

JOINT QUALITY OF SERVICE SURVEY REPORT

INTRODUCTION

1.1 In order to measure the performance and service quality of Cellular Mobile Operators (CMOs), a Joint Quality of Service (QoS) Survey has been carried out in eight (08) x cities of Gilgit Baltistan, in Third Quarter 2022. The name of cities along with survey dates are mentioned in **Table 1.1: QoS Survey Cities & Dates**.

S. #	Province	City	Days	Survey Dates
1.		Gilgit	2	18 ~ 19 July 2022
2.		Jaglot	1	20 July2022
3.		Hunza	2	21 ~ 22 July 2022
4.	Gilgit Baltistan (GB)	Ghakuch	2	25 ~ 26 July 2022
5.		Astore	2	27 ~ 28 July 2022
6.		Skardu	2	1 ~ 2 August 2022
7.		Shigar	1	3 August 2022
8.		Khaplu	2	4 ~ 5 August 2022

Table 1.1: QoS Survey Dates and Samples

DRIVE TEST DETAILS

2.1 The QoS survey/drive tests were conducted using <u>NEMO QoS Tool</u> of CMOs. Drive test survey teams selected survey routes in such a manner to cover main roads, service roads and majority of sectors/colonies. During the survey, mobile handsets for Voice Calls, SMS and Data Sessions, were kept in 3G/4G locked mode.

VOICE SERVICE

3.1. A total of 5,000 Call attempts were made to analyze the performance of Cellular Voice services in 8 x cities of Gilgit Baltistan. 7x Voice Service QoS KPIs (i.e. Network Accessibility, Call Setup Success Rate, Call Setup Time, Call Completion Rate, Mean Opinion Score, Inter System Handover Success Rate & RAB Setup Success Rate) have been measured while testing voice services in 8 x surveyed cities of Gilgit Baltistan CMO wise call statistics are shown in **Table 3.1: Call Statistics**. The overall compliance level of threshold values of voice QoS KIs in 8 x cities is shown in **Table 3.2: City Wise Voice QoS KPIs Compliance Level**.

DESCRIPTION	Jazz	Telenor	Ufone	ZonG	SCOM
TOTAL CALLS ATTEMPTS	1000	1000	1000	1000	1000
NETWORK ACCESSEBILITY	99.94%	99.74%	100%	100%	100%
CALL SETUP SUCCESS RATE	99.94%	99.93%	100%	100%	100%
CALL SETUP TIME	7.4	10.1	6.81	8.2	5.94
CALL COMPLETION RATIO	100%	99.88%	100%	100%	100%
MEAN OPINION SCORE	3.8	3.38	3.32	3.3	3.6
ISHO SUCCESS RATE	N/A	N/A	N/A	N/A	100%
RAB SETUP SUCCESS RATE	N/A	N/A	N/A	N/A	95%

Table 3.1: Call Statistics.