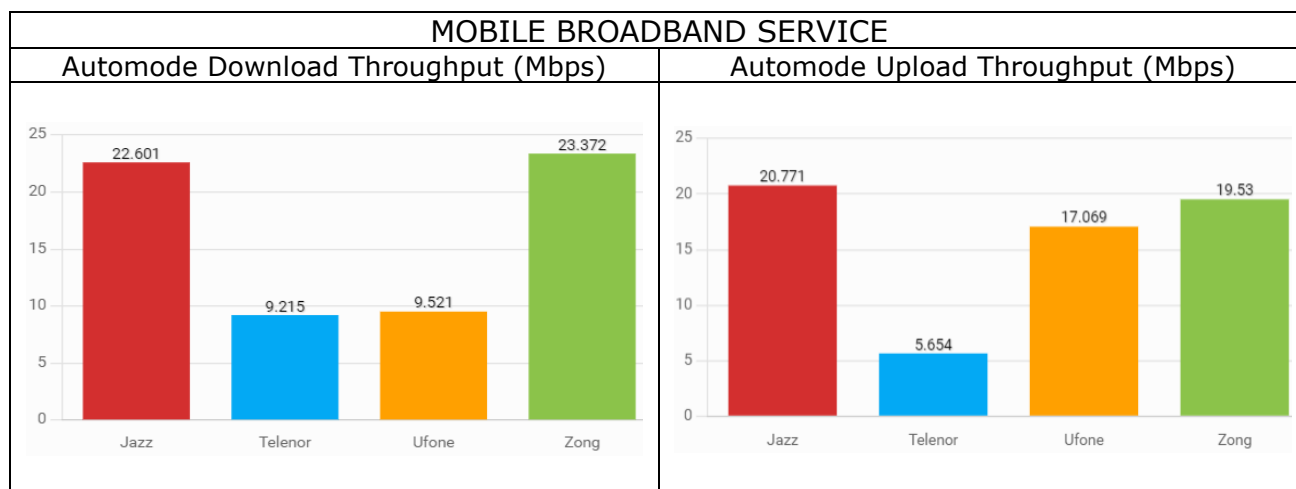|								
QUETTA	30.12	46.1	47.17	27.12	Yes	Yes	Yes	Yes
RAWALPINDI	21	42.5	23.7	16.5	Yes	Yes	Yes	Yes
CHUNIAN	38.56	46.26	36.96	16.78	Yes	Yes	Yes	Yes
SHARAQPUR	29.19	22.51	35.58	15.68	Yes	Yes	Yes	Yes
KOTRI	24.99	26.83	38.25	23.3	Yes	Yes	Yes	Yes

Table 7.3: Ookla Latency

8.   MOBILE BROADBAND SERVICE – WEB PAGE LOADING

Web Page Loading Time of different national and international websites were tested. Results of testing are shown in Table 8.1: Web Page Loading Time.

WEBPAGE LOADING TIME IN IN TECHNOLOGY AUTO DETECT MODE								
City	Webpage Loading Time [seconds]				Compliant (Yes/No)			
	Jazz	Telenor	Ufone	ZonG	Jazz	Telenor	Ufone	ZonG
BAHWALNAGAR	0.12	0.88	0.89	0.14	Yes	Yes	Yes	Yes
D.I KHAN	2.20	**6.60**	2.80	1.9	Yes	**No**	Yes	Yes
LAHORE	3.26	1.68	1.62	1.24	Yes	Yes	Yes	Yes
MARDAN	2.9	**5.2**	2.6	1.9	Yes	**No**	Yes	Yes
SAMUNDARI	0.68	0.31	0.34	0.14	Yes	Yes	Yes	Yes
SHIKARPUR	3.9	2.70	2.90	1.9	Yes	Yes	Yes	Yes
HYDERABAD	4.9	**6.7**	**6.5**	4.9	Yes	**No**	**No**	Yes
JHELUM	1.9	2.5	2.3	2.1	Yes	Yes	Yes	Yes
KARACHI MALIR	4.4	**7.2**	**6.2**	4.7	Yes	**No**	**No**	Yes
NAWABSHAH	4.6	2.5	3.1	1.7	Yes	Yes	Yes	Yes
NUSHKI	N/A	**6.6**	**7.6**	**5.3**	N/A	**No**	**No**	**No**
QUETTA	**5**	**7.5**	**6.5**	**5.4**	**No**	**No**	**No**	**No**
RAWALPINDI	2.3	2.7	2.3	2.1	Yes	Yes	Yes	Yes
CHUNIAN	**6.6**	**7.1**	**7.1**	**6.5**	**No**	**No**	**No**	**No**
SHARAQPUR	**5.3**	**6.4**	**6.9**	**5.9**	**No**	**No**	**No**	**No**
KOTRI	4.5	**6.9**	**6.6**	**5.1**	Yes	**No**	**No**	**No**

Table 8.1: Web Page Loading Time

Overall survey results of Mobile Broadband Services for each Mobile Operator are shown in the below graphs.

MOBILE BROADBAND SERVICE
Automode Download Throughput (Mbps) — Jazz 22.601, Telenor 9.215, Ufone 9.521, Zong 23.372
Automode Upload Throughput (Mbps) — Jazz 20.771, Telenor 5.654, Ufone 17.069, Zong 19.53

Description	Jazz	Telenor	Ufone	Zong
Total Calls Attempts	5101	4988	4705	4690
Failed Calls Attempts	42	143	98	57
Established Calls Attempts	5059	4845	4607	4633
Dropped Calls Attempts	0	1	0	1
Completed Calls Attempts	5059	4844	4607	4632
Call Setup Success Rate (%)	99.18	**97.13**	**97.92**	98.78
Call Setup Time (Sec)	**7.49**	**7.86**	6.67	6.78
Call Completion Rate (%)	100	**71.43**	98.61	**98.48**
Mean Opinion Score	3.82	3.87	3.57	3.67
Total Speech Test	50845	48666	46332	46536

Table 9.1: Call Statistic

CMO	KPIS	BAHWALNAGAR	D.I KHAN	LAHORE	MARDAN	SAMUNDARI	SHIKARPUR
Jazz	NA	Yes	Yes	Yes	Yes	Yes	Yes
	CSSR	**No**	Yes	Yes	Yes	Yes	Yes
	CCT	Yes	Yes	Yes	Yes	Yes	Yes
	CCR	Yes	Yes	Yes	Yes	Yes	Yes
	MOS	Yes	Yes	Yes	Yes	Yes	Yes
Telenor	NA	Yes	Yes	Yes	Yes	Yes	Yes
	CSSR	**No**	**No**	**No**	Yes	Yes	**No**
	CCT	Yes	Yes	Yes	Yes	Yes	Yes
	CCR	Yes	Yes	Yes	Yes	Yes	Yes
	MOS	Yes	Yes	Yes	Yes	Yes	Yes
Ufone	NA	Yes	Yes	Yes	Yes	Yes	Yes
	CSSR	Yes	**No**	Yes	**No**	Yes	**No**
	CCT	Yes	Yes	Yes	Yes	Yes	Yes
	CCR	Yes	Yes	Yes	Yes	Yes	Yes
	MOS	Yes	Yes	Yes	Yes	Yes	Yes
ZonG	NA	Yes	Yes	Yes	Yes	Yes	Yes
	CSSR	Yes	Yes	Yes	Yes	Yes	Yes
	CCT	Yes	Yes	Yes	Yes	Yes	Yes
	CCR	Yes	Yes	Yes	**No**	Yes	Yes
	MOS	Yes	Yes	Yes	Yes	Yes	Yes

Note Voice QoS KPIs: Network Accessibility (NA), Call Setup Success Rate (CSSR), Call Connection Time (CCT), Call Completion Ratio (CCR), Mean Opinion Score (MOS)

Table 9.2: Voice QoS KPIs Compliance Level

CMO	KPIS	HYDERABAD	JHELUM	MALIR	NAWABSHAH	NUSHKI	QUETTA
Jazz	NA	Yes	Yes	Yes	Yes	Yes	Yes
	CSSR	Yes	Yes	Yes	Yes	Yes	Yes
	CCT	Yes	Yes	Yes	Yes	Yes	Yes
	CCR	Yes	Yes	Yes	Yes	Yes	Yes
	MOS	Yes	Yes	Yes	Yes	No	Yes
Telenor	NA	Yes	Yes	Yes	Yes	Yes	Yes
	CSSR	Yes	Yes	**No**	**No**	**No**	**No**
	CCT	Yes	Yes	Yes	Yes	Yes	Yes
	CCR	Yes	Yes	Yes	Yes	Yes	**No**
	MOS	Yes	Yes	Yes	Yes	Yes	Yes
Ufone	NA	Yes	Yes	Yes	Yes	Yes	Yes
	CSSR	Yes	Yes	Yes	Yes	**No**	**No**
	CCT	Yes	Yes	Yes	Yes	Yes	Yes