

DOWNLOAD USER DATA THROUGHPUT IN TECHNOLOGY AUTO DETECT MODE (FIXED DURATION)								
City	Download User Data Throughput [Mbps]				Operator Position			
	Jazz	Telenor	Ufone	ZonG	Jazz	Telenor	Ufone	ZonG
SUJAWAL	35.88	3.75	27.37	29.90	First	Fourth	Third	Second
MITHI	30.56	4.11	11.33	36.56	Second	Fourth	Third	First
ABBOTTABAD	21.49	4.03	7.54	20.56	First	Fourth	Third	Second
SHUJABAD	18.03	8.66	2.02	30.38	Second	Third	Fourth	First
SWABI	23.63	2.02	5.39	14.21	First	Fourth	Third	Second
MURIDKE	20.61	10.40	13.45	24.98	Second	Fourth	Third	First

Table4.2: Download User Data Throughput Technology Auto Detect Mode [Fixed Duration] \geq 3Mbps

DOWNLOAD USER DATA THROUGHPUT IN TECHNOLOGY AUTO DETECT MODE (FIXED SIZE)								
City	Download User Data Throughput [Mbps]				Operator Position			
	Jazz	Telenor	Ufone	ZonG	Jazz	Telenor	Ufone	ZonG
UPPER DIR	7.00	4.50	10.29	9.07	Third	Fourth	First	Second
LARKANA	11.83	5.52	6.05	11.28	First	Fourth	Third	Second
LAHORE	10.40	7.47	10.28	14.39	Second	Fourth	Third	First
KHAIRPUR	9.14	8.73	6.62	11.90	Second	Third	Fourth	First
KAHROR PACCA	10.70	9.19	5.73	13.00	Second	Third	Fourth	First
SHAHKOT	12.78	6.46	11.27	10.13	First	Fourth	Second	Third
GUJAR KHAN	13.40	3.83	7.58	12.08	First	Fourth	Third	Second
WAH/ TAXILA	11.13	3.51	8.73	10.76	First	Fourth	Third	Second
RAWALPINDI	13.17	4.89	7.60	11.45	First	Fourth	Third	Second
BUNER	11.67	3.25	4.70	8.43	First	Fourth	Third	Second
JACOBABAD	13.22	7.57	7.64	11.59	First	Fourth	Third	Second
SUJAWAL	15.45	3.45	14.53	13.85	First	Fourth	Second	Third
MITHI	13.57	5.30	8.31	10.95	First	Fourth	Third	Second
ABBOTTABAD	10.9	4.9	6.7	10.5	First	Fourth	Third	Second
SHUJABAD	10.8	7.0	3.4	14.9	Second	Third	Fourth	First
SWABI	11.6	3.6	5.4	8.5	First	Fourth	Third	Second
MURIDKE	10.5	7.3	8.9	12.4	Second	Fourth	Third	First

Table4.3: Download User Data Throughput Technology Auto Detect Mode [Fixed Size] \geq 3Mbps

4.3. **UPLOAD USER DATA THROUGHPUT.** As per Cellular Mobile Network Quality of Service (QoS) Regulations 2021, licensees are required to meet the threshold of minimum of 786Kbps of 4G/LTE & 128Kbps of 3G of Upload User Data Throughput. The results of Data Service QoS KPI i.e. Upload User Data Throughput is shown in (i). Table 4.4: Upload User Data Throughput Technology Auto Detect Mode [Fixed Duration] \geq 768Kbps, (ii). Table 4.5: Upload User Data Throughput Technology Auto Detect Mode [Fixed Size] \geq 768Kbps,

UPLOAD USER DATA THROUGHPUT IN TECHNOLOGY AUTO DETECT MODE (FIXED DURATION)								
City	Upload User Data Throughput [Kbps]				Operator Position			
	Jazz	Telenor	Ufone	ZonG	Jazz	Telenor	Ufone	ZonG
UPPER DIR	9507.45	3170.27	17244.33	13612.93	Third	Fourth	First	Second
LARKANA	24512.48	4702.53	20062.1	23229.12	First	Fourth	Third	Second
LAHORE	23461.84	8847.7	20101.42	22446.8	First	Fourth	Third	Second
KHAIRPUR	24993.93	6974.67	17714.76	23106.16	First	Fourth	Third	Second
KAHROR PACCA	30147.08	5254.37	12927.14	19185.98	First	Fourth	Third	Second
SHAHKOT	28517.78	4735.65	19663.35	24699.69	First	Fourth	Third	Second
GUJAR KHAN	29127.13	6331.51	20642.18	18486.91	First	Fourth	Second	Third
WAH/ TAXILA	20938.3	6911.5	21533.72	18357.29	Second	Fourth	First	Third
RAWALPINDI	23112.06	6676.87	18659.59	19165.98	First	Fourth	Third	Second

UPLOAD USER DATA THROUGHPUT IN TECHNOLOGY AUTO DETECT MODE (FIXED DURATION)								
City	Upload User Data Throughput [Kbps]				Operator Position			
	Jazz	Telenor	Ufone	ZonG	Jazz	Telenor	Ufone	ZonG
BUNER	12076.96	6402.05	11474.17	14910.37	Second	Fourth	Third	First
JACOBABAD	21392.15	5395.46	20752.6	24100.5	Second	Fourth	Third	First
SUJAWAL	30264.2	8667.95	24412.42	26721.56	First	Fourth	Third	Second
MITHI	27408.96	5363.88	21042.25	14055.58	First	Fourth	Second	Third
ABBOTTABAD	24644.38	5952.18	16826.93	16966.41	First	Fourth	Third	Second
SHUJABAD	18676.77	4130.71	10026.45	20404.5	Second	Fourth	Third	First
SWABI	16598.01	4779.99	15172.14	17896.14	Second	Fourth	Third	First
MURIDKE	27363.76	8960.83	19725.39	23908.06	First	Fourth	Third	Second

Table 4.4: Upload User Data Throughput Technology Auto Detect Mode [Fixed Duration] \geq 768Kbps

UPLOAD USER DATA THROUGHPUT IN TECHNOLOGY AUTO DETECT MODE (FIXED SIZE)								
City	Upload User Data Throughput [Kbps]				Operator Position			
	Jazz	Telenor	Ufone	ZonG	Jazz	Telenor	Ufone	ZonG
UPPER DIR	4927.35	3068.89	5575.65	5381.32	Third	Fourth	First	Second
LARKANA	6606.51	4256.48	7313.52	6148.18	Second	Fourth	First	Third
LAHORE	7698.76	5448.96	7130.36	6750.15	First	Fourth	Second	Third
KHAIRPUR	6051.87	5106.27	6749.1	6724.66	Third	Fourth	First	Second
KAHROR PACCA	7344.14	3887.46	5608.74	5704.35	First	Fourth	Third	Second
SHAHKOT	8255.79	3669.27	7264.38	7217.23	First	Fourth	Second	Third
GUJAR KHAN	8416.55	4617.48	7797.97	6288.04	First	Fourth	Second	Third
WAH/ TAXILA	6595.94	4806.2	6713.08	7549.82	Third	Fourth	Second	First
RAWALPINDI	7460.44	4827.62	7021.3	8039.07	Second	Fourth	Third	First
BUNER	6027.38	4254.6	5553.95	5629.37	First	Fourth	Third	Second
JACOBABAD	6513.63	3991.51	6460.68	6941.84	Second	Fourth	Third	First
SUJAWAL	8739.95	5786.09	7771.44	7785.5	First	Fourth	Third	Second
MITHI	7910.93	3836.52	7066.35	5297.96	First	Fourth	Second	Third
ABBOTTABAD	6948.94	4392.97	6117.5	7318.75	Second	Fourth	Third	First
SHUJABAD	6214.58	3394.36	5405.01	5699.26	First	Fourth	Third	Second
SWABI	5912.57	3846.93	5942.12	6338.53	Third	Fourth	Second	First
MURIDKE	6260.61	5286.31	6539.18	6778.73	Third	Fourth	Second	First

Table 4.5: Upload User Data Throughput Technology Auto Detect Mode [Fixed Size] \geq 768Kbps

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 are shown in **Table 4.6: Webpage Loading Time < 5 Seconds.**

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
UPPER DIR	3.60	3.59	3.78	3.05	Yes	Yes	Yes	Yes
LARKANA	2.42	2.98	3.37	2.82	Yes	Yes	Yes	Yes
LAHORE	2.84	2.72	3.02	2.41	Yes	Yes	Yes	Yes
KHAIRPUR	2.50	2.70	3.20	2.70	Yes	Yes	Yes	Yes
KAHROR PACCA	2.57	3.58	3.73	2.61	Yes	Yes	Yes	Yes
SHAHKOT	2.41	3.01	2.31	2.17	Yes	Yes	Yes	Yes
GUJAR KHAN	3.12	3.03	3.28	2.92	Yes	Yes	Yes	Yes