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QUALITY OF SERVICE TEST RESULTS - 2018 SECOND QUArTER

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**MONITORING TEST RESULTS FOR AIRTEL**

**VOICE TEST**

**Central Region**

|  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- |
| **KPI** | **SDCCH CONGEST.**  **RATE** | **TCH CONGEST.**  **RATE** | **CALL DROP**  **RATE** | **CALL SETUP**  **TIME** | **CALL COMPLETION**  **RATE** |
| **Threshold** | **≤ 1%** | **≤ 1%** | **≤ 3%** | **˂10 sec** | **˃70%** |
| **Airtel** | 0.00 | 0.00 | 0.00 | 7.50 | 96.22 |

* *Service Provider met all Key Performance Indicators (KPIs) in the Central Region*

**Ashanti Region**

|  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- |
| **KPI** | **SDCCH CONGEST.**  **RATE** | **TCH CONGEST.**  **RATE** | **CALL DROP**  **RATE** | **CALL SETUP**  **TIME** | **CALL COMPLETION**  **RATE** |
| **Threshold** | **≤ 1%** | **≤ 1%** | **≤ 3%** | **˂10 sec** | **˃70%** |
| **Airtel** | 0.00 | 0.04 | 0.00 | 6.91 | 93.06 |

* *Service Provider met all KPIs in the Ashanti Region*

**Brong Ahafo Region**

|  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- |
| **KPI** | **SDCCH CONGEST.**  **RATE** | **TCH CONGEST.**  **RATE** | **CALL DROP**  **RATE** | **CALL SETUP**  **TIME** | **CALL COMPLETION**  **RATE** |
| **Threshold** | **≤ 1%** | **≤ 1%** | **≤ 3%** | **˂10 sec** | **˃70%** |
| **Airtel** | 0.03 | 0.00 | 0.00 | 7.80 | 84.72 |

* *Service Provider met all KPIs in the Brong Ahafo Region*

**Volta Region**

|  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- |
| **KPI** | **SDCCH CONGEST.**  **RATE** | **TCH CONGEST.**  **RATE** | **CALL DROP**  **RATE** | **CALL SETUP**  **TIME** | **CALL COMPLETION**  **RATE** |
| **Threshold** | **≤ 1%** | **≤ 1%** | **≤ 3%** | **˂10 sec** | **˃70%** |
| **Airtel** | 0.00 | 0.00 | 0.00 | 7.69 | 97.44 |

* *Service Provider met all KPIs in the Volta Region*

**Upper East Region**

|  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- |
| **KPI** | **SDCCH CONGEST.**  **RATE** | **TCH CONGEST.**  **RATE** | **CALL DROP**  **RATE** | **CALL SETUP**  **TIME** | **CALL COMPLETION**  **RATE** |
| **Threshold** | **≤ 1%** | **≤ 1%** | **≤ 3%** | **˂10 sec** | **˃70%** |
| **Airtel** | 0.10 | 0.00 | 0.00 | 6.94 | 82.67 |

* *Service Provider met all KPIs in the Upper East Region*

**Upper West Region**

|  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- |
| **KPI** | **SDCCH CONGEST.**  **RATE** | **TCH CONGEST.**  **RATE** | **CALL DROP**  **RATE** | **CALL SETUP**  **TIME** | **CALL COMPLETION**  **RATE** |
| **Threshold** | **≤ 1%** | **≤ 1%** | **≤ 3%** | **˂10 sec** | **˃70%** |
| **Airtel** | 0.00 | 0.00 | 0.00 | 6.73 | 72.79 |

* *Service Provider met all KPIs in the Upper West Region*

**VOICE QUALITY (MOS)**

**Ashanti Region**

|  |  |  |  |
| --- | --- | --- | --- |
| **District Capital** | **Airtel** | | |
| **(95% of call connections >3.5)** | **Compliance** | **Non-Compliance** |
| Agogo | **66.10%** |  | **√** |
| Agona | **63.08%** |  | **√** |
| Akomadan | **81.25%** |  | **√** |
| Asiwa | No Network Coverage | | |
| Bekwai | **59.97%** |  | **√** |
| Drobonso | No Network Coverage | | |
| Effiduase | **63.57%** |  | **√** |
| Ejisu | **77.89%** |  | **√** |
| Ejura | **70.83%** |  | **√** |
| Foase | **81.01%** |  | **√** |
| Fomena | **72.91%** |  | **√** |
| Jacobu | **46.56%** |  | **√** |
| Juaso | **70.11%** |  | **√** |
| Kodie | **63.25%** |  | **√** |
| Konongo-Odumase | **78.07%** |  | **√** |
| Kumawu | **70.88%** |  | **√** |
| Kuntanase | **73.47%** |  | **√** |
| Mampong | **76.50%** |  | **√** |
| Mampongteng | **69.15%** |  | **√** |
| Mankraso | **68.10%** |  | **√** |
| Manso-Nkwanta | **69.86%** |  | **√** |
| New Edubiase | **62.53%** |  | **√** |
| Nkawie | **64.13%** |  | **√** |
| Nsuta | **72.39%** |  | **√** |
| Nyinahin | **90.60%** |  | **√** |
| Obuasi | **63.22%** |  | **√** |
| Offinso | **60.74%** |  | **√** |
| Tepa | **86.52%** |  | **√** |

* *Service Provider failed to meet the MOS minimum requirement in all twenty eight (28) tested district capitals in the Ashanti Region*
* *Service Provider did not have network coverage in two (2) district capitals*

**Brong Ahafo Region**

|  |  |  |  |
| --- | --- | --- | --- |
| **District Capital** | **Airtel** | | |
| **(95% of call connections >3.5)** | **Compliance** | **Non-Compliance** |
| Atebubu | **85.40%** |  | **√** |
| Banda Ahenkro | No Network Coverage | | |
| Bechem | **56.33%** |  | **√** |
| Berekum | **47.37%** |  | **√** |
| Busunya | **0.00%** |  | **√** |
| Dormaa-Ahenkro | **30.23%** |  | **√** |
| Drobo | **71.91%** |  | **√** |
| Duayaw-Nkwanta | **7.51%** |  | **√** |
| Goaso | **50.83%** |  | **√** |
| Hwidiem | **28.21%** |  | **√** |
| Jema | No Network Coverage | | |
| Kajaji |
| Kenyasi | **18.49%** |  | **√** |
| Kintampo | **63.07%** |  | **√** |
| Kukuom | **62.04%** |  | **√** |
| Kwame Danso | **78.68%** |  | **√** |
| Nkoranza | **30.28%** |  | **√** |
| Nkran Nkwanta | No Network Coverage | | |
| Nsawkaw |
| Odumasi | **18.60%** |  | **√** |
| Sampa | **90.65%** |  | **√** |
| Sunyani | **37.26%** |  | **√** |
| Techiman | **63.38%** |  | **√** |
| Tuobodom | **16.74%** |  | **√** |
| Wamfie | **69.12%** |  | **√** |
| Wenchi | **35.53%** |  | **√** |
| Yeji | **67.27%** |  | **√** |

* *Service Provider failed to meet the MOS minimum requirement in all twenty seven (27) tested district capitals in the Brong Ahafo Region*
* *Service Provider did not have network coverage in five (5) district capitals*

**Volta Region**

|  |  |  |  |
| --- | --- | --- | --- |
| **District Capital** | **Airtel** | | |
| **(95% of call connections >3.5)** | **Compliance** | **Non-Compliance** |
| Adaklu Waya | **0.00%** |  | **√** |
| Adidome | **74.05%** |  | **√** |
| Agortime-Kpetoe | **80.38%** |  | **√** |
| Akatsi | **27.95%** |  | **√** |
| Amfoega | **0.00%** |  | **√** |
| Ave Dakpa | **8.64%** |  | **√** |
| Battor Dugame | **0.83%** |  | **√** |
| Chinderi | **65.08%** |  | **√** |
| Dambai | **70.20%** |  | **√** |
| Denu | **77.97%** |  | **√** |
| Dzodze | **63.45%** |  | **√** |
| Dzolokpuita | **0.00%** |  | **√** |
| Ho | **37.53%** |  | **√** |
| Hohoe | **42.10%** |  | **√** |
| Jasikan | **88.91%** |  | **√** |
| Kadjebi | **91.91%** |  | **√** |
| Keta | **33.94%** |  | **√** |
| Kete-Krachi | **91.24%** |  | **√** |
| Kpando | **65.63%** |  | **√** |
| Kpasa | **90.86%** |  | **√** |
| Kpeve | **7.94%** |  | **√** |
| Nkonya-Ahenkro | **82.00%** |  | **√** |
| Nkwanta | **58.54%** |  | **√** |
| Sogakope | **61.43%** |  | **√** |
| Ve-Golokwati | **7.66%** |  | **√** |

* *Service Provider failed to meet the MOS minimum requirement in all twenty five (25) tested district capitals in the Volta Region*

**Central Region**

|  |  |  |  |
| --- | --- | --- | --- |
| **District Capital** | **Airtel** | | |
| **(95% of call connections >3.5)** | **Compliance** | **Non-Compliance** |
| Abura-Dunkwa | **57.85%** |  | **√** |
| Afransi | **58.29%** |  | **√** |
| Agona Swedru | **65.06%** |  | **√** |
| Ajumako | **62.48%** |  | **√** |
| Apam | **71.88%** |  | **√** |
| Assin Fosu | **66.32%** |  | **√** |
| Awutu Breku | **63.26%** |  | **√** |
| Breman Asikuma | **64.04%** |  | **√** |
| Cape Coast | **67.15%** |  | **√** |
| Diaso | **67.02%** |  | **√** |
| Dunkwa-On-Offin | **66.03%** |  | **√** |
| Elmina | **63.11%** |  | **√** |
| Essarkyir | **62.47%** |  | **√** |
| Kasoa | **50.91%** |  | **√** |
| Komenda | **54.68%** |  | **√** |
| Mankessim | **52.49%** |  | **√** |
| Nsaba | **55.27%** |  | **√** |
| Nsuaem-Kyekyewere | No Network Coverage | | |
| Saltpond | **53.58%** |  | **√** |
| Twifo Hemang | **51.87%** |  | **√** |
| Twifo Praso | **53.78%** |  | **√** |
| Winneba | **55.22%** |  | **√** |

* *Service Provider failed to meet the MOS requirement in all twenty two (22) tested district capitals in the Central Region*
* *Service Provider did not have network coverage in one (1) district capital*

**Upper East Region**

|  |  |  |  |
| --- | --- | --- | --- |
|  | **AIRTEL** | | |
| **District Capital** | **Voice Quality**  **(95% of call connections >3.5)** | **Compliance** | **Non-Compliance** |
| Bawku | **86.64%** |  | **√** |
| Binduri | **0.00%** |  | **√** |
| Bolgatanga | **82.38%** |  | **√** |
| Bongo | **70.29%** |  | **√** |
| Fumbisi | **0.00%** |  | **√** |
| Garu | **90.11%** |  | **√** |
| Nangodi | **43.08%** |  | **√** |
| Navrongo | **83.53%** |  | **√** |
| Paga | **83.33%** |  | **√** |
| Pusiga | **11.86%** |  | **√** |
| Sandema | No Network Coverage | | |
| Tongo | **65.67%** |  | **√** |
| Zebilla | **78.28%** |  | **√** |

* *Service Provider failed to meet the MOS requirement in all thirteen (13) tested district capitals in the Upper East Region*
* *Service Provider did not have network coverage in one (1) district capital*

**Upper West Region**

|  |  |  |  |
| --- | --- | --- | --- |
|  | **AIRTEL** | | |
| **District Capital** | **Voice Quality**  **(95% of call connections >3.5)** | **Compliance** | **Non-Compliance** |
| Funsi | **1.27%** |  | **√** |
| Gwollu | **33.71%** |  | **√** |
| Issa | No Network Coverage | | |
| Jirapa | **0.00%** |  | **√** |
| Lambussie | **52.00%** |  | **√** |
| Lawra | No Network Coverage | | |
| Nadowli | **47.22%** |  | **√** |
| Nandom | No Network Coverage | | |
| Tumu | **96.53%** | **√** |  |
| Wa | **61.87%** |  | **√** |
| Wechiau | **32.14%** |  | **√** |

* *Service Provider complied with the minimum MOS in only one (1) of the tested district capitals in the Upper West Region*
* *Service Provider did not have network coverage in three (3) district capital*

**3G DATA/COVERAGE TEST**

**Brong Ahafo Region**

|  |  |  |  |  |
| --- | --- | --- | --- | --- |
|  | **AIRTEL** | | | |
| **District Capital** | **Data Access Success Rate (%)**  **≥ 95%** | **Data Drop Rate (%) ≤ 1%** | **Data Throughput (kbps)**  **≥ 256kbps** | **3G  Coverage ≥ -105dBm** |
| Atebubu | 100.00 | 0.00 | 11294.38 | -90.10 |
| Banda | **No 3G Coverage** | | | |
| Bechem | 100.00 | 0.00 | 7394.00 | 86.92 |
| Berekum | 100.00 | 0.00 | 7359.93 | -103.04 |
| Busunya | 100.00 | 0.00 | 1276.86 | **-116.53** |
| Dormaa | 100.00 | 0.00 | 11370.31 | -91.85 |
| Drobo | 100.00 | 0.00 | 10011.42 | -95.23 |
| Duayaw Nkwanta | 100.00 | 0.00 | 6629.90 | **-114.99** |
| Goaso | 100.00 | 0.00 | 8511.51 | -93.99 |
| Hwediem | No Successful Data Session | | | -85.88 |
| Jema | **No 3G Coverage** | | | |
| Kajaji | No Successful Data Session | | | **-125.70** |
| Kenyasi | No Successful Data Session | | | -99.61 |
| Kintampo | 100.00 | 0.00 | 6284.50 | -89.36 |
| Kukuom | 100.00 | 0.00 | 10824.88 | -85.87 |
| Kwame Danso | 100.00 | 0.00 | 12401.78 | -88.05 |
| Nkoranza | 100.00 | 0.00 | 5619.99 | -95.49 |
| Nkrankwanta | No Successful Data Session | | | -88.12 |
| Nsawkaw | **No 3G Coverage** | | | |
| Odumasi | 100.00 | 0.00 | 9374.76 | -88.05 |
| Sampa | 100.00 | 0.00 | 6900.01 | -84.33 |
| Sunyani | 100.00 | 0.00 | 7416.33 | -87.28 |
| Techiman | 100.00 | 0.00 | 7128.27 | -85.22 |
| Tuobodom | 100.00 | 0.00 | 7016.59 | -80.60 |
| Wamfie | 100.00 | 0.00 | 8318.71 | -91.08 |
| Wenchi | 100.00 | 0.00 | 6829.78 | -95.15 |
| Yeji | 100.00 | 0.00 | 7388.00 | -97.08 |

* *Service Provider did not meet 3G Coverage obligations in three (3) of the tested district capitals in the Brong Ahafo Region*
* *Service Provider did not have 3G coverage in three (3) district capitals*

**Central Region**

|  |  |  |  |  |
| --- | --- | --- | --- | --- |
|  | **AIRTEL** | | | |
| **District Capital** | **Data Access Success Rate (%)**  **≥ 95%** | **Data Drop Rate (%) ≤ 1%** | **Data Throughput (kbps)**  **≥ 256kbps** | **3G  Coverage ≥ -105dBm** |
| Abura-Dunkwa | 100.00 | 0.00 | 7511.55 | -94.08 |
| Afransi | 100.00 | 0.00 | 9259.54 | -83.38 |
| Agona Swedru | 100.00 | 0.00 | 1782.44 | -91.35 |
| Ajumako | 100.00 | 0.00 | 11940.62 | -83.17 |
| Apam | 100.00 | 0.00 | 8153.87 | -89.31 |
| Assin Fosu | 100.00 | 0.00 | 10886.85 | -86.83 |
| Awutu Breku | 100.00 | 0.00 | 7409.51 | -81.99 |
| Breman Asikuma | 100.00 | 0.00 | 10244.61 | -86.86 |
| Cape Coast | 100.00 | 0.00 | 8276.29 | -90.67 |
| Diaso | 100.00 | 0.00 | 11011.50 | -91.21 |
| Dunkwa-On-Offin | 100.00 | 0.00 | 8721.75 | -89.26 |
| Elmina | 100.00 | 0.00 | 7390.79 | -95.49 |
| Essarkyir | No Successful Data Session | | | **-118.03** |
| Kasoa | 100.00 | 0.00 | 4491.90 | -83.54 |
| Komenda | 100.00 | 0.00 | 9446.44 | -81.04 |
| Mankessim | 100.00 | 0.00 | 2125.46 | -94.15 |
| Nsaba | 100.00 | 0.00 | 6055.48 | -80.52 |
| Nsuaem-Kyekyewere | **No 3G Coverage** | | | |
| Saltpond | No Successful Data Session | | | -102.74 |
| Twifo Hemang | **-115.08** |
| Twifo Praso | 100.00 | 0.00 | 9651.46 | -84.03 |
| Winneba | 100.00 | 0.00 | 3887.07 | -90.80 |

* *Service Provider did not meet 3G Coverage obligations in two (2) of the tested district capitals in the Central Region*
* *Service Provider did not have 3G coverage in one (1) district capital*

**Upper East Region**

|  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- |
|  | **AIRTEL** | | | |  |  |
| **District Capital** | **Data Access Success Rate (%)**  **≥ 95%** | **Data Drop Rate (%) ≤ 1%** | **Data Throughput (kbps)**  **≥ 256kbps** | **3G  Coverage ≥ -105dBm** |
| Bawku | 100.00 | 0.00 | 5727.09 | -89.23 |  |
| Binduri | No Successful Data Session | | | **-113.55** |  |
| Bolgatanga | 100.00 | 0.00 | 5267.69 | -94.96 |  |
| Bongo | 100.00 | 0.00 | 6082.39 | -100.64 |  |
| Fumbisi | **No 3G Coverage** | | | |  |
| Garu | 100.00 | 0.00 | 12055.47 | -90.93 |  |
| Nangodi | **No 3G Coverage** | | | |
| Navrongo | 100.00 | 0.00 | 3956.64 | -97.02 |  |
| Paga | 100.00 | 0.00 | 897.18 | **-109.27** |  |
| Pusiga | 100.00 | 0.00 | 2302.23 | -91.56 |  |
| Sandema | No Successful Data Session | | | -83.27 |  |
| Tongo | 100.00 | 0.00 | 5041.95 | **-107.64** |  |
| Zebilla | 100.00 | 0.00 | 6326.42 | -95.00 |  |

* *Service Provider did not meet 3G Coverage obligations in three (3) of the tested district capitals in the Upper East Region*
* *Service Provider did not have 3G coverage in two (2) district capitals*

**Upper West Region**

|  |  |  |  |  |
| --- | --- | --- | --- | --- |
|  | **AIRTEL** | | | |
| **District Capital** | **Data Access Success Rate (%)**  **≥ 95%** | **Data Drop Rate (%) ≤ 1%** | **Data Throughput (kbps) ≥ 256kbps** | **3G  Coverage ≥ -105dBm** |
| Funsi | 100.00 | 0.00 | 420.57 | -87.71 |
| Gwollu | 100.00 | 0.00 | 9165.42 | -86.77 |
| Jirapa | No Successful Data Session | | | -69.72 |
| Lambussie | No Successful Data Session | | | -72.79 |
| Lawra | **No 3G Coverage** | | | |
| Nadowli |
| Nandom | No Successful Data Session | | | -90.00 |
| Tumu | 100.00 | 0.00 | 8130.53 | -90.21 |
| Wa | No Successful Data Session | | | -95.76 |
| Wechiau | 100.00 | 100.00 | 3644.02 | - |

* *Service Provider did not have 3G coverage in two (2) district capitals*

**Volta Region**

|  |  |  |  |  |
| --- | --- | --- | --- | --- |
|  | **AIRTEL** | | | |
| **District Capital** | **Data Access Success Rate (%)**  **≥ 95%** | **Data Drop Rate (%)**  **≤ 1%** | **Data Throughput (kbps) ≥ 256kbps** | **3G  Coverage ≥ -105dBm** |
| Adaklu | No Successful Data Session | | | **-109.40** |
| Adidome | 100.00 | 0.00 | 9046.04 | -94.66 |
| Akatsi | 100.00 | 0.00 | 5759.63 | -97.23 |
| Anfoega | 100.00 | 0.00 | 7819.98 | - |
| Ave Dakpa | 100.00 | 0.00 | 11701.66 | - |
| Battor | 100.00 | 0.00 | 1560.47 | **-113.08** |
| Chinderi | No Successful Data Session | | | **-114.19** |
| Dambai | 100.00 | 0.00 | 230.59 | -91.47 |
| Denu | 100.00 | 0.00 | 7585.87 | -75.22 |
| Dzodze | 100.00 | 0.00 | 9781.16 | -91.82 |
| Dzolokpuita | **No 3G Coverage** | | | |
| Golokwati | No Successful Data Session | | | -102.68 |
| Ho | 100.00 | 0.00 | 4829.38 | -92.09 |
| Hohoe | 100.00 | 0.00 | 7921.49 | -95.70 |
| Jasikan | 100.00 | 0.00 | 15656.66 | -81.76 |
| Kadjebi | 100.00 | 0.00 | 5106.53 | -87.84 |
| Keta | 100.00 | 0.00 | 8447.83 | -102.16 |
| Kete Krachi | 100.00 | 0.00 | 9894.55 | -84.65 |
| Kpando | 100.00 | 0.00 | 6623.90 | -92.13 |
| Kpassa | 100.00 | 0.00 | 7457.63 | -97.25 |
| Kpetoe | 100.00 | 0.00 | 9906.04 | -95.21 |
| Kpeve | 100.00 | 0.00 | 3016.83 | - |
| Nkonya Ahenkro | 100.00 | 0.00 | 12695.73 | -87.02 |
| Nkwanta | 100.00 | 0.00 | 189.45 | -91.74 |
| Sogakope | 100.00 | 0.00 | 9472.85 | -92.16 |

* *Service Provider did not meet 3G Coverage KPI in three (3) of the tested district capitals in the Volta Region*

**MONITORING TEST RESULTS FOR TIGO**

**VOICE TEST**

**Central Region**

|  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- |
| **KPI** | **SDCCH CONGEST.**  **RATE** | **TCH CONGEST.**  **RATE** | **CALL DROP**  **RATE** | **CALL SETUP**  **TIME** | **CALL COMPLETION**  **RATE** |
| **Threshold** | **≤ 1%** | **≤ 1%** | **≤ 3%** | **˂10 sec** | **˃70%** |
| **Tigo** | 0.00 | 0.02 | 0.00 | 6.71 | 97.16 |

* *Service Provider met all Key Performance Indicators (KPIs) in the Central Region*

**Ashanti Region**

|  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- |
| **KPI** | **SDCCH CONGEST.**  **RATE** | **TCH CONGEST.**  **RATE** | **CALL DROP**  **RATE** | **CALL SETUP**  **TIME** | **CALL COMPLETION**  **RATE** |
| **Threshold** | **≤ 1%** | **≤ 1%** | **≤ 3%** | **˂10 sec** | **˃70%** |
| **Tigo** | 0.00 | 0.00 | 0.00 | 7.10 | 84.49 |

* *Service Provider met all KPIs in the Ashanti Region*

**Brong Ahafo Region**

|  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- |
| **KPI** | **SDCCH CONGEST.**  **RATE** | **TCH CONGEST.**  **RATE** | **CALL DROP**  **RATE** | **CALL SETUP**  **TIME** | **CALL COMPLETION**  **RATE** |
| **Threshold** | **≤ 1%** | **≤ 1%** | **≤ 3%** | **˂10 sec** | **˃70%** |
| **Tigo** | 0.00 | 0.35 | 0.00 | 7.80 | 89.61 |

* *Service Provider met all KPIs in the Brong Ahafo Region*

**Volta Region**

|  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- |
| **KPI** | **SDCCH CONGEST.**  **RATE** | **TCH CONGEST.**  **RATE** | **CALL DROP**  **RATE** | **CALL SETUP**  **TIME** | **CALL COMPLETION**  **RATE** |
| **Threshold** | **≤ 1%** | **≤ 1%** | **≤ 3%** | **˂10 sec** | **˃70%** |
| **Tigo** | 0.00 | 0.13 | 0.00 | 7.60 | 87.53 |

* *Service Provider met all KPIs in the Volta Region*

**Upper East Region**

|  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- |
| **KPI** | **SDCCH CONGEST.**  **RATE** | **TCH CONGEST.**  **RATE** | **CALL DROP**  **RATE** | **CALL SETUP**  **TIME** | **CALL COMPLETION**  **RATE** |
| **Threshold** | **≤ 1%** | **≤ 1%** | **≤ 3%** | **˂10 sec** | **˃70%** |
| **Tigo** | 0.00 | 0.05 | 0.00 | 8.71 | 88.60 |

* *Service Provider met all KPIs in the Upper East Region*

**Upper West Region**

|  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- |
| **KPI** | **SDCCH CONGEST.**  **RATE** | **TCH CONGEST.**  **RATE** | **CALL DROP**  **RATE** | **CALL SETUP**  **TIME** | **CALL COMPLETION**  **RATE** |
| **Threshold** | **≤ 1%** | **≤ 1%** | **≤ 3%** | **˂10 sec** | **˃70%** |
| **Tigo** | 0.00 | 0.08 | 0.00 | 9.40 | 77.12 |

* *Service Provider met all KPIs in the Upper West Region*

**VOICE QUALITY (MOS)**

**Ashanti Region**

|  |  |  |  |
| --- | --- | --- | --- |
| **District Capital** | **TIGO** | | |
| **(95% of call connections >3.5)** | **Compliance** | **Non-Compliance** |
| Agogo | **95.33%** | **√** |  |
| Agona | **68.16%** |  | **√** |
| Akomadan | **67.98%** |  | **√** |
| Asiwa | **72.35%** |  | **√** |
| Bekwai | **66.32%** |  | **√** |
| Drobonso | No Network Coverage | | |
| Effiduase | **52.15%** |  | **√** |
| Ejisu | **57.02%** |  | **√** |
| Ejura | **67.39%** |  | **√** |
| Foase | **58.70%** |  | **√** |
| Fomena | **71.56%** |  | **√** |
| Jacobu | No Network Coverage | | |
| Juaso | **47.54%** |  | **√** |
| Kodie | **67.12%** |  | **√** |
| Konongo-Odumase | **61.89%** |  | **√** |
| Kumawu | **59.62%** |  | **√** |
| Kuntanase | **63.57%** |  | **√** |
| Mampong | **70.78%** |  | **√** |
| Mampongteng | **49.21%** |  | **√** |
| Mankraso | **65.41%** |  | **√** |
| Manso-Nkwanta | **70.23%** |  | **√** |
| New Edubiase | **57.51%** |  | **√** |
| Nkawie | **51.09%** |  | **√** |
| Nsuta | **73.76%** |  | **√** |
| Nyinahin | **69.77%** |  | **√** |
| Obuasi | **53.04%** |  | **√** |
| Offinso | **59.56%** |  | **√** |
| Tepa | **72.05%** |  | **√** |

* *Service Provider complied with the minimum Mean Opinion Score(MOS) in only one of the tested district capitals in the Ashanti Region*
* *Service Provider did not have network coverage in two (2) district capitals*

**Brong Ahafo Region**

|  |  |  |  |
| --- | --- | --- | --- |
| **District Capital** | **TIGO** | | |
| **(95% of call connections >3.5)** | **Compliance** | **Non-Compliance** |
| Atebubu | **61.84%** |  | **√** |
| Banda Ahenkro | **84.47%** |  | **√** |
| Bechem | **39.07%** |  | **√** |
| Berekum | **47.71%** |  | **√** |
| Busunya | **69.70%** |  | **√** |
| Dormaa-Ahenkro | **59.92%** |  | **√** |
| Drobo | **71.22%** |  | **√** |
| Duayaw-Nkwanta | **6.25%** |  | **√** |
| Goaso | **86.56%** |  | **√** |
| Hwidiem | **85.17%** |  | **√** |
| Jema | **70.21%** |  | **√** |
| Kajaji | **70.59%** |  | **√** |
| Kenyasi | **84.18%** |  | **√** |
| Kintampo | **60.33%** |  | **√** |
| Kukuom | **82.69%** |  | **√** |
| Kwame Danso | **61.41%** |  | **√** |
| Nkoranza | **70.00%** |  | **√** |
| Nkran Nkwanta | **69.84%** |  | **√** |
| Nsawkaw | **67.59%** |  | **√** |
| Odumasi | **73.20%** |  | **√** |
| Sampa | **54.85%** |  | **√** |
| Sunyani | **68.42%** |  | **√** |
| Techiman | **51.77%** |  | **√** |
| Tuobodom | **56.97%** |  | **√** |
| Wamfie | **66.87%** |  | **√** |
| Wenchi | **52.98%** |  | **√** |
| Yeji | **60.24%** |  | **√** |

* *Service Provider failed to meet the MOS minimum requirement in all twenty seven (27) tested district capitals in the Brong Ahafo Region*

**Volta Region**

|  |  |  |  |
| --- | --- | --- | --- |
| **District Capital** | **TIGO** | | |
| **(95% of call connections >3.5)** | **Compliance** | **Non-Compliance** |
| Adaklu Waya | **64.39%** |  | **√** |
| Adidome | **75.59%** |  | **√** |
| Agortime-Kpetoe | **47.41%** |  | **√** |
| Akatsi | **40.73%** |  | **√** |
| Amfoega | **75.48%** |  | **√** |
| Ave Dakpa | **69.74%** |  | **√** |
| Battor Dugame | **78.90%** |  | **√** |
| Chinderi | **0.00%** |  | **√** |
| Dambai | **87.04%** |  | **√** |
| Denu | **76.89%** |  | **√** |
| Dzodze | **63.45%** |  | **√** |
| Dzolokpuita | **0.00%** |  | **√** |
| Ho | **46.72%** |  | **√** |
| Hohoe | **54.56%** |  | **√** |
| Jasikan | **16.51%** |  | **√** |
| Kadjebi | **94.33%** |  | **√** |
| Keta | **61.15%** |  | **√** |
| Kete-Krachi | **8.73%** |  | **√** |
| Kpando | **33.09%** |  | **√** |
| Kpasa | **55.92%** |  | **√** |
| Kpeve | **78.80%** |  | **√** |
| Nkonya-Ahenkro | **22.41%** |  | **√** |
| Nkwanta | **55.85%** |  | **√** |
| Sogakope | **63.85%** |  | **√** |
| Ve-Golokwati | **66.67%** |  | **√** |

* *Service Provider failed to meet the MOS minimum requirement in all twenty five (25) tested district capitals in the Volta Region*

**Central Region**

|  |  |  |  |
| --- | --- | --- | --- |
| **District Capital** | **TIGO** | | |
| **(95% of call connections >3.5)** | **Compliance** | **Non-Compliance** |
| Abura-Dunkwa | **27.31%** |  | **√** |
| Afransi | **36.55%** |  | **√** |
| Agona Swedru | **51.56%** |  | **√** |
| Ajumako | **54.99%** |  | **√** |
| Apam | **64.84%** |  | **√** |
| Assin Fosu | **54.86%** |  | **√** |
| Awutu Breku | **64.33%** |  | **√** |
| Breman Asikuma | **58.39%** |  | **√** |
| Cape Coast | **54.71%** |  | **√** |
| Diaso | **51.47%** |  | **√** |
| Dunkwa-On-Offin | **53.02%** |  | **√** |
| Elmina | **57.22%** |  | **√** |
| Essarkyir | **58.54%** |  | **√** |
| Kasoa | **53.53%** |  | **√** |
| Komenda | **57.95%** |  | **√** |
| Mankessim | **55.82%** |  | **√** |
| Nsaba | **60.19%** |  | **√** |
| Nsuaem-Kyekyewere | **60.75%** |  | **√** |
| Saltpond | **66.96%** |  | **√** |
| Twifo Hemang | **67.18%** |  | **√** |
| Twifo Praso | **65.49%** |  | **√** |
| Winneba | **63.70%** |  | **√** |

* *Service Provider failed to meet the MOS requirement in all twenty two (22) tested district capitals in the Central Region*

**Upper East Region**

|  |  |  |  |
| --- | --- | --- | --- |
|  | **TIGO** | | |
| **District Capital** | **Voice Quality**  **(95% of call connections >3.5)** | **Compliance** | **Non-Compliance** |
| Bawku | **34.08%** |  | **√** |
| Binduri | **68.02%** |  | **√** |
| Bolgatanga | **12.24%** |  | **√** |
| Bongo | **12.23%** |  | **√** |
| Fumbisi | **71.28%** |  | **√** |
| Garu | **62.32%** |  | **√** |
| Nangodi | **2.37%** |  | **√** |
| Navrongo | **31.10%** |  | **√** |
| Paga | **29.74%** |  | **√** |
| Pusiga | **6.25%** |  | **√** |
| Sandema | **53.87%** |  | **√** |
| Tongo | **71.27%** |  | **√** |
| Zebilla | **53.66%** |  | **√** |

* *Service Provider failed to meet the MOS requirement in all thirteen (13) tested district capitals in the Upper East Region*

**Upper West Region**

|  |  |  |  |
| --- | --- | --- | --- |
|  | **TIGO** | | |
| **District Capital** | **Voice Quality**  **(95% of call connections >3.5)** | **Compliance** | **Non-Compliance** |
| Funsi | **0.00%** |  | **√** |
| Gwollu | **58.05%** |  | **√** |
| Issa | No Network Coverage | | |
| Jirapa | **48.48%** |  | **√** |
| Lambussie | **40.32%** |  | **√** |
| Lawra | **55.56%** |  | **√** |
| Nadowli | **51.04%** |  | **√** |
| Nandom | **18.70%** |  | **√** |
| Tumu | **67.79%** |  | **√** |
| Wa | **44.56%** |  | **√** |
| Wechiau | **68.55%** |  | **√** |

* *Service Provider failed to meet the MOS requirement in all thirteen (11) tested district capitals in the Upper West Region*
* *Service Provider did not have network coverage in one (1) district capital*

**3G DATA/COVERAGE TEST**

**Brong Ahafo Region**

|  |  |  |  |  |
| --- | --- | --- | --- | --- |
|  | **TIGO** | | | |
| **District Capital** | **Data Access Success Rate (%)**  **≥ 95%** | **Data Drop Rate (%)**  **≤ 1%** | **Data Throughput (kbps)**  **≥ 256kbps** | **3G  Coverage ≥ -105dBm** |
| Atebubu | 100.00 | 0.00 | 2950.08 | -101.32 |
| Banda | No Successful Data Session | | | **-110.37** |
| Bechem | 100.00 | 0.00 | 6371.86 | -96.12 |
| Berekum | 100.00 | 0.00 | 4489.31 | -97.74 |
| Busunya | 100.00 | 0.00 | 7150.89 | -77.60 |
| Dormaa | 100.00 | 0.00 | 7032.24 | -93.86 |
| Drobo | 100.00 | 0.00 | 6890.58 | -91.92 |
| Duayaw Nkwanta | 100.00 | 0.00 | 6629.90 | **-105.57** |
| Goaso | 100.00 | 0.00 | 4268.29 | -102.56 |
| Hwediem | No Successful Data Session | | | **-111.51** |
| Jema | 100.00 | 0.00 | 3438.72 | -87.69 |
| Kajaji | 100.00 | 0.00 | 6059.04 | -84.76 |
| Kenyasi | 100.00 | 0.00 | 4451.38 | -100.34 |
| Kintampo | 100.00 | 0.00 | 4377.95 | -99.07 |
| Kukuom | 100.00 | 0.00 | 6919.02 | -86.92 |
| Kwame Danso | 100.00 | 0.00 | 3246.04 | -93.26 |
| Nkoranza | 100.00 | 0.00 | 6052.83 | -100.31 |
| Nkrankwanta | **No 3G Coverage** | | | |
| Nsawkaw | 100.00 | 0.00 | 6846.11 | -78.19 |
| Odumasi | 100.00 | 0.00 | 4106.58 | -86.67 |
| Sampa | 100.00 | 0.00 | 1172.83 | -87.98 |
| Sunyani | 100.00 | 0.00 | 5264.57 | -87.94 |
| Techiman | 100.00 | 0.00 | 5013.41 | -96.01 |
| Tuobodom | 100.00 | 0.00 | 5385.72 | -96.75 |
| Wamfie | 100.00 | 0.00 | 3800.03 | -85.16 |
| Wenchi | 100.00 | 0.00 | 2286.38 | -90.93 |
| Yeji | 100.00 | 0.00 | 2783.78 | -100.20 |

* *Service Provider did not meet 3G Coverage obligations in three (3) of the tested district capitals in the Brong Ahafo Region*
* *Service Provider did not have 3G coverage in one (1) district capital*

**Central Region**

|  |  |  |  |  |
| --- | --- | --- | --- | --- |
|  | **TIGO** | | | |
| **District Capital** | **Data Access Success Rate (%)**  **≥ 95%** | **Data Drop Rate (%) ≤ 1%** | **Data Throughput (kbps)**  **≥ 256kbps** | **3G  Coverage ≥ -105dBm** |
| Abura-Dunkwa | 100.00 | 0.00 | 5989.68 | -93.84 |
| Afransi | 100.00 | 0.00 | 5625.29 | -80.61 |
| Agona Swedru | 100.00 | 0.00 | 4440.74 | -86.26 |
| Ajumako | 100.00 | 0.00 | 7134.93 | -79.39 |
| Apam | 100.00 | 0.00 | 6715.42 | -92.81 |
| Assin Fosu | 100.00 | 0.00 | 3033.02 | -92.64 |
| Awutu Breku | 100.00 | 0.00 | 6797.36 | -89.50 |
| Breman Asikuma | 100.00 | 0.00 | 6102.59 | -85.51 |
| Cape Coast | 100.00 | 0.00 | 3607.37 | -86.74 |
| Diaso | 100.00 | 0.00 | 7296.07 | -80.52 |
| Dunkwa-On-Offin | 100.00 | 0.00 | 3717.97 | -83.79 |
| Elmina | 100.00 | 0.00 | 7054.68 | -97.33 |
| Essarkyir | No Successful Data Session | | | **-111.63** |
| Kasoa | 100.00 | 0.00 | 5608.66 | -80.70 |
| Komenda | 100.00 | 0.00 | 8113.60 | -79.83 |
| Mankessim | 100.00 | 0.00 | 4186.92 | -101.02 |
| Nsaba | 100.00 | 0.00 | 6005.96 | -82.32 |
| Nsuaem-Kyekyewere | 100.00 | 0.00 | 9081.54 | -82.47 |
| Saltpond | 100.00 | 0.00 | 7963.32 | -96.72 |
| Twifo Hemang | No Successful Data Session | | | **-115.93** |
| Twifo Praso | 100.00 | 0.00 | 6473.97 | **-112.42** |
| Winneba | 100.00 | 0.00 | 4571.69 | -90.40 |

* *Service Provider did not meet 3G Coverage obligations in three (3) of the tested district capitals in the Central Region*

**Upper East Region**

|  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- |
|  | **TIGO** | | | |  |  |
| **District Capital** | **Data Access Success Rate (%) ≥ 95%** | **Data Drop Rate (%) ≤ 1%** | **Data Throughput (kbps) ≥ 256kbps** | **3G  Coverage ≥ -105dBm** |
| Bawku | 100.00 | 0.00 | 5627.00 | -80.85 |  | |
| Binduri | 100.00 | 0.00 | 8676.21 | -99.72 |  | |
| Bolgatanga | 100.00 | 0.00 | 5318.72 | -98.12 |  | |
| Bongo | 100.00 | 0.00 | 3950.42 | -102.27 |  | |
| Fumbisi | 100.00 | 0.00 | 7496.14 | -78.30 |  | |
| Garu | 100.00 | 0.00 | 5501.40 | -90.53 |  | |
| Nangodi | **No 3G Coverage** | | | |
| Navrongo | 100.00 | 0.00 | 4430.10 | -100.97 |  | |
| Paga | 100.00 | 0.00 | 3164.29 | -101.97 |  | |
| Pusiga | 100.00 | 0.00 | 3268.54 | **-150.80** |  | |
| Sandema | 100.00 | 0.00 | 6225.04 | -93.50 |  | |
| Tongo | 100.00 | 0.00 | 7517.51 | -93.41 |  | |
| Zebilla | 100.00 | 0.00 | 5328.80 | -90.68 |  | |

* *Service Provider did not meet 3G Coverage obligations in one (1) of the tested district capitals in the Upper East Region*
* *Service Provider did not have 3G coverage in one (1) district capitals*

**Upper West Region**

|  |  |  |  |  |
| --- | --- | --- | --- | --- |
|  | **TIGO** | | | |
| **District Capital** | **Data Access Success Rate (%)**  **≥ 95%** | **Data Drop Rate (%)**  **≤ 1%** | **Data Throughput (kbps)**  **≥ 256kbps** | **3G  Coverage ≥ -105dBm** |
| Funsi | 100.00 | 0.00 | 251.79 | - |
| Gwollu | 100.00 | 0.00 | 6486.42 | -88.51 |
| Jirapa | 100.00 | 0.00 | 3095.24 | -97.47 |
| Lambussie | 100.00 | 0.00 | 3782.75 | -96.84 |
| Lawra | 100.00 | 0.00 | 6326.56 | -90.23 |
| Nadowli | 100.00 | 0.00 | 3255.29 | -90.73 |
| Nandom | No Successful Data Session | | | **-112.30** |
| Tumu | 100.00 | 0.00 | 5394.64 | -90.28 |
| Wa | 100.00 | 0.00 | 5571.54 | -98.63 |
| Wechiau | 100.00 | 0.00 | 3312.82 | -82.68 |

* *Service Provider did not meet 3G Coverage obligations in one (1) of the tested district capitals in the Upper West Region*

**Volta Region**

|  |  |  |  |  |
| --- | --- | --- | --- | --- |
|  | **TIGO** | | | |
| **District Capital** | **Data Access Success Rate (%) ≥ 95%** | **Data Drop Rate (%) ≤ 1%** | **Data Throughput (kbps)**  **≥ 256kbps** | **3G  Coverage ≥ -105dBm** |
| Adaklu | 100.00 | 0.00 | 8843.61 | -78.31 |
| Adidome | 100.00 | 0.00 | 6582.38 | -93.96 |
| Akatsi | 100.00 | 0.00 | 2019.59 | **-106.63** |
| Anfoega | 100.00 | 0.00 | 6812.58 | -88.33 |
| Ave Dakpa | 100.00 | 0.00 | 9095.03 | -86.23 |
| Battor | 100.00 | 0.00 | 8258.83 | -90.94 |
| Chinderi | **No 3G Coverage** | | | |
| Dambai | **No 3G Coverage** | | | |
| Denu | 100.00 | 0.00 | 1559.60 | **-107.31** |
| Dzodze | 100.00 | 0.00 | 6037.79 | -95.47 |
| Dzolokpuita | No Successful Data Session | | | **-115.47** |
| Golokwati | 100.00 | 0.00 | 6625.71 | -84.39 |
| Ho | 100.00 | 0.00 | 3888.27 | -86.29 |
| Hohoe | 100.00 | 0.00 | 6048.81 | -102.18 |
| Jasikan | **No 3G Coverage** | | | |
| Kadjebi | **No 3G Coverage** | | | |
| Keta | 100.00 | 0.00 | 6586.40 | -97.36 |
| Kete Krachi | 100.00 | 0.00 | 3396.44 | -94.02 |
| Kpando | 100.00 | 0.00 | 3065.32 | **-111.69** |
| Kpassa | **No 3G Coverage** | | | |
| Kpetoe | 100.00 | 0.00 | 6582.38 | -104.56 |
| Kpeve | 100.00 | 0.00 | 3077.44 | -80.03 |
| Nkonya Ahenkro | No Successful Data Session | | | **-115.07** |
| Nkwanta | No Successful Data Session | | | -71.99 |
| Sogakope | 100.00 | 0.00 | 4121.82 | -90.92 |

* *Service Provider did not meet 3G Coverage obligations in five (5) of the tested district capitals in the Volta Region*
* *Service Provider did not have 3G coverage in five (5) district capitals*

**MONITORING TEST RESULTS FOR GLO**

**VOICE TEST**

**Central Region**

|  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- |
| **KPI** | **SDCCH CONGEST.**  **RATE** | **TCH CONGEST.**  **RATE** | **CALL DROP**  **RATE** | **CALL SETUP**  **TIME** | **CALL COMPLETION**  **RATE** |
| **Threshold** | **≤ 1%** | **≤ 1%** | **≤ 3%** | **˂10 sec** | **˃70%** |
| **GLO** | 0.02 | 0.11 | 0.00 | **11.08** | 75.16 |

* *Service Provider did not meet Call Setup Time KPI in the Central Region*

**Ashanti Region**

|  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- |
| **KPI** | **SDCCH CONGEST.**  **RATE** | **TCH CONGEST.**  **RATE** | **CALL DROP**  **RATE** | **CALL SETUP**  **TIME** | **CALL COMPLETION**  **RATE** |
| **Threshold** | **≤ 1%** | **≤ 1%** | **≤ 3%** | **˂10 sec** | **˃70%** |
| **GLO** | 0.00 | 0.78 | 0.00 | **11.93** | **42.58** |

* *Service Provider did not meet Call Setup Time and Call Completion Rate KPIs in the Ashanti Region*

**Brong Ahafo Region**

|  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- |
| **KPI** | **SDCCH CONGEST.**  **RATE** | **TCH CONGEST.**  **RATE** | **CALL DROP**  **RATE** | **CALL SETUP**  **TIME** | **CALL COMPLETION**  **RATE** |
| **Threshold** | **≤ 1%** | **≤ 1%** | **≤ 3%** | **˂10 sec** | **˃70%** |
| **GLO** | 0.00 | 0.59 | 0.00 | 7.50 | **42.49** |

* *Service Provider did not meet Call Completion Rate KPI in the Brong Ahafo Region*

**Volta Region**

|  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- |
| **KPI** | **SDCCH CONGEST.**  **RATE** | **TCH CONGEST.**  **RATE** | **CALL DROP**  **RATE** | **CALL SETUP**  **TIME** | **CALL COMPLETION**  **RATE** |
| **Threshold** | **≤ 1%** | **≤ 1%** | **≤ 3%** | **˂10 sec** | **˃70%** |
| **GLO** | 0.02 | 0.08 | 0.00 | 9.66 | **21.97** |

* *Service Provider did not meet Call Completion Rate KPI in the Volta Region*

**Upper East Region**

|  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- |
| **KPI** | **SDCCH CONGEST.**  **RATE** | **TCH CONGEST.**  **RATE** | **CALL DROP**  **RATE** | **CALL SETUP**  **TIME** | **CALL COMPLETION**  **RATE** |
| **Threshold** | **≤ 1%** | **≤ 1%** | **≤ 3%** | **˂10 sec** | **˃70%** |
| **GLO** | - | - | - | - | - |

* \**Glo did not have Network Coverage in all District Capitals in Upper East*

**Upper West Region**

|  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- |
| **KPI** | **SDCCH CONGEST.**  **RATE** | **TCH CONGEST.**  **RATE** | **CALL DROP**  **RATE** | **CALL SETUP**  **TIME** | **CALL COMPLETION**  **RATE** |
| **Threshold** | **≤ 1%** | **≤ 1%** | **≤ 3%** | **˂10 sec** | **˃70%** |
| **GLO** | - | - | - | - | - |

* *\*Glo did not have Network Coverage in all District Capitals in Upper West*

**VOICE QUALITY (MOS)**

**Central Region**

|  |  |  |  |
| --- | --- | --- | --- |
|  | **GLO** | |  |
| **District Capital** | **Voice Quality**  **(95% of call connections >3.5)** | **Compliance** | **Non- Compliance** |
| Abura-Dunkwa | **No Network Coverage** | | |
| Afransi |
| Ajumako |
| Apam |
| Asikuma |
| Assin Fosu |
| Awutu-Breku |
| Cape Coast |
| Diaso |
| Dunkwa-On-Offin |
| Elmina |
| Essarkyir |
| Hemang |
| Kasoa | **2.10%** |  | **√** |
| Nsaba | **No Network Coverage**  **No Network Coverage** | | |
| Nsuaem-Kyekyewere |
| Saltpond |
| Swedru |
| Twifo Praso |
| Winneba |

* *Service Provider failed to meet the MOS requirement in the Central Region*
* *Service Provider had coverage in one (1) out of twenty (20) district capitals*

**Volta Region**

|  |  |  |  |
| --- | --- | --- | --- |
|  | **GLO** | | |
| **District Capital** | **Voice Quality**  **(95% of call connections >3.5)** | **Compliance** | **Non-Compliance** |
| Adaklu | **No Network Coverage** | | |
| Adidome | **2.70%** |  | **√** |
| Akatsi | **41.99%** |  | **√** |
| Amfoega | **10.26%** |  | **√** |
| Ave Dakpa | **No Network Coverage** | | |
| Battor | **18.50%** |  | **√** |
| Chinderi | **No Network Coverage** | | |
| Dambai |
| Denu | **13.43%** |  | **√** |
| Dzodze | **4.55%** |  | **√** |
| Dzolokpuita | **No Network Coverage** | | |
| Golokwati | **15.32%** |  | **√** |
| Ho | **36.77%** |  | **√** |
| Hohoe | **No Network Coverage** | | |
| Jasikan |
| Kadjebi |
| Keta | **1.69%** |  | **√** |
| Ketekrachi | **No Network Coverage** | | |
| Kpando |
| Kpassa |
| Kpetoe |
| Kpeve |
| Nkonya Ahenkro |
| Nkwanta |
| Sogakope | **32.14%** |  | **√** |

* *Service Provider failed to meet the MOS requirement in all tested district capitals in the Volta Region*
* *Service Provider did not have network coverage in fifteen (15) district capitals*

**Ashanti Region**

|  |  |  |  |
| --- | --- | --- | --- |
|  | **GLO** | | |
| **District Capital** | **Voice Quality**  **(95% of call connections >3.5)** | **Compliance** | **Non-Compliance** |
| Agogo | **5.39%** |  | **√** |
| Agona | **2.21%** |  | **√** |
| Akomadan | **No Network Coverage** | | |
| Asiwa |
| Bekwai | **10.31%** |  | **√** |
| Drobonso | **No Network Coverage** | | |
| Effiduase | **7.50%** |  | **√** |
| Ejisu | **3.10%** |  | **√** |
| Ejura | **No Network Coverage** | | |
| Foase | **0.00%** |  | **√** |
| Fomena | **No Network Coverage** | | |
| Jacobu | **9.30%** |  | **√** |
| Juaso | **8.50%** |  | **√** |
| Kodie | **2.53%** |  | **√** |
| Konongo | **10.99%** |  | **√** |
| Kumawu | **No Network Coverage** | | |
| Kuntanase | **8.74%** |  | **√** |
| Mampong | **0.51%** |  | **√** |
| Mampongteng | **4.35%** |  | **√** |
| Mankranso | **No Network Coverage** | | |
| Manso Nkwanta |
| New Edubiase |
| Nkawie | **13.24%** |  | **√** |
| Nsuta | **4.76%** |  | **√** |
| Nyinahin | **No Network Coverage** | | |
| Obuasi | **5.57%** |  | **√** |
| Offinso | **1.64%** |  | **√** |
| Tepa | **0.00%** |  | **√** |

* *Service Provider failed to meet the MOS requirement in all tested district capitals in the Ashanti Region*
* *Service Provider did not have network coverage in ten (10) district capitals*

**Brong Ahafo Region**

|  |  |  |  |
| --- | --- | --- | --- |
|  | **GLO** | | |
| **District Capital** | **Voice Quality**  **(95% of call connections >3.5)** | **Compliance** | **Non-Compliance** |
| Atebubu | **4.56%** |  | **√** |
| Banda Ahenkro | **No Network Coverage** | | |
| Bechem |
| Berekum | **12.70%** |  | **√** |
| Busunya | **No Network Coverage** | | |
| Dormaa-Ahenkro |
| Drobo |
| Duayaw-Nkwanta |
| Goaso | **13.06%** |  | **√** |
| Hwidiem | **No Network Coverage** | | |
| Jema |
| Kajaji |
| Kenyasi |
| Kintampo | **13.72%** |  | **√** |
| Kukuom | **13.52%** |  | **√** |
| Kwame Danso | **No Network Coverage** | | |
| Nkoranza |
| Nkran Nkwanta |
| Nsawkaw |
| Odumasi | **14.40%** |  | **√** |
| Sampa | **No Network Coverage** | | |
| Sunyani | **16.97%** |  | **√** |
| Techiman | **15.07%** |  | **√** |
| Tuobodom | **No Network Coverage** | | |
| Wamfie |
| Wenchi | **8.96%** |  | **√** |
| Yeji | **No Network Coverage** | | |

* *Service Provider failed to meet the MOS requirement in all tested district capitals in the Brong Ahafo Region*
* *Service Provider did not have network coverage in eighteen (18) district capitals*

\*Glo did not have Network Coverage in the Upper East & West Regions

**3G DATA/COVERAGE TEST**

**Central Region**

|  |  |  |  |  |
| --- | --- | --- | --- | --- |
|  | **GLO** | | | |
| **District Capital** | **Data Access Success Rate**  **(%)**  **≥ 95%** | **Data Drop Rate**  **(%)**  **≤ 1%** | **Data Throughput**  **(kbps)**  **≥ 256kbps** | **3G**  **Coverage**  **≥ -105dBm** |
| Abura-Dunkwa | No Successful Data Session | | | **-116.36** |
| Afransi | **-106.67** |
| Ajumako | **-108.39** |
| Apam | **-111.41** |
| Asikuma | **No 3G Coverage** | | | |
| Assin Fosu | No Successful Data Session | | | -88.88 |
| Awutu-Breku | **-112.91** |
| Cape Coast | -95.90 |
| Diaso | **No 3G Coverage** | | | |
| Dunkwa-On-Offin | No Successful Data Session | | | -104.21 |
| Elmina | **-112.06** |
| Essarkyir | **No 3G Coverage** | | | |
| Hemang |
| Kasoa | No Successful Data Session | | | -100.22 |
| Nsaba | **-116.29** |
| Nsuaem-Kyekyewere | **-111.88** |
| Saltpond | -93.38 |
| Swedru | -95.28 |
| Twifo Praso | **No 3G Coverage** | | | |
| Winneba | No Successful Data Session | | | -98.45 |

* *Service Provider did not meet the 3G Coverage obligations in eight (8) tested district capitals in the Central Region*
* *Service Provider did not have network coverage in five (5) district capitals*

**Volta Region**

|  |  |  |  |  |
| --- | --- | --- | --- | --- |
|  | **GLO** | | | |
| **District Capital** | **Data Access Success Rate**  **(%)**  **≥ 95%** | **Data Drop Rate**  **(%)**  **≤ 1%** | **Data Throughput**  **(kbps)**  **≥ 256kbps** | **3G**  **Coverage**  **≥ -105dBm** |
| Adaklu | 100.00 | 0.00 | 375.38 | **-115.40** |
| Adidome | 100.00 | 0.00 | 2594.21 | **-116.17** |
| Akatsi | 100.00 | 0.00 | 3490.70 | -88.49 |
| Amfoegu | **No 3G Coverage** | | | |
| Ave Dakpa |
| Battor | 100.00 | 0.00 | 394.08 | **-113.93** |
| Chinderi | **No 3G Coverage** | | | |
| Dambai |
| Denu | 100.00 | 0.00 | 3178.11 | -82.17 |
| Dzodze | No Successful Data Session | | | **-110.63** |
| Dzolokpuita | No Successful Data Session | | | **-115.35** |
| Golokwati | **No 3G Coverage** | | | |
| Ho | 100.00 | 0.00 | 3641.98 | -85.57 |
| Hohoe | **No 3G Coverage** | | | |
| Jasikan |
| Kadjebi |
| Keta | No Successful Data Session | | | **-114.01** |
| Ketekrachi | **No 3G Coverage** | | | |
| Kpando |
| Kpassa |
| Kpetoe | No Successful Data Session | | | **-111.59** |
| Kpeve | 100.00 | 0.00 | 3077.44 | -64.97 |
| Nkonya Ahenkro | **No 3G Coverage** | | | |
| Nkwanta |
| Sogakope | 100.00 | 0.00 | 2840.41 | -80.77 |

* *Service Provider did not meet the 3G Coverage obligations in seven (7) tested district capitals in the Volta Region*
* *Service Provider did not have network coverage in thirteen (13) district capitals*

**Brong Ahafo Region**

|  |  |  |  |  |
| --- | --- | --- | --- | --- |
|  | **GLO** | | | |
| **District Capital** | **Data Access Success Rate**  **(%)**  **≥ 95%** | **Data Drop Rate**  **(%)**  **≤ 1%** | **Data Throughput**  **(kbps)**  **≥ 256kbps** | **3G**  **Coverage**  **≥ -105dBm** |
| Atebubu | **No 3G Coverage** | | | |
| Banda Ahenkro |
| Bechem |
| Berekum |
| Busunya |
| Dormaa-Ahenkro |
| Drobo |
| Duayaw-Nkwanta |
| Goaso |
| Hwidiem |
| Jema |
| Kajaji | **No 3G Coverage** | | | |
| Kenyasi |
| Kintampo |
| Kukuom |
| Kwame Danso |
| Nkoranza |
| Nkran Nkwanta |
| Nsawkaw |
| Odumasi | No Successful Data Session | | | -95.83 |
| Sampa | **No 3G Coverage** | | | |
| Sunyani | No Successful Data Session | | | -86.53 |
| Techiman | 100.00 | 0.00 | 2678.58 | -86.76 |
| Tuobodom | No Successful Data Session | | | -**111.97** |
| Wamfie | **No 3G Coverage** | | | |
| Wenchi |
| Yeji |

* *Service Provider did not meet the 3G Coverage obligations in one (1) tested district capital in the Brong Ahafo Region*
* *Service Provider did not have network coverage in twenty three (23) district capitals*

**Upper East Region**

|  |  |  |  |  |
| --- | --- | --- | --- | --- |
|  | **GLO** | | | |
| **District Capital** | **Data Access Success Rate**  **(%)**  **≥ 95%** | **Data Drop Rate**  **(%)**  **≤ 1%** | **Data Throughput**  **(kbps)**  **≥ 256kbps** | **3G**  **Coverage**  **≥ -105dBm** |
| Bawku | **No 3G Coverage** | | | |
| Binduri |
| Bolgatanga |
| Bongo |
| Fumbisi |
| Garu |
| Nangodi |
| Navrongo |
| Paga |
| Pusiga |
| Sandema |
| Tongo |
| Zebilla |

* *Service Provider did not have 3G Coverage in all thirteen district capitals in the Upper East Region*

**Upper West Region**

|  |  |  |  |  |
| --- | --- | --- | --- | --- |
|  | **GLO** | | | |
| **District Capital** | **Data Access Success Rate**  **(%)**  **≥ 95%** | **Data Drop Rate**  **(%)**  **≤ 1%** | **Data Throughput**  **(kbps)**  **≥ 256kbps** | **3G**  **Coverage**  **≥ -105dBm** |
| Funsi | **No 3G Coverage** | | | |
| Gwollu | No Successful Data Session | | | -92.04 |
| Issa | **No 3G Coverage** | | | |
| Jirapa |
| Lambussie |
| Lawra |
| Nadowli |
| Nandom |
| Tumu | No Successful Data Session | | | **-120.15** |
| Wa | -99.52 |
| Wechiau | -81.24 |

* *Service Provider did not meet the 3G Coverage obligations in one (1) tested district capital in the Upper West Region*
* *Service Provider did not have network coverage in seven (7) district capitals*

**MONITORING TEST RESULTS FOR MTN**

**VOICE TEST**

**Central Region**

|  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- |
| **KPI** | **SDCCH CONGEST.**  **RATE** | **TCH CONGEST.**  **RATE** | **CALL DROP**  **RATE** | **CALL SETUP**  **TIME** | **CALL COMPLETION**  **RATE** |
| **Threshold** | **≤ 1%** | **≤ 1%** | **≤ 3%** | **˂10 sec** | **˃70%** |
| **MTN** | 0.00 | 0.00 | 0.00 | **10.77** | 96.83 |

* *Service Provider did not meet Call Setup Time KPI in the Central Region*

**Ashanti Region**

|  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- |
| **KPI** | **SDCCH CONGEST.**  **RATE** | **TCH CONGEST.**  **RATE** | **CALL DROP**  **RATE** | **CALL SETUP**  **TIME** | **CALL COMPLETION**  **RATE** |
| **Threshold** | **≤ 1%** | **≤ 1%** | **≤ 3%** | **˂10 sec** | **˃70%** |
| **MTN** | 0.00 | 0.00 | 0.00 | 7.60 | 98.46 |

* *Service Provider met all KPIs in the Ashanti Region*

**Brong Ahafo Region**

|  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- |
| **KPI** | **SDCCH CONGEST.**  **RATE** | **TCH CONGEST.**  **RATE** | **CALL DROP**  **RATE** | **CALL SETUP**  **TIME** | **CALL COMPLETION**  **RATE** |
| **Threshold** | **≤ 1%** | **≤ 1%** | **≤ 3%** | **˂10 sec** | **˃70%** |
| **MTN** | 0.00 | 0.00 | 0.00 | 7.14 | 98.65 |

* *Service Provider met all KPIs in the Brong Ahafo Region*

**Volta Region**

|  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- |
| **KPI** | **SDCCH CONGEST.**  **RATE** | **TCH CONGEST.**  **RATE** | **CALL DROP**  **RATE** | **CALL SETUP**  **TIME** | **CALL COMPLETION**  **RATE** |
| **Threshold** | **≤ 1%** | **≤ 1%** | **≤ 3%** | **˂10 sec** | **˃70%** |
| **MTN** | 0.00 | 0.00 | 0.00 | 7.10 | 99.42 |

* *Service Provider met all KPIs in the Volta Region*

**Upper East**

|  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- |
| **KPI** | **SDCCH CONGEST.**  **RATE** | **TCH CONGEST.**  **RATE** | **CALL DROP**  **RATE** | **CALL SETUP**  **TIME** | **CALL COMPLETION**  **RATE** |
| **Threshold** | **≤ 1%** | **≤ 1%** | **≤ 3%** | **˂10 sec** | **˃70%** |
| **MTN** | 0.00 | 0.00 | 0.00 | 9.29 | 95.13 |

* *Service Provider met all KPIs in the Upper East Region*

**Upper West**

|  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- |
| **KPI** | **SDCCH CONGEST.**  **RATE** | **TCH CONGEST.**  **RATE** | **CALL DROP**  **RATE** | **CALL SETUP**  **TIME** | **CALL COMPLETION**  **RATE** |
| **Threshold** | **≤ 1%** | **≤ 1%** | **≤ 3%** | **˂10 sec** | **˃70%** |
| **MTN** | 0.00 | 0.00 | 0.00 | 8.10 | 96.13 |

* *Service Provider met all KPIs in the Upper West Region*

**VOICE QUALITY (MOS)**

**Central Region**

|  |  |  |  |
| --- | --- | --- | --- |
|  | **MTN** | | |
| **District Capital** | **Voice Quality**  **(95% of call connections >3.5)** | **Compliance** | **Non-Compliance** |
| Abura-Dunkwa | **11.44%** |  | **√** |
| Afransi | **12.63%** |  | **√** |
| Ajumako | **28.08%** |  | **√** |
| Apam | **46.21%** |  | **√** |
| Asikuma | **36.72%** |  | **√** |
| Assin Fosu | **9.26%** |  | **√** |
| Awutu-Breku | **16.41%** |  | **√** |
| Cape Coast | **27.46%** |  | **√** |
| Diaso | **15.93%** |  | **√** |
| Dunkwa-On-Offin | **10.55%** |  | **√** |
| Elmina | **30.59%** |  | **√** |
| Essarkyir | **48.87%** |  | **√** |
| Hemang | **14..86%** |  | **√** |
| Kasoa | **20.43%** |  | **√** |
| Nsaba | **25.21%** |  | **√** |
| Nsuaem-Kyekyewere | **68.55%** |  | **√** |
| Saltpond | **30.33%** |  | **√** |
| Swedru | **38.97%** |  | **√** |
| Twifo Praso | **9.35%** |  | **√** |
| Winneba | **23.26%** |  | **√** |

* *Service Provider failed to meet MOS requirement in all twenty (20) tested district capitals in the Central Region*

**Volta Region**

|  |  |  |  |
| --- | --- | --- | --- |
|  | **MTN** | | |
| **District Capital** | **Voice Quality**  **(95% of call connections >3.5)** | **Compliance** | **Non-Compliance** |
| Adaklu | **49.12%** |  | **√** |
| Adidome | **43.65%** |  | **√** |
| Akatsi | **17.95%** |  | **√** |
| Amfoega | **22.95%** |  | **√** |
| Ave Dakpa | **42.44%** |  | **√** |
| Battor | **25.93%** |  | **√** |
| Chinderi | **38.82%** |  | **√** |
| Dambai | **17.31%** |  | **√** |
| Denu | **14.29%** |  | **√** |
| Dzodze | **15.86%** |  | **√** |
| Dzolokpuita | **22.83%** |  | **√** |
| Golokwati | **15.86%** |  | **√** |
| Ho | **25.69%** |  | **√** |
| Hohoe | **10.43%** |  | **√** |
| Jasikan | **29.03%** |  | **√** |
| Kadjebi | **34.74%** |  | **√** |
| Keta | **32.96%** |  | **√** |
| Ketekrachi | **25.83%** |  | **√** |
| Kpando | **15.07%** |  | **√** |
| Kpassa | **3.63%** |  | **√** |
| Kpetoe | **15.08%** |  | **√** |
| Kpeve | **34.88%** |  | **√** |
| Nkonya Ahenkro | **19.55%** |  | **√** |
| Nkwanta | **23.80%** |  | **√** |
| Sogakope | **22.30%** |  | **√** |

* *Service Provider failed to meet MOS requirement in all twenty five (25) tested district capitals in the Volta Region*

**Brong Ahafo Region**

|  |  |  |  |
| --- | --- | --- | --- |
|  | **MTN** | | |
| **District Capital** | **Voice Quality**  **(95% of call connections >3.5)** | **Compliance** | **Non-Compliance** |
| Atebubu | **18.30%** |  | **√** |
| Banda Ahenkro | **83.33%** |  | **√** |
| Bechem | **40.41%** |  | **√** |
| Berekum | **56.96%** |  | **√** |
| Busunya | **95.15%** | **√** |  |
| Dormaa-Ahenkro | **13.92%** |  | **√** |
| Drobo | **44.90%** |  | **√** |
| Duayaw-Nkwanta | **55.23%** |  | **√** |
| Goaso | **52.32%** |  | **√** |
| Hwidiem | **63.37%** |  | **√** |
| Jema | **25.00%** |  | **√** |
| Kajaji | **74.25%** |  | **√** |
| Kenyasi | **56.90%** |  | **√** |
| Kintampo | **35.97%** |  | **√** |
| Kukuom | **34.06%** |  | **√** |
| Kwame Danso | **38.31%** |  | **√** |
| Nkoranza | **20.36%** |  | **√** |
| Nkran Nkwanta | **25.86%** |  | **√** |
| Nsawkaw | **75.21%** |  | **√** |
| Odumasi | **61.97%** |  | **√** |
| Sampa | **48.57%** |  | **√** |
| Sunyani | **56.12%** |  | **√** |
| Techiman | **25.83%** |  | **√** |
| Tuobodom | **9.16%** |  | **√** |
| Wamfie | **4.43%** |  | **√** |
| Wenchi | **19.94%** |  | **√** |
| Yeji | **17.97%** |  | **√** |

* *Service Provider complied with the minimum MOS in only one (1) of the tested district capitals in the Brong Ahafo Region*

**Ashanti Region**

|  |  |  |  |
| --- | --- | --- | --- |
|  | **MTN** | | |
| **District Capital** | **Voice Quality**  **(95% of call connections >3.5)** | **Compliance** | **Non-Compliance** |
| Agogo | **18.04%** |  | **√** |
| Agona | **8.90%** |  | **√** |
| Akomadan | **63.11%** |  | **√** |
| Asiwa | **97.64%** | **√** |  |
| Bekwai | **11.15%** |  | **√** |
| Drobonso | **98.86%** | **√** |  |
| Effiduase | **19.75%** |  | **√** |
| Ejisu | **33.98%** |  | **√** |
| Ejura | **16.02%** |  | **√** |
| Foase | **99.07%** | **√** |  |
| Fomena | **24.46%** |  | **√** |
| Jacobu | **23.51%** |  | **√** |
| Juaso | **19.27%** |  | **√** |
| Kodie | **48.55%** |  | **√** |
| Konongo | **14.02%** |  | **√** |
| Kumawu | **18.24%** |  | **√** |
| Kuntanase | **47.31%** |  | **√** |
| Mampong | **13.38%** |  | **√** |
| Mampongteng | **27.19%** |  | **√** |
| Mankranso | **23.19%** |  | **√** |
| Manso Nkwanta | **39.39%** |  | **√** |
| New Edubiase | **12.42%** |  | **√** |
| Nkawie | **14.68%** |  | **√** |
| Nsuta | **24.21%** |  | **√** |
| Nyinahin | **3.96%** |  | **√** |
| Obuasi | **23.04%** |  | **√** |
| Offinso | **32.06%** |  | **√** |
| Tepa | **21.84%** |  | **√** |

* *Service Provider complied with the minimum MOS in three (3) of the tested district capitals in the Ashanti Region*

**Upper East Region**

|  |  |  |  |
| --- | --- | --- | --- |
|  | **MTN** | | |
| **District Capital** | **Voice Quality**  **(95% of call connections >3.5)** | **Compliance** | **Non-Compliance** |
| Bawku | **16.58%** |  | **√** |
| Binduri | **48.55%** |  | **√** |
| Bolgatanga | **43.31%** |  | **√** |
| Bongo | **14.33%** |  | **√** |
| Fumbisi | **47.72%** |  | **√** |
| Garu | **2.54%** |  | **√** |
| Nangodi | **48.00%** |  | **√** |
| Navrongo | **25.21%** |  | **√** |
| Paga | **67.90%** |  | **√** |
| Pusiga | **8.53%** |  | **√** |
| Sandema | **53.08%** |  | **√** |
| Tongo | **12.45%** |  | **√** |
| Zebilla | **23.98%** |  | **√** |

* *Service Provider failed to meet MOS requirement in all thirteen (13) tested district capitals in the Upper East Region*

**Upper West Region**

|  |  |  |  |
| --- | --- | --- | --- |
|  | **MTN** | | |
| **District Capital** | **Voice Quality**  **(95% of call connections >3.5)** | **Compliance** | **Non-Compliance** |
| Funsi | **0.63%** |  | **√** |
| Gwollu | **1.92%** |  | **√** |
| Issa | **89.13%** |  | **√** |
| Jirapa | **1.81%** |  | **√** |
| Lambussie | **95.00%** | **√** |  |
| Lawra | **63.54%** |  | **√** |
| Nadowli | **26.69%** |  | **√** |
| Nandom | **45.60%** |  | **√** |
| Tumu | **54.70%** |  | **√** |
| Wa | **58.77%** |  | **√** |
| Wechiau | **17.78%** |  | **√** |

* *Service Provider complied with the minimum MOS in only one(1) of the tested district capitals in the Upper West Region*

**3G DATA/COVERAGE TEST**

**Central Region**

|  |  |  |  |  |
| --- | --- | --- | --- | --- |
|  | **MTN** | | | |
| **District Capital** | **Data Access Success Rate**  **(%)**  **≥ 95%** | **Data Drop Rate**  **(%)**  **≤ 1%** | **Data Throughput**  **(kbps)**  **≥ 256kbps** | **3G**  **Coverage**  **≥ -105dBm** |
| Abura-Dunkwa | 100.00 | 0.00 | 5184.61 | -82.91 |
| Afransi | 100.00 | 0.00 | 5378.88 | -79.96 |
| Ajumako | 100.00 | 0.00 | 6698.02 | -81.75 |
| Apam | 100.00 | 0.00 | 7777.19 | -74.67 |
| Asikuma | 100.00 | 0.00 | 6770.16 | -77.70 |
| Assin Fosu | 100.00 | 0.00 | 4345.74 | -79.71 |
| Awutu-Breku | 100.00 | 0.00 | 7049.36 | -78.56 |
| Cape Coast | 100.00 | 0.00 | 6196.42 | -81.61 |
| Diaso | 100.00 | 0.00 | 6044.46 | -80.45 |
| Dunkwa-On-Offin | 100.00 | 0.00 | 6948.07 | -81.51 |
| Elmina | 100.00 | 0.00 | 7335.61 | -93.13 |
| Essarkyir | 100.00 | 0.00 | 7601.12 | -81.42 |
| Hemang | 100.00 | 0.00 | 7201.67 | -84.59 |
| Kasoa | 100.00 | 0.00 | 6817.38 | -79.08 |
| Nsaba | 100.00 | 0.00 | 6719.38 | -81.37 |
| Nsuaem-Kyekyewere | 100.00 | 0.00 | 8655.44 | -84.21 |
| Saltpond | 100.00 | 0.00 | 8452.08 | -83.50 |
| Swedru | 100.00 | 0.00 | 6677.93 | -75.61 |
| Twifo Praso | 100.00 | 0.00 | 5502.45 | -79.42 |
| Winneba | 100.00 | 0.00 | 3271.98 | -83.03 |

* *Service Provider met all KPIs in all tested district capitals in the Central Region*

**Volta Region**

|  |  |  |  |  |
| --- | --- | --- | --- | --- |
|  | **MTN** | | | |
| **District Capital** | **Data Access Success Rate**  **(%)**  **≥ 95%** | **Data Drop Rate**  **(%)**  **≤ 1%** | **Data Throughput**  **(kbps)**  **≥ 256kbps** | **3G**  **Coverage**  **≥ -105dBm** |
| Adaklu | 100.00 | 0.00 | 9462.79 | -74.23 |
| Adidome | 100.00 | 0.00 | 8170.82 | -84.28 |
| Akatsi | 100.00 | 0.00 | 5886.32 | -81.61 |
| Amfoegu | 100.00 | 0.00 | 4397.14 | -75.16 |
| Ave Dakpa | 100.00 | 0.00 | 6408.45 | -84.85 |
| Battor | 100.00 | 0.00 | 7312.56 | -83.08 |
| Chinderi | 100.00 | 0.00 | 5103.14 | -76.95 |
| Dambai | 100.00 | 0.00 | 4045.21 | -85.53 |
| Denu | 100.00 | 0.00 | 2544.67 | -78.63 |
| Dzodze | 100.00 | 0.00 | 3600.93 | -77.56 |
| Dzolokpuita | 100.00 | 0.00 | 5736.35 | -96.48 |
| Golokwati | 100.00 | 0.00 | 4726.31 | -80.70 |
| Ho | 100.00 | 0.00 | 2716.25 | -76.24 |
| Hohoe | 100.00 | 0.00 | 2915.47 | -77.74 |
| Jasikan | 100.00 | 0.00 | 3475.86 | -85.35 |
| Kadjebi | 100.00 | 0.00 | 5601.20 | -83.01 |
| Keta | 100.00 | 0.00 | 4772.90 | -83.22 |
| Ketekrachi | 100.00 | 0.00 | 4232.64 | -78.00 |
| Kpando | 100.00 | 0.00 | 3104.08 | -87.38 |
| Kpassa | 100.00 | 0.00 | 4273.84 | -76.75 |
| Kpetoe | 100.00 | 0.00 | - | -84.54 |
| Kpeve | 100.00 | 0.00 | 5771.30 | -81.63 |
| Nkonya Ahenkro | 100.00 | 0.00 | 4790.32 | -80.97 |
| Nkwanta | 100.00 | 0.00 | 3804.52 | -77.59 |
| Sogakope | 100.00 | 0.00 | 2640.66 | -78.98 |

* *Service Provider met all KPIs in all tested district capitals in the Volta Region*

**Brong Ahafo Region**

|  |  |  |  |  |
| --- | --- | --- | --- | --- |
|  | **MTN** | | | |
| **District Capital** | **Data Access Success Rate**  **(%)**  **≥ 95%** | **Data Drop Rate**  **(%)**  **≤ 1%** | **Data Throughput**  **(kbps)**  **≥ 256kbps** | **3G**  **Coverage**  **≥ -105dBm** |
| Atebubu | 100.00 | 0.00 | 3528.60 | -81.54 |
| Banda Ahenkro | 100.00 | 0.00 | 4792.95 | -80.83 |
| Bechem | 100.00 | 0.00 | 1768.64 | -81.40 |
| Berekum | 100.00 | 0.00 | 3476.87 | -80.00 |
| Busunya | 100.00 | 0.00 | 4579.07 | -82.30 |
| Dormaa-Ahenkro | 100.00 | 0.00 | 1936.84 | -86.56 |
| Drobo | 100.00 | 0.00 | 3403.51 | -79.18 |
| Duayaw-Nkwanta | 100.00 | 0.00 | 3733.92 | -82.30 |
| Goaso | 100.00 | 0.00 | 4561.70 | -81.10 |
| Hwidiem | 100.00 | 0.00 | 4012.36 | -84.16 |
| Jema | 100.00 | 0.00 | 4427.05 | -84.13 |
| Kajaji | 100.00 | 0.00 | 4842.94 | -75.57 |
| Kenyasi | 100.00 | 0.00 | 3568.49 | -79.09 |
| Kintampo | 100.00 | 0.00 | 3724.76 | -82.57 |
| Kukuom | 100.00 | 0.00 | 3429.74 | -83.06 |
| Kwame Danso | 100.00 | 0.00 | 4342.23 | -79.85 |
| Nkoranza | 100.00 | 0.00 | 4100.57 | -86.94 |
| Nkran Nkwanta | 100.00 | 0.00 | 3976.97 | -90.55 |
| Nsawkaw | 100.00 | 0.00 | 4582.31 | -75.24 |
| Odumasi | 100.00 | 0.00 | 3834.13 | -77.53 |
| Sampa | 100.00 | 0.00 | 4205.73 | -90.73 |
| Sunyani | 100.00 | 0.00 | 3025.14 | -77.75 |
| Techiman | 100.00 | 0.00 | 3041.12 | -77.88 |
| Tuobodom | 100.00 | 0.00 | 3953.30 | -79.01 |
| Wamfie | 100.00 | 0.00 | 1768.64 | -78.03 |
| Wenchi | 100.00 | 0.00 | 3446.50 | -77.84 |
| Yeji | 100.00 | 0.00 | 4115.48 | -84.39 |

* *Service Provider met all KPIs in all tested district capitals in the Brong Ahafo Region*

**Upper East Region**

|  |  |  |  |  |
| --- | --- | --- | --- | --- |
|  | **MTN** | | | |
| **District Capital** | **Data Access Success Rate**  **(%)**  **≥ 95%** | **Data Drop Rate**  **(%)**  **≤ 1%** | **Data Throughput**  **(kbps)**  **≥ 256kbps** | **3G**  **Coverage**  **≥ -105dBm** |
| Bawku | 100.00 | 0.00 | 4223.67 | -82.27 |
| Binduri | 100.00 | 0.00 | 6187.75 | -78.50 |
| Bolgatanga | 100.00 | 0.00 | 5117.32 | -80.53 |
| Bongo | 100.00 | 0.00 | 4268.72 | -88.97 |
| Fumbisi | 100.00 | 0.00 | 5629.96 | -82.65 |
| Garu | 100.00 | 0.00 | 4022.69 | -82.57 |
| Nangodi | 100.00 | 0.00 | 4093.41 | -91.36 |
| Navrongo | 100.00 | 0.00 | 3401.71 | -91.10 |
| Paga | 100.00 | 0.00 | 3895.37 | -86.32 |
| Pusiga | 100.00 | 0.00 | 3974.41 | -80.72 |
| Sandema | 100.00 | 0.00 | 4267.98 | -84.26 |
| Tongo | 100.00 | 0.00 | 3988.59 | -83.15 |
| Zebilla | 100.00 | 0.00 | 4310.27 | -84.36 |

* *Service Provider met all KPIs in all tested district capitals in the Upper East Region*

**Upper West Region**

|  |  |  |  |  |
| --- | --- | --- | --- | --- |
|  | **MTN** | | | |
| **District Capital** | **Data Access Success Rate**  **(%)**  **≥ 95%** | **Data Drop Rate**  **(%)**  **≤ 1%** | **Data Throughput**  **(kbps)**  **≥ 256kbps** | **3G**  **Coverage**  **≥ -105dBm** |
| Funsi | 100.00 | 0.00 | 4339.16 | -80.00 |
| Gwollu | 100.00 | 0.00 | 8442.53 | -81.48 |
| Issa | 100.00 | 0.00 | 10543.05 | -76.19 |
| Jirapa | 100.00 | 0.00 | 1548.00 | -90.16 |
| Lambussie | 100.00 | 0.00 | 10387.11 | -79.31 |
| Lawra | 100.00 | 0.00 | 8721.20 | -87.02 |
| Nadowli | 100.00 | 0.00 | 8270.16 | -87.02 |
| Nandom | 100.00 | 0.00 | 8665.34 | -84.47 |
| Tumu | 100.00 | 0.00 | 4116.56 | -85.24 |
| Wa | 100.00 | 0.00 | 5369.81 | -83.32 |
| Wechiau | 100.00 | 0.00 | 9763.89 | -91.87 |

* *Service Provider met all KPIs in all tested district capitals in the Upper West Region*

**MONITORING TEST RESULTS FOR VODAFONE**

**VOICE TEST**

**Central Region**

|  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- |
| **KPI** | **SDCCH CONGEST.**  **RATE** | **TCH CONGEST.**  **RATE** | **CALL DROP**  **RATE** | **CALL SETUP**  **TIME** | **CALL COMPLETION**  **RATE** |
| **Threshold** | **≤ 1%** | **≤ 1%** | **≤ 3%** | **˂10 sec** | **˃70%** |
| **VODAFONE** | 0.00 | 0.02 | 0.00 | 9.50 | 99.18 |

* *Service Provider met all KPIs in the Central Region*

**Ashanti Region**

|  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- |
| **KPI** | **SDCCH CONGEST.**  **RATE** | **TCH CONGEST.**  **RATE** | **CALL DROP**  **RATE** | **CALL SETUP**  **TIME** | **CALL COMPLETION**  **RATE** |
| **Threshold** | **≤ 1%** | **≤ 1%** | **≤ 3%** | **˂10 sec** | **˃70%** |
| **VODAFONE** | 0.00 | 0.08 | 0.00 | 6.81 | 97.9 |

* *Service Provider met all KPIs in the Ashanti Region*

**Brong Ahafo Region**

|  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- |
| **KPI** | **SDCCH CONGEST.**  **RATE** | **TCH CONGEST.**  **RATE** | **CALL DROP**  **RATE** | **CALL SETUP**  **TIME** | **CALL COMPLETION**  **RATE** |
| **Threshold** | **≤ 1%** | **≤ 1%** | **≤ 3%** | **˂10 sec** | **˃70%** |
| **VODAFONE** | 0.00 | 0.02 | 0.00 | 8.60 | 97.11 |

* *Service Provider met all KPIs in the Brong Ahafo Region*

**Volta Region**

|  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- |
| **KPI** | **SDCCH CONGEST.**  **RATE** | **TCH CONGEST.**  **RATE** | **CALL DROP**  **RATE** | **CALL SETUP**  **TIME** | **CALL COMPLETION**  **RATE** |
| **Threshold** | **≤ 1%** | **≤ 1%** | **≤ 3%** | **˂10 sec** | **˃70%** |
| **VODAFONE** | 0.00 | 0.38 | 0.00 | 7.69 | 97.57 |

* *Service Provider met all KPIs in the Volta Region*

**Upper East Region**

|  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- |
| **KPI** | **SDCCH CONGEST.**  **RATE** | **TCH CONGEST.**  **RATE** | **CALL DROP**  **RATE** | **CALL SETUP**  **TIME** | **CALL COMPLETION**  **RATE** |
| **Threshold** | **≤ 1%** | **≤ 1%** | **≤ 3%** | **˂10 sec** | **˃70%** |
| **VODAFONE** | 0.00 | 0.12 | 0.00 | 9.87 | 97.82 |

* *Service Provider met all KPIs in the Upper East Region*

**Upper West Region**

|  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- |
| **KPI** | **SDCCH CONGEST.**  **RATE** | **TCH CONGEST.**  **RATE** | **CALL DROP**  **RATE** | **CALL SETUP**  **TIME** | **CALL COMPLETION**  **RATE** |
| **Threshold** | **≤ 1%** | **≤ 1%** | **≤ 3%** | **˂10 sec** | **˃70%** |
| **VODAFONE** | 0.00 | 0.00 | 0.00 | 6.86 | 98.81 |

* *Service Provider met all KPIs in the Upper West Region*

**VOICE QUALITY (MOS)**

**Central Region**

|  |  |  |  |
| --- | --- | --- | --- |
|  | **VODAFONE** | | |
| **District Capital** | **Voice Quality**  **(95% of call connections >3.5)** | **Compliance** | **Non-Compliance** |
| Abura-Dunkwa | **80.44%** |  | **√** |
| Afransi | **100.00%** | **√** |  |
| Ajumako | **56.62%** |  | **√** |
| Apam | **80.03%** |  | **√** |
| Asikuma | **65.00%** |  | **√** |
| Assin Fosu | **72.00%** |  | **√** |
| Awutu-Breku | **69.00%** |  | **√** |
| Cape Coast | **46.00%** |  | **√** |
| Diaso | **84.00%** |  | **√** |
| Dunkwa-On-Offin | **24.00%** |  | **√** |
| Elmina | **47.00%** |  | **√** |
| Essarkyir | **16.00%** |  | **√** |
| Hemang | **60.00%** |  | **√** |
| Kasoa | **28.00%** |  | **√** |
| Nsaba | **86.00%** |  | **√** |
| Nsuaem-Kyekyewere | **83.00%** |  | **√** |
| Saltpond | **18.00%** |  | **√** |
| Swedru | **52.00%** |  | **√** |
| Twifo Praso | **70.00%** |  | **√** |
| Winneba | **34.00%** |  | **√** |

* *Service Provider complied with the minimum MOS in only one (1) of the tested district capitals in the Central Region*

**Volta Region**

|  |  |  |  |
| --- | --- | --- | --- |
|  | **VODAFONE** | | |
| **District Capital** | **Voice Quality**  **(95% of call connections >3.5)** | **Compliance** | **Non-Compliance** |
| Adaklu | **21.19%** |  | **√** |
| Adidome | **44.68%** |  | **√** |
| Akatsi | **29.01%** |  | **√** |
| Amfoega | **55.05%** |  | **√** |
| Ave Dakpa | **52.70%** |  | **√** |
| Battor | **29.00%** |  | **√** |
| Chinderi | **74.64%** |  | **√** |
| Dambai | **90.00%** |  | **√** |
| Denu | **56.02%** |  | **√** |
| Dzodze | **51.62%** |  | **√** |
| Dzolokpuita | **17.24%** |  | **√** |
| Golokwati | **38.68%** |  | **√** |
| Ho | **44.39%** |  | **√** |
| Hohoe | **45.31%** |  | **√** |
| Jasikan | **84.16%** |  | **√** |
| Kadjebi | **83.68%** |  | **√** |
| Keta | **37.07%** |  | **√** |
| Ketekrachi | **53.04%** |  | **√** |
| Kpando | **55.34%** |  | **√** |
| Kpassa | **73.15%** |  | **√** |
| Kpetoe | **61.03%** |  | **√** |
| Kpeve | **85.29%** |  | **√** |
| Nkonya Ahenkro | **66.12%** |  | **√** |
| Nkwanta | **78.74%** |  | **√** |
| Sogakope | **41.46%** |  | **√** |

* *Service Provider failed meet MOS requirement in all tested district capitals in the Volta Region*

**Brong Ahafo Region**

|  |  |  |  |
| --- | --- | --- | --- |
|  | **VODAFONE** | | |
| **District Capital** | **Voice Quality**  **(95% of call connections >3.5)** | **Compliance** | **Non-Compliance** |
| Atebubu | **51.69%** |  | **√** |
| Banda Ahenkro | **57.86%** |  | **√** |
| Bechem | **71.81%** |  | **√** |
| Berekum | **23.62%** |  | **√** |
| Busunya | **100.00%** | **√** |  |
| Dormaa-Ahenkro | **19.81%** |  | **√** |
| Drobo | **52.45%** |  | **√** |
| Duayaw-Nkwanta | **54.28%** |  | **√** |
| Goaso | **42.22%** |  | **√** |
| Hwidiem | **87.86%** |  | **√** |
| Jema | **54.79%** |  | **√** |
| Kajaji | **93.49%** |  | **√** |
| Kenyasi | **59.44%** |  | **√** |
| Kintampo | **63.00%** |  | **√** |
| Kukuom | **32.61%** |  | **√** |
| Kwame Danso | **87.89%** |  | **√** |
| Nkoranza | **79.15%** |  | **√** |
| Nkran Nkwanta | **65.97%** |  | **√** |
| Nsawkaw | **100.00%** | **√** |  |
| Odumasi | **32.57%** |  | **√** |
| Sampa | **31.93%** |  | **√** |
| Sunyani | **26.02%** |  | **√** |
| Techiman | **37.13%** |  | **√** |
| Tuobodom | **56.97%** |  | **√** |
| Wamfie | **54.12%** |  | **√** |
| Wenchi | **54.92%** |  | **√** |
| Yeji | **56.25%** |  | **√** |

* *Service Provider complied with the minimum MOS in two (2) of the tested district capitals in the Brong Ahafo Region*

**Ashanti Region**

|  |  |  |  |
| --- | --- | --- | --- |
|  | **VODAFONE** | | |
| **District Capital** | **Voice Quality**  **(95% of call connections >3.5)** | **Compliance** | **Non-Compliance** |
| Agogo | **78.52%** |  | **√** |
| Agona | **83.44%** |  | **√** |
| Akomadan | **90.70%** |  | **√** |
| Asiwa | **94.53%** |  | **√** |
| Bekwai | **74.95%** |  | **√** |
| Drobonso | **33.33%** |  | **√** |
| Effiduase | **76.11%** |  | **√** |
| Ejisu | **50.52%** |  | **√** |
| Ejura | **83.62%** |  | **√** |
| Foase | **53.22%** |  | **√** |
| Fomena | **88.06%** |  | **√** |
| Jacobu | **64.46%** |  | **√** |
| Juaso | **89.60%** |  | **√** |
| Kodie | **64.81%** |  | **√** |
| Konongo | **70.68%** |  | **√** |
| Kumawu | **66.59%** |  | **√** |
| Kuntanase | **63.31%** |  | **√** |
| Mampong | **52.53%** |  | **√** |
| Mampongteng | **32.10%** |  | **√** |
| Mankranso | **71.92%** |  | **√** |
| Manso Nkwanta | **95.09%** | **√** |  |
| New Edubiase | **86.35%** |  | **√** |
| Nkawie | **35.35%** |  | **√** |
| Nsuta | **89.47%** |  | **√** |
| Nyinahin | **55.03%** |  | **√** |
| Obuasi | **83.10%** |  | **√** |
| Offinso | **75.57%** |  | **√** |
| Tepa | **74.46%** |  | **√** |

* *Service Provider complied with the minimum MOS in only one (1) of the tested district capitals in the Ashanti Region*

**Upper East Region**

|  |  |  |  |
| --- | --- | --- | --- |
|  | **VODAFONE** | | |
| **District Capital** | **Voice Quality**  **(95% of call connections >3.5)** | **Compliance** | **Non-Compliance** |
| Bawku | **58.61%** |  | **√** |
| Binduri | **4.23%** |  | **√** |
| Bolgatanga | **39.00%** |  | **√** |
| Bongo | **57.3%** |  | **√** |
| Fumbisi | **89.21%** |  | **√** |
| Garu | **71.93%** |  | **√** |
| Nangodi | **46.44%** |  | **√** |
| Navrongo | **51.02%** |  | **√** |
| Paga | **77.27%** |  | **√** |
| Pusiga | **92.75%** |  | **√** |
| Sandema | **85.54%** |  | **√** |
| Tongo | **61.80%** |  | **√** |
| Zebilla | **71.91%** |  | **√** |

* *Service Provider failed to meet MOS requirement in all tested district capitals in the Upper East Region*

**Upper West Region**

|  |  |  |  |
| --- | --- | --- | --- |
|  | **VODAFONE** | | |
| **District Capital** | **Voice Quality**  **(95% of call connections >3.5)** | **Compliance** | **Non-Compliance** |
| Funsi | **79.73%** |  | **√** |
| Gwollu | **1.53%** |  | **√** |
| Issa | **45.75%** |  | **√** |
| Jirapa | **28.86%** |  | **√** |
| Lambussie | **77.00%** |  | **√** |
| Lawra | **31.74%** |  | **√** |
| Nadowli | **38.08%** |  | **√** |
| Nandom | **43.00%** |  | **√** |
| Tumu | **80.09%** |  | **√** |
| Wa | **47.53%** |  | **√** |
| Wechiau | **48.65%** |  | **√** |

* *Service Provider failed to meet MOS requirement in all tested district capitals in the Upper West Region*

**3G DATA/COVERAGE TEST**

**Central Region**

|  |  |  |  |  |
| --- | --- | --- | --- | --- |
|  | **VODAFONE** | | | |
| **District Capital** | **Data Access Success Rate**  **(%)**  **≥ 95%** | **Data Drop Rate**  **(%)**  **≤ 1%** | **Data Throughput**  **(kbps)**  **≥ 256kbps** | **3G**  **Coverage**  **≥ -105dBm** |
| Abura-Dunkwa | 100.00 | 0.00 | 5211.20 | -91.52 |
| Afransi | 100.00 | 0.00 | 9,460.55 | -75.85 |
| Ajumako | 100.00 | 0.00 | 6,507.51 | -89.62 |
| Apam | 100.00 | 0.00 | 7,321.64 | -79.25 |
| Asikuma | 100.00 | 0.00 | 6090.42 | -92.72 |
| Assin Fosu | 100.00 | 0.00 | 5957.49 | -83.87 |
| Awutu-Breku | 100.00 | 0.00 | 7455.57 | -79.6 |
| Cape Coast | 100.00 | 0.00 | 5,115.62 | -83.06 |
| Diaso | 100.00 | 0.00 | 6,952.82 | -79.98 |
| Dunkwa-On-Offin | 100.00 | 0.00 | 2,677.73 | -83.4 |
| Elmina | 100.00 | 0.00 | 6,533.44 | -90.61 |
| Essarkyir | 100.00 | 0.00 | 1,404.16 | -102.23 |
| Hemang | No Successful Data Session | | | -91.49 |
| Kasoa | 100.00 | 0.00 | 5486.09 | -79.03 |
| Nsaba | 100.00 | 0.00 | 7,160.49 | -82.27 |
| Nsuaem-Kyekyewere | 100.00 | 0.00 | 8,282.77 | -79.25 |
| Saltpond | 100.00 | 0.00 | 6,153.21 | -88.42 |
| Swedru | 100.00 | 0.00 | 6507.51 | -83.03 |
| Twifo Praso | 100.00 | 0.00 | 8,628.45 | -83.65 |
| Winneba | 100.00 | 0.00 | 3,295.33 | -82.04 |

* *Service Provider met all KPIs in the tested district capitals in the Central Region*

**Volta Region**

|  |  |  |  |  |
| --- | --- | --- | --- | --- |
|  | **VODAFONE** | | | |
| **District Capital** | **Data Access Success Rate**  **(%)**  **≥ 95%** | **Data Drop Rate**  **(%)**  **≤ 1%** | **Data Throughput**  **(kbps)**  **≥ 256kbps** | **3G**  **Coverage**  **≥ -105dBm** |
| Adaklu | No Successful Data Session | | | **-116.00** |
| Adidome | 100.00 | 0.00 | 7478.97 | -85.49 |
| Akatsi | 100.00 | 0.00 | 4394.35 | -90.96 |
| Amfoega | 100.00 | 0.00 | 6549.13 | -91.22 |
| Ave Dakpa | No Successful Data Session | | | -**111.02** |
| Battor | 100.00 | 0.00 | 7436.24 | -77.51 |
| Chinderi | 100.00 | 0.00 | 4519.31 | -80.56 |
| Dambai | 100.00 | 0.00 | 430.10 | -84.46 |
| Denu | 100.00 | 0.00 | 3292.89 | -82.19 |
| Dzodze | 100.00 | 0.00 | 6037.79 | -93.56 |
| Dzolokpuita | 100.00 | 0.00 | 476.24 | **-115.13** |
| Golokwati | 100.00 | 0.00 | 4494.78 | **-108.31** |
| Ho | 100.00 | 0.00 | 2583.94 | -75.86 |
| Hohoe | 100.00 | 0.00 | 2425.61 | -85.31 |
| Jasikan | 100.00 | 0.00 | 4301.27 | -81.47 |
| Kadjebi | 100.00 | 0.00 | 4635.87 | -79.90 |
| Keta | 100.00 | 0.00 | 7072.45 | -97.99 |
| Ketekrachi | 100.00 | 0.00 | 5411.38 | -89.08 |
| Kpando | 100.00 | 0.00 | 4871.31 | -82.79 |
| Kpassa | 100.00 | 0.00 | 3638.51 | -79.85 |
| Kpetoe | 100.00 | 0.00 | 8197.68 | -87.19 |
| Kpeve | 100.00 | 0.00 | 5552.97 | -83.16 |
| Nkonya Ahenkro | 100.00 | 0.00 | 5415.71 | -93.79 |
| Nkwanta | 100.00 | 0.00 | 4008.66 | -82.47 |
| Sogakope | 100.00 | 0.00 | 6677.64 | -92.74 |

* *Service Provider did not meet 3G Coverage obligations in four (4) tested district capitals in the Volta Region*

**Brong Ahafo Region**

|  |  |  |  |  |
| --- | --- | --- | --- | --- |
|  | **VODAFONE** | | | |
| **District Capital** | **Data Access Success Rate**  **(%)**  **≥ 95%** | **Data Drop Rate**  **(%)**  **≤ 1%** | **Data Throughput**  **(kbps)**  **≥ 256kbps** | **3G**  **Coverage**  **≥ -105dBm** |
| Atebubu | 100.00 | 0.00 | 8299.80 | -92.19 |
| Banda Ahenkro | 100.00 | 0.00 | 8316.76 | -97.22 |
| Bechem | 100.00 | 0.00 | 7995.40 | -80.16 |
| Berekum | 100.00 | 0.00 | 7801.97 | -79.96 |
| Busunya | 100.00 | 0.00 | 2392.38 | -68.40 |
| Dormaa-Ahenkro | 100.00 | 0.00 | 3162.43 | -92.05 |
| Drobo | 100.00 | 0.00 | 5784.89 | -79.73 |
| Duayaw-Nkwanta | 100.00 | 0.00 | 6729.32 | -85.45 |
| Goaso | 100.00 | 0.00 | 6841.03 | -86.21 |
| Hwidiem | 100.00 | 0.00 | 8791.46 | -79.68 |
| Jema | 100.00 | 0.00 | 2412.02 | -88.07 |
| Kajaji | 100.00 | 0.00 | 8485.26 | -76.44 |
| Kenyasi | 100.00 | 0.00 | 8081.45 | -84.68 |
| Kintampo | 100.00 | 0.00 | 3219.89 | -83.55 |
| Kukuom | 100.00 | 0.00 | 5098.33 | -86.98 |
| Kwame Danso | 100.00 | 0.00 | 7827.44 | -83.26 |
| Nkoranza | 100.00 | 0.00 | 6874.85 | -79.32 |
| Nkran Nkwanta | 100.00 | 0.00 | 7105.00 | -84.73 |
| Nsawkaw | 100.00 | 0.00 | 6409.83 | -73.14 |
| Odumasi | 100.00 | 0.00 | 4972.81 | -78.45 |
| Sampa | 100.00 | 0.00 | 1877.47 | -84.07 |
| Sunyani | 100.00 | 0.00 | 4283.31 | -76.95 |
| Techiman | 100.00 | 0.00 | 4549.25 | -79.65 |
| Tuobodom | 100.00 | 0.00 | 5624.03 | -87.36 |
| Wamfie | 100.00 | 0.00 | 5335.94 | -83.45 |
| Wenchi | 100.00 | 0.00 | 7639.09 | -79.32 |
| Yeji | 100.00 | 0.00 | 6301.77 | -82.36 |

* *Service Provider met all KPIs in the tested district capitals in the Brong Ahafo Region*

**Upper East Region**

|  |  |  |  |  |
| --- | --- | --- | --- | --- |
|  | **VODAFONE** | | | |
| **District Capital** | **Data Access Success Rate**  **(%)**  **≥ 95%** | **Data Drop Rate**  **(%)**  **≤ 1%** | **Data Throughput**  **(kbps)**  **≥ 256kbps** | **3G**  **Coverage**  **≥ -105dBm** |
| Bawku | 100.00 | 0.00 | 5661.23 | -90.94 |
| Binduri | 100.00 | 0.00 | 2,893.49 | -**109.15** |
| Bolgatanga | 100.00 | 0.00 | 6,298.46 | -87.66 |
| Bongo | 100.00 | 0.00 | 7,740.94 | -90.95 |
| Fumbisi | 100.00 | 0.00 | 9,047.20 | -86.21 |
| Garu | 100.00 | 0.00 | 11,268.03 | -84.44 |
| Nangodi | 100.00 | 0.00 | 6,090.55 | -102.62 |
| Navrongo | 100.00 | 0.00 | 7,476.33 | -89.49 |
| Paga | 100.00 | 0.00 | 6,247.72 | -81.94 |
| Pusiga | 100.00 | 0.00 | 7,486.14 | -81.15 |
| Sandema | 100.00 | 0.00 | 9,910.42 | -84.62 |
| Tongo | 100.00 | 0.00 | 5,369.53 | -79.73 |
| Zebilla | 100.00 | 0.00 | 6,532.76 | -84.17 |

* *Service Provider did not meet 3G Coverage obligations in one (1) tested district capital in the Upper East Region*

**Upper West Region**

|  |  |  |  |  |
| --- | --- | --- | --- | --- |
|  | **VODAFONE** | | | |
| **District Capital** | **Data Access Success Rate**  **(%)**  **≥ 95%** | **Data Drop Rate**  **(%)**  **≤ 1%** | **Data Throughput**  **(kbps)**  **≥ 256kbps** | **3G**  **Coverage**  **≥ -105dBm** |
| Funsi | 100.00 | 0.00 | 9478.41 | -79.67 |
| Gwollu | 100.00 | 0.00 | 3867.10 | -75.88 |
| Issa | No Successful Data Session | | | **-116.65** |
| Jirapa | 100.00 | 0.00 | 7016.37 | -97.54 |
| Lambussie | 100.00 | 0.00 | 9421.38 | -79.02 |
| Lawra | 100.00 | 0.00 | 3766.60 | -83.26 |
| Nadowli | 100.00 | 0.00 | 7134.91 | -100.87 |
| Nandom | 100.00 | 0.00 | 7857.42 | -81.90 |
| Tumu | 100.00 | 0.00 | 3701.86 | -77.14 |
| Wa | 100.00 | 0.00 | 6858.33 | -80.81 |
| Wechiau | 100.00 | 0.00 | 8583.32 | -87.65 |

* *Service Provider did not meet 3G Coverage obligations in one (1) tested district capital in the Upper West Region*

**Voice Quality of Service Parametres – Definitions**

**Voice Quality or Mean Opinion Score -** MOS, Mean Opinion Score is a measure of voice quality, and is a quality measure that has been used as a way to assess the human user’s opinion of call quality. The test is used widely to ensure quality voice transmission, test for quality issues, and measures voice degradation and performance.

**Call Setup Time (CST) -** Call Setup Time is the length of time it takes from initiating a call to the time the call is delivered or the fraction of the attempts to make a call that result in a connection to the dialed number. Due to various reasons not all call attempts end with a connection to the dialed number. Call Setup Time is thus, measuring this fraction as a percentage of all call attempts.

**Call Congestion Rate (CCR) -** It is the ease or difficulty with which a consumer is able to get a call through their service provider’s network system. The measurement of the frequency of Call Congestion is termed as Call Congestion Rate.

**Call Drop Rate (CDR) -** It is the frequency in which a consumer’s on-going call is cut off or disconnected without their permission or knowledge. The measurement of the frequency of call drops is termed as Call Drop Rate.

**Stand-Alone Dedicated Control Channel (SDCCH) Congestion Rate -** It is the frequency of a consumer’s inability to access a Provider’s network for other services such as the transmission of data (texting). The measurement of the frequency is termed as Stand-alone Dedicated Control Channel Congestion rate.

**Data Quality of Service Parametres – Definitions**

**Data Drop Rate -** Data Drop Rate is the probability to drop or release a data session without end consumer or user’s intervention.

**Data Access Success Rate -** Data Access Success Rate is the probability to successfully access a public data server.

**Data Throughput -** Data Throughput is the speed at which data is downloaded.