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	
MIRPUR KHAS	29.70	6.50	11.20	23.41	First	Fourth	Third	Second	
NOWSHERA	28.25	5.02	6.29	15.75	First	Fourth	Third	Second	
OKARA	23.30	7.60	11.52	22.96	First	Fourth	Third	Second	
PESHAWAR	23.47	3.89	4.79	12.20	First	Fourth	Third	Second	
QUETTA	24.20	7.80	6.81	14.92	First	Third	Fourth	Second	
SEHWAN	14.70	8.21	12.38	23.80	Second	Fourth	Third	First	
THATTA	34.60	9.30	8.20	23.74	First	Third	Fourth	Second	

Table4.2: Download User Data Throughput Technology Auto Detect Mode [Fixed Duration] ≥ 4Mbps

DOWNLOAD USER DATA THROUGHPUT IN TECHNOLOGY AUTO DETECT MODE (FIXED SIZE)									
C:L-	Download User Data Throughput [Mbps]				Operator Position				
City	Jazz	Telenor	Ufone	ZonG	Jazz	Telenor	Ufone	ZonG	
BATTAGRAM	12.10	3.10	8.04	11.04	First	Fourth	Third	Second	
BESHAM	15.70	4.50	N/A	15.73	Second	Third	N/A	First	
DADU	10.65	5.04	6.39	10.22	First	Fourth	Third	Second	
DASKA	10.38	4.99	10.74	11.66	Third	Fourth	Second	First	
DERA ALLAH YAR	20.50	4.40	5.21	18.70	First	Fourth	Third	Second	
GHOTKI	9.29	6.17	4.66	10.13	Second	Third	Fourth	First	
ISLAMABAD	12.75	5.56	6.40	10.43	First	Fourth	Third	Second	
JHANG	13.76	6.51	6.50	9.20	First	Third	Fourth	Second	
KHUSHAB	13.24	8.52	4.05	10.87	First	Third	Fourth	Second	
MUZAFARGARH	12.10	8.70	6.58	13.68	Second	Third	Fourth	First	
MIRPUR KHAS	12.50	5.90	8.85	14.19	Second	Fourth	Third	First	
NOWSHERA	12.25	4.77	6.85	8.95	First	Fourth	Third	Second	
OKARA	9.60	6.80	8.84	11.23	Second	Fourth	Third	First	
PESHAWAR	11.12	4.63	5.30	7.80	First	Fourth	Third	Second	
QUETTA	11.80	6.70	6.02	10.55	First	Third	Fourth	Second	
SEHWAN	10.84	6.68	7.70	12.60	Second	Fourth	Third	First	
THATTA	16.40	8.00	7.59	14.23	First	Third	Fourth	Second	

Table4.3: Download User Data Throughput Technology Auto Detect Mode [Fixed Size] ≥ 4Mbps

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 1 Mbps of 4G/LTE. 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]**  $\geq$  1 Mbps, (ii). **Table 4.5: Upload User Data Throughput Technology Auto Detect Mode [Fixed Size]**  $\geq$  1 Mbps,

UPLOAD USER DATA THROUGHPUT IN TECHNOLOGY AUTO DETECT MODE (FIXED DURATION)									
O'.	Upload	l User Data	Throughput	[Mbps]	Operator Position				
City	Jazz	Telenor	Ufone	ZonG	Jazz	Telenor	Ufone	ZonG	
BATTAGRAM	24.3	4.6	18.88	11.72	First	Fourth	Second	Third	
BESHAM	23.1	5.0	N/A	13.4	First	Third	N/A	Second	
DADU	20.33	3.69	15.56	22.23	Second	Fourth	Third	First	
DASKA	21.8	5.3	19.7	26.6	Second	Fourth	Third	First	
DERA ALLAH YAR	1.90	2.90	3.20	1.80	Third	Second	First	Fourth	
GHOTKI	25.21	5.28	14.80	22.04	First	Fourth	Third	Second	
ISLAMABAD	19.39	7.56	14.11	13.52	First	Fourth	Second	Third	
JHANG	23.26	5.95	18.61	24.87	Second	Fourth	Third	First	

UPLOAD USER DATA THROUGHPUT IN TECHNOLOGY AUTO DETECT MODE (FIXED DURATION)									
C:L-	Upload User Data Throughput [Mbps]				Operator Position				
City	Jazz	Telenor	Ufone	ZonG	Jazz	Telenor	Ufone	ZonG	
KHUSHAB	25.01	5.92	12.99	23.44	First	Fourth	Third	Second	
MUZAFARGARH	24.9	8.3	16.2	23.51	First	Fourth	Third	Second	
MIRPUR KHAS	23.5	3.8	23.6	22.04	Second	Fourth	First	Third	
NOWSHERA	23.45	8.26	15.13	17.94	First	Fourth	Third	Second	
OKARA	21	7.3	17.77	20	First	Fourth	Third	Second	
PESHAWAR	21.98	6.22	11.89	16.35	First	Fourth	Third	Second	
QUETTA	20.4	5.9	12.91	13.33	First	Fourth	Third	Second	
SEHWAN	20.96	65.12	6.8	26	Third	First	Fourth	Second	
THATTA	33.1	6.5	21.57	27.57	First	Fourth	Third	Second	

Table 4.4: Upload User Data Throughput Technology Auto Detect Mode [Fixed Duration]  $\geq$  1 Mbps

UPLOAD USER DATA THROUGHPUT IN TECHNOLOGY AUTO DETECT MODE (FIXED SIZE)										
City	Upload	l User Data	Throughp	ut [Kbps]	Operator Position					
City	Jazz	Telenor	Ufone	ZonG	Jazz	Telenor	Ufone	ZonG		
BATTAGRAM	6.2	4	7.48	5.9	Second	Fourth	First	Third		
BESHAM	6.8	4.2	N/A	4.84	First	Third	N/A	Second		
DADU	6.08	3.42	6.28	6.41	Third	Fourth	Second	First		
DASKA	6.4	4.2	7.2	8.2	Third	Fourth	Second	First		
DERA ALLAH YAR	24.5	3.7	16.07	19.06	First	Fourth	Third	Second		
GHOTKI	6.13	4.27	5.73	6.11	First	Fourth	Third	Second		
ISLAMABAD	6.00	5.00	6.19	5.92	Second	Fourth	First	Third		
JHANG	6.37	4.44	7.29	6.68	Third	Fourth	First	Second		
KHUSHAB	6.32	4.27	5.44	6.81	Second	Fourth	Third	First		
MUZAFARGARH	5.8	5.5	6.33	7.03	Third	Fourth	Second	First		
MIRPUR KHAS	7.8	3.6	9.14	8.38	Third	Fourth	First	Second		
NOWSHERA	5.90	5.36	6.70	6.07	Third	Fourth	First	Second		
OKARA	5.8	5	6.7	6.43	Third	Fourth	First	Second		
PESHAWAR	5.63	4.36	5.05	5.92	Second	Fourth	Third	First		
QUETTA	5.8	4.6	6.43	7.26	Third	Fourth	Second	First		
SEHWAN	6.54	4.9	2.3	8.5	Second	Third	Fourth	First		
THATTA	8.6	5.3	8.76	9.71	Third	Fourth	Second	First		

Table 4.5: Upload User Data Throughput Technology Auto Detect Mode [Fixed Size] ≥ 1 Mbps

4.4. **WEBPAGE LOADING TIME.** As per Cellular Mobile Network Quality of Service (QoS) Regulations 2021, licensees are required to meet <u>Webpage Loading Time threshold of 5 Seconds.</u> 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									
C:	Webpage Loading Time [seconds]				Compliant (Yes/No)				
City	Jazz	Telenor	Ufone	ZonG	Jazz	Telenor	Ufone	ZonG	
BATTAGRAM	2.40	7.00	1.90	2.30	Yes	No	Yes	Yes	
BESHAM	2.20	6.60	N/A	2.20	Yes	No	N/A	Yes	
DADU	2.68	2.86	3.35	2.21	Yes	Yes	Yes	Yes	
DASKA	2.47	3.18	2.30	2.27	Yes	Yes	Yes	Yes	
DERA ALLAH YAR	1.9	2.9	3.2	1.8	Yes	Yes	Yes	Yes	
GHOTKI	2.11	2.66	3.16	2.16	Yes	Yes	Yes	Yes	