



LATENCY. As per Cellular Mobile Network Quality of Service (QoS) Regulations 2021, licensees are required to meet threshold of 75 milliseconds of 4G/LTE Technology & 150 milliseconds of 3G Technology of Latency. The results of QoS KPI Latency are shown in. **Table 4.11: Latency in Technology Auto Detect Mode < 75 milliseconds** and (ii) **Table 4.12: Latency in 3G Locked Mode < 150 milliseconds.**

LATENCY IN TECHNOLOGY AUTO DETECT MODE										
City	Latency [milliseconds]					Compliant (Yes/No)				
	Jazz	Telenor	Ufone	ZonG	SCOM	Jazz	Telenor	Ufone	ZonG	SCOM
MUZAFARABAD	105	91	73	97	68	No	No	Yes	No	Yes
MIRPUR	108	72	50	103	81	No	Yes	Yes	No	No
KOTLI	90	78	108	164	74	No	No	No	No	Yes

Table 4.11: Latency in Technology Auto Detect Mode < 75 milliseconds

LATENCY IN 3G LOCKED MODE		
City	Latency [milliseconds]	Compliant (Yes/No)
	SCOM	SCOM
MUZAFARABAD	83	Yes
MIRPUR	98	Yes
KOTLI	103	Yes

Table 4.12: Latency in Technology Auto Detect Mode < 150 millisecond

OOKLA SPEED TEST. In addition, Ookla Speed Test was also carried out to measure Download and Upload User Data Throughput and Round-Trip Time/Latency. The Number of Tests, Upload and Download User Data Throughput and Latency detail is mentioned in **Table 4.13: Ookla Tests Statistics.** City wise results of Ookla Download Throughput, Upload Throughput and Latency are shown in (i).

Table 4.14: Ookla Download Throughput in Technology Auto Detect Mode, (ii). Table 4.15: Ookla Upload Throughput in Technology Auto Detect Mode, (iii) Table 4.16 Ookla Latency in Technology Auto Detect Mode < 75 Milliseconds

DESCRIPTION				JAZZ	TELENOR	UFONE	ZONG	SCOM
Ookla Tests	THROUGHPUT TEST	DOWNLOAD	ATTEMPTS	1149	1147	1113	1147	1148
			SPEED (Mbps)	7.493	7.595	8.287	8.186	18.64
		UPLOAD	ATTEMPTS	1149	1147	1113	1147	1148
			SPEED (Mbps)	7.674	12.95	7.907	12.94	23.70
	PING TEST	ATTEMPTS		1149	1147	1113	1147	1148
		LATENCY (msec)		27.5	28.4	38	43.5	67.4

Table 4.13: Ookla Tests Statistics

OOKLA DOWNLOAD THROUGHPUT IN TECHNOLOGY AUTO DETECT MODE										
Cities	Download Throughput (Kbps)					Operator Position				
	Jazz	Telenor	Ufone	ZonG	SCOM	Jazz	Telenor	Ufone	ZonG	SCOM
MUZAFARABAD	6.55	5.06	5.95	12.92	9.48	Third	Fifth	Fourth	First	Second
MIRPUR	8.75	9.82	10.52	24.02	9.47	Fifth	Third	Second	First	Fourth
KOTLI	6.51	9.45	7.08	16.99	3.23	Fourth	Second	Third	First	Fifth

Table 4.14: Ookla Download Throughput in Technology Auto Detect Mode

OOKLA UPLOAD THROUGHPUT IN TECHNOLOGY AUTO DETECT MODE										
Cities	Upload Throughput (Kbps)					Operator Position				
	Jazz	Telenor	Ufone	ZonG	SCOM	Jazz	Telenor	Ufone	ZonG	SCOM
MUZAFARABAD	8599	4365	12020	27717	14196	Fourth	Fifth	Third	First	Second
MIRPUR	7686	10237	15383	23612	14096	Fifth	Fourth	Second	First	Third
KOTLI	6732	8882	11641	20015	10350	Fifth	Fourth	Second	First	Third

Table 4.15: Ookla Upload Throughput in Technology Auto Detect Mode

OOKLA LATENCY IN TECHNOLOGY AUTO DETECT MODE										
City	Latency [milliseconds]					Compliant (Yes/No)				
	Jazz	Telenor	Ufone	ZonG	SCOM	Jazz	Telenor	Ufone	ZonG	SCOM
MUZAFARABAD	26.09	32.14	20.45	63.14	26.31	Yes	Yes	Yes	Yes	Yes
MIRPUR	29.73	33.76	21.47	65.69	22.92	Yes	Yes	Yes	Yes	Yes
KOTLI	26.04	35.34	93.64	103.77	36.47	Yes	Yes	No	No	Yes

Table 4.16: Ookla Upload Throughput in Technology Auto Detect Mode

VOICE SERVICE

5.1. A total of 3,506 Call attempts made and out of which 167 were failed attempts. In 3,339 successful call attempts, 98 calls dropped prior to completion of two minutes duration, whereas, 3,241 calls remained connected for the complete duration of two minutes. The company wise call statistics is shown in Table5.1: Call Statistics.

DESCRIPTION	JAZZ	SCOM	TELENOR	UFONE	ZONG
TOTAL CALLS ATTEMPTS	685	712	678	715	716
FAILED CALLS ATTEMPTS	25	32	67	23	20
ESTABLISHED CALLS ATTEMPTS	660	680	611	692	696
DROPPED CALLS ATTEMPTS	33	17	21	4	23
COMPLETED CALLS ATTEMPTS	627	663	590	688	673
CALL SETUP SUCCESS RATE %	96.35	95.51	90.12	96.78	97.21
CALL SETUP TIME (s)	7.67	7.63	7.64	10.24	8.72
CALL COMPLETION RATE %	97.44	85.59	100	97.05	98.01
ISHO SUCCESS RATE %	-	100	-	-	-
RAB SETUP SUCCESS RATE %	100	100	-	-	-