OPERATOR	KPIS	GILGIT	HUNZA	SOST	GHAKUCH	ASTORE	SKARDU	KHAPLU
	NA	Yes	Yes	N/A	Yes	Yes	Yes	Yes
	SA	Yes	Yes	N/A	Yes	Yes	Yes	Yes
	CCT	No	No	N/A	No	Yes	No	Yes
Jazz	CCR	Yes	Yes	N/A	Yes	Yes	Yes	Yes
	MOS	Yes	Yes	N/A	Yes	Yes	Yes	Yes
	ISHO	N/A	N/A	N/A	N/A	N/A	N/A	N/A
	RSSR	N/A	N/A	N/A	N/A	N/A	N/A	N/A
	NA	Yes	Yes	Yes	Yes	Yes	Yes	Yes
	SA	Yes	Yes	Yes	Yes	Yes	Yes	Yes
	CCT	Yes	Yes	Yes	No	Yes	Yes	Yes
Telenor	CCR	Yes	Yes	Yes	Yes	Yes	Yes	Yes
	MOS	Yes	Yes	Yes	Yes	Yes	Yes	Yes
	ISHO	N/A	N/A	N/A	N/A	N/A	N/A	N/A
	RSSR	N/A	N/A	N/A	N/A	N/A	N/A	N/A
	NA	Yes	Yes	Yes	Yes	Yes	Yes	Yes
	SA	Yes	Yes	Yes	Yes	Yes	Yes	Yes
	CCT	Yes	Yes	Yes	Yes	Yes	Yes	Yes
Ufone	CCR	No	Yes	Yes	Yes	Yes	Yes	Yes
	MOS	Yes	Yes	Yes	Yes	Yes	Yes	Yes
	ISHO	N/A	N/A	N/A	N/A	N/A	N/A	N/A
	RSSR	N/A	N/A	N/A	N/A	N/A	N/A	N/A
	NA	Yes	Yes	Yes	Yes	Yes	Yes	Yes
	SA	Yes	Yes	Yes	Yes	Yes	Yes	Yes
	CCT	Yes	Yes	No	Yes	No	Yes	Yes
ZonG	CCR	Yes	Yes	Yes	Yes	Yes	Yes	Yes
	MOS	Yes	Yes	Yes	Yes	Yes	Yes	Yes
	ISHO	N/A	N/A	N/A	N/A	N/A	N/A	N/A
	RSSR	N/A	N/A	N/A	N/A	N/A	N/A	N/A
	NA	Yes	Yes	Yes	Yes	Yes	Yes	Yes
	SA	Yes	Yes	Yes	Yes	Yes	Yes	Yes
	CCT	Yes	Yes	Yes	Yes	Yes	Yes	Yes
SCOM	CCR	Yes	Yes	Yes	Yes	Yes	Yes	Yes
	MOS	Yes	Yes	Yes	Yes	Yes	Yes	Yes
	ISHO	Yes	Yes	Yes	Yes	Yes	Yes	Yes
	RSSR	Yes	Yes	Yes	Yes	Yes	Yes	Yes

Table 3.2: City Wise Voice QoS KPIs Compliance Level.

SMS SERVICE

4.1 A total of 4,400 SMS sending attempts were conducted to gauge the performance of SMS service in Gilgit Baltistan. CMO wise SMS statistics are shown in <u>Table 4.1: CMO Wise SMS Statistics</u> & <u>Table 4.2: SMS QoS KPIs Compliance Level.</u>

DESCRIPTION	Jazz	Telenor	Ufone	Zong	SCOM
SMS SEND REQUEST	800	900	900	900	900
SMS RECEIVE SUCCESS RATE	100%	100%	99%	100%	100%
END-TO-END DELIVERY TIME	9	5.93	7.9	10.9	2.9

Table 4.1: CMO Wise SMS Statistics

Operator		Jazz		Telenor		Ufone		ZonG		SCOM	
SMS KPI		SR	DT	SR	DT	SR	DT	SR	DT	SR	DT
	GILGIT	Yes	Yes	Yes	Yes	No	No	Yes	Yes	Yes	Yes
Cities	HUNZA	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes
	SOST	N/A	N/A	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes
Surveyed	GHAKUCH	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes
Ve.	ASTORE	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes
Sur	SKARDU	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes
	KHAPLU	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes
* Note SMS OoS KPIs: Success Rate (SR) > 99%, Delivery Time (DT) < 12											

Table 4.2: SMS QoS KPIs Compliance Level

DATA SERVICES SIGNAL STRENGTH

During the survey, SCOM data services were tested in technology locked mode, wherein 4G and 3G signal strength samples were recorded on survey routes. As per Next Generation Mobile Service (NGMS) Licenses and Cellular Mobile Network Quality of Service (QoS) Regulations 2021, licensees are required to meet the threshold of -100dBm or above with 90%confidence level for RSRP and RSCP.

The Confidence Level and Compliance of signal strength is shown in **Table 5.1: Data Services Signal Strength** -100dBm with 90% Confidence Level in Gilgit Baltistan.

	Avera	ge RSRP (4G)	Compliant (Yes/No)	Avera	Compliant	
City	Signal Strength	90% Confidence Level		Signal Strength	90% Confidence Level	Compliant (Yes/No)
GILGIT	-76	98.98%	Yes	-68.39	99.9%	Yes
HUNZA	-85.8	93.46%	Yes	-76.35	99.46%	Yes
GHAKUCH	-86	98.36%	Yes	-73.09	99.96%	Yes
ASTORE	-80.13	97.3%	Yes	-73.7	99.9%	Yes
SKARDU	-82.89	96.2%	Yes	-73.92	100%	Yes
SOST	-74	99.98%	Yes	-74	99.98%	Yes
KHAPLU	-88.9	93.41%	Yes	-80.21	99.29%	Yes

Table 5.1: Data Services Signal Strength -100dBm with 90% Confidence Level in Gilgit Baltistan.

USER DATA THROUGHPUT

As per Next Generation Mobile Service (NGMS) Licenses and Cellular Mobile Network Quality of Service (QoS) Regulations 2021, licensees are required to meet the threshold of minimum of 2Mbps of 4G User Data Throughput and a of minimum of 256Kbps of 3G User Data Throughput. The results of Data Service QoS KPI i.e. User Data Throughput is shown in **Table 6.1: User Data Throughput in Gilgit Baltistan.**

Cit-	SCOM					
City	User Data Throughput (4G) > 2Mbps	User Data Throughput (3G) > 256kbps				
GILGIT	7.2Mbps	4.5Mbps				
HUNZA	5.2Mbps	3.5Mbps				
GHAKUCH	4.6Mbps	2.8 Mbps				
ASTORE	4.5Mbps	3Mbps				
SKARDU	7.1Mbps	2.5Mbps				
SOST	5.9Mbps	4Mbps				
KHAPLU	4.5Mbps	3Mbps				

Table 6.1: User Data Throughput in Gilgit Baltistan