

- b. **NON-COMPLIANCE.** The cities where CMOs remained non-compliant is mentioned in **Table 4.2: Non-Compliance of 4G User Data Through > 2Mbps.**

S. #.	Operator	Cities	
		Count	Names
1.	Jazz	1	Nawabshah
2.	Telenor	2	Larkana, Sanghar
3.	Ufone	1	Sanghar

Table 4.2: Non-Compliance of 4G User Data Throughput > 2Mbps

4.2. **3G USER DATA THROUGHPUT.** As per Next Generation Mobile Service (NGMS) licenses awarded, licensees are required to meet the threshold of minimum of 256Kbps of 3G User Data Throughput. The analysis of 3G User Data Throughput Survey Results revealed that all CMOs remained compliant of minimum threshold value of 256 Kbps at all 13 x surveyed cities.

VOICE SERVICE

5.1. 7 x QoS KPIs have been measured while testing voice services. The results of voice QoS KPIs are as under:

- a. **NETWORK ACCESSIBILITY.** All CMOs have achieved the QoS KPI Network Accessibility > 99% in all 13 x surveyed cities.
- b. **SERVICE ACCESSIBILITY.** The analysis of QoS KPI Service Accessibility of > 98% in surveyed cities revealed following.
- i. **COMPLIANCE.** The cities where CMOs remained compliant is mentioned in **Table 5.1: Compliance of Service Accessibility > 98%**

S. #.	Operator	Cities	
		Count	Names
1.	Jazz	6	Narowal, Badin, Larkana, Mirpur Khas, Sanghar, Nawabshah,
2.	Ufone	6	Narowal, Badin, Larkana, Sanghar, Nawabshah, Sukkur
3.	ZonG	3	Bahawalpur, Badin, Larkana,

Table 5.1: Compliance of Service Accessibility > 98%

- ii. **NON-COMPLIANCE.** The cities where CMOs remained non-compliant is mentioned in **Table 5.2: Non-Compliance of Service Accessibility > 98%.**

S. #.	Operator	Cities	
		Count	Names
1.	Jazz	7	Attock, Chakwal, Mianwali, Multan, Bahawalpur, Nowshera, Sukkur
2.	Telenor	13	Attock, Chakwal, Mianwali, Narowal, Multan, Bahawalpur, Nowshera, Badin, Larkana, Mirpur Khas, Sanghar, Nawabshah, Sukkur
3.	Ufone	7	Attock, Chakwal, Mianwali, Multan, Bahawalpur, Nowshera, Mirpur Khas,
4.	ZonG	10	Attock, Chakwal, Mianwali, Narowal, Multan, Nowshera, Mirpur Khas, Sanghar, Nawabshah, Sukkur

Table 5.2: Non-Compliance of Service Accessibility > 98%

- c. **CALL CONNECTION TIME.** The analysis of QoS KPI **Call Connection Time of < 6.5 Seconds** in all the surveyed cities revealed following.

- i. **COMPLIANCE.** The cities where CMOs remained compliant is mentioned in **Table 5.3: Compliance of Call Connection Time < 6.5 Seconds.**

S. #.	Operator	Cities	
		Count	Names
1.	Jazz	9	Attock, Chakwal, Narowal, Bahawalpur, Badin, Larkana, Mirpur Khas, Sukkur, Nowshera
2.	Telenor	13	Attock, Chakwal, Mianwali, Narowal, Multan, Bahawalpur, Badin, Larkana, Mirpur Khas, Nawabshah, Sanghar, Sukkur, Nowshera
3.	Ufone	12	Attock, Chakwal, Mianwali, Narowal, Bahawalpur, Badin, Larkana, Mirpur Khas, Nawabshah, Sanghar, Sukkur, Nowshera
4.	ZonG	12	Attock, Chakwal, Mianwali, Narowal, Multan, Bahawalpur, Badin, Larkana, Mirpur Khas, Nawabshah, Sanghar, Nowshera

Table 5.3: Compliance of Call Connection Time < 6.5 Seconds

- ii. **NON-COMPLIANCE.** The cities where CMOs remained non-compliant is mentioned in **Table 5.4: Non-Compliance of Call Connection Time < 6.5 Seconds.**

S. #.	Operator	Cities	
		Count	Names
1.	Jazz	4	Mianwali, Multan, Sanghar, Nawabshah
2.	Ufone	1	Multan
3.	ZonG	1	Sukkur

Table 5.4: Non-Compliance of Call Connection Time < 6.5 Seconds

- d. **CALL COMPELETION RATIO.** The analysis of QoS KPI **Call Completion Ratio of > 98%** in surveyed cities revealed following:

- i. **COMPLIANCE.** The cities where CMOs remained compliant is mentioned in **Table 5.5: Compliance of Call Completion Ratio > 98%.**

S. #.	Operator	Cities	
		Count	Names
1.	Jazz	10	Attock, Chakwal, Mianwali, Narowal, Bahawalpur, Badin, Mirpur Khas, Nawabshah, Sanghar, Nowshera
2.	Telenor	9	Attock, Mianwali, Narowal, Bahawalpur, Mirpur Khas, Nawabshah, Sanghar, Sukkur, Nowshera
3.	Ufone	12	Chakwal, Mianwali, Narowal, Multan, Bahawalpur, Badin, Larkana, Mirpur Khas, Nawabshah, Sanghar, Sukkur, Nowshera
4.	ZonG	13	Attock, Chakwal, Mianwali, Narowal, Multan, Bahawalpur, Badin, Larkana, Mirpur Khas, Nawabshah, Sanghar, Sukkur, Nowshera

Table 5.5: Compliance of Call Completion Ratio > 98%

- ii. **NON-COMPLIANCE.** The cities where CMOs remained non-compliant is mentioned in **Table 5.6: Non-Compliance of Call Completion Ratio > 98%.**