LATENCY IN TECHNOLOGY AUTO DETECT MODE								
Road	Latency (milliseconds)				Compliant (Yes/No)			
	Jazz	Telenor	Ufone	ZonG	Jazz	Telenor	Ufone	ZonG
Lahore to Islamabad	266	258	215	237	No	No	No	No
Lahore To Sialkot	266	228	268	247	No	No	No	No
Rawalpindi To Turkham	304	237	225	262	No	No	No	No

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

LATENCY IN 4G/LTE TECHNOLOGY LOCKED MODE								
Road	Latency [milliseconds]				Compliant (Yes/No)			
	Jazz	Telenor	Ufone	ZonG	Jazz	Telenor	Ufone	ZonG
Hazara Motorway	69.68	119.82	125.24	78.72	Yes	No	No	No
Haripur To Taxila	76.50	105.77	82.28	227.84	No	No	No	No
Pindi Bhatian To Multan	65.00	81.00	93.00	79.00	Yes	No	No	No
Multan to Sukkur	116.59	88.40	133.92	94.14	No	No	No	No
Nowshera To Chitral	90.66	126.42	124.63	151.97	No	No	No	No
Swabi To Katlang	162.04	120.59	105.77	86.65	No	No	No	No
Islamabad To Kohala	73.04	77.25	95.02	184.34	Yes	No	No	No
Islamabad To Peshawar	73.60	201.39	84.72	310.71	Yes	No	No	No
Lahore to Abdul Hakeem	116.73	74.52	89.87	83.52	No	Yes	No	No
Lahore to Islamabad	76.38	89.92	78.16	226.17	No	No	No	No
Lahore To Sialkot	91.16	99.16	77.23	89.92	No	No	No	No
Rawalpindi To Turkham	148.73	110.48	92.70	126.75	No	No	No	No

Table 4.12: Latency in 4G/LTE Technology Locked Mode < 75 milliseconds

LATENCY IN 3G TECHNOLOGY LOCKED MODE								
Road	Latency [milliseconds]				Compliant (Yes/No)			
	Jazz	Telenor	Ufone	ZonG	Jazz	Telenor	Ufone	ZonG
Hazara Motorway	510	337	465	207	No	No	No	No
Haripur To Taxila	547	480	431	187	No	No	No	No
Pindi Bhatian To Multan	253	739	484	204	No	No	No	No
Multan to Sukkur	353	955	602	216	No	No	No	No
Nowshera To Chitral	575	735	480	448	No	No	No	No
Swabi To Katlang	569	377	531	476	No	No	No	No
Islamabad To Kohala	474	294	392	169	No	No	No	No
Islamabad To Peshawar	542	292	430	209	No	No	No	No
Lahore to Abdul Hakeem	468	665	488	147	No	No	No	Yes
Lahore to Islamabad	517	495	459	187	No	No	No	No
Lahore To Sialkot	508	393	448	205	No	No	No	No
Rawalpindi To Turkham	601	425	523	463	No	No	No	No

Table 4.13: Latency in 3G Technology Locked Mode < 150 milliseconds

4.6.   During the survey, the deployed technologies by Cellular Mobile Operators (CMOs), Success Rate of http Transfer Download Tests and Resource Block Utilization have been recorded. The details can be seen in attached graphs.

		VOICE CALLS ROADS – COMPLIANCE (YES/NO)						
Operator	*Voice KPIs	Hazara Motorway	Quetta To Karachi	Haripur To Taxila	Pindi Bhatian To Multan	Multan to Sukkur	Nowshera To Chitral	Swabi To Katlang
Jazz	NA	Yes	**No**	Yes	Yes	Yes	Yes	Yes
Jazz	SA	**No**	**No**	**No**	Yes	No	**No**	Yes
Jazz	CCT	Yes	Yes	Yes	Yes	Yes	**No**	Yes
Jazz	CCR	**No**	**No**	**No**	Yes	**No**	**No**	Yes
Jazz	MOS	Yes	Yes	**No**	Yes	Yes	**No**	**No**
Jazz	ISHO	Yes	Yes	Yes	**N/A**	Yes	Yes	Yes
Jazz	RSSR	Yes	Yes	Yes	**N/A**	Yes	Yes	Yes
Telenor	NA	Yes	**No**	Yes	Yes	Yes	Yes	Yes
Telenor	SA	No	No	No	No	No	No	No
Telenor	CCT	**No**	Yes	**No**	Yes	Yes	Yes	Yes
Telenor	CCR	**No**	**No**	**No**	**No**	**No**	**No**	**No**
Telenor	MOS	**No**	**No**	**No**	Yes	Yes	Yes	Yes
Telenor	ISHO	**N/A**	Yes	**N/A**	**N/A**	Yes	Yes	Yes
Telenor	RSSR	Yes	Yes	Yes	Yes	Yes	Yes	Yes
Ufone	NA	Yes	Yes	Yes	Yes	Yes	**No**	No
Ufone	SA	**No**	**No**	**No**	**No**	**No**	**No**	Yes
Ufone	CCT	Yes	Yes	Yes	**No**	**No**	Yes	Yes
Ufone	CCR	**No**	**No**	**No**	Yes	Yes	**No**	**No**
Ufone	MOS	Yes	Yes	Yes	**No**	**No**	Yes	**No**
Ufone	ISHO	**No**	Yes	Yes	**No**	**No**	**No**	**No**
Ufone	RSSR	Yes	Yes	Yes	Yes	Yes	Yes	Yes
ZonG	NA	Yes	**No**	Yes	Yes	Yes	**No**	**No**
ZonG	SA	**No**	**No**	**No**	**No**	**No**	**No**	Yes
ZonG	CCT	Yes	Yes	Yes	Yes	Yes	Yes	Yes
ZonG	CCR	Yes	**No**	**No**	**No**	Yes	**No**	Yes
ZonG	MOS	Yes	Yes	Yes	Yes	Yes	Yes	Yes
ZonG	ISHO	N/A						
ZonG	RSSR	Yes	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 5.1: Voice QoS KPIs Compliance Level

		VOICE CALLS ROADS – COMPLIANCE (YES/NO)					
Operator	*Voice KPIs	Islamabad To Kohala	Islamabad To Peshawar	Lahore to Abdul Hakeem	Lahore to Islamabad	Lahore To Sialkot	Rawalpindi To Turkham
Jazz	NA	Yes	Yes	Yes	Yes	Yes	Yes
Jazz	SA	**No**	**No**	**No**	**No**	**No**	**No**
Jazz	CCT	Yes	Yes	N/A	**No**	N/A	**No**
Jazz	CCR	**No**	Yes	**No**	Yes	**No**	**No**
Jazz	MOS	**No**	**No**	Yes	Yes	Yes	Yes
Jazz	ISHO	Yes	Yes	Yes	**No**	N/A	**No**
Jazz	RSSR	Yes	Yes	Yes	Yes	N/A	Yes
Telenor	NA	Yes	Yes	Yes	Yes	Yes	Yes
Telenor	SA	**No**	**No**	**No**	**No**	**No**	**No**
Telenor	CCT	**No**	**No**	Yes	**No**	Yes	Yes
Telenor	CCR	**No**	**No**	**No**	**No**	**No**	**No**
Telenor	MOS	**No**	**No**	Yes	**No**	**No**	Yes