- d. **CALL COMPELETION RATIO.** The analysis of QoS KPI **Call Completion Ratio of > 98%** in surveyed Motorways / Highways / Inter Cities Roads revealed following:
 - i. **COMPLIANCE**. The Motorways / Highways / Inter Cities Roads where CMOs remained compliant is mentioned in **Table 5.5**: **Compliance of Call Completion Ratio** > 98%.

S.	Onomotom		Motorways / Highways / Inter Cities Roads
#.	Operator	Count	Names
1.	Jazz	10	Rawalpindi to Attock, Rawalpindi to Chakwal, Lahore to Narowal, Lahore to Pattoki, Multan to Abdul Hakeem, Multan to Bahawalpur, Multan to Kot Addu, Hyderabad to Badin, Karachi to Nawabshah, Sukkur to Larkana
2.	Telenor	9	GT Road Peshawar to Rawalpindi, Rawalpindi to Attock, Rawalpindi to Chakwal, Lahore to Mianwali, Multan to Abdul Hakeem, Multan to Bahawalpur, Multan to Kot Addu, Hyderabad to Mirpur Khas, Sukkur to Larkana
3.	Ufone	8	GT Road Peshawar to Rawalpindi, Lahore to Mianwali, Lahore to Pattoki, Multan to Abdul Hakeem, Multan to Bahawalpur, Hyderabad to Mirpur Khas, Sukkur to Nawabshah, Sukkur to Larkana
4.	ZonG	13	GT Road Peshawar to Rawalpindi, Rawalpindi to Attock, Rawalpindi to Chakwal, Lahore to Pattoki, Lahore to Multan, Multan to Abdul Hakeem, Multan to Bahawalpur, Multan to Kot Addu, Hyderabad to Badin, Hyderabad to Mirpur Khas, Karachi to Nawabshah, Sukkur to Nawabshah, Sukkur to Larkana

Table 5.5: Compliance of Call Completion Ratio > 98%

ii. **NON-COMPLIANCE**. The Motorways / Highways / Inter Cities Roads where CMOs remained non-compliant is mentioned in **Table 5.6**: **Non-Compliance of Call Completion Ratio** > 98%.

S.	Operator	Motorways / Highways / Inter Cities Roads	
#.		Count	Names
1.	Jazz	6	GT Road Peshawar to Rawalpindi, Lahore to Mianwali, Lahore to Multan, Hyderabad to Mirpur Khas, Karachi to Sanghar, Sukkur to Nawabshah
2.	Telenor	7	Lahore to Narowal, Lahore to Pattoki, Lahore to Multan, Hyderabad to Badin, Karachi to Nawabshah, Karachi to Sanghar, Sukkur to Nawabshah
3.	Ufone	8	Rawalpindi to Attock, Rawalpindi to Chakwal, Lahore to Narowal, Lahore to Multan, Multan to Kot Addu, Hyderabad to Badin, Karachi to Nawabshah, Karachi to Sanghar
4.	ZonG	3	Lahore to Mianwali, Lahore to Narowal, Karachi to Sanghar

Table 5.6: Non-Compliance of Call Completion Ratio > 98%

- e. **END-TO-END SPEECH QUALITY / MEAN OPINION SCORE.** None of the CMOs have achieved the QoS KPI **End-to-End Speech Quality/ Mean Opinion Score of > 3** in all the surveyed Motorways / Highways / Inter Cities Roads revealed following:
 - COMPLIANCE. The Motorways / Highways / Inter Cities Roads where CMOs remained compliant is mentioned in Table 5.7: Compliance of Mean Opinion Score > 3.

S.	Operator		Motorways / Highways / Inter Cities Roads
#.		Count	Names
1.	Jazz	9	GT Road Peshawar to Rawalpindi, Rawalpindi to Attock, Rawalpindi to Chakwal, Lahore to Pattoki, Multan to Kot Addu, Hyderabad to Badin, Hyderabad to Mirpur Khas, Karachi to Nawabshah, Karachi to Sanghar
2.	Telenor	5	Multan to Bahawalpur, Multan to Kot Addu, Hyderabad to Mirpur Khas, Karachi to Nawabshah, Karachi to Sanghar
3.	Ufone	12	GT Road Peshawar to Rawalpindi, Rawalpindi to Attock, Rawalpindi to Chakwal, Lahore to Mianwali, Lahore to Narowal, Lahore to Pattoki, Multan to Bahawalpur, Hyderabad to Mirpur Khas, Karachi to Nawabshah, Karachi to Sanghar, Sukkur to Nawabshah, Sukkur to Larkana
4.	ZonG	16	GT Road Peshawar to Rawalpindi, Rawalpindi to Attock, Rawalpindi to Chakwal, Lahore to Mianwali, Lahore to Narowal, Lahore to Pattoki, Lahore to Multan, Multan to Abdul Hakeem, Multan to Bahawalpur, Multan to Kot Addu, Hyderabad to Badin, Hyderabad to Mirpur Khas, Karachi to Nawabshah, Karachi to Sanghar, Sukkur to Nawabshah, Sukkur to Larkana

Table 5.7: Compliance of Mean Opinion Score > 3

ii. **NON-COMPLIANCE**. The Motorways / Highways / Inter Cities Roads where CMOs remained non-compliant is mentioned in **Table 5.8**: **Non-Compliance of Mean Opinion Score** > **3**.

S.	Operator	Motorways / Highways / Inter Cities Roads	
#.		Count	Names
1.	Jazz	7	Lahore to Mianwali, Lahore to Narowal, Lahore to Multan, Multan to Abdul Hakeem, Multan to Bahawalpur, Sukkur to Nawabshah, Sukkur to Larkana
2.	Telenor	11	GT Road Peshawar to Rawalpindi, Rawalpindi to Attock, Rawalpindi to Chakwal, Lahore to Mianwali, Lahore to Narowal, Lahore to Pattoki, Lahore to Multan, Multan to Abdul Hakeem, Hyderabad to Badin, Sukkur to Nawabshah, Sukkur to Larkana
3.	Ufone	4	Lahore to Multan, Multan to Abdul Hakeem, Multan to Kot Addu, Hyderabad to Badin

Table 5.8: Non-Compliance of Mean Opinion Score > 3

- f. INTER SYSTEM HANDOVER OF CIRCUIT SWITCHED VOICE. The analysis of QoS KPI Inter System Handover of Circuit Switched Voice > 98% in all 16 x surveyed Motorways / Highways / Inter Cities Roads revealed following:
 - i. **COMPLIANCE**. The towns where CMOs remained compliant is mentioned in **Table 5.9**: **ISHO for Circuit Switched Voice** \geq **98%**.

S.	Operator	Towns	
#.		Count	Names
1.	Jazz	13	GT Road Peshawar to Rawalpindi, Rawalpindi to Chakwal, Lahore to Mianwali, Lahore to Narowal, Lahore to Pattoki, Lahore to Multan, Multan to Abdul Hakeem, Multan to Bahawalpur, Multan to Kot Addu, Hyderabad to Badin, Hyderabad to Mirpur Khas, Karachi to Nawabshah, Sukkur to Larkana