

QOS STANDARDS FOR FIXED NETWORK TELECOMMUNICATION SERVICE (LOCAL LEASED CIRCUIT SERVICE)

This is applicable to digital local leased circuit service providers (i.e., Facilities-Based Operators (FBO) who own and operate the circuits). It is not applicable to resellers.

Local Leased Circuits (LLCs) refer to domestic private leased circuits with either point-to-point or point-to-multi-point configurations, providing dedicated/transparent telecom links to end users or licensees for carrying any voice/data/video traffic using the SDH technology. It includes LLCs used for connections to international IPLC gateways but exclude other domestic infrastructure or data services such as managed data services and backhaul for access to international capacities via submarine cables or satellites.

- Service providers who offer higher or equivalent Service Level Agreements or Guarantees to their end users can request for an exemption from complying with the QoS framework. A service provider can also request for an exemption if it can demonstrate that its end users have agreed to accept a lower QoS standard.
- Where the service provider is exempted from compliance, the service provider has the responsibility to inform the end user of the service level it will be providing and the fact that it does not comply with IDA's minimum quality of service standards.

Performance Indicators (For Compliance ¹)	QoS Standards
Service Reliability ²	≥ 99.9%
Provisioning Time ³	≥ 95%
Mean Time to Repair ⁴	≥ 3 hrs

For each instance of non-compliance, a financial penalty of S\$5,000 per standard per month may be imposed.

$$^2 \quad \left\{ \frac{\text{Sum [Per circuit minutes - per circuit outage minutes]}}{\text{Sum [Per circuit minutes]}} \right\} \times 100\%$$

Per circuit minutes = No. of days in the month x 24 hours x 60 mins

Per circuit outage minutes = Cumulative duration of outage per circuit in the month

$$^3 \quad \left\{ \frac{\text{[Total no. of leased circuits provided within date agreed with customers]}}{\text{[Total no. of leased circuits required]}} \right\} \times 100\%$$

NB: This indicator looks at the total number of circuits requested rather than the number of customer requests received.

Eg: if a customer requests for 3 leased circuits, this would be treated as 3 requests and not 1 request.

⁴ The mean time to repair shall be calculated from the time the fault is reported by the customer to the service provider.

$$\left\{ \frac{\text{[Total no. of hours taken to repair faults for all leased circuits]}}{\text{[Total no. of leased circuit faults reported]}} \right\}$$