Electrical breaks to help isolate faults on two rail lines

CONTINUED FROM PAGE 1

link allows trains to move between the two lines and is also “essential” because Bishan Depot is the only depot with heavy maintenance and overhaul capability serving the two lines, explaining Mr Khaw, who is also the Coordinating Minister for Infrastructure.

“A decision was made in the early 1980s to build only one such depot to minimise costs and land-take. This limitation would disappear when the Teras West Extension is completed next year, when we will have a depot on the EWL with similar facilities, at the Teras West Depot,” Mr Khaw wrote on his ministry’s blog yesterday.

“Other than for maintenance, allowing cross-overs gives operational flexibility. Unfortunately, this also means that a power fault on one line could affect the other,” he added, noting that the July 7 breakdown was a disaster because of its scale, which “no service recovery plan can adequately address”.

SMRT was fined $85.4 million for the disruption, which affected 418,000 commuters.

By the end of next month, electrical breaks will be installed at Juru, East and Raffles Place inter-change stations, where the NS and EW lines cross. The installation will involve cutting the running rail into two and rejoined using “bonded insulated rail joints”, which have an electrical insulating strip and a cable, said a spokesperson from the Land Transport Authority (LTA).

“When a rail incident occurs and there is a need to delink the two rail lines, SMRT staff can disconnect the cables and operate each line separately,” the spokesperson said. This will have to be done manually.

Mr Khaw said the electrical breaks will not be activated under normal operations, so as to maintain the flexibility between the NS and EW lines.

Commenting on the move, transport analyst Park Byung-joon said electrical breaks should have been installed when the tracks were first built. Noting the three-month gap between the July 7 disruption and yesterday’s announcement, Dr Park, an adjunct associate professor at UniSIM, said it was possible the authorities needed to identify the cause of the breakdown before deciding on a way to solve it.

National University of Singapore professor Lee Der Hoon said he was glad that action was being taken.

“I’m pretty sure they did not foresee this possibility of a breakdown of this large scale, (or that) Singapore would have so many different MRT lines,” he said. “(Several) breakdowns all happening at the same time — that is going to be a thing of the past.”

But Dr Kenneth Sng, an associate professor at the Singapore Institute of Technology, sounded a note of caution. “You have to make sure that the de-coupled system can supply enough power properly in a reliable manner,” he said.

Source: © 2015 Mediacorp Press Ltd. Article first appeared in TODAY.