

ZAMBIA BENCHMARK AUDIT REPORT





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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 Zambia.

The audit was done as a performance benchmark performed by P3 communications between October 06th 2017 and November 02nd 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

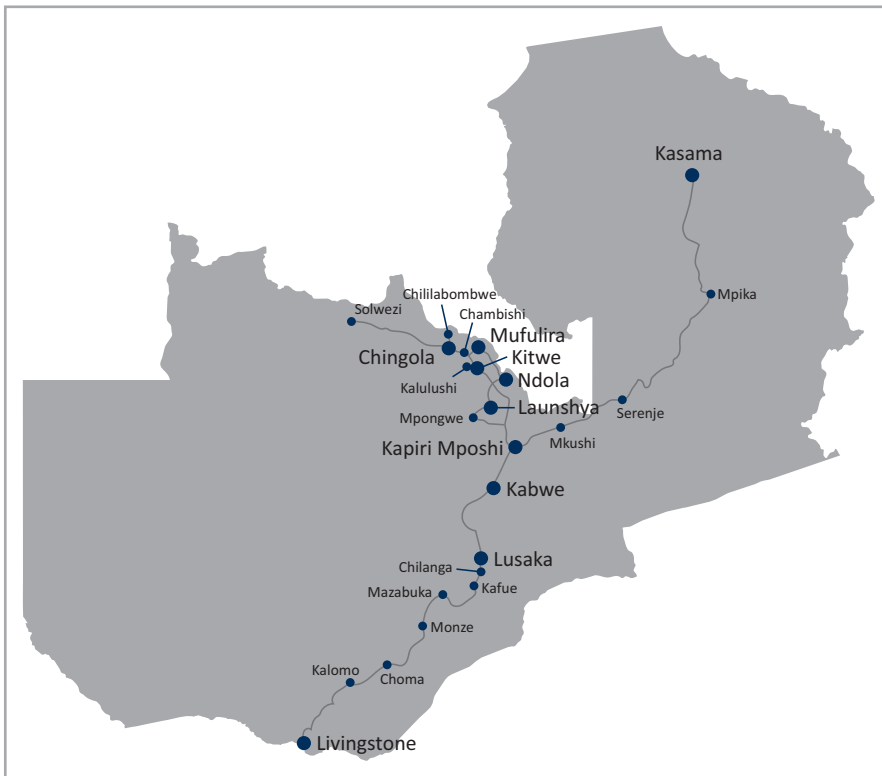
The following pages provide a comparative overview about the performance results observed for the different tested service types.

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	100% Drivetest 59% in Cities, 16% in Towns and 25% on Roads	
Samples	~ 3600 per Operator	~ 2000 per Operator
Dates	22 measurement days October 06th – November 02nd, 2017	

TESTING ROUTE



5,460 km
measuring distance



32,5 %
of population measured

CLAIMS



Best in Test

MTN



Best in Data

MTN



Best in Voice

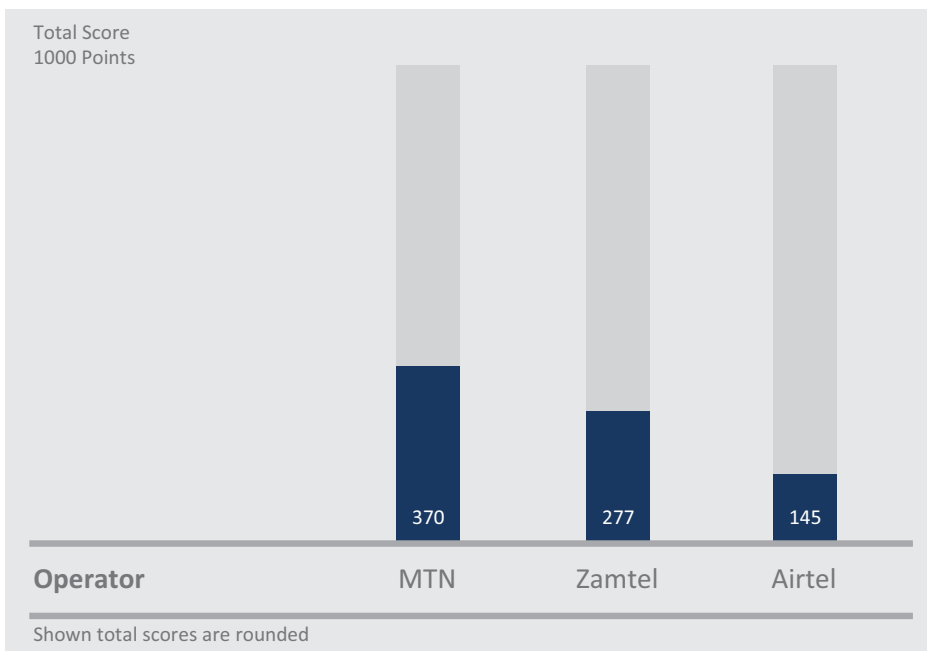
Zamtel

OVERALL SCORE

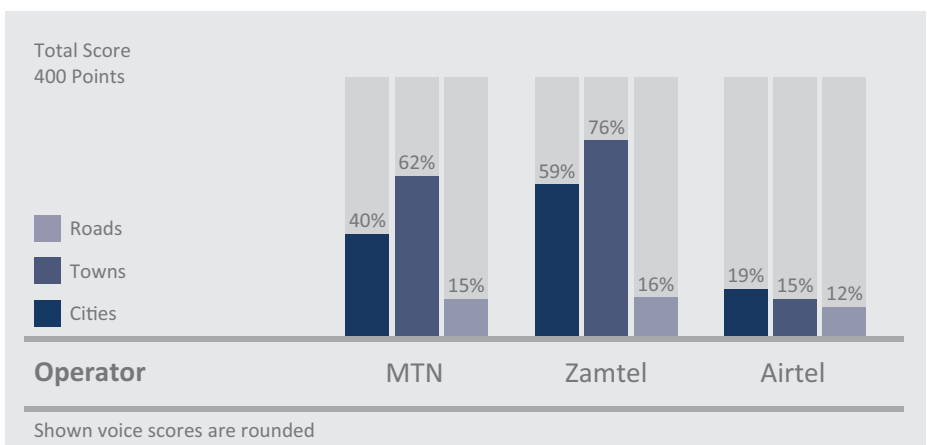
MTN ACHIEVED THE HIGHEST SCORE AMONG COMPETITORS WITH 370 POINTS OUT OF MAXIMUM 1000.

MTN IS AHEAD OF COMPETITION FOR DATA SERVICES, ZAMTEL IS AHEAD OF COMPETITION FOR VOICE SERVICES.

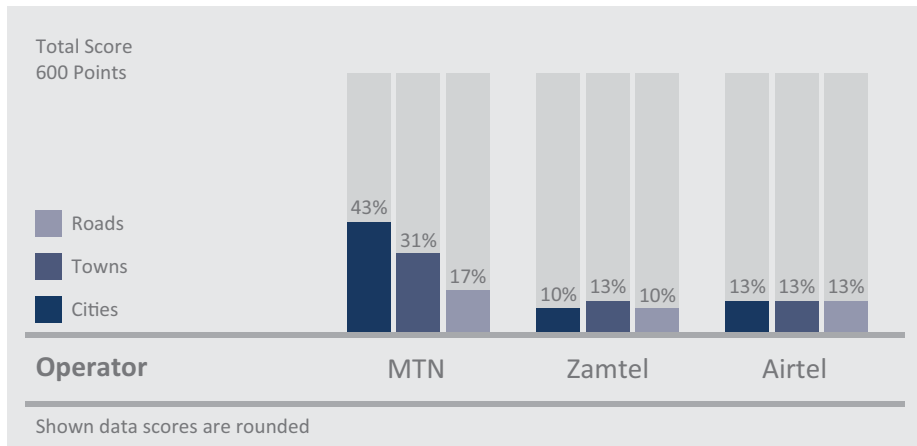
Total Score



Voice Score



Data Score



VOICE AND DATA OVERALL

		MTN	Zamtel	Airtel
Voice	max. 400	158	215	68
Cities	240	40%	59%	19%
Towns	80	62%	76%	15%
Roads	80	15%	16%	12%
Data	max. 600	212	62	77
Cities	360	43%	10%	13%
Towns	120	31%	13%	13%
Roads	120	17%	10%	13%
Total	1000	370	277	145

Shown scores are rounded.

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