

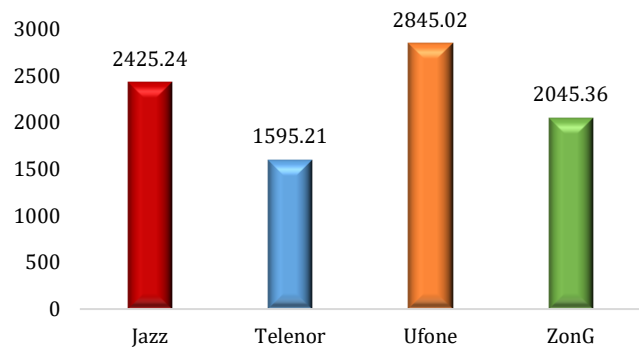
<i>CMO</i>	KPIs	Threshold	KARACHI CENTRAL	KARACHI KEMARI	KARACHI MALIR	NANKANA SAHIB	NOWSHERA	MURIDKE	SWABI
<i>Jazz</i>	NA	$\geq 99\%$	Yes	Yes	Yes	Yes	Yes	Yes	Yes
	CSSR	$\geq 98\%$	Yes	Yes	Yes	Yes	No	Yes	Yes
	CCT	$\leq 7.5$ sec	Yes	Yes	Yes	Yes	Yes	Yes	Yes
	CCR	$> 98\%$	Yes	Yes	Yes	Yes	Yes	Yes	Yes
	MOS	$\geq 3$	Yes	Yes	Yes	Yes	Yes	Yes	Yes
	ISHO	$\geq 98\%$	N/A	Yes	Yes	N/A	Yes	Yes	Yes
	RSSR	$> 98\%$	Yes	No	Yes	Yes	Yes	Yes	Yes
<i>Telenor</i>	NA	$\geq 99\%$	Yes	Yes	Yes	Yes	Yes	Yes	Yes
	CSSR	$\geq 98\%$	Yes	Yes	Yes	Yes	No	No	No
	CCT	$\leq 7.5$ sec	Yes	Yes	Yes	Yes	Yes	Yes	Yes
	CCR	$> 98\%$	Yes	Yes	Yes	Yes	Yes	No	No
	MOS	$\geq 3$	Yes	Yes	Yes	Yes	Yes	Yes	Yes
	ISHO	$\geq 98\%$	N/A	N/A	N/A	N/A	N/A	N/A	N/A
	RSSR	$> 98\%$	Yes	Yes	Yes	Yes	Yes	Yes	Yes
<i>Ufone</i>	NA	$\geq 99\%$	Yes	Yes	Yes	Yes	Yes	Yes	Yes
	CSSR	$\geq 98\%$	Yes	Yes	Yes	Yes	Yes	Yes	Yes
	CCT	$\leq 7.5$ sec	Yes	Yes	Yes	Yes	Yes	Yes	Yes
	CCR	$> 98\%$	Yes	Yes	Yes	Yes	Yes	Yes	Yes
	MOS	$\geq 3$	Yes	Yes	Yes	Yes	Yes	Yes	Yes
	ISHO	$\geq 98\%$	N/A	N/A	N/A	N/A	No	N/A	N/A
	RSSR	$> 98\%$	Yes	Yes	Yes	Yes	Yes	Yes	Yes
<i>ZonG</i>	NA	$\geq 99\%$	Yes	Yes	Yes	Yes	Yes	Yes	Yes
	CSSR	$\geq 98\%$	Yes	Yes	Yes	Yes	Yes	Yes	No
	CCT	$\leq 7.5$ sec	Yes	Yes	Yes	Yes	Yes	Yes	Yes
	CCR	$> 98\%$	Yes	Yes	Yes	Yes	Yes	Yes	Yes
	MOS	$\geq 3$	Yes	Yes	Yes	Yes	Yes	Yes	Yes
	ISHO	$\geq 98\%$	N/A	N/A	N/A	N/A	N/A	N/A	N/A
	RSSR	$> 98\%$	Yes	Yes	Yes	Yes	Yes	Yes	Yes

\* Note Voice QoS KPIs: Network Accessibility (NA)  $> 99\%$ , Service Accessibility (SA)  $> 98\%$ , Call Connection Time (CCT)  $\leq 7.5$  Seconds, Call Completion Ratio (CCR)  $\geq 98\%$ , Mean Opinion Score (MOS)  $> 3$ , Inter System Hand Over (ISHO)  $> 98\%$  & RAB Setup Success Rate (RSSR)  $> 98\%$

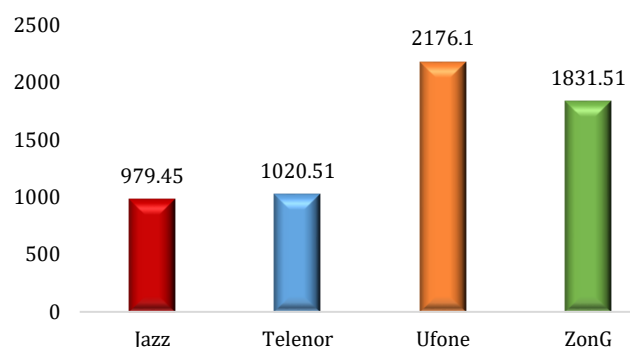
**Table 5.1: Voice QoS KPIs Compliance Level**

## QUALITY OF SERVICE SURVEY RESULTS (3G) – SWABI

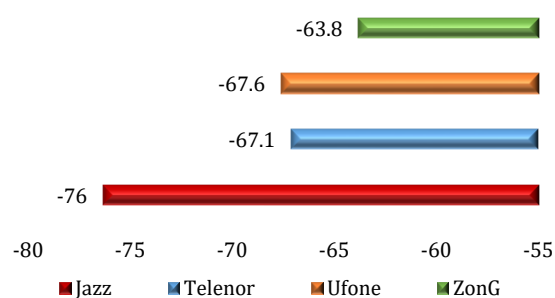
**User Data Throughput Download (3G) > 512 Kbps**



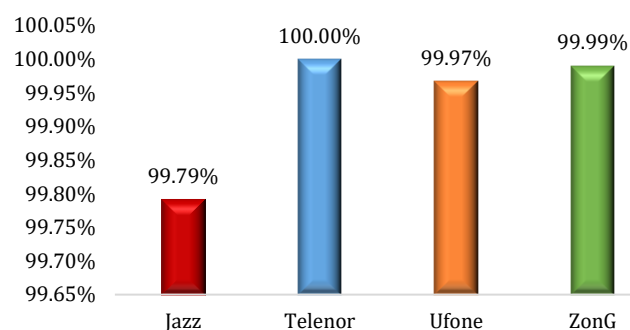
**User Data Throughput Upload (3G) > 128 Kbps**



**Signal Strength (RSCP) > -100dBm**



**Signal Strength (RSCP) Confidencel Level > 90%**



**Latency (3G) < 150 ms**

