

Breakdowns and fixes

Various measures have been rolled out to make the MRT network more reliable since two massive disruptions on the North-South Line in 2011. Insight looks at the major rail disruptions and initiatives to improve rail reliability.

DECEMBER 2011

The North-South Line is hit by two massive disruptions on Dec 15 and 17, affecting more than 220,000 commuters.



What was done:

- Then SMRT CEO Saw Phaik Hwa (below, left) resigned in January 2012, and was replaced by Mr Desmond Kuek in October 2012.



- A high-level Committee of Inquiry that investigated the breakdowns recommended a raft of measures to improve SMRT's maintenance regime after a six-week hearing that started in April 2012.



- SMRT and the Land Transport Authority began major projects to overhaul key systems on the North-South and East-West lines, including replacing the sleepers (left) and third rail.
- In 2013, SMRT rolled out a network-wide predictive maintenance regime, introducing new technologies on the North-South and East-West lines. It also formed a technical advisory panel comprising local and international experts.



MARCH 2012, AUGUST 2012, JANUARY 2013

The North-East Line run by SBS Transit sees major disruptions on separate occasions after components of its overhead power system give way (below).

What was done:

SBS Transit replaced all stainless steel counterweight cables and U-bolts along the stretch of tunnel between HarbourFront and Outram Park stations.

OCTOBER 2012

A faulty power cable disrupts service along the entire Circle Line for about an hour.

What was done:

Power cables along the entire line were replaced by higher-grade cables.

JULY 2015

A salt-encrusted insulator triggers a power fault that cripples the entire North-South and East-West lines for more than two hours, affecting over 400,000 commuters.

What was done:

- Breakers were installed to de-link the two MRT lines.
- LTA appointed an independent advisory panel to study the power system's resilience.



APRIL 2016

A power trip at an intake station brings down the western segment of four rail lines.

What was done:

The power system on the older lines was upgraded, from increasing its capacity to improving its design.

