Case Reference	R/E/I/139
Title	Singtel's Service Difficulty Incident on 8 August 2019 ("Incident")
Case Opened	8 August 2019
Case Closed	3 April 2020
Complainant	IMDA initiated this proceeding pursuant to the Code of Practice for Telecommunication Service Resiliency 2016 ("Code")
Respondent	Singapore Telecommunications Ltd (referred herein as "Singtel")
Case Summary	On 8 August 2019, a disruption to Singtel's fixed line voice service affected over 262,000 fixed line subscribers from 1736 hours to 1943 hours.
	The cause of the Incident was attributed to the failure of a Line Processing Unit ("LPU") card in a core router, causing the multiservice access nodes ("MSANs") to be disconnected from the soft-switch and disrupted fixed line voice services.
IMDA's Determination	IMDA notes that traffic from the active core router with the faulty line card could have failed over to a standby core router through a connecting LAN switch. However, the Virtual Router Redundancy Protocol ("VRRP") setting of the connecting LAN switch was not configured to monitor and detect traffic failure from the incoming ports of the switch. Thus, the failover of traffic to the standby core router was not triggered during the Incident. To restore the affected fixed line voice services, Singtel attempted to switch all the disconnected MSANs to a standby soft-switch. However, some of the MSANs had missing configurations and thus failed to switch over to the standby soft-switch, resulting in further delays to full service recovery. Accordingly, IMDA determines the Incident could have been prevented if Singtel had exercised due care and diligence in the configuration of its network equipment.
	Nevertheless, IMDA also notes that Singtel (1) took effort to restore the affected services expeditiously within 1 hour and 30 minutes; (2) had extended its full cooperation during IMDA's

future recurrences.
Taking all factors into consideration, IMDA decides to impose a
financial penalty of \$36,000 on Singtel for the Incident.