

NIGERIA BENCHMARK AUDIT REPORT





P3 communications GmbH

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tested and measured the
performance of its voice and data services on smartphones
in comparison to other LTE/UMTS/GSM mobile radio networks in metropolitan and rural areas of Nigeria.

The audit was done as a performance benchmark performed by P3 communications
between November 16th 2017 and December 23th 2017 in cities and towns as well as on connection roads.

Measurements have been executed as drive tests outdoors using a
Samsung Galaxy S7 cat9 Smartphone 300 Mbit/s Download / 50 Mbit/s Upload.
All data measurements have been performed in 4G preferred mode. Voice measurements have been done in 4G/4G preferred mode on both sides, and in 4G/3G
preferred mode on both sides,
while call origin has been alternated

The following pages provide a comparative overview about the performance results
observed for the different tested service types.

MEASUREMENT OVERVIEW

MEASUREMENT SETUP

	Voice	Data
Device	Samsung Galaxy S7 cat9	Samsung Galaxy S7 cat9
Test Cases	Mobile-to-Mobile (M2M) Side1 (4G preferred) to Side1 (4G preferred) 115 sec call window 70 sec call duration 15 sec call setup timeout Email traffic injection on both sides (100KB) (1 email per call window)	Data 4G preferred CA HTTP DL datastream 7s HTTP UL datastream 7s HTTP 3MB DL fixed file transfer HTTP 1MB UL fixed file transfer Web Browsing - Kepler ETSI Ref. Page 6 Live web pages (50% http, 50% https) YouTube HD/ SD video - 45s
Mobility and Route Types	Drive test 50.82% in Cities, 15.33% in Towns and 33.85% on Roads Cities, towns and roads	
Samples	~ 3.940 per Operator	~ 2.320 per Operator
Dates	26 measurement days November 16th – December 23th, 2017	

TESTING ROUTE



9000 km
measuring distance



17 %
of population measured

CLAIMS



Best in Test

Etisalat



Best in Data

MTN



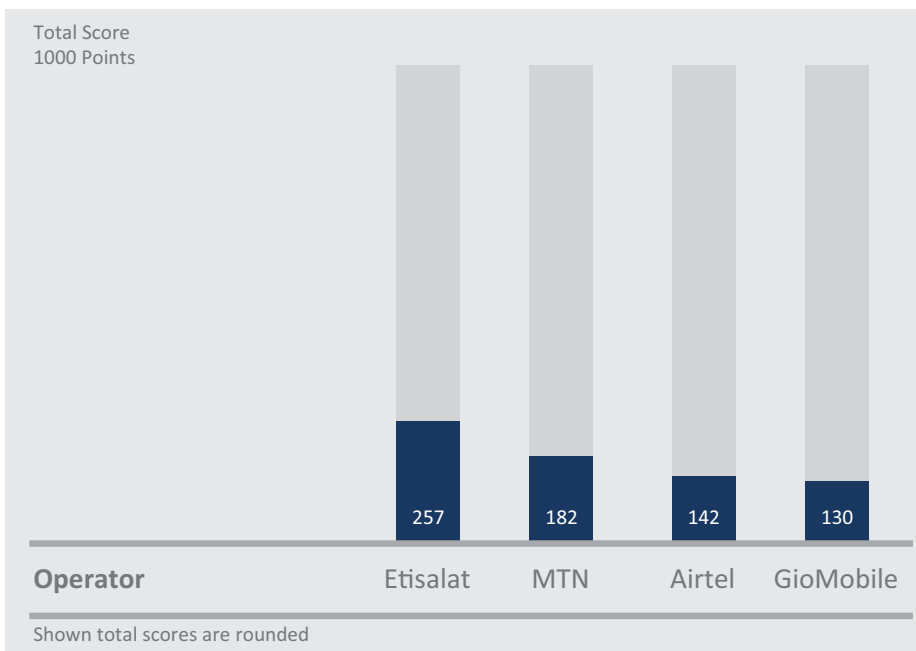
Best in Voice

Etisalat

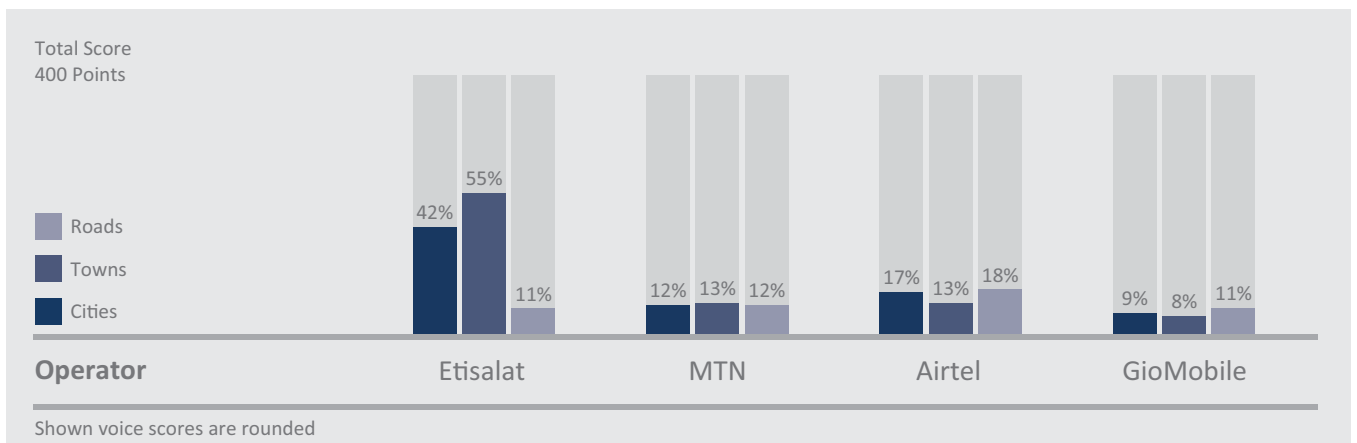
OVERALL SCORE

ETISALAT ACHIEVED THE HIGHEST SCORE AMONG COMPETITORS WITH 257 POINTS OUT OF MAXIMUM 1000. ETISALAT IS AHEAD OF COMPETITION FOR VOICE SERVICES, MTN IS AHEAD OF COMPETITION FOR DATA SERVICES.

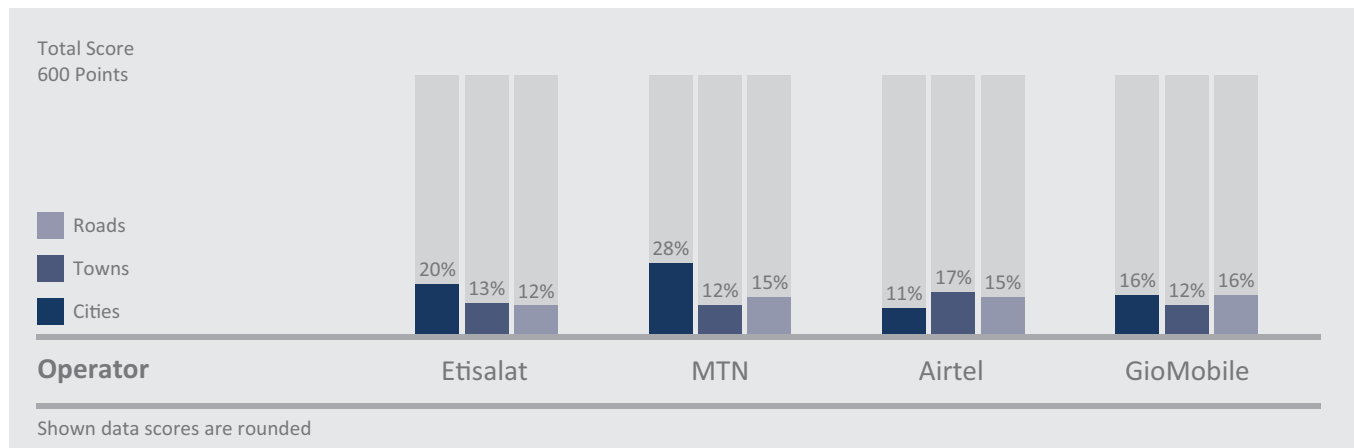
Total Score



Voice Score



Data Score



VOICE AND DATA OVERALL

		Etisalat	MTN	Airtel	GioMobile
Voice	max. 400	154	48	64	37
Cities	180	42%	12%	17%	9%
Towns	60	55%	13%	13%	8%
Roads	80	11%	12%	18%	11%
Data	max. 600	102	134	77	93
Cities	270	20%	28%	11%	16%
Towns	90	13%	12%	17%	12%
Roads	120	12%	15%	15%	16%
Total	1000	257	182	142	130

Shown scores are rounded.

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