

4.4. **WEBPAGE LOADING TIME.** As per Cellular Mobile Network Quality of Service (QoS) Regulations 2021, licensees are required to meet Webpage Loading Time threshold of 5 Seconds. The results of Webpage Loading Time is shown in **Table 4.10: Webpage Loading Time < 5 Seconds**.

WEBPAGE LOADING TIME IN TECHNOLOGY AUTO DETECT MODE IN CITIES								
City	Webpage Loading Time [Seconds]				Compliant (Yes/No)			
	Jazz	Telenor	Ufone	ZonG	Jazz	Telenor	Ufone	ZonG
<i>Attock</i>	6.3	6.6	6.5	5.1	No	No	No	No
<i>Hafizabad</i>	6.7	7.6	5.0	6.2	No	No	No	No
<i>Rawalpindi</i>	6.2	6.2	5.7	4.9	No	No	No	Yes
<i>Hyderabad</i>	5.2	5.4	4.9	4.6	No	No	Yes	Yes
<i>Karachi East</i>	6.3	6.1	5.5	5.4	No	No	No	No
<i>Pakpattan</i>	5.8	6.0	4.2	5.5	No	No	Yes	No
<i>Khanpur</i>	7.6	7.4	5.2	6.3	No	No	No	No
<i>Lodhran</i>	7.5	6.9	8.1	6.5	No	No	No	No
<i>Wazirabad</i>	4.8	5.8	4.8	4.8	Yes	No	Yes	Yes

Table 4.10: Webpage Loading Time < 5 Seconds

4.5. **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 is shown in (i). **Table 4.11: Latency in Technology Auto Detect Mode < 75 milliseconds**, (ii). **Table 4.12: Latency in 4G/LTE Technology Locked Mode < 75 milliseconds & (iii) Table 4.13: Latency in 3G Technology Locked Mode < 150 milliseconds**.

LATENCY IN TECHNOLOGY AUTO DETECT MODE								
City	Latency (milliseconds)				Compliant (Yes/No)			
	Jazz	Telenor	Ufone	ZonG	Jazz	Telenor	Ufone	ZonG
<i>Attock</i>	241	219	205	208	No	No	No	No
<i>Hafizabad</i>	256	231	226	238	No	No	No	No
<i>Rawalpindi</i>	224	230	212	226	No	No	No	No
<i>Hyderabad</i>	281	215	223	249	No	No	No	No
<i>Karachi East</i>	205	209	195	213	No	No	No	No
<i>Pakpattan</i>	250	245	216	229	No	No	No	No
<i>Khanpur</i>	248	253	201	223	No	No	No	No
<i>Lodhran</i>	216	266	246	275	No	No	No	No
<i>Wazirabad</i>	219	216	225	222	No	No	No	No

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

LATENCY IN 4G/LTE TECHNOLOGY LOCKED MODE								
City	Latency [milliseconds]				Compliant (Yes/No)			
	Jazz	Telenor	Ufone	ZonG	Jazz	Telenor	Ufone	ZonG
<i>Attock</i>	87	74	67	169	No	Yes	Yes	No
<i>Hafizabad</i>	84	77	78	154	No	No	No	No
<i>Rawalpindi</i>	67	77	71	118	Yes	No	Yes	No
<i>Hyderabad</i>	276	211	223	248	No	No	No	No
<i>Karachi East</i>	N/A				N/A			
<i>Pakpattan</i>	88	84	60	69	No	No	Yes	Yes
<i>Khanpur</i>	78	109	62	84	No	No	Yes	No
<i>Lodhran</i>	68	105	84	77	Yes	No	No	No
<i>Wazirabad</i>	80	74	87	74	No	Yes	No	Yes

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

LATENCY IN 3G TECHNOLOGY LOCKED MODE								
City	Latency [milliseconds]				Compliant (Yes/No)			
	Jazz	Telenor	Ufone	ZonG	Jazz	Telenor	Ufone	ZonG
<i>Attock</i>	521	504	523	270	No	No	No	No
<i>Hafizabad</i>	537	338	525	172	No	No	No	No
<i>Rawalpindi</i>	504	340	466	206	No	No	No	No
<i>Hyderabad</i>	463	N/A	231	N/A	No	No	No	No
<i>Karachi East</i>	N/A	N/A	N/A	N/A	No	No	No	No
<i>Pakpattan</i>	560	694	388	110	No	No	No	Yes
<i>Khanpur</i>	248	783	505	159	No	No	No	No
<i>Lodhran</i>	243	1021	480	114	No	No	No	Yes
<i>Wazirabad</i>	557	457	499	127	No	No	No	Yes

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.

