation Limited (MTRCL) on February 14 and accepted its investigation findings on the cause of incident and recommendations.

After the incident, the MTRCL has been carrying out maintenance of tracks in strict accordance with established maintenance procedures. The EMSD has also requested the MTRCL to install monitoring devices to facilitate the monitoring of rail conditions. The EMSD has instructed and confirmed that the MTRCL has reviewed the condition of sleepers along the entire East Rail Line and has completed replacement of sleepers in dissatisfactory condition. The MTRCL has also proposed improvement measures for enhancing track maintenance to prevent the recurrence of similar incidents.

The Government is very concerned about the incident. In the interest of safety, the Secretary for Transport and Housing has, pursuant to section 28 of the Mass Transit Railway Ordinance (Cap. 556), given a notice in writing to the MTRCL, requesting the MTRCL to take relevant steps, including the installation of a real-time monitoring system on passenger trains to enhance track monitoring, and the submission of report on the implementation of measures to improve the management of track maintenance, with a view to preventing a recurrence of similar incidents. The EMSD will continue to

closely monitor the effectiveness of the MTRCL in implementing the relevant measures in order to ensure railway safety.

The investigation report has been uploaded on the EMSD's website ([www.emsd.gov.hk/filemanager/en/content\\_1394/ERL\\_Derailment\\_Incident\\_Report\\_\(Eng\).pdf](http://www.emsd.gov.hk/filemanager/en/content_1394/ERL_Derailment_Incident_Report_(Eng).pdf)).