Summary of IMDA's Assessment and Decision for the MNOs' Failure to Meet the 4G QoS Standard for the Changi Airport MRT Line

Title	Singtel Mobile, M1 and StarHub Mobile's Failure to Comply with IMDA's Quality of Service Standards for 4G Mobile Services
Date of IMDA's Decision	11 November 2019
Licensees	Singtel Mobile Singapore Pte Ltd ("Singtel Mobile"), M1 Limited ("M1") and StarHub Mobile Pte Ltd ("StarHub Mobile"), collectively the Mobile Network Operators ("MNOs").
Case Summary	Under IMDA's 4G Quality of Service ("QoS") framework, the MNOs are required to provide > 99% mobile coverage in road and MRT tunnels by 1 July 2018.
	IMDA's measurement of the MNOs' 4G coverage performance in the MRT tunnels in Q3 2018, Q4 2018, and Q1 2019, revealed that the MNOs had failed to meet the required QoS standard in one of the MRT lines – the Changi Airport MRT Line ("CAL") – for all three quarters, with one exception for Singtel Mobile, which met the QoS standard in Q1 2019. For the majority of the failed quarters, the MNOs had provided at least 93% coverage or higher.
IMDA's Determination	On 21 June 2018, the MNOs requested for an extension of the deadline for compliance with the 4G QoS standard for the CAL, due to delays to the mobile coverage enhancements works that were beyond the MNOs' reasonable control.
	In its assessment, IMDA noted the operational delays in enabling access for the mobile coverage enhancement works, and had withheld its enforcement action until the MNOs completed the 4G enhancement works for the CAL by the deadline of 30 April 2019.
	On 25 April 2019, the MNOs informed IMDA that the enhancements in the CAL had been completed. IMDA conducted a 4G mobile coverage performance measurement at the CAL, and the measurement results showed that all three MNOs met the 4G QoS standard for CAL. The results for Singtel Mobile, M1 and StarHub Mobile were 99.93%, 100%, and 100% respectively.
	In assessing the MNOs' non-compliance with the 4G QoS framework, IMDA took into consideration that the MNOs had taken a longer than expected period to complete their tender for the mobile coverage enhancement works for the CAL. Nonetheless, IMDA noted that there were some operational delays which were outside the MNOs' reasonable control, and that the MNOs had completed the deployment works by the deadline of 30 April 2019.

Having considered all the factors, IMDA decided to issue a warning to the MNOs and waived the financial penalty for the
non-compliance with the 4G QoS standard, on an exceptional
and without prejudice basis.