

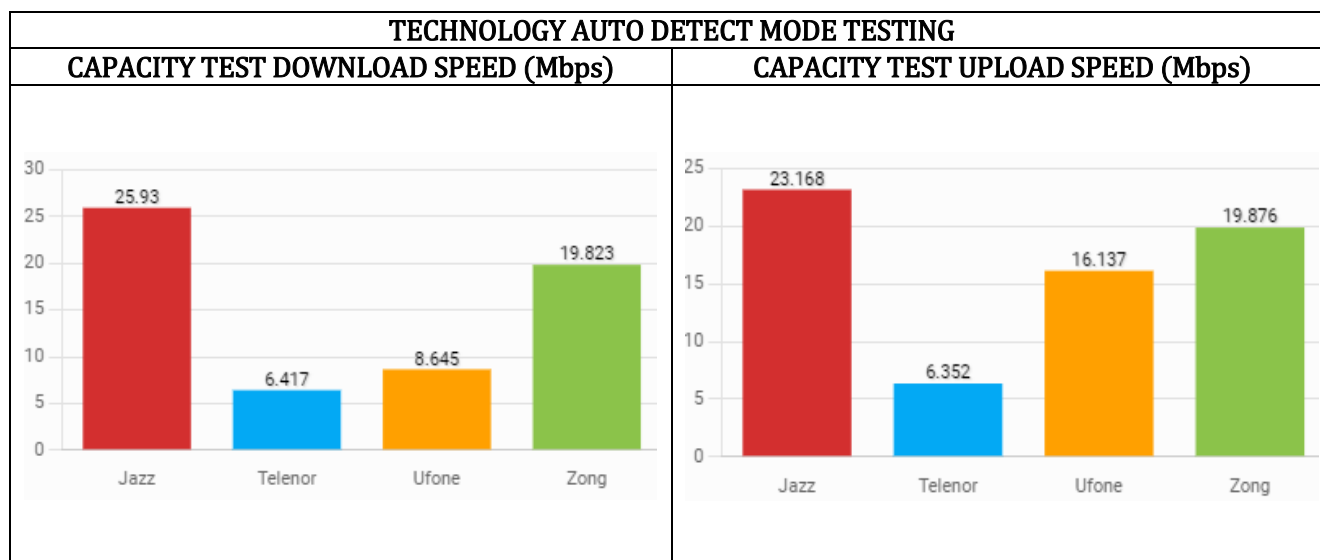
OOKLA UPLOAD THROUGHPUT IN TECHNOLOGY AUTO DETECT MODE								
Cities	Upload Throughput (Kbps)				Operator Position			
	Jazz	Telenor	Ufone	ZonG	Jazz	Telenor	Ufone	ZonG
OKARA	23.9	7.5	20.17	26.74	Second	Fourth	Third	First
PESHAWAR	24.5	6.7	14.7	16.6	First	Fourth	Third	Second
QUETTA	20.9	7.1	14.37	12.29	First	Fourth	Second	Third
SEHWAN	13.1	6.3	16.83	30.81	Third	Fourth	Second	First
THATTA	29.2	7.1	22.3	31.86	Second	Fourth	Third	First

Table 4.10: Ookla Upload Throughput in Technology Auto Detect Mode

OOKLA LATENCY IN TECHNOLOGY AUTO DETECT MODE								
City	Latency [milliseconds]				Compliant (Yes/No)			
	Jazz	Telenor	Ufone	ZonG	Jazz	Telenor	Ufone	ZonG
BATTAGRAM	27	48	22	34	Yes	Yes	Yes	Yes
BESHAM	29	43	N/A	76	Yes	Yes	N/A	No
DADU	32	29	58	26	Yes	Yes	Yes	Yes
DASKA	46	19	28	15	Yes	Yes	Yes	Yes
DERA ALLAH YAR	32	52	34	35	Yes	Yes	Yes	Yes
GHOTKI	25	38	35	42	Yes	Yes	Yes	Yes
ISLAMABAD	22	41	27	68	Yes	Yes	Yes	Yes
JHANG	28	54	70	36	Yes	Yes	Yes	Yes
KHUSHAB	27	57	93	36	Yes	Yes	No	Yes
MUZAFARGARH	53	56	49	32	Yes	Yes	Yes	Yes
MIRPUR KHAS	25	185	27	28	Yes	No	Yes	Yes
NOWSHERA	33	35	25	66	Yes	Yes	Yes	Yes
OKARA	49	36	61	29	Yes	Yes	Yes	Yes
PESHAWAR	41	45	32	83	Yes	Yes	Yes	No
QUETTA	30	47	55	45	Yes	Yes	Yes	Yes
SEHWAN	35	44	26	3	Yes	Yes	Yes	Yes
THATTA	27	42	27	26	Yes	Yes	Yes	Yes

Table 4.11: Ookla Latency in Technology Auto Detect Mode < 75 Milliseconds

4.6. Overall results of Download and Upload Throughputs in Capacity Tests, Data Transfer Tests, Latency (overall) and Latency (Per Web Page), can be seen in attached graphs.



SMS SERVICE

6.1. A total of **20,433 SMS sending attempts** were conducted, out of which **20,372 SMS** were **successfully transmitted** by A-Party while **20,203 SMS** were **successfully received** at B-Party. The company wise SMS Statistics are shown in **Table 6.1: SMS Statistics**

DESCRIPTION	JAZZ	TELENOR	UFONE	ZONG
SMS SEND REQUEST	5134	5070	5111	5118
SMS SUCCESSFULLY TRANSMITTED	5125	5040	5104	5103
SMS SUCCESSFULLY RECEIVED	5105	4941	5074	5083
SMS RECEIVE SUCCESS RATE (%)	99.44	97.46	99.28	99.32
END-TO-END DELIVERY TIME (Sec)	3.07	3.22	2.87	2.7

Table 6.1: SMS Statistics

Operator		Jazz		Telenor		Ufone		ZonG	
SMS KPI		Success Rate	Delivery Time	Success Rate	Delivery Time	Success Rate	Delivery Time	Success Rate	Delivery Time
Surveyed Cities	BATTAGRAM	Yes	Yes	No	Yes	Yes	Yes	Yes	Yes
	BESHAM	Yes	Yes	No	Yes	No	Yes	Yes	Yes
	DADU	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes
	DASKA	No	Yes	No	Yes	Yes	Yes	Yes	Yes
	DERA ALLAH YAR	Yes	Yes	No	Yes	Yes	Yes	Yes	Yes
	GHOTKI	Yes	Yes	No	Yes	Yes	Yes	Yes	Yes
	ISLAMABAD	No	Yes	No	Yes	No	Yes	Yes	Yes
	JHANG	Yes	Yes	No	Yes	Yes	Yes	Yes	Yes
	KHUSHAB	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes
	MUZAFARGARH	No	Yes	Yes	Yes	No	Yes	Yes	Yes
	MIRPUR KHAS	Yes	Yes	No	Yes	Yes	Yes	Yes	Yes
	NOWSHERA	Yes	Yes	No	Yes	Yes	Yes	Yes	Yes
	OKARA	Yes	Yes	No	Yes	Yes	Yes	No	Yes
	PESHAWAR	No	Yes	No	Yes	Yes	Yes	No	Yes
	QUETTA	Yes	Yes	No	Yes	No	Yes	No	Yes
	SEHWAN	No	Yes	No	Yes	No	Yes	Yes	Yes
	THATTA	Yes	Yes	No	Yes	No	Yes	Yes	Yes

Table 6.2: SMS QoS KPIs Compliance Level

6.2. The SMS Send Request & Successful Reception by Technology, Average Success Rate & End to End Delivery Time and Delivery Duration by Technology are shown in the graphs.

