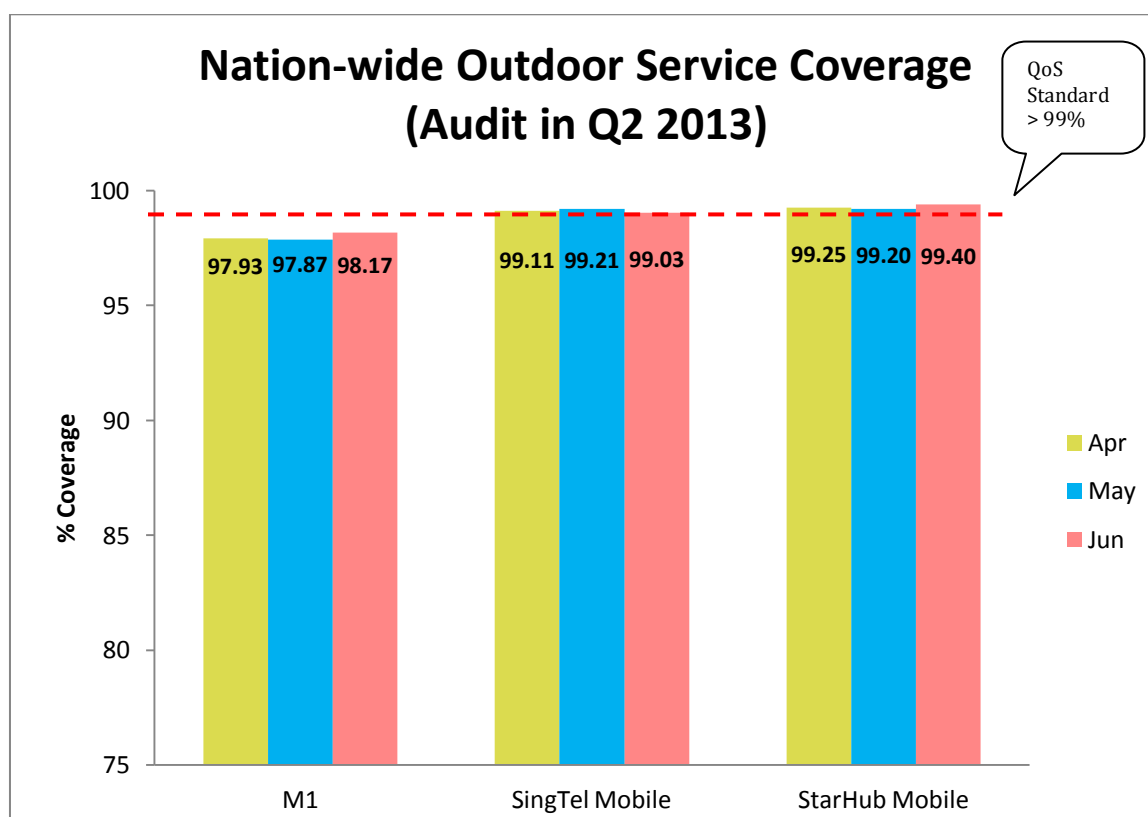


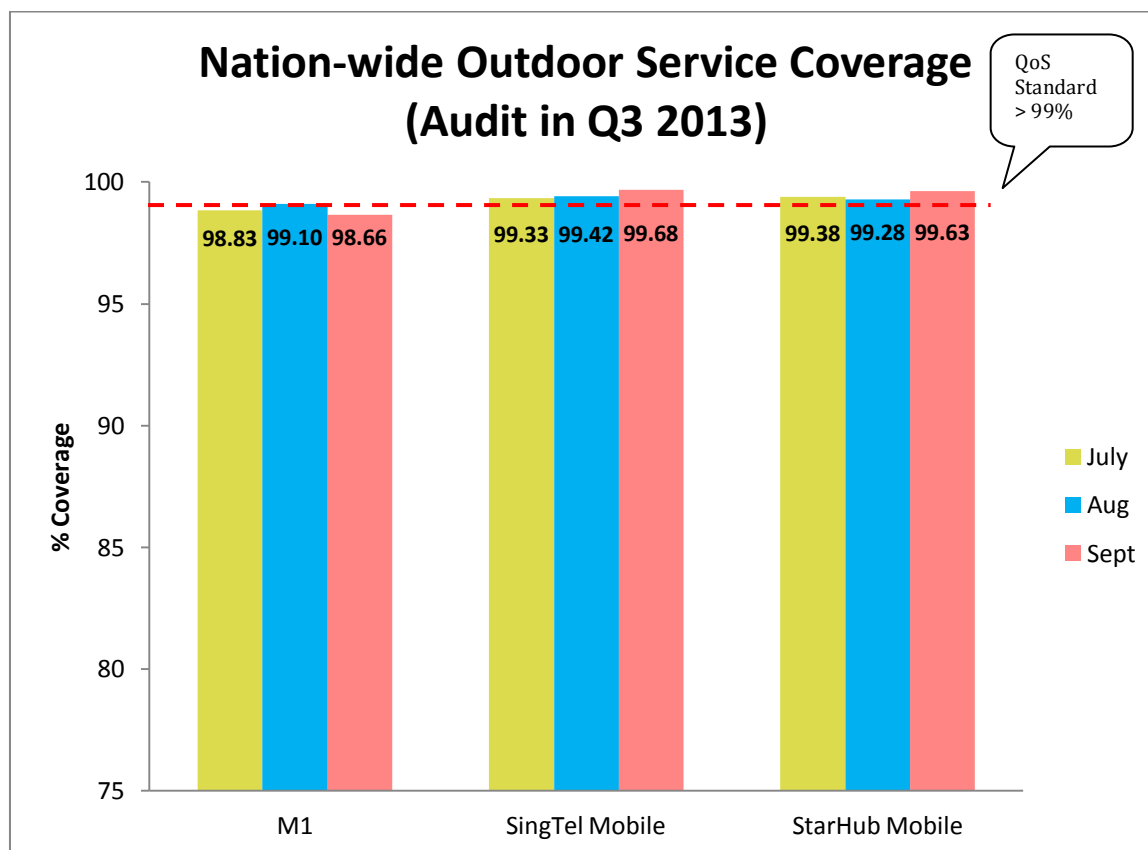
Fact sheet – 3G Quality of Service Indicators

The mobile operators' performance for the QoS indicators for the key standards required by IDA is set out below.

Nation-wide Outdoor Service Coverage

This indicator measures Nation-Wide Outdoor Service Coverage for the 3G cellular network. Service coverage is determined by signal strength. The availability of service coverage is the ability of a cellular network to achieve the minimum signal strength of at least -100dBm. Under IDA's 3G Public Cellular Mobile Telephone Service ("PCMTS") QoS framework, mobile operators are required to achieve Nation-Wide Outdoor Service Coverage of >99%. In order to better measure the end users' experience*, IDA has used mobile handsets to collect the signal strength sample readings for all service coverage indicators starting from Q2 2013.



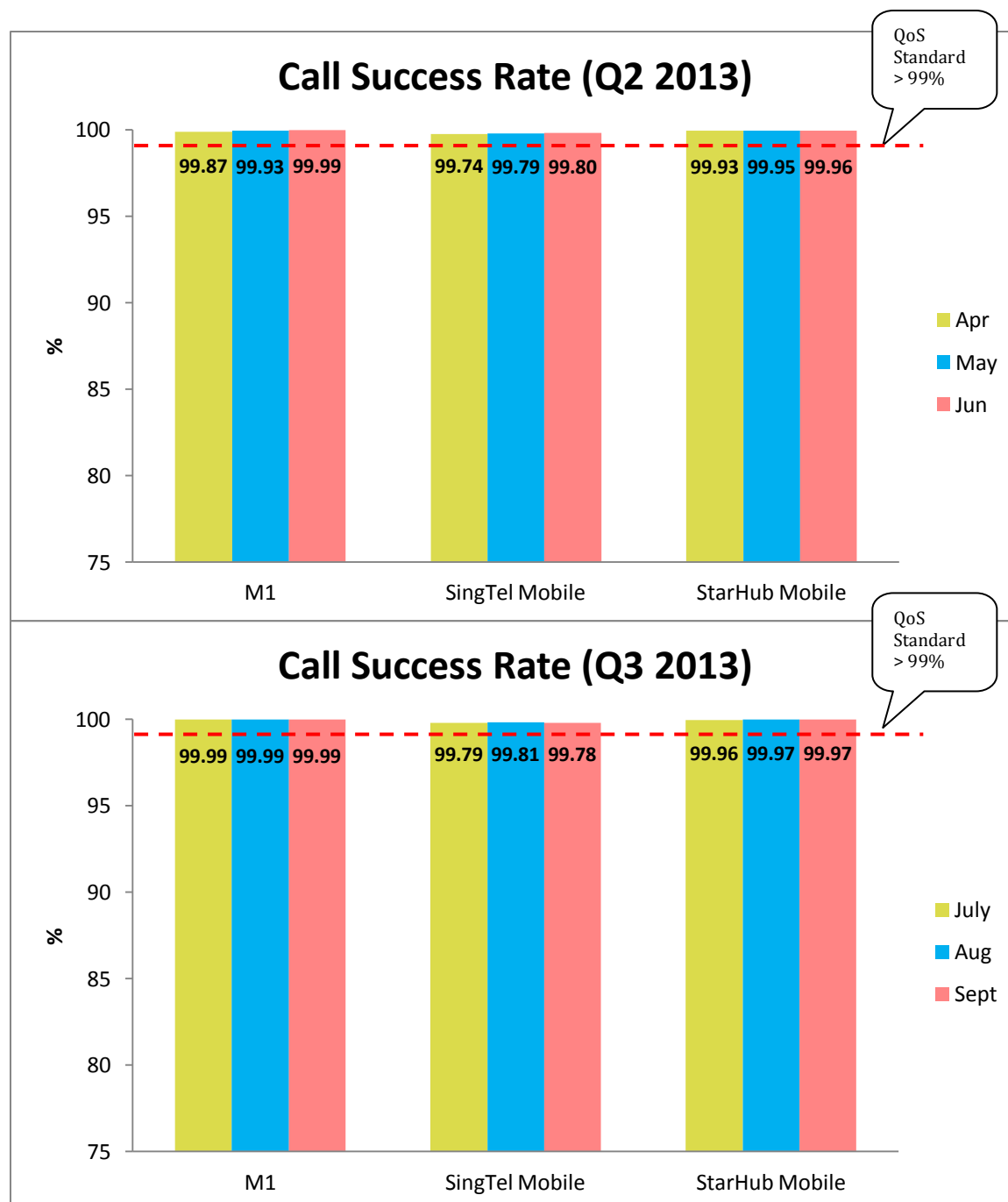


*Based on IDA's independent tests which included nation-wide outdoor drive test and areas such as housing estates/town centres, outdoor recreational areas and above ground MRT tracks.

Note: End users' individual experience may differ due to various reasons such as model of handset used, handset settings, number of users in the vicinity, etc.

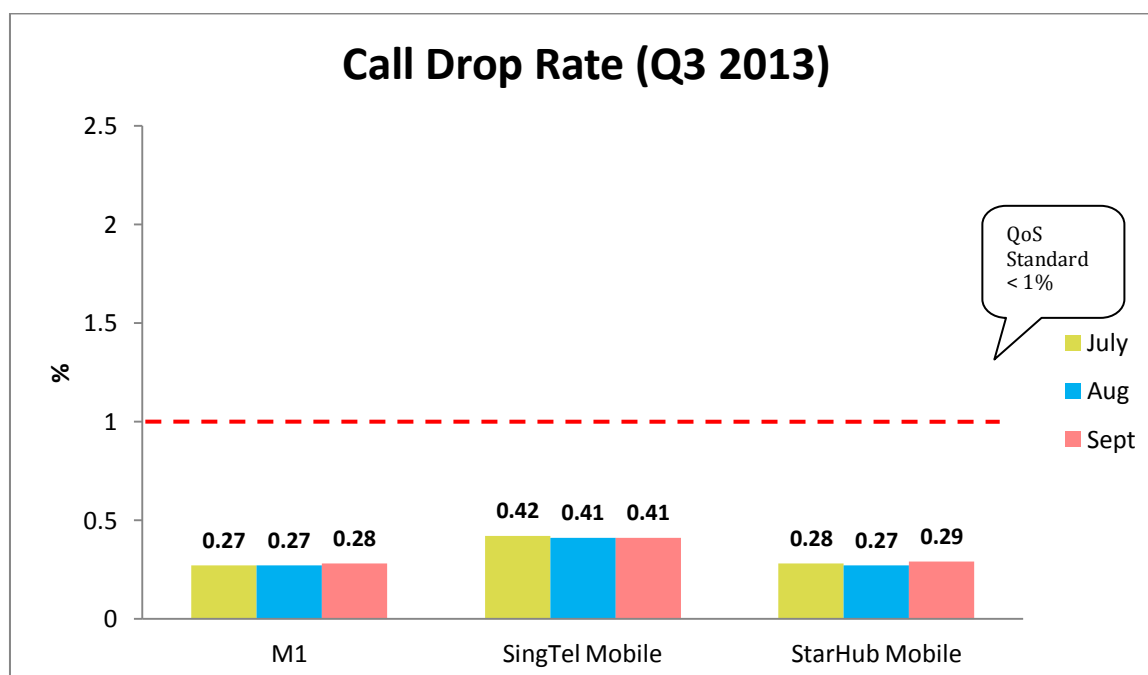
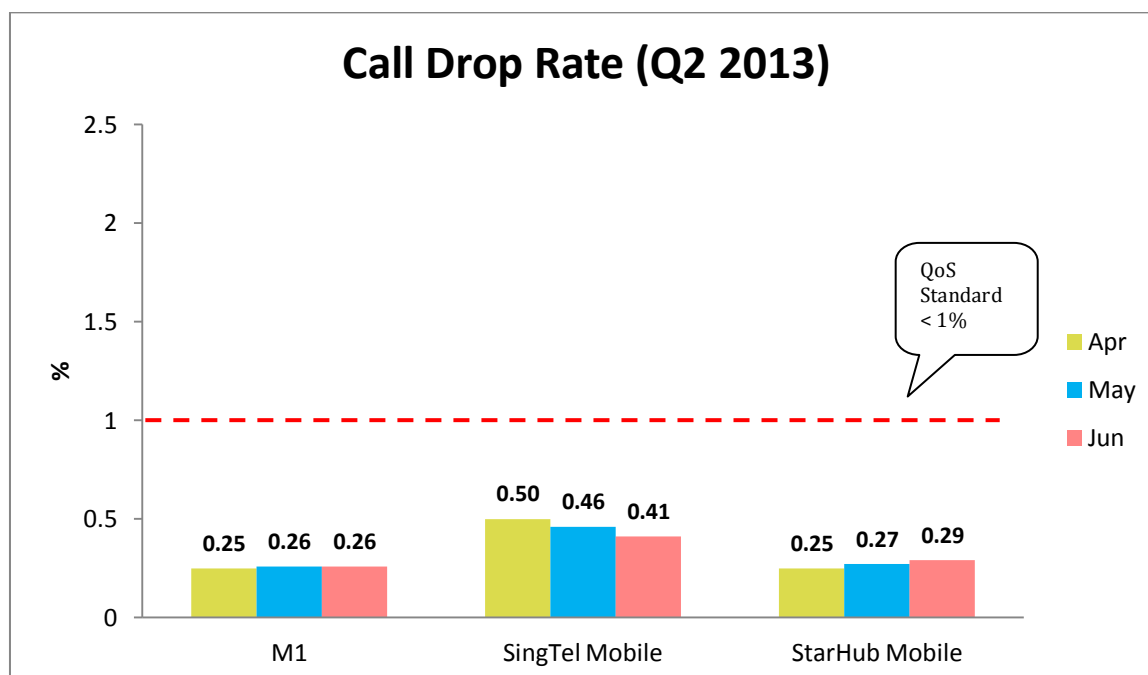
Call Success Rate

This indicator measures the percentage of successful call attempts made on the 3G cellular network. A call attempt is deemed successful when the calling party (the individual who makes the call) gets connected to the called party (the individual who receives the call) or receives a busy tone. Under IDA's 3G PCMTS QoS framework, the mobile operators are required to achieve >99% success rate (average across all cell localities during busy hour).



Call Drop Rate

This indicator measures the percentage of unintended disconnection of 3G mobile calls by the cellular network during a 100 second call. Under IDA's 3G PCMTS QoS framework, mobile operators are required to achieve <1% drop call rate (average across the entire month).



In-building Service Coverage

This indicator measures in-building service coverage for the 3G cellular network. Under IDA's 3G PCMTS QoS framework, mobile operators are required to achieve a service coverage of >85% per building. Service coverage is measured at randomly selected buildings and at publicly accessible areas within the tested buildings as a proxy for the coverage in the entire building to avoid disturbing residents. For buildings that have failed IDA's compliance standard, mobile operators will have a period of six months to improve the coverage within the buildings. IDA will audit the buildings again after the six-month period.

	IDA's Performance Survey Period	M1	SingTel Mobile	StarHub Mobile
No of buildings passed/No of buildings tested Compliance standard >85% per building	Q2 2013	41/60	50/60	57/60

	IDA's Performance Survey Period	M1	SingTel Mobile	StarHub Mobile
No of buildings passed/No of buildings tested Compliance standard >85% per building	Q3 2013	46/60	59/60	59/60

Note: The same sixty buildings were tested across the three mobile operators. The performance of each of the MTO varies for each of the building tested. End users' individual experience may differ due to various reasons such as model of handset used, handset settings, building/unit structures, number of users in the vicinity, etc.

Tunnel Service Coverage

This indicator measures service coverage for the 3G cellular network within tunnels. Under IDA's 3G PCMTS QoS framework, mobile operators are required to achieve a service coverage of >95% for existing road and MRT tunnels.*

IDA's Performance Survey Period - Q2 2013	Compliance standard	M1	SingTel Mobile	StarHub Mobile
CTE	>95% for existing road and MRT tunnels	Pass	Pass	Pass
KPE		Pass	Pass	Pass
Fort Canning		Pass	Pass	Pass
Woodsville		Pass	Pass	Pass
NS MRT		Pass	Pass	Pass
EW MRT		Pass	Pass	Pass
CCL MRT		Pass	Pass	Pass
NEL MRT		Pass	Pass	Pass

IDA's Performance Survey Period - Q3 2013	Compliance standard	M1	SingTel Mobile	StarHub Mobile
CTE	>95% for existing road and MRT tunnels	Pass	Pass	Pass
KPE		Pass	Pass	Pass
Fort Canning		Pass	Pass	Pass
Woodsville		Pass	Pass	Pass
NS MRT		Pass	Pass	Pass
EW MRT		Pass	Pass	Pass
CCL MRT		Pass	Pass	Pass
NEL MRT		Pass	Pass	Pass

*For new tunnels where deployment work was committed by mobile operators after 26 January 2012, a higher standard of >99% applies.

Note: End users' individual experience may differ due to various reasons such as model of handset used, handset settings, number of users in the vicinity, etc.