



**NIGERIAN COMMUNICATIONS COMMISSION**

**REPORT ON THE QUALITY OF SERVICE KEY PERFORMANCE  
INDICATORS**

**December 19, 2011**

## Quality of Service Key Performance Indicators

**ANNUAL REPORT January –November 2011**

### GSM

| Company         | CSSR         | TCH Cong | SDCCH Cong  | DCR  | CCR          | Overall Assessment |
|-----------------|--------------|----------|-------------|------|--------------|--------------------|
| <b>MTN</b>      | Improvement  | Good     | Improvement | Good | Improvement  | Improvement        |
| <b>GLOBACOM</b> | Fluctuations | Poor     | Good        | Good | Slight Decay | Improvement        |
| <b>ETISALAT</b> | Good         | Good     | Poor        | Good | Good         | Good               |
| <b>AIRTEL</b>   | Improvement  | Good     | Poor        | Good | Improvement  | Improvement        |

### CDMA

| Company           | CSSR                          | TCH Cong     | DCR          | PSR                           | CCR                           | Overall Assessment |
|-------------------|-------------------------------|--------------|--------------|-------------------------------|-------------------------------|--------------------|
| <b>VISAFONE</b>   | Excellent                     | Excellent    | -            | Improvement                   | Excellent                     | Excellent          |
| <b>STARCOMMS</b>  | Improvement                   | Good         | Good         | Good                          | Poor                          | Improvement        |
| <b>ZOOM</b>       | Fluctuations                  | Fluctuations | Fluctuations | Poor                          | Fluctuations with improvement | Fluctuations       |
| <b>MULTILINKS</b> | Mostly Steady below threshold | Good         | Good         | Mostly steady below threshold | Mostly steady below threshold | Improvement        |

#### Attention

In the attached assessment:

1. Improvement does not mean the new key performance indicator threshold is met; it meant that the trend to reach the threshold is progressing towards the set target of the indicator taking into consideration the challenges the operators are facing today.

2. Decay means the Performance Indicator concerned is slightly worse than in the previous month
3. Poor means the Indicator is consistently poor
4. Fluctuations means the Performance Indicator is consistently changing always below the set target
5. For more information on the Quality of Service Key Performance Indications, go to the Nigerian Communications Commission web-site at:

**ncc.gov.ng**

Under Technical Standards and Network Integrity Department

The definition of the Key Performance Indicators with the set thresholds is given in the table below:

|                      | <b>Key Performance Indicator</b>                        | <b>Accronym</b> | <b>Definitions</b>   | <b>Target (%)</b>  |
|----------------------|---|-----------------|--|--------------------|
| <b>GSM Operators</b> |   |                 |  |                    |
| 1                    | CSSR Call Setup Success Rate                            | CSSR            | Number of the unblocked call attempts divided by the total number of call attempts.<br>Or<br>(1 - Blocking Probability) x 100%                 | ≥98%               |
| 2                    | Traffic Channel Congestion (with and without Handover). | TCHCon          | Is the ratio of the number of unsuccessful TCH requests to the total number of TCH request attempts expressed as percentage                    | ≤2% WOH<br>≤4% WHO |
| 3                    | Call Drop Rate.   | CDR             | Is the number of dropped calls divided by the total number of call attempts<br>Or<br>(1 - Call Completion Ratio) x 100%                        | ≤2%                |
| 4                    | Call Completion Rate                                    | CCR             | is the ratio of successfully completed calls to the total number of attempted calls  | ≥96%               |
| 5                    | Standalone Dedicated Control Channel                    | SDCCH           | Is a logical signalling channel that is used for call set-up. Once a call is successfully setup SDCCH is released and RTCH is assigned for the | ≤1%                |

|                       |                            |        |  |                    |
|-----------------------|----------------------------|--------|--|--------------------|
|                       |                            |        | conversation.  |                    |
| <b>CDMA Operators</b> |                            |        |  |                    |
| 1                     | Call Setup Success Rate    | CSSR   | Number of the unblocked call attempts divided by the total number of call attempts.<br>Or<br>(1 - Blocking Probability) x 100%   | ≥98%               |
| 2                     | Traffic Channel Congestion | TCHCon | Is the ratio of the number of unsuccessful TCH requests to the total number of TCH request attempts expressed as percentage  | ≤2% WOH<br>≤4% WHO |
| 3                     | Call Drop Rate.            | CDR    | is the number of dropped calls divided by the total number of call attempts.<br>Or<br>(1 - Call Completion Ratio) x 100%   | ≤2%                |
| 4                     | Call Completion Rate       | CCR    | is the ratio of successfully completed calls to the total number of attempted calls  | ≥96%               |
| 5                     | Paging Success Rate        | PSR    | It measures the page response acceptance rate when the MSC/VLR believes that the mobile is in the coverage area and pages the mobile to find the terminating mobile party to complete the incoming call. | ≥98%               |

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