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Case Reference	R/E/I/112
Title	Service Difficulty – Fire Incident at Bukit Panjang Exchange on 9 October 2013 ("Service Difficulty Incident")
Case Opened	9 October 2013
Case Closed	29 April 2014
Complainant	IDA initiated this proceeding pursuant to the Code of Practice for Telecommunication Service Resiliency ("Service Resiliency Code"), CityNet's Facilities-Based Operations ("FBO") Licence, and the Code of Practice for Next Generation National Broadband Network NetCo Resiliency ("NetCo Resiliency Code")
Respondent	Singapore Telecommunications Limited ("SingTel"), CityNet Infrastructure Management Pte Ltd ("CityNet") and OpenNet Pte Ltd ("OpenNet")
Case Summary	A fire broke out at the Bukit Panjang exchange (the "Exchange") <sup>1</sup> , at around 1402hrs on 9 October 2013, at one of the four lead-in entry locations in the Exchange's cable chamber. The fire damaged optical fibre cables and affected telecommunication services provided by multiple operators in the northern and western parts of Singapore, including fixed voice, broadband Internet access and mobile services. The service disruption also affected telecom and broadcast services to close to 270,000 subscribers <sup>2</sup> , including residential users, some government agencies, businesses, financial institutions, and multi-application kiosks providing e-commerce and payment services. The affected services were fully restored on 17 October 2013 at 0220hrs.  Based on IDA's investigations, IDA has concluded that the service disruptions were due to a fire in the cable chamber of the Exchange, which was most likely caused by hot works carried out by SingTel on its cables on 9 October 2013. IDA also found that the service disruptions could have been prevented had SingTel enforced its standard operating procedures and work safety practices. These included but are not limited to a lack of proper supervision when hot works were carried out at the Exchange.  IDA also found that there were procedural lapses on CityNet's part,

Bukit Panjang exchange, formerly owned by SingTel, is now owned and managed by CityNet. CityNet is a trustee-manager of the NetLink Trust, which owns the telecom exchanges, ducts and manholes used to support the Nationwide Broadband Network ("NBN"). SingTel owns 100% of the units in the NetLink Trust at present. Besides Bukit Panjang exchange, CityNet owns and manages six other telecom exchanges.

The number of "subscribers" here refers to the absolute number of subscriptions across all service providers, e.g., a user could have signed on to both fixed voice and broadband Internet services. In this case, this counts as two subscriptions.

such as a lack of robust approving process for hot works in the Exchange, and the failure to ensure the safety of the work area and compliance with proper operating procedures. These lapses contributed to the incident.

As for OpenNet, while not a direct contributor to the cause of the incident, OpenNet has been found to contribute to the delay in service restoration to its affected users. IDA found that OpenNet could have expedited the service restoration and recovery process, such as by adopting more appropriate service restoration processes for large scale service disruptions. As a result, the duration of service disruptions to affected users was unnecessarily prolonged.

# IDA's Determination

## SingTel

In determining the enforcement action applicable, IDA took into consideration all the relevant factors, including but not limited to the length of the Incident, the number of affected subscribers, and the fact that the Incident was a serious one which could have been prevented.

On the other hand, IDA also acknowledged the presence of several mitigating factors, including SingTel's commitment to invest in enhancing network resilience. Some of the commitments SingTel made include: (i) replacing lead duct seals in exchanges with the Multi Cable Transit system which does not require heating; (ii) installation of automatic fire suppression systems within cable chambers in all its exchanges; (iii) centralised monitoring of smoke detectors and fire alarms; (iv) enhancing the physical security of cable chambers, in particular, installing CCTVs to prevent unauthorised access; and (v) enhancing its Operations Support System and processes to ensure compliance to fibre path diversity requirements for enterprise customers with redundancy and path diversity needs. IDA also considered the compensation SingTel had given to its end users and the way it managed the Incident, and transparency pro-activeness its communications and the convening of a Board Committee of Inquiry ("BCOI"). IDA has required SingTel to put in place these committed improvement measures, and will monitor the progress and implementation.

Taking into account all the relevant factors, including the mitigating factors, IDA decided to impose a financial penalty of S\$6 million on SingTel.

# <u>CityNet</u>

IDA took into account the corrective measures committed by CityNet as mitigating factors. Some of the commitments CityNet

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made include: (i) replacing the lead duct seals in all cable chambers; (ii) installing gas suppression systems and more fire extinguishers in all cable chambers; (iii) installing a centralised alarm monitoring system to monitor critical building alarms, including smoke detectors (and other fire warning alarm systems); and (iv) installing an electronic access system, together with CCTVs located at the entrance of each cable chamber. IDA has required CityNet to put in place these committed improvement measures, and will monitor the progress and implementation. Accordingly, IDA decided to impose a financial penalty of S\$300,000 on CityNet.

## OpenNet

IDA found OpenNet to have contravened its obligations under the NetCo Resiliency Code, and decided to impose a financial penalty of \$\$200,000. IDA has required OpenNet to enhance its Business Continuity Management ("**BCM**") and work with the other operators on an end-to-end BCM in the multi-layered NBN.