# 3RD PARTY QUALITY OF SERVICE SURVEY OF LAHORE

### 1. <u>INTRODUCTION</u>

1.1. In order to measure the performance and service quality of 2G (GSM), 3G (UMTS/HSPA+ etc.) and 4G (LTE), of Cellular Mobile Operators (CMOs), Pakistan Telecommunication Authority (PTA) carried out an independent Quality of Service (QoS) Survey of Lahore through a  $3^{rd}$  Party Service Provider from  $15^{th} \sim 28^{th}$  February 2021 and  $3^{rd} \sim 8^{th}$  March 2021.

#### 2. DRIVE TEST DETAILS

2.1. In the QoS survey at Lahore, different markets and hotspot areas during the 20 days of tests from 0800 to 2100 hours on daily basis by deploying urban mobility riders. The details are as under:

#### a. Markets & Hotspots Areas

DESCRIPTION	DETAILS		
Markets	Azam Cloth Market, Chuna Mandi, Mochi Gate, Landa Bazar, Badami Bagh, Rang Mahal, Shah Alam Market, Electronics Market, Shah Alam, Bilal Ganj Baghban Pura, Sarafa Bazaar, Abid Market, Akbari Mandi, Brandreth Road, Hall Road and Kashmiri Road		
Hotspots Areas	Brandreth Road, High Court and Surroundings, Johar Town, Shah Alam Market Bahria Town, Bedian Road, Paragon City and DHA		

## b. Testing Scenario

DRIVETEST	VOICE	DATA	COVERAGE
Device	Xiaomi Mi A3, Sony	Xiaomi Mi A3, Sony Xperia XZ2	Xiaomi Mi A3, Sony
	Xperia XZ2, OnePlus 3T	H8216	Xperia XZ2, OnePlus 3T
Test Scenario	120 Seconds Call	Data 4G (Auto Mode)	4G: RSRP, RSRQ & SINR
	Duration	HTTP Fixed File Transfer	3G: RSCP & Ec/No
	30 Seconds Wait	Download: 10Mb & 100Mb	2G: RX Lev Sub &
	between Calls	Upload: 10Mb	RxQual
Dates	15 <sup>th</sup> ~ 28 <sup>th</sup> Feb 21	3 <sup>rd</sup> ~ 8 <sup>th</sup> Mar 21	On all testing days
Coverage	Total 100Million Samples (2G & 3G & 4G)		

#### c. Sampling

TEST TYPES	TOTAL SAMPLES	TOTAL TESTING HOURS
Voice Calls	7781	500
Data Sessions	36367	700
Coverage 4G	25Million	1200

#### d. Operator Wise Samples

OPERATOR	VOICE CALLS	DATA SESSIONS
Jazz	1363	9523
Telenor	2312	8726