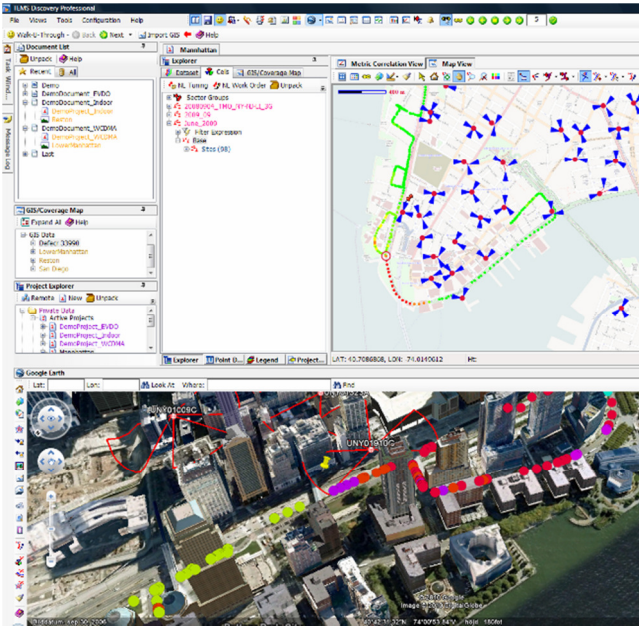# QoS ASSESSMENT ON CELLULAR SERVICES IN KELANTAN FOR FIRST HALF 2012

1.0   Background

This report presents result of QoS assessment for Kota Bharu area. Three cellular networks, Celcom, DiGi and Maxis were assessed for the first half of 2012. Assessment was conducted with following criteria:

a. Tests were carried out in moving vehicles (Drive Test).

b. Call duration lasts for 60 seconds, with 10 seconds interval between calls.

c. Phones were set on roam-free environment between 2G and 3G networks that simulates the experience of user in making voice call using phone supporting both technologies.

d. The results of the study only reflect the behavior of the networks on the locations and time of the measurements.

2.0 Key Performance Indicators

Two main parameters act as indicator for the performance are Dropped Call Rate and Blocked Call Rate.   Below are descriptions of these two parameters:

a. Dropped Call Rate (DCR)

Dropped call means a call where a connection succeed, that is, the network is accessed, call set up is successful and traffic channel has been assigned, but is disconnected due to abnormal call release.

Dropped Call Rate is calculated based on the percentage of number of dropped call over total number of call attempt.

b. Blocked Call Rate (BCR)

Blocked call means a call is not connected after call attempt due to unavailability of free traffic channel.

Blocked Call Rate is calculated based on the percentage of number of blocked call over total number of call attempt.

3.0 Result

3.1 Dropped Call Rate

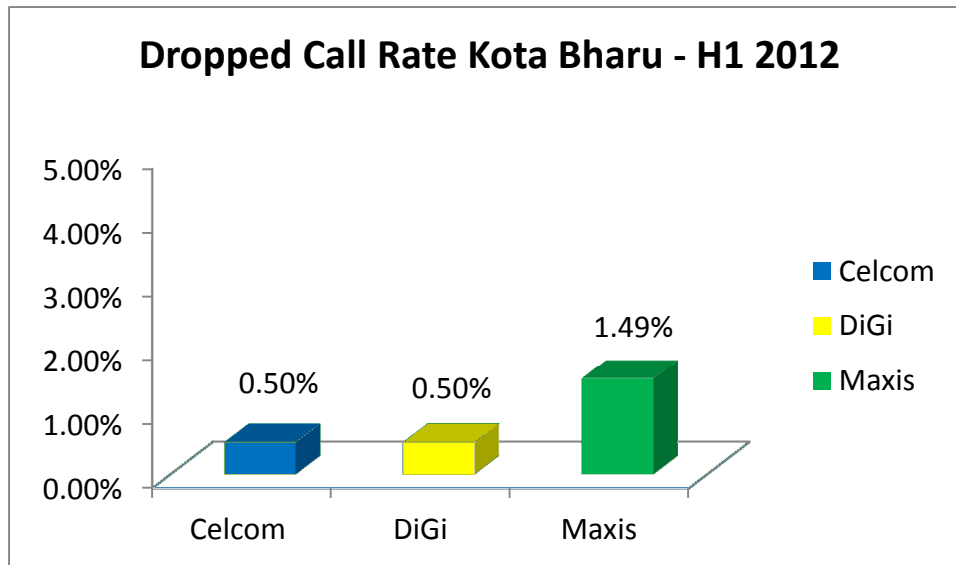Table 1 below shows Dropped Call Rate for Celcom, DiGi and Maxis for Kota Bharu area:

Dropped Call Rate Kota Bharu - H1 2012

- Celcom: 0.50%
- DiGi: 0.50%
- Maxis: 1.49%

Table 1

3.2 Blocked Call Rate

Table 2 below shows Blocked Call Rate for Celcom, DiGi and Maxis for Kota Bharu area:

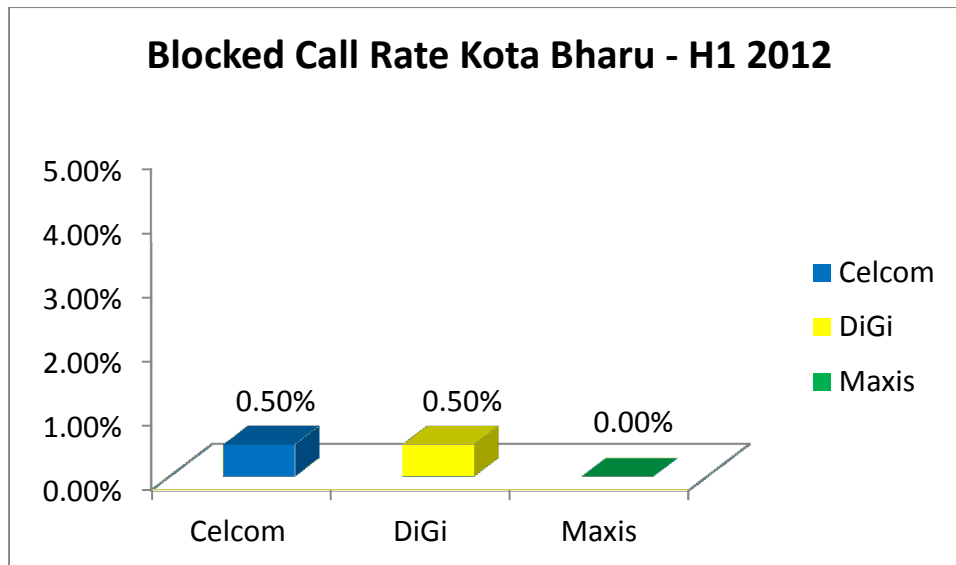**Blocked Call Rate Kota Bharu - H1 2012**

- Celcom: 0.50%
- DiGi: 0.50%
- Maxis: 0.00%

Table 2