

4G Signal Strength -100dBm with 90% Confidence Level – Technology Auto Detect Mode								
City	Confidence Level (%)				Compliant (Yes/No)			
	Jazz	Telenor	Ufone	ZonG	Jazz	Telenor	Ufone	ZonG
SUKKUR	99.84%	93.97%	99.05%	99.84%	Yes	Yes	Yes	Yes
BAHAWALPUR	95.49%	91.74%	87.36%	98.81%	Yes	Yes	No	Yes
CHARSADDA	84.52%	70.63%	99.40%	98.68%	No	No	Yes	Yes
GWADAR	90.60%	96.57%	99.27%	96.38%	Yes	Yes	Yes	Yes
QUETTA	99.62%	97.04%	99.09%	99.61%	Yes	Yes	Yes	Yes
ISLAMABAD	97.47%	96.68%	99.71%	98.89%	Yes	Yes	Yes	Yes
KOT RADHA KISHAN	99.13%	88.75%	98.06%	99.20%	Yes	No	Yes	Yes
SHEIKHUPURA	99.64%	97.11%	98.57%	100.00%	Yes	Yes	Yes	Yes
HANGU	87.46%	40.77%	99.78%	72.76%	No	No	Yes	No
KUCHLAK	95.97%	77.87%	99.66%	98.49%	Yes	No	Yes	Yes
ABBOTTABAD	94.50%	96.16%	98.49%	97.70%	Yes	Yes	Yes	Yes
LOWER DIR	98.95%	98.56%	97.76%	85.25%	Yes	Yes	Yes	No
MANSEHRA	96.97%	98.46%	97.81%	98.84%	Yes	Yes	Yes	Yes
MATIARI	99.90%	89.80%	92.50%	95.66%	Yes	No	Yes	Yes
MACH	83.20%	90.99%	95.80%	90.04%	No	Yes	Yes	Yes
PASROOR	98.35%	97.82%	98.61%	98.40%	Yes	Yes	Yes	Yes
PISHIN	96.33%	79.92%	99.07%	98.64%	Yes	No	Yes	Yes
SARGODHA	97.61%	90.61%	96.28%	94.38%	Yes	Yes	Yes	Yes
UMERKOT	89.76%	98.32%	90.40%	97.26%	No	Yes	Yes	Yes

Table 3.1: 4G Signal Strength Technology Auto Detect Mode -100 dBm with 90% Confidence Level

4G Signal Strength -100dBm with 90% Confidence Level – Technology Locked Mode								
City	Confidence Level (%)				Compliant (Yes/No)			
	Jazz	Telenor	Ufone	ZonG	Jazz	Telenor	Ufone	ZonG
SUKKUR	99.76%	95.56%	98.94%	99.67%	Yes	Yes	Yes	Yes
BAHAWALPUR	99.10%	97.97%	94.41%	99.98%	Yes	Yes	Yes	Yes
CHARSADDA	89.37%	81.52%	98.78%	97.83%	No	No	Yes	Yes
GWADAR	96.74%	97.92%	99.48%	98.81%	Yes	Yes	Yes	Yes
QUETTA	99.71%	98.52%	99.11%	99.79%	Yes	Yes	Yes	Yes
ISLAMABAD	98.36%	96.05%	99.67%	99.30%	Yes	Yes	Yes	Yes
KOT RADHA KISHAN	99.71%	91.46%	99.13%	98.31%	Yes	Yes	Yes	Yes
SHEIKHUPURA	99.77%	94.19%	98.90%	99.87%	Yes	Yes	Yes	Yes
HANGU	93.52%	69.50%	99.99%	80.27%	Yes	No	Yes	No
KUCHLAK	97.31%	90.16%	99.81%	99.97%	Yes	Yes	Yes	Yes
ABBOTTABAD	96.84%	98.68%	97.88%	98.76%	Yes	Yes	Yes	Yes
LOWER DIR	99.20%	99.40%	98.67%	92.47%	Yes	Yes	Yes	Yes
MANSEHRA	97.43%	99.43%	97.46%	98.59%	Yes	Yes	Yes	Yes
MATIARI	99.53%	86.01%	86.54%	96.10%	Yes	No	No	Yes
MACH	85.21%	92.44%	93.85%	91.34%	No	Yes	Yes	Yes
PASROOR	98.19%	96.38%	97.90%	98.62%	Yes	Yes	Yes	Yes
PISHIN	97.61%	83.29%	99.13%	98.41%	Yes	No	Yes	Yes
SARGODHA	98.30%	95.14%	92.76%	97.56%	Yes	Yes	Yes	Yes
UMERKOT	92.07%	97.43%	93.19%	92.90%	Yes	Yes	Yes	Yes

Table 3.2: 4G Signal Strength Technology Locked Mode -100 dBm with 90% Confidence Level

3.2. **3G SIGNAL STRENGTH IN TECHNOLOGY AUTO DETECT MODE.** During the survey, 3G signal strength samples were also recorded on survey routes, wherever network switched to 3G while keeping the mobile handset in technology auto detect mode and also in technology locked mode. As per Next Generation Mobile Service (NGMS) licenses, licensees are required to meet the threshold of -100 dBm or above of Received Signal Code Power (RSCP) with 90% confidence level. City wise compliance of 90% Confidence Level of signal strength is shown in (i). **Table 3.3: 3G Signal Strength Technology Auto Detect**

Mode -100 dBm with 90% Confidence Level (ii). Table 3.4: 3G Signal Strength Technology Locked Mode - 100 dBm with 90% Confidence Level.

3G Signal Strength -100dBm with 90% Confidence Level – Technology Auto Detect Mode								
City	Confidence Level (%)				Compliant (Yes/No)			
	Jazz	Telenor	Ufone	ZonG	Jazz	Telenor	Ufone	ZonG
SUKKUR	N/A	100.00%	N/A	N/A	N/A	Yes	N/A	N/A
BAHAWALPUR	N/A	N/A	99.63%	100.00%	N/A	N/A	Yes	Yes
CHARSADDA	100.00%	99.72%	100.00%	100.00%	Yes	Yes	Yes	Yes
GWADAR	N/A	98.95%	100.00%	97.30%	N/A	Yes	Yes	Yes
QUETTA	99.38%	100.00%	100.00%	100.00%	Yes	Yes	Yes	Yes
ISLAMABAD	100.00%	100.00%	100.00%	100.00%	Yes	Yes	Yes	Yes
KOT RADHA KISHAN	N/A	N/A	100.00%	N/A	N/A	N/A	Yes	N/A
SHEIKHUPURA	N/A	N/A	100.00%	N/A	N/A	N/A	Yes	N/A
HANGU	91.48%	97.68%	100.00%	98.00%	Yes	Yes	Yes	Yes
KUCHLAK	99.93%	99.21%	100.00%	99.95%	Yes	Yes	Yes	Yes
ABBOTTABAD	N/A	100.00%	100.00%	N/A	N/A	Yes	Yes	N/A
LOWER DIR	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
MANSEHRA	100.00%	100.00%	100.00%	N/A	Yes	Yes	Yes	N/A
MATIARI	N/A	100.00%	100.00%	48.22%	N/A	Yes	Yes	No
MACH	100.00%	35.00%	99.56%	100.00%	Yes	No	Yes	Yes
PASROOR	N/A	N/A	100.00%	N/A	N/A	N/A	Yes	N/A
PISHIN	62.34%	94.88%	100.00%	81.52%	No	Yes	Yes	No
SARGODHA	N/A	100.00%	100.00%	100.00%	N/A	Yes	Yes	Yes
UMERKOT	33.33%	100.00%	99.23%	N/A	No	Yes	Yes	N/A

Note: N/A means No Fallback to 3G Network

Table 3.3: 3G Signal Strength Technology Auto Detect Mode -100 dBm with 90% Confidence Level

3G Signal Strength -100dBm with 90% Confidence Level – Technology Locked Mode								
City	Signal Strength Percentage				Compliant (Yes/No)			
	Jazz	Telenor	Ufone	ZonG	Jazz	Telenor	Ufone	ZonG
SUKKUR	98.75%	100.00%	99.93%	100.00%	Yes	Yes	Yes	Yes
BAHAWALPUR	100.00%	100.00%	99.99%	100.00%	Yes	Yes	Yes	Yes
CHARSADDA	100.00%	99.47%	100.00%	100.00%	Yes	Yes	Yes	Yes
GWADAR	99.99%	100.00%	100.00%	100.00%	Yes	Yes	Yes	Yes
QUETTA	99.38%	100.00%	100.00%	100.00%	Yes	Yes	Yes	Yes
ISLAMABAD	100.00%	100.00%	100.00%	100.00%	Yes	Yes	Yes	Yes
KOT RADHA KISHAN	100.00%	99.59%	100.00%	100.00%	Yes	Yes	Yes	Yes
SHEIKHUPURA	100.00%	100.00%	99.95%	100.00%	Yes	Yes	Yes	Yes
HANGU	91.66%	96.42%	100.00%	98.34%	Yes	Yes	Yes	Yes
KUCHLAK	99.92%	99.21%	100.00%	99.88%	Yes	Yes	Yes	Yes
ABBOTTABAD	99.83%	100.00%	99.90%	100.00%	Yes	Yes	Yes	Yes
LOWER DIR	99.15%	99.95%	96.86%	100.00%	Yes	Yes	Yes	Yes
MANSEHRA	100.00%	100.00%	98.74%	100.00%	Yes	Yes	Yes	Yes
MATIARI	100.00%	100.00%	100.00%	99.68%	Yes	Yes	Yes	Yes
MACH	98.75%	99.51%	100.00%	98.04%	Yes	Yes	Yes	Yes
PASROOR	100.00%	100.00%	100.00%	100.00%	Yes	Yes	Yes	Yes
PISHIN	99.21%	99.39%	100.00%	99.77%	Yes	Yes	Yes	Yes
SARGODHA	99.42%	100.00%	99.87%	100.00%	Yes	Yes	Yes	Yes
UMERKOT	93%	100%	100%	100%	Yes	Yes	Yes	Yes

Table 3.4: 3G Signal Strength Technology Locked Mode -100 dBm with 90% Confidence Level

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4.1. **DATA SESSIONS IN TECHNOLOGY AUTO DETECT MODE & LOCKED MODE.** A series of data tests including Capacity Tests, Data Transfer Tests, Web Browsing and Ping were carried out wherein Key