

Early warning mechanism for rail faults wins \$250,000 grant



Commuters stuck at the North-East Line's Serangoon Station due to a track fault on Dec 20, 2012. A proposal for an early warning mechanism that can detect potential faults in the rail system has been awarded a grant by the National Research Foundation (NRF), the foundation said on Monday. -- BT FILE PHOTO: ONG WEE JIN

By Kash Cheong

A proposal for an early warning mechanism that can detect potential faults in the rail system has been awarded a grant by the National Research Foundation (NRF), the foundation said on Monday.

Currently, train inspections are carried out during off-service hours using a dedicated vehicle installed with sensors and instruments run on the railway tracks.

Rail defects which occur outside inspection hours may not be detected. But with this real-time radiowave monitoring system, any signs of faulty components associated with the electrical system can be detected instantly and repaired.

This idea was proposed by engineering expert Associate Professor See Kye Yak of the Nanyang Technological University. It is one of the nine projects that received a \$250,000 grant under the 9th Proof-of-Concept (POC) Grant Call organised by NRF. Awardees are given a year to commercialise their ideas.

"This current crop of projects is focused on addressing the practical concerns and needs of citizens. These proposals seek to improve operations, realise greater efficiency in design, and push the boundaries of technology," said NRF's chief executive, professor Low Teck Seng.

Another proposal awarded the grant was the world's first dengue prognostic kit. This kit determines during early infection whether a person will develop life-threatening conditions such as dengue haemorrhagic fever and dengue shock syndrome.

These projects were selected by 22 experts appointed by the NRF. The 10th POC grant call is currently open.