



QUALITY OF SERVICE FINDINGS IN CAPE-COAST, ELMINA, WINNEBA, SEKONDI-TAKORADI, AUGUST 2010

As part of their licence conditions, Cellular Mobile Operators are required to maintain certain minimum quality of service key performance indicators.

From 12th to 25th August 2010, the National Communications Authority carried out an assessment of the quality of cellular mobile voice services provided by the operators MTN, Vodafone, Tigo, Zain and Kasapa in the Cape-Coast, Elmina, Winneba and Sekondi-Takoradi.

The key performance indicators used in measuring the attainment of service quality are Call Setup Time, Call Congestion Rate and Call Drop Rate.

The purpose of this exercise was to measure the level of attainment of the licence conditions of Operators in fulfillment of their licence obligations to users.

a) Call Setup Time

Call Setup Time is the period between when a user dials a number and when the other party being called receives the signal.

According to the licence conditions, Call Setup Time should be less than ten seconds. This means that when a user dials a number, it should ring within 10 seconds of the call.

The performance of the Operators in respect of Call Setup Time is as shown in Table 1 below:

Table 1: Call Setup Time of Cellular Operators in Cape-Coast, Elmina, Winneba, Sekondi-Takoradi, August 2010

| City/Town | MTN | Vodafone | Tigo | Zain | Kasapa |
|------------------|-----------|-----------|-----------|-----------|-----------|
| Cape Coast | 10.55secs | 12.28secs | 10.94secs | 12.04secs | 13.20secs |
| Elmina | 11.48secs | 13.11secs | 10.92secs | 12.84secs | 12.43secs |
| Winneba | 10.68secs | 11.39secs | 11.04secs | 11.57secs | 12.19secs |
| Sekondi-Takoradi | 11.28secs | 15.25secs | 11.74secs | 13.89secs | 16.93secs |

OBSERVATIONS:

- ❖ There were Call Setup delays on all networks in Cape-Coast, Elmina, Winneba and Sekondi-Takoradi.

This means that irrespective of the Cellular network, users experienced longer Call Setup Times in all these areas.

b) Call Congestion Rate

Call Congestion Rate is the extent of difficulty experienced in making a call because of unavailability of traffic channel at that moment. The acceptable rate of call congestion should not exceed one call connection failure in 100 call attempts, i.e. not more than 1 %.

The performance of the Operators in respect of call congestion is as shown in Table 2 below:

Table 2: Call Congestion Rate of Cellular Operators in Cape-Coast, Elmina, Winneba, Sekondi-Takoradi, August 2010

| City/Town | MTN | Vodafone | Tigo | Zain | Kasapa |
|------------------|---------------|---------------|---------------|---------------|---------------|
| Cape Coast | No congestion | No Congestion | 11% | 2% | 2% |
| Elmina | No congestion | 1% | 7% | No congestion | No congestion |
| Winneba | 1% | No congestion | No congestion | No congestion | 83% |
| Sekondi-Takoradi | 2% | No Congestion | 5% | 5% | 7% |

OBSERVATIONS:

- ❖ Users of MTN experienced no congestion in Cape Coast and Elmina and were within acceptable limits in Winneba, however, users of the network experienced congestion in Tanokrom, Market Circle, Anaji, Beach Road and New Takoradi suburbs of Sekondi-Takoradi.
- ❖ Users of Vodafone experienced no congestion in Cape Coast, Winneba and Sekondi-Takoradi, and that for Elmina was within acceptable limits.
- ❖ Users of Tigo experienced severe congestion within the Regional office, Victoria Park, Cape Coast University and Abora, suburbs of Cape-Coast. Congestion on the network was equally beyond acceptable limits at Elmina and in Aboadze, Market Circle, Anaji, Aprembo and Adiembra, clusters of Sekondi-Takoradi.
- ❖ Users of Zain experienced congestion within the Regional office, Adisadel, Victoria Park and Abora, suburbs of Cape-Coast. Consumers also experienced unacceptable limits of congestion within Aboadze, New Takoradi, Anaji, Tanokrom and Adiembra, clusters of Sekondi-Takoradi.

- ❖ Users of Kasapa experienced congestion within the Regional office, Cape Vars and Victoria Park suburbs of Cape-Coast as well as within Anaji and Tanokrom clusters of Sekondi-Takoradi. Call congestion in Winneba showed rather extraordinary readings and this requires particular attention.

c) Call Drop Rate

Call Drop Rate is how often a call goes off during a conversation without either parties voluntarily ending the call. An acceptable rate of call drops should not exceed three (3) in a hundred (100) call conversations, i.e. not more than 3%.

The performance of the Operators in respect of call drops is as shown in Table 3 below:

Table 3: Call Drop Rate of Cellular Operators in Cape-Coast, Elmina, Winneba, Sekondi-Takoradi, August 2010

| City/Town | MTN | Vodafone | Tigo | Zain | Kasapa |
|------------------|--------------|--------------|--------------|--------------|--------------|
| Cape Coast | No Drop Call | No Drop Call | 3% | 3% | No Drop Call |
| Elmina | No Drop Call | No Drop Call | 9% | No Drop Call | No Drop Call |
| Winneba | No Drop Call | No Drop Call | No Drop Call | No Drop Call | No Drop Call |
| Sekondi-Takoradi | 1% | No Drop Call | 1% | 1% | 1% |

OBSERVATIONS:

- ❖ Users of MTN did not experience call drops in Cape Coast, Elmina and Winneba and that of Sekondi Takoradi was within acceptable limits .
- ❖ Vodafone recorded no call drop in all the areas assessed.
- ❖ Tigo recorded no call drops in Winneba and were within acceptable limits in Cape Coast and Sekondi Takoradi, however, users in Elmina experienced call drop over and above the specified limit.
- ❖ Users of Zain experienced no call drops at Elmina and Winneba and were within acceptable limits in Cape Coast and Sekondi-Takoradi.
- ❖ Kasapa recorded no call drops in all the areas assessed except for Sekondi-Takoradi which was within acceptable limits.

The National Communications Authority has provided the above findings to the Network Operators to rectify these deficiencies. The Authority will carry out field tests thereafter to verify whether or not these deficiencies have been rectified.