

CMOS' QUALITY OF SERVICE SURVEY RESULTS – (2ND QUARTER, 2019)

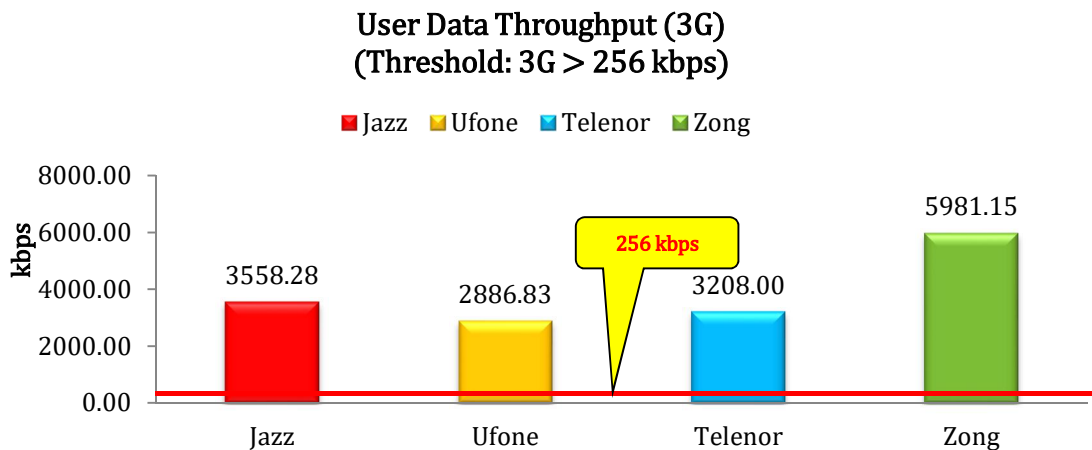
In the 2nd Quarter 2019, Pakistan Telecommunication Authority (PTA) has conducted quarterly Quality of Service (QoS) survey jointly with Cellular Mobile Operators (CMOs) using NEMO Automated QoS Tool. During the period, a total of six (6) cities of Punjab, Balochistan and KPK have been surveyed. The names of these cities are as under:-

S. No.	Name	S. No.	Name	S. No.	Name
1	Jhelum	3	Noshki	5	Bannu
2	Bahawalnagar	4	Dera Murad Jamali	6	Faisalabad

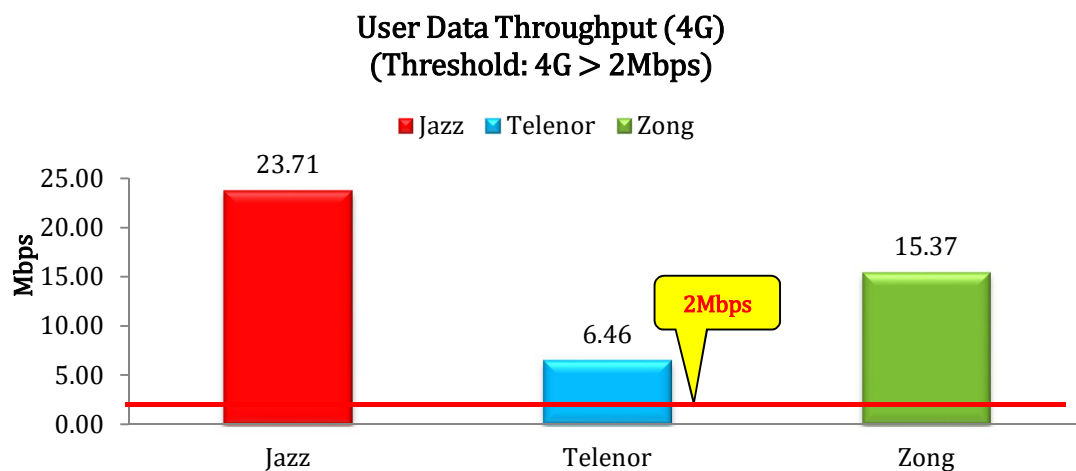
DATA – KEY PERFORMANCE INDICATORS

Data KPIs. The performance of data services of CMOs has been checked by measuring User Data Throughput and Signal Strength (i.e. Received Signal Code Power (RSCP) for 3G and Reference Signal Received Power (RSRP) for 4G) KPIs.

User Data Throughput. This KPI defines user data rate (Internet speed) to be provided by NGMS operators to mobile users across the coverage areas. The data throughput results of all NGMS licensees are as under:



User data "throughput" of 3G services found higher than the benchmark value of 256Kbps



User data "throughput" of 4G services found higher than the benchmark value of 2Mbps