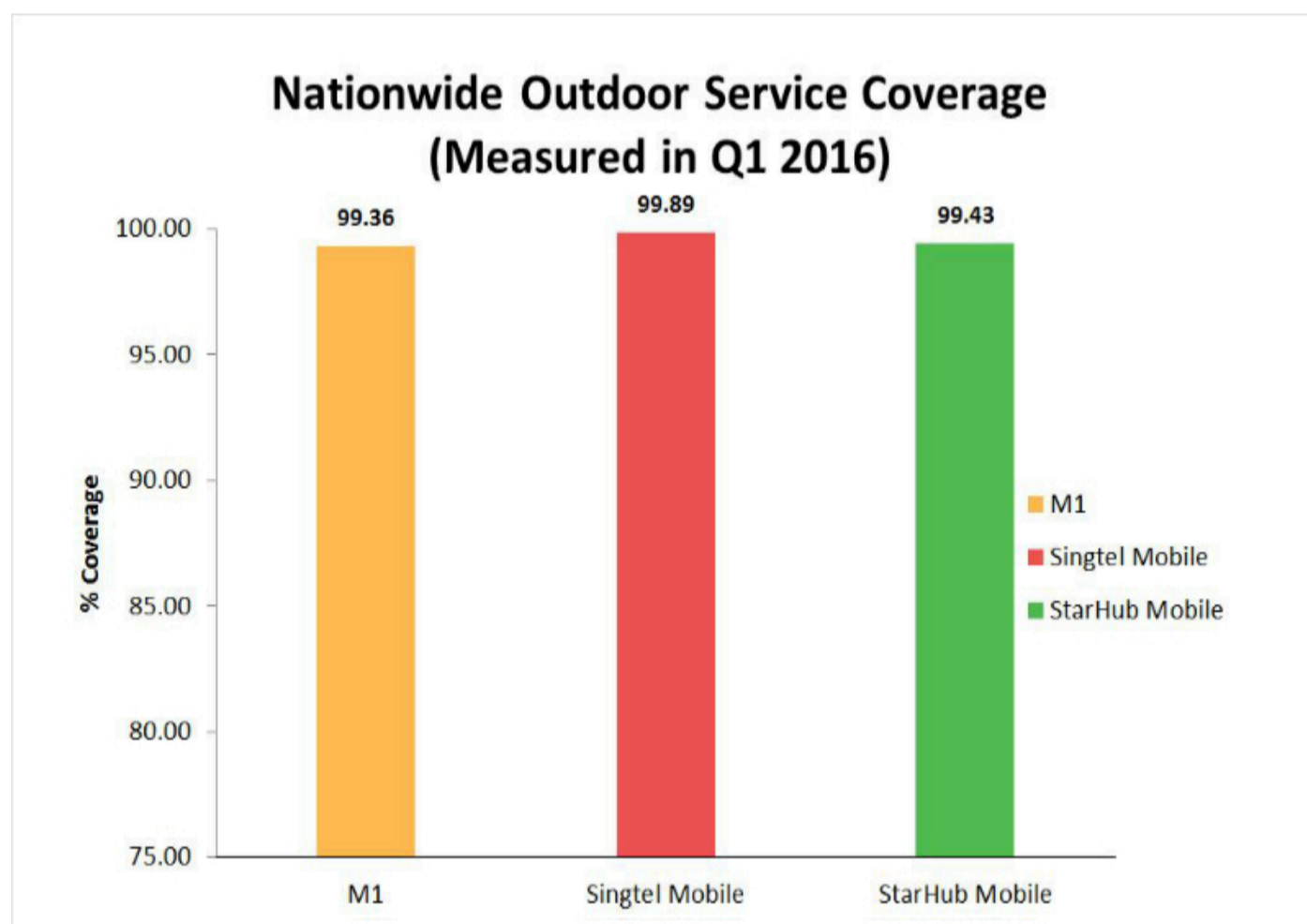


# 4G Measurement Survey Results for Q1 2016

## 4G Mobile Service Coverage in Q1 2016

### Nationwide Outdoor Service Coverage

This indicator measures Nationwide Outdoor Service Coverage for the 4G cellular network. Outdoor 4G mobile service coverage is the ability of a cellular network to achieve a minimum signal strength of at least -109dBm. The outdoor areas surveyed by IDA include all main roads, as well as areas such as housing estates/town centres, outdoor recreational areas and above ground MRT tracks. In order to better reflect end users' experience, IDA had used mobile handsets to collect signal strength sample readings for all mobile service coverage indicators.



**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.

### Tunnel Service Coverage

This indicator measures service coverage for the 4G cellular network within tunnels.

IDA's Performance Survey Period - Q1 2016	M1	Singtel Mobile	StarHub Mobile
CTE	99.56%	98.88%	100%
KPE	99.93%	99.77%	99.23%

<b>IDA's Performance Survey Period - Q1 2016</b>	<b>M1</b>	<b>Singtel Mobile</b>	<b>StarHub Mobile</b>
Fort Canning	100%	100%	100%
Woodsville	100%	99.47%	100%
MCE	Rollout in progress	Rollout in progress	Rollout in progress
North-South Line MRT	97.59%	99.14%	99.64%
East-West Line MRT	96.16%	98.05%	98.82%
Circle Line MRT	98.91%	99.99%	99.07%
North East Line MRT	99.85%	100%	99.49%
Changi Airport Line MRT	84.22%	87.05%	73.60%
Downtown Line MRT	99.73%	99.94%	99.35%

**Note 1:** For road and/or MRT tunnels without a published result, it means that the respective mobile operator has not completed its 4G service deployment at the particular road and/or MRT tunnel.

**Note 2:** 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. The tunnel service coverage results are based on IDA's coverage performance surveys.

**Note 3:** Rollout of 4G coverage between "Promenade" and "Marina Bay" MRT stations in the Circle Line is in progress for M1 and StarHub Mobile.