



Quality of (Mobile & Fixed) Network & Services reporting for Quarter 1 . 2 . 3 . 4 2011

Background

The Technical Quality of Service (QoS) & Key Performance Indicators (KPIs) Regulations forms part of the regulations issued by the TRA in accordance with:

- Article 13 (3) of Federal Law by Decree No. (3) of 2003. This regulation is designed to ensure that licensees meet quality standards of performance and adherence to the terms and conditions of the license granted to them.
- Article 14 (3) of Federal Law by Decree No. (3) of 2003. This regulation is designed to grants the TRA the authority to issue policies with respect to the terms and level of service by the licensees to the consumers, including the standards and quality of Service.

Methodology

Our study methodology was divided into two parts:

- 1- Measuring Quality of Service of Telecom operators under the parameters published by the TRA.
- 2- Assessing the Quality of Service of Telecom operators by comparing them with the drive test data conducted by wireless networks and services Team and Quality of Service standards benchmarks done by TRA.

Key Performance Indicators (KPI)

Quality of Service Parameters includes:

I. Mobile Network based Voice Services:

- **Network Availability – Core & Radio Network**
- **Call Success Rate**
- **Call Drop Rate**
- **Call Setup Success Rate**
- **Call Setup Time**

Key Performance Indicators (KPI)

2. Fixed Network based Voice Services:

- Network Availability of main Telephone Exchange Equipment
- Network Effectiveness Ratio

3. Two additional parameters

- Dial up connection
- Broadband

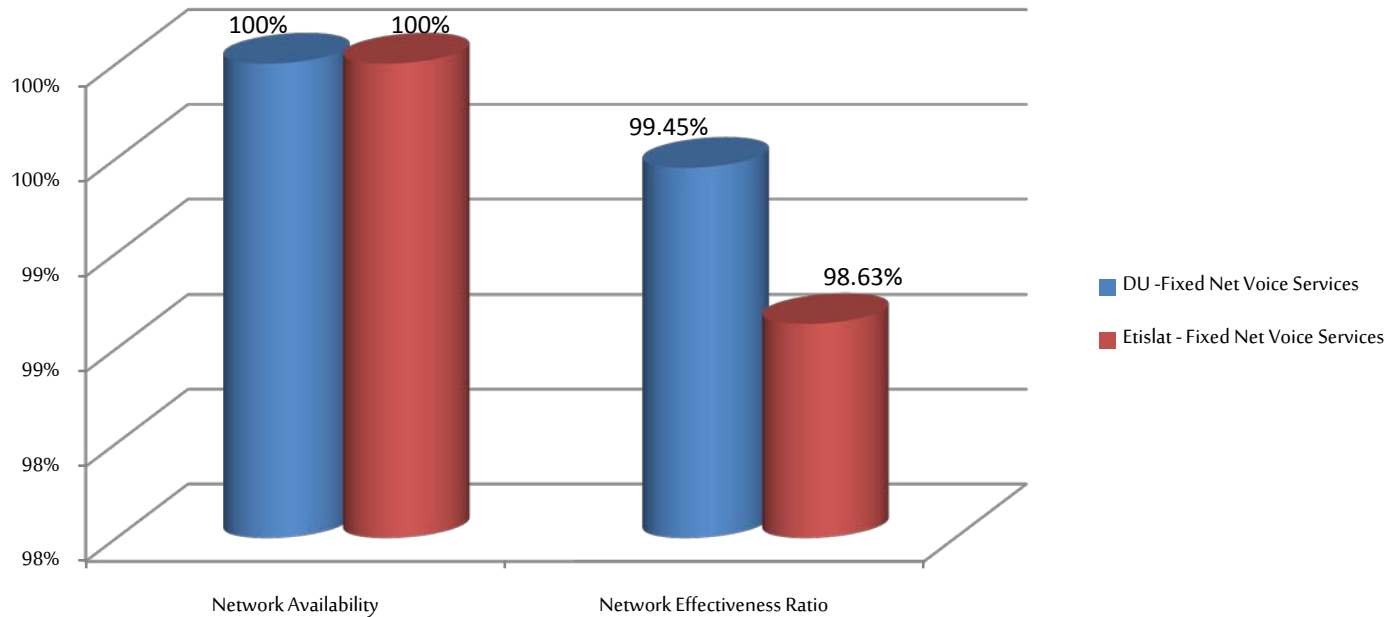
Reports Summary

The Reports based on the Quality of Service for the Mobile & Fixed Network - Annex 2 data reported via licensees (Etisalat & du) to the Technology Developments Affairs during 1st, 2nd, 3rd & 4th Quarter of 2011.

Indicators are measured on the monthly averaged data, which includes the largest possible statistical representation.

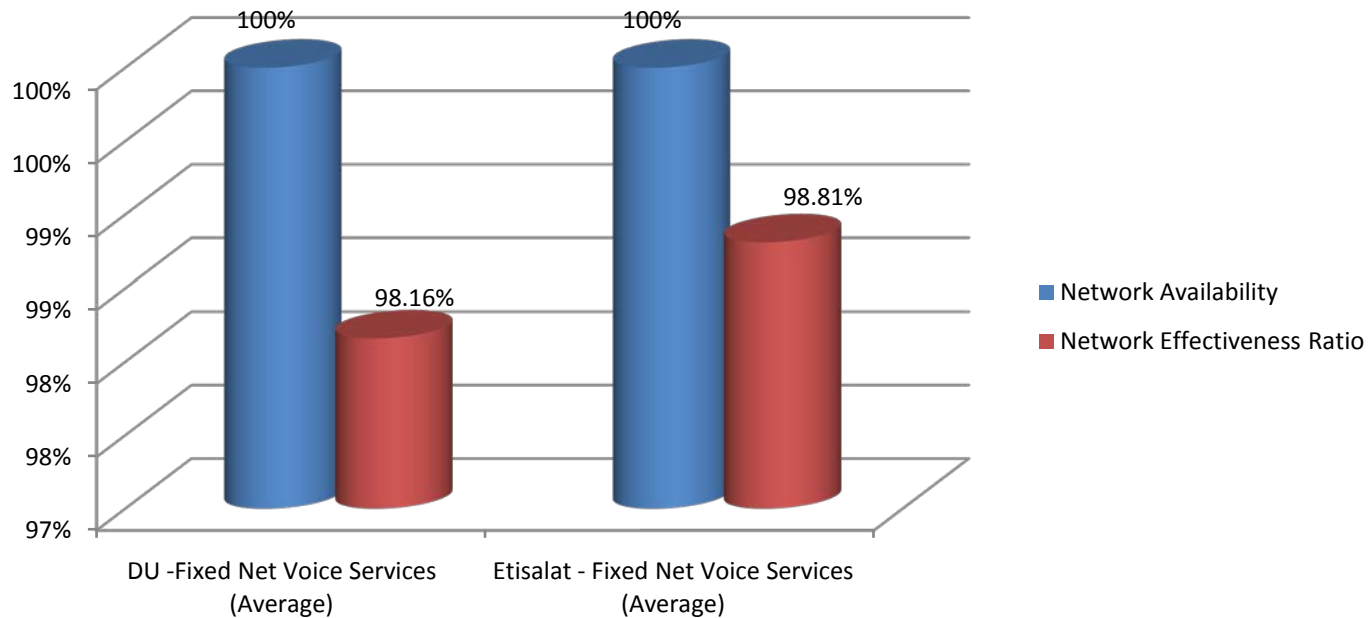
Fixed Net Voice Services – Q1

	DU -Fixed Net Voice Services (Average)	Etisalat - Fixed Net Voice Services (Average)
Network Availability	100%	100%
Network Effectiveness Ratio	99.45%	98.63%



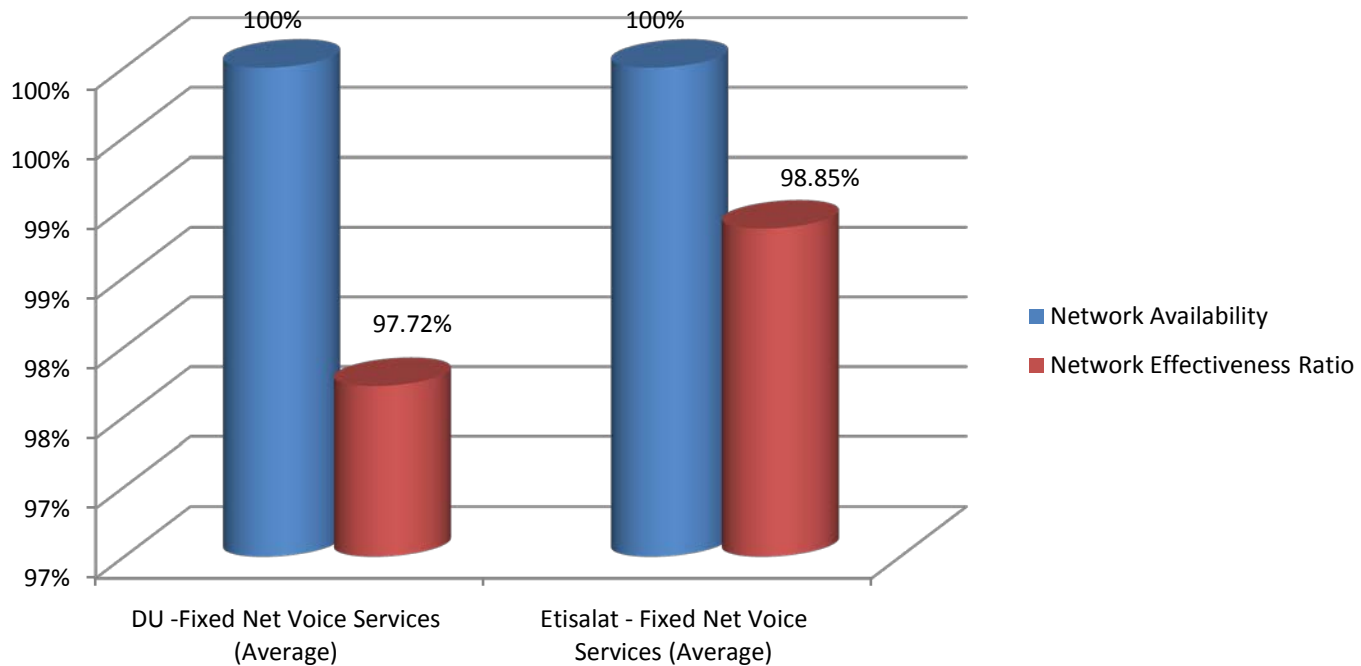
Fixed Net Voice Services – Q2

	DU -Fixed Net Voice Services (Average)	Etisalat - Fixed Net Voice Services (Average)
Network Availability	100%	100%
Network Effectiveness Ratio	98.16%	98.81%



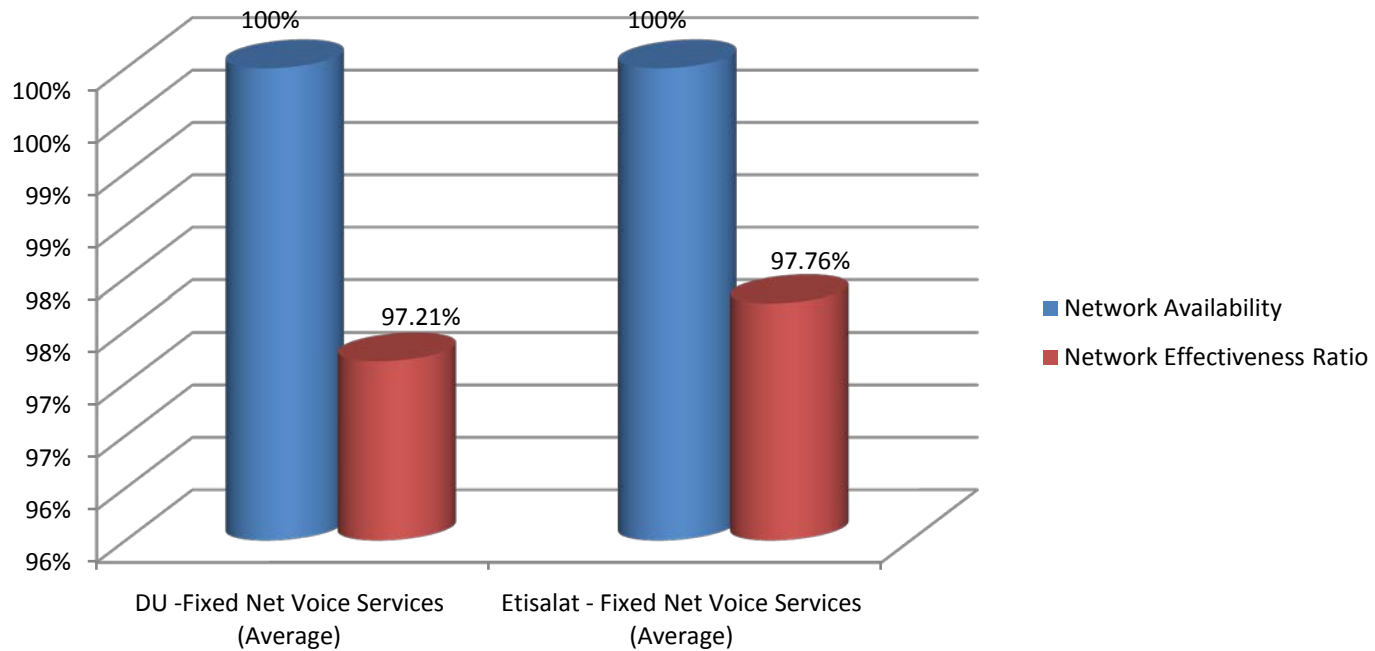
Fixed Net Voice Services – Q3

	DU -Fixed Net Voice Services (Average)	Etisalat - Fixed Net Voice Services (Average)
Network Availability	100%	100%
Network Effectiveness Ratio	97.72%	98.85%



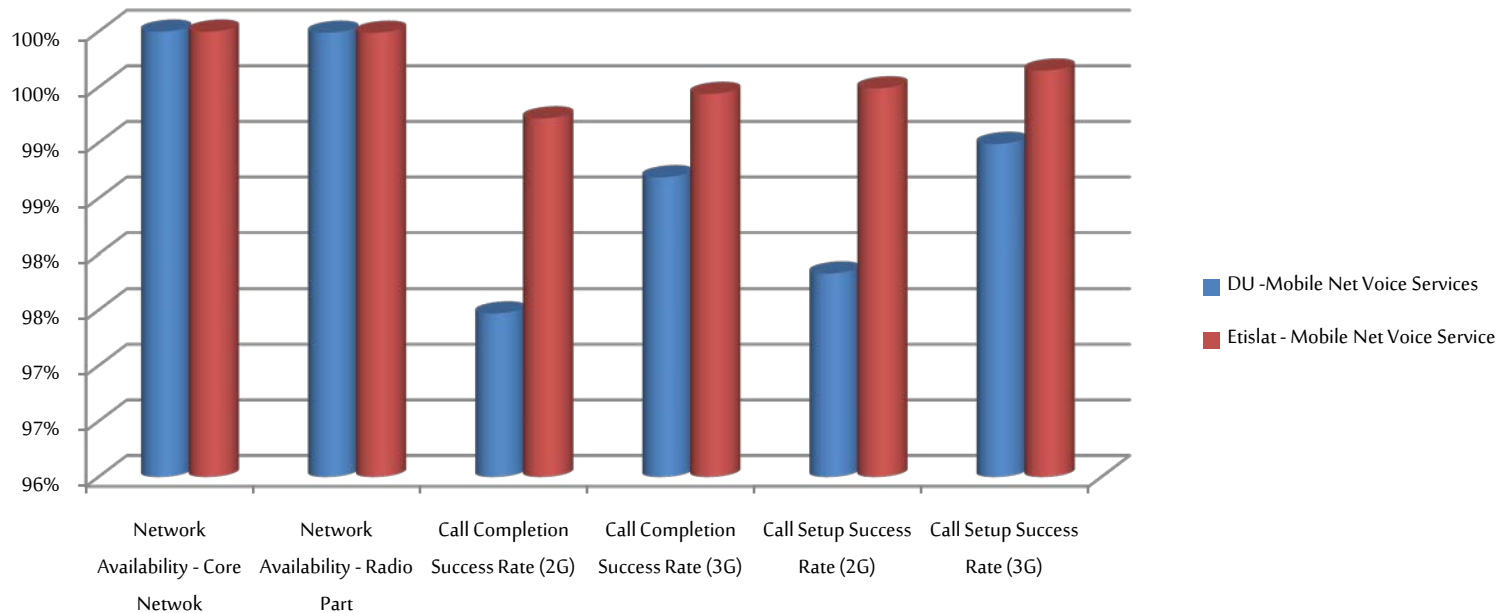
Fixed Net Voice Services – Q4

	DU -Fixed Net Voice Services (Average)	Etisalat - Fixed Net Voice Services (Average)
Network Availability	100%	100%
Network Effectiveness Ratio	97.21%	97.76%



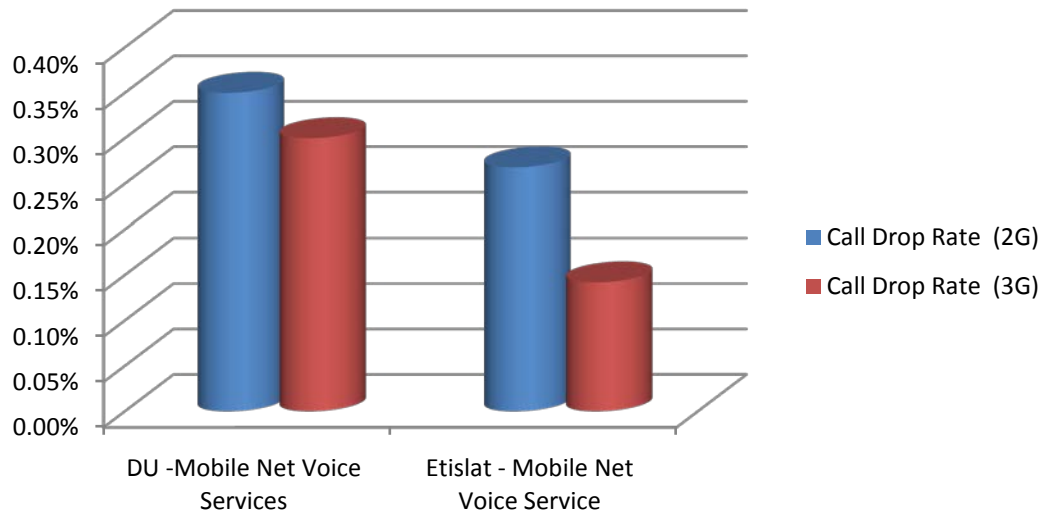
Mobile Net Voice Services – Q1

	DU -Mobile Net Voice Services (Average)	Etisalat - Mobile Net Voice Service (Average)
Network Availability - Core Network	100%	100%
Network Availability - Radio Part	99.99%	99.99%
Call Completion Success Rate (2G)	97.47 %	99.22%
Call Completion Success Rate (3G)	98.69%	99.44%
Call Setup Success Rate (2G)	97.83%	99.49%
Call Setup Success Rate (3G)	98.99%	99.65%



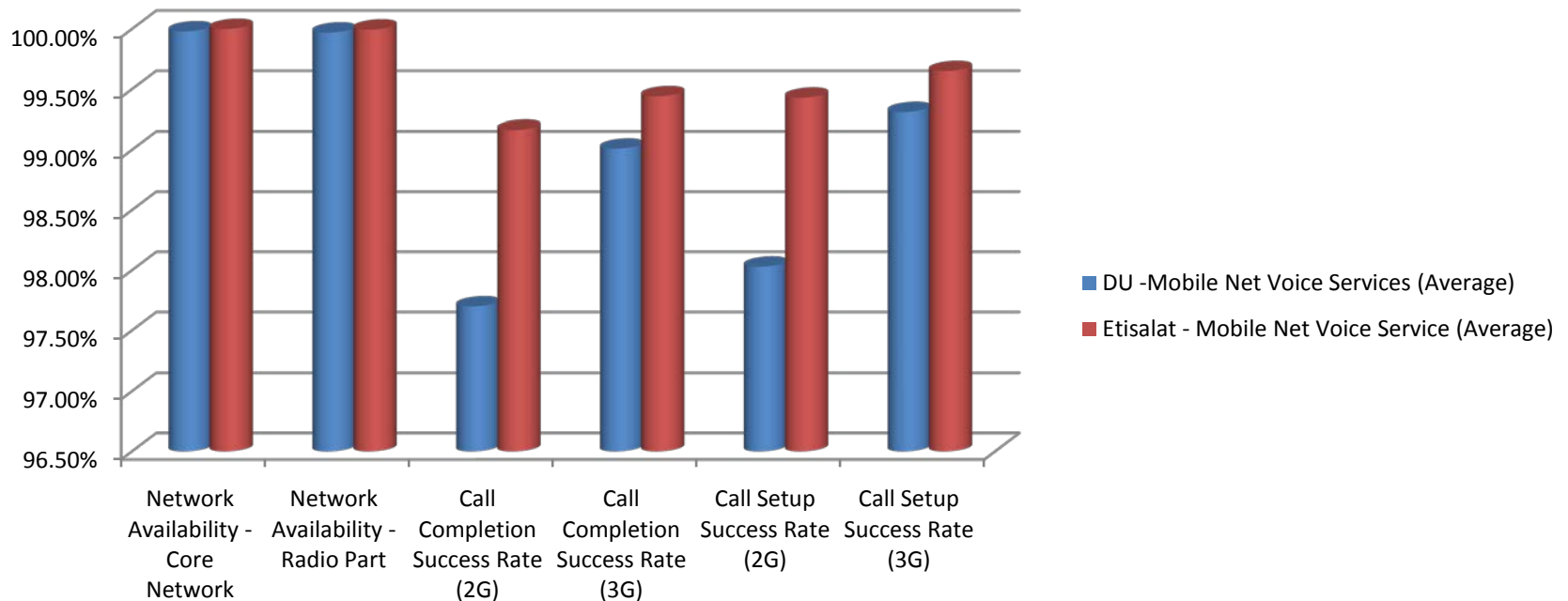
Mobile Net Voice Services – Q1

	DU -Mobile Net Voice Services (Average)	Etisalat - Mobile Net Voice Service (Average)
Call Drop Rate (2G)	0.38%	0.28%
Call Drop Rate (3G)	0.30%	0.21%



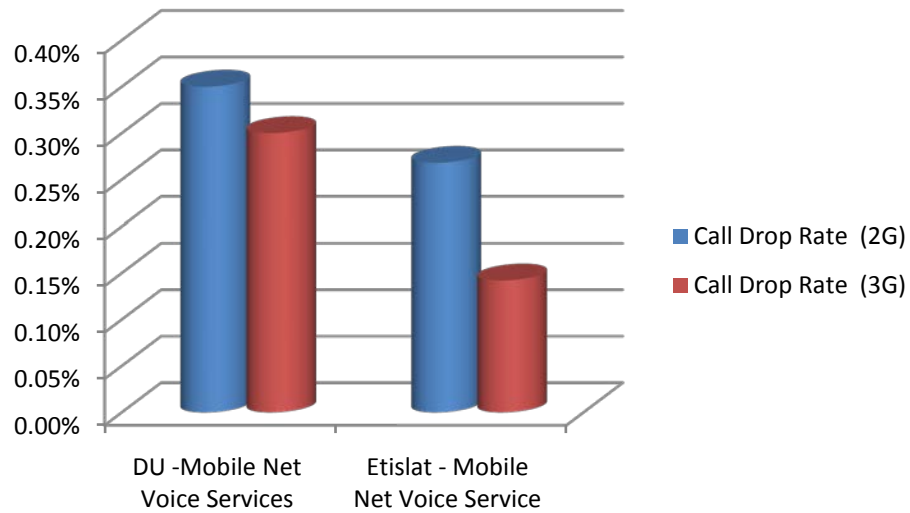
Mobile Net Voice Services – Q2

	DU -Mobile Net Voice Services (Average)	Etisalat - Mobile Net Voice Service (Average)
Network Availability - Core Network	99.98%	100%
Network Availability - Radio Part	99.97%	99.995%
Call Completion Success Rate (2G)	97.70%	99.164%
Call Completion Success Rate (3G)	99.01%	99.441%
Call Setup Success Rate (2G)	98.03%	99.429%
Call Setup Success Rate (3G)	99.31%	99.65%



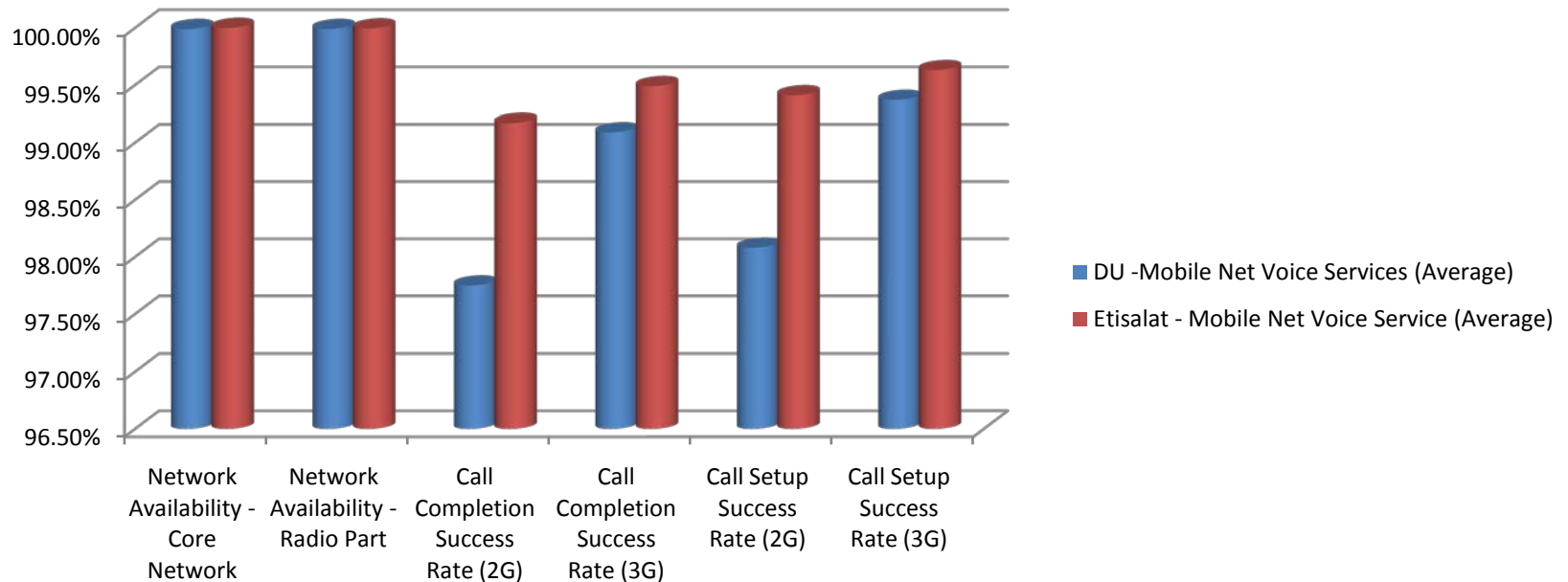
Mobile Net Voice Services – Q2

	DU -Mobile Net Voice Services (Average)	Etisalat - Mobile Net Voice Service (Average)
Call Drop Rate (2G)	0.35%	0.268%
Call Drop Rate (3G)	0.30%	0.142%



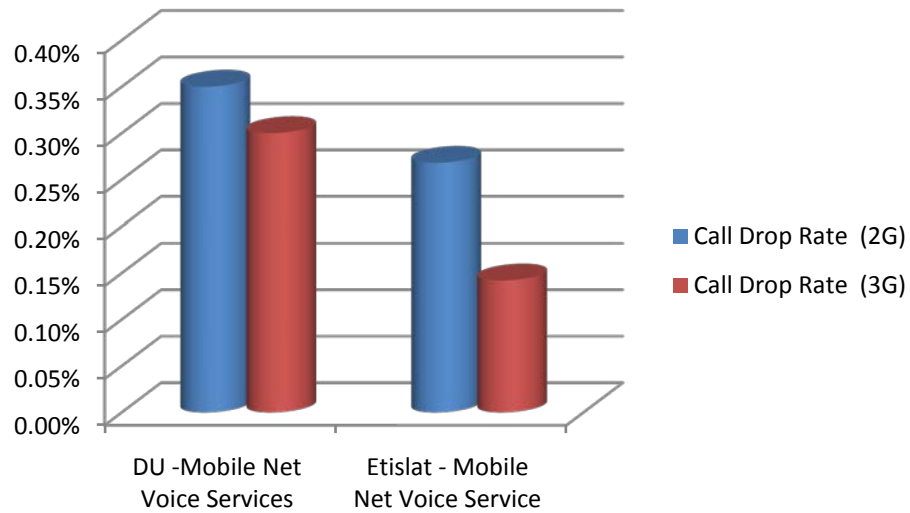
Mobile Net Voice Services – Q3

	DU -Mobile Net Voice Services (Average)	Etisalat - Mobile Net Voice Service (Average)
Network Availability - Core Network	99.99%	100%
Network Availability - Radio Part	99.99%	99.995%
Call Completion Success Rate (2G)	97.75%	99.17%
Call Completion Success Rate (3G)	99.09%	99.49%
Call Setup Success Rate (2G)	98.08%	99.41%
Call Setup Success Rate (3G)	99.37%	99.63%



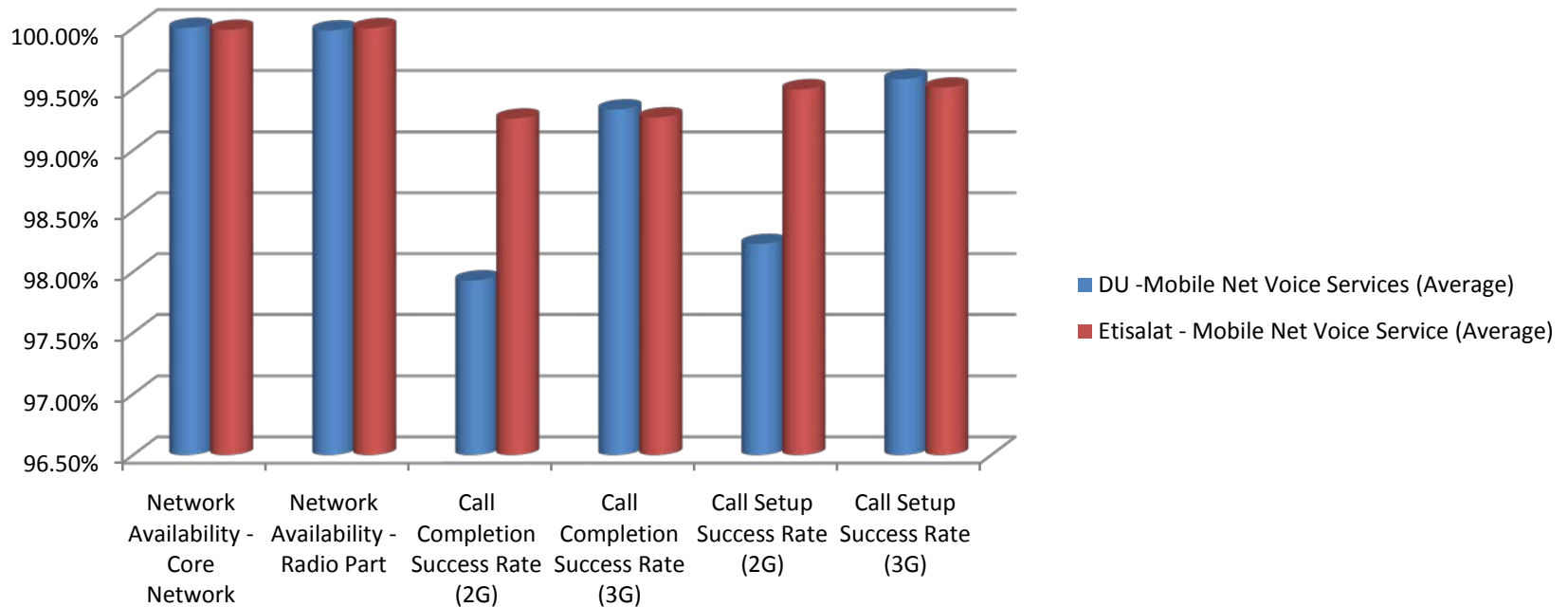
Mobile Net Voice Services – Q3

	DU -Mobile Net Voice Services (Average)	Etisalat - Mobile Net Voice Service (Average)
Call Drop Rate (2G)	0.33%	0.25%
Call Drop Rate (3G)	0.28%	0.09%



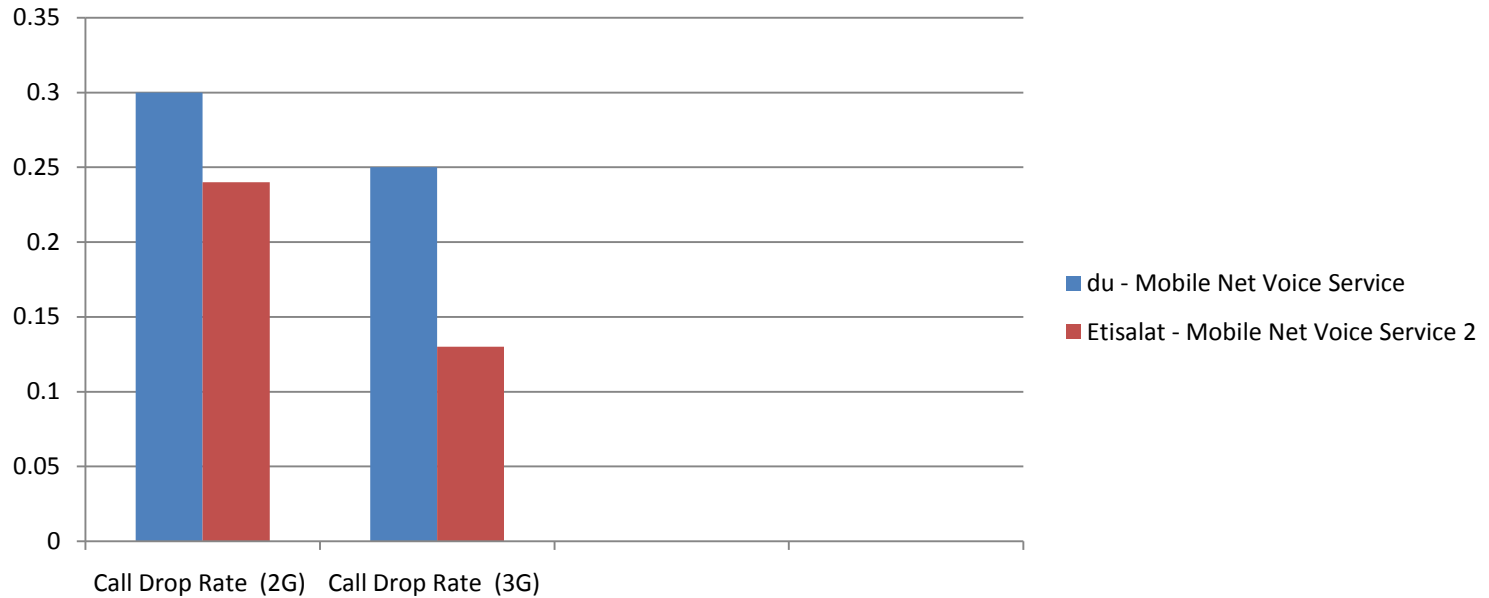
Mobile Net Voice Services – Q4

	DU -Mobile Net Voice Services (Average)	Etisalat - Mobile Net Voice Service (Average)
Network Availability - Core Network	100.00%	99.985%
Network Availability - Radio Part	99.98%	99.998%
Call Completion Success Rate (2G)	97.93%	99.255%
Call Completion Success Rate (3G)	99.33%	99.265%
Call Setup Success Rate (2G)	98.23%	99.496%
Call Setup Success Rate (3G)	99.58%	99.510%



Mobile Net Voice Services – Q4

	DU -Mobile Net Voice Services (Average)	Etisalat - Mobile Net Voice Service (Average)
Call Drop Rate (2G)	0.30%	0.24%
Call Drop Rate (3G)	0.25%	0.13%



Measurments

- **Etisalat - Internet Dial up connection**

		Quarter 1	Quarter 2	Quarter 3	Quarter 4
Internet Dial Up Services	Total number of dial attempts, which are answered by the Internet Server (Average)	94.07%	90%	75.25%	94.98

- **DU - Internet Dial up connection**

- Not applicable