

# 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 seven (07) x cities of Gilgit Baltistan, in Third Quarter 2023. 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 BALTISTAN (GB)	GILGIT	2	8~9 August 2023
2.		HUNZA	2	15~16 August 2023
3.		GHAKUCH	2	11~12 August 2023
4.		ASTORE	1	28 August 2023
5.		SKARDU	2	21~22 August 2023
6.		SOST	1	17 August 2023
7.		KHAPLU	2	23~24 August 2023

**Table 1.1: QoS Survey Dates and Samples**

## DRIVE TEST DETAILS

2.1 The QoS survey/drive tests were conducted using **NEMO QoS Tool** 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 4,400 Call attempts were made to analyze the performance of Cellular Voice services in 7 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 7 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 7 x cities is shown in in **Table 3.2: City Wise Voice QoS KPIs Compliance Level**.

DESCRIPTION	JAZZ	TELENOR	UFONE	ZONG	SCOM
TOTAL CALLS ATTEMPTS	800	900	900	900	900
NETWORK ACESSEBILITY	100%	100%	100%	100%	100%
CALL SETUP SUCCESS RATE	100%	100%	99.71%	100%	100%
CALL SETUP TIME	7.8	6.5	6.4	8	4.3
CALL COMPLETION RATIO	100%	100%	96.86%	100%	100%
MEAN OPINION SCORE	3.8	3.6	3.8	3.6	3.8
ISHO SUCCESS RATE	N/A	N/A	N/A	N/A	100%
RAB SETUP SUCCESS RATE	N/A	N/A	N/A	N/A	100%

**Table 3.1: Call Statistics.**