

CAMPAIGN OVERVIEW

1. INTRODUCTION

1.1. European Telecommunications Standards Institute (ETSI) has published a Technical Report (TR) i.e. ETSI TR 103 559 *"SPEECH AND MULTIMEDIA TRANSMISSION QUALITY (STQ); BEST PRACTICES FOR ROBUST NETWORK QOS BENCHMARK TESTING AND SCORING"*, in August 2019, commonly known as Network Performance Score (NPS). This report provides a method to collect and aggregate the test results and the weighting of the various aspects tested for each application like telephony, video and data services. The application fields are then in turn weighted and aggregated over the different areas where the data is collected i.e. City, Town and Road etc. Finally, calculation of an overall score or a joint score is performed.

2. BENCHMARKING CAMPAIGN

2.1. PTA in partnership with Rohde & Schwarz (Pvt.) Ltd., carried out NPS Benchmarking Campaign of CMOs from 11th January to 2nd February 2022 and collected drive test data of Voice and Data Services in different Cities, Towns and Roads throughout Pakistan. A total of 5 x Cities, 4 x Towns and 4 x Motorways/Highways surveyed and a distance of **4,522KM** travelled. This distance traveled is distributed in Cities, Towns and Motorways/Highways as 2,644KM (58.5%), **626KM** (13.8%) and **1,252KM** (27.7%) respectively. The name of Cities, Towns and Motorways/Highways along with survey dates are shown in **Table 1.1: Name of Cities, Towns & Roads**. Mobile Handsets have been kept on Auto Detect Mode (LTE/UMTS/GSM) i.e. preferably 4G and fallback to 3G and 2G. The signal strength samples i.e. RSRP (4G), RSCP (3G) and RxLev (2G) recorded along with maps of Cities, Towns and Motorways/Highways are attached as **Annex-A**, **Annex-B** and **Annex-C** respectively.

TYPE	NAME		DAYS	DATE	KM
CITY	Islamabad		4	11 th ~ 14 th Jan 22	354
			1	18 th Jan 22	
	Lahore		3	11 th ~ 13 th Jan 22	699
			2	17 th ~ 18 th Jan 22	
			2	24 th ~ 25 th Jan 22	
	Karachi		2	13 th ~ 14 th Jan 22	889
			5	17 th ~ 21 st Jan 22	
	Peshawar		3	24 th ~ 26 th Jan 22	359
	Quetta		1	31 st Jan 22	343
			2	1 st ~ 2 nd Feb 22	
Sub-Total					2644
TOWN	Fath e Jhang		2	17 th ~ 18 th Jan 22	156
	Thatta		2	24 th ~ 25 th Jan 22	198
	Charsadda		2	28 th ~ 31 st Jan 22	130
	Lodhran		1	31 st Jan 22	142
			1	1 st Feb 22	
	Sub-Total				
Motorway / Highway	M-1	Islamabad to Peshawar	1	20 th Jan 22	158
	M-2	Lahore to Islamabad	1	20 th Jan 22	333
	M-9 /N-55	Karachi to Sukkur	1	27 th Jan 22	431
	M-3 / M-4	Lahore to Multan	1	28 th Jan 22	330
	Sub-Total				
TOTAL					4522

Table 1.1: Name of Cities, Towns & Roads