| СМО     | KPIs | Threshold           | KARACHI CENTRAL | KARACHI<br>KEMARI | KARACHI<br>MALIR | NANKANA SAHIB | NOWSHERA | MURIDKE | SWABI |
|---------|------|---------------------|-----------------|-------------------|------------------|---------------|----------|---------|-------|
| Jazz    | NA   | <u>&gt;</u> 99%     | Yes             | Yes               | Yes              | Yes           | Yes      | Yes     | Yes   |
|         | CSSR | ≥98%                | Yes             | Yes               | Yes              | Yes           | No       | Yes     | Yes   |
|         | CCT  | <u>&lt;</u> 7.5 sec | Yes             | Yes               | Yes              | Yes           | Yes      | Yes     | Yes   |
|         | CCR  | > 98%               | Yes             | Yes               | Yes              | Yes           | Yes      | Yes     | Yes   |
|         | MOS  | ≥3                  | Yes             | Yes               | Yes              | Yes           | Yes      | Yes     | Yes   |
|         | ISHO | <u>≥</u> 98%        | N/A             | Yes               | Yes              | N/A           | Yes      | Yes     | Yes   |
|         | RSSR | > 98%               | Yes             | No                | Yes              | Yes           | Yes      | Yes     | Yes   |
| Telenor | NA   | ≥99%                | Yes             | Yes               | Yes              | Yes           | Yes      | Yes     | Yes   |
|         | CSSR | <u>≥</u> 98%        | Yes             | Yes               | Yes              | Yes           | No       | No      | No    |
|         | CCT  | <u>&lt;</u> 7.5 sec | Yes             | Yes               | Yes              | Yes           | Yes      | Yes     | Yes   |
|         | CCR  | > 98%               | Yes             | Yes               | Yes              | Yes           | Yes      | No      | No    |
|         | MOS  | <u>≥</u> 3          | Yes             | Yes               | Yes              | Yes           | Yes      | Yes     | Yes   |
|         | ISHO | ≥98%                | N/A             | N/A               | N/A              | N/A           | N/A      | N/A     | N/A   |
|         | RSSR | > 98%               | Yes             | Yes               | Yes              | Yes           | Yes      | Yes     | Yes   |
| Ufone   | NA   | ≥99%                | Yes             | Yes               | Yes              | Yes           | Yes      | Yes     | Yes   |
|         | CSSR | <u>&gt;</u> 98%     | Yes             | Yes               | Yes              | Yes           | Yes      | Yes     | Yes   |
|         | CCT  | <u>&lt;</u> 7.5 sec | Yes             | Yes               | Yes              | Yes           | Yes      | Yes     | Yes   |
|         | CCR  | > 98%               | Yes             | Yes               | Yes              | Yes           | Yes      | Yes     | Yes   |
|         | MOS  | <u>≥</u> 3          | Yes             | Yes               | Yes              | Yes           | Yes      | Yes     | Yes   |
|         | ISHO | ≥ 98%               | N/A             | N/A               | N/A              | N/A           | No       | N/A     | N/A   |
|         | RSSR | > 98%               | Yes             | Yes               | Yes              | Yes           | Yes      | Yes     | Yes   |
| ZonG    | NA   | <u>&gt;</u> 99%     | Yes             | Yes               | Yes              | Yes           | Yes      | Yes     | Yes   |
|         | CSSR | ≥98%                | Yes             | Yes               | Yes              | Yes           | Yes      | Yes     | No    |
|         | CCT  | <u>&lt;</u> 7.5 sec | Yes             | Yes               | Yes              | Yes           | Yes      | Yes     | Yes   |
|         | CCR  | > 98%               | Yes             | Yes               | Yes              | Yes           | Yes      | Yes     | Yes   |
|         | MOS  | <u>≥</u> 3          | Yes             | Yes               | Yes              | Yes           | Yes      | Yes     | Yes   |
|         | ISHO | ≥ 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 – KARACHI CENTRAL**













