OOKLA UPLOAD THROUGHPUT IN TECHNOLOGY AUTO DETECT MODE								
Cities	Upload Throughput (Kbps)				Operator Position			
	Jazz	Telenor	Ufone	ZonG	Jazz	Telenor	Ufone	ZonG
OKARA	23.9	7.5	20.17	26.74	Second	Fourth	Third	First
PESHAWAR	24.5	6.7	14.7	16.6	First	Fourth	Third	Second
QUETTA	20.9	7.1	14.37	12.29	First	Fourth	Second	Third
SEHWAN	13.1	6.3	16.83	30.81	Third	Fourth	Second	First
THATTA	29.2	7.1	22.3	31.86	Second	Fourth	Third	First

Table 4.10: 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	Jazz	Telenor	Ufone	ZonG
BATTAGRAM	27	48	22	34	Yes	Yes	Yes	Yes
BESHAM	29	43	N/A	76	Yes	Yes	N/A	No
DADU	32	29	58	26	Yes	Yes	Yes	Yes
DASKA	46	19	28	15	Yes	Yes	Yes	Yes
DERA ALLAH YAR	32	52	34	35	Yes	Yes	Yes	Yes
GHOTKI	25	38	35	42	Yes	Yes	Yes	Yes
ISLAMABAD	22	41	27	68	Yes	Yes	Yes	Yes
JHANG	28	54	70	36	Yes	Yes	Yes	Yes
KHUSHAB	27	57	93	36	Yes	Yes	No	Yes
MUZAFARGARH	53	56	49	32	Yes	Yes	Yes	Yes
MIRPUR KHAS	25	185	27	28	Yes	No	Yes	Yes
NOWSHERA	33	35	25	66	Yes	Yes	Yes	Yes
OKARA	49	36	61	29	Yes	Yes	Yes	Yes
PESHAWAR	41	45	32	83	Yes	Yes	Yes	No
QUETTA	30	47	55	45	Yes	Yes	Yes	Yes
SEHWAN	35	44	26	3	Yes	Yes	Yes	Yes
THATTA	27	42	27	26	Yes	Yes	Yes	Yes

Table 4.11: Ookla Latency in Technology Auto Detect Mode < 75 Milliseconds

4.6.   Overall results of Download and Upload Throughputs in Capacity Tests, Data Transfer Tests, Latency (overall) and Latency (Per Web Page), can be seen in attached graphs.

TECHNOLOGY AUTO DETECT MODE TESTING	
CAPACITY TEST DOWNLOAD SPEED (Mbps)	CAPACITY TEST UPLOAD SPEED (Mbps)
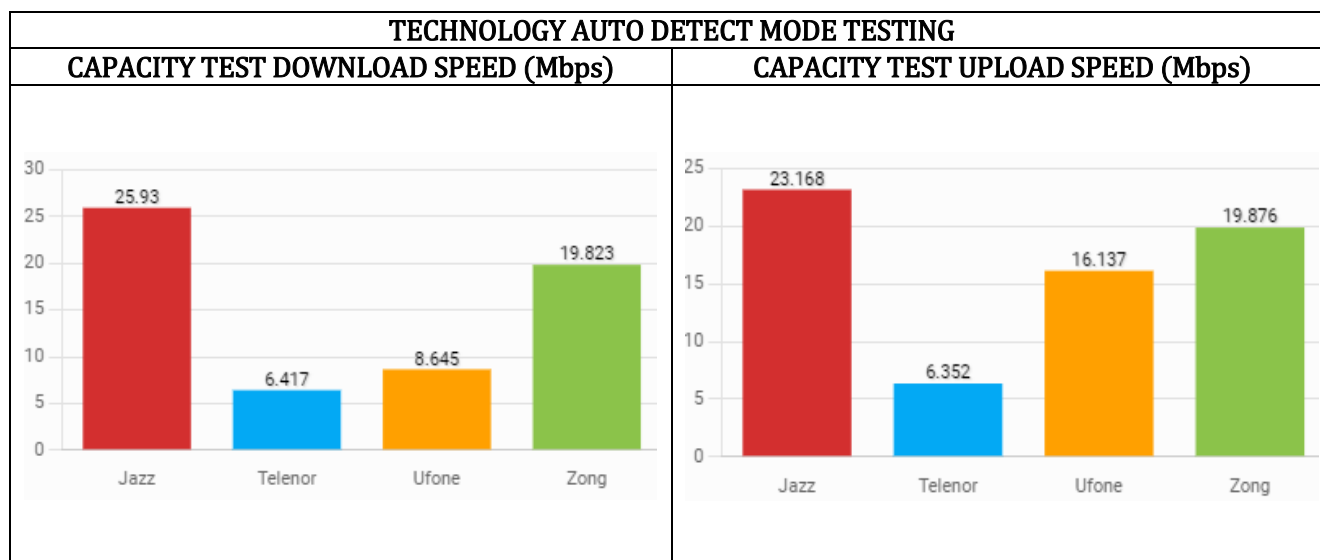
CMO	KPIS	THRESHOLD	ISLAMABAD	JHANG	KHUSHAB	MIRPUR KHAS	MUZAFARGARH	NOWSHERA
Jazz	NA	$\geq 99\%$	Yes	Yes	Yes	Yes	Yes	Yes
	CSSR	$\geq 98\%$	Yes	**No**	Yes	Yes	**No**	Yes
	CCT	≤ 7.5 sec	Yes	Yes	Yes	Yes	Yes	Yes
	CCR	$> 98\%$	Yes	Yes	Yes	Yes	**No**	Yes
	MOS	≥ 3	Yes	Yes	Yes	Yes	Yes	Yes
	ISHO	$\geq 98\%$	Yes	Yes	**N/A**	**N/A**	**N/A**	**N/A**
	RSSR	$> 98\%$	Yes	Yes	Yes	Yes	**N/A**	**N/A**
Telenor	NA	$\geq 99\%$	Yes	Yes	Yes	Yes	Yes	Yes
	CSSR	$\geq 98\%$	Yes	Yes	Yes	Yes	Yes	Yes
	CCT	≤ 7.5 sec	Yes	Yes	Yes	Yes	Yes	Yes
	CCR	$> 98\%$	**No**	Yes	Yes	Yes	Yes	Yes
	MOS	≥ 3	Yes	Yes	Yes	Yes	Yes	Yes
	ISHO	$\geq 98\%$	**N/A**	**N/A**	**N/A**	**N/A**	**N/A**	**N/A**
	RSSR	$> 98\%$	Yes	Yes	N/A	Yes	Yes	Yes
Ufone	NA	$\geq 99\%$	Yes	Yes	Yes	Yes	Yes	Yes
	CSSR	$\geq 98\%$	Yes	Yes	**No**	Yes	Yes	Yes
	CCT	≤ 7.5 sec	Yes	Yes	Yes	Yes	Yes	Yes
	CCR	$> 98\%$	Yes	Yes	Yes	Yes	Yes	Yes
	MOS	≥ 3	Yes	Yes	Yes	Yes	Yes	Yes
	ISHO	$\geq 98\%$	**N/A**	**N/A**	**N/A**	**N/A**	**N/A**	**N/A**
	RSSR	$> 98\%$	Yes	Yes	Yes	Yes	Yes	Yes
ZonG	NA	$\geq 99\%$	Yes	Yes	Yes	Yes	Yes	Yes
	CSSR	$\geq 98\%$	Yes	Yes	Yes	Yes	Yes	**No**
	CCT	≤ 7.5 sec	Yes	Yes	Yes	Yes	Yes	Yes
	CCR	$> 98\%$	Yes	Yes	Yes	Yes	Yes	**No**
	MOS	≥ 3	Yes	Yes	Yes	Yes	Yes	Yes
	ISHO	$\geq 98\%$	**N/A**	**N/A**	**N/A**	**N/A**	**N/A**	**N/A**
	RSSR	$> 98\%$	Yes	Yes	Yes	Yes	Yes	Yes

*Note Voice QoS KPIs: Network Accessibility (NA) > 99%, Service Accessibility (SA)> 98%, Call Connection Time (CCT) < 7.5 Seconds, Call Completion Ratio (CCR) > 98%, Mean Opinion Score (MOS) > 3, Inter System Hand Over (ISHO) > 98% & RAB Setup Success Rate (RSSR) > 98%

Table 5.3: Voice QoS KPIs Compliance Level