



QUARTER FOUR (Q4) 2018 QUALITY OF SERVICE REPORT FOR MOBILE NETWORK OPERATORS (TNM/AIRTEL)

1.0 INTRODUCTION

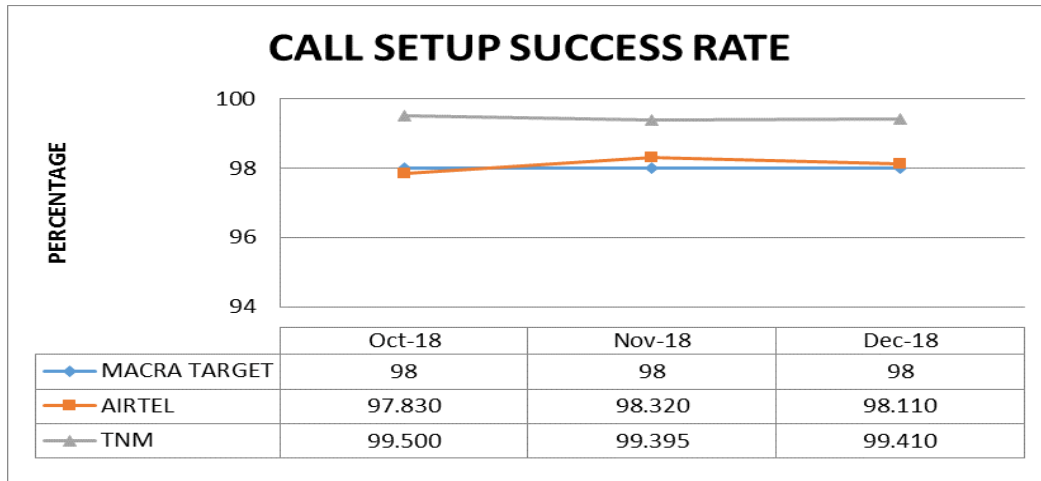
The Quarter Four (Q4) 2018 report analyses the key Performance Indicators which have been achieved by the GSM Service providers namely TNM and Airtel within the months of October, November and December, 2018.

The Key Performance Indicators (KPIs) under consideration are Radio Network Availability, Call Set up Success Rate, SDCCH Congestion, Traffic Channel Congestion, Call Drop Rate, Handover Success Rate, GPRS Context Activation Success Rate, SMS Success Rate, Trunk Congestion, MSC Availability and IN Platform Availability.

All the graphs in this report were plotted using already analyzed data which was submitted by both Airtel and Telekom Networks Malawi Plc. It must be noted that MACRA currently does not have proper tools to independently verify what has been submitted by the operators. However, the Authority will be capable of verifying this data once the CIRMS has been rolled out.

2.0 KEY PERFORMANCE INDICATORS

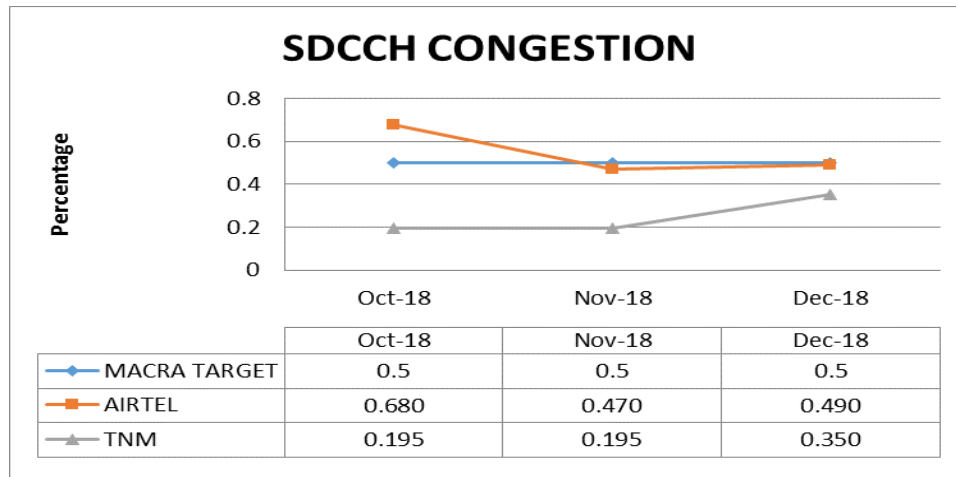
2.1 CALL SETUP SUCCESS RATE (CSSR)



Graph 1 Showing Call Setup Success Rate

NOTE: TNM managed to meet the target for the period under review and Airtel failed to meet the target in the month of October and managed to meet the target in the months of November and December for the whole period under review.

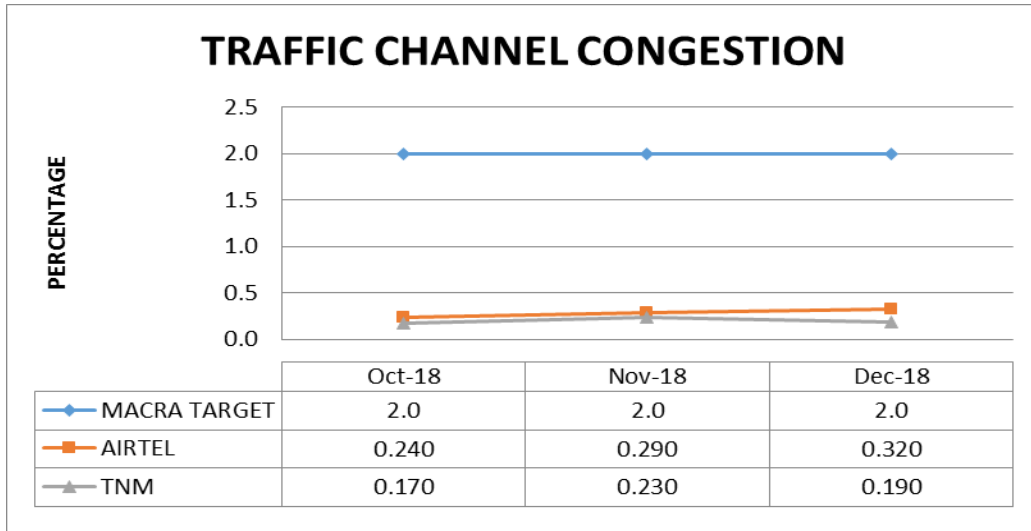
2.2 SIGNALLING (SDCCH) CONGESTION



Graph 2 Showing SDCCH Congestion

NOTE: TNM managed to meet the target for the period under review while Airtel managed to meet the target in the months of November and December but failed in the month of October for the whole period under review.

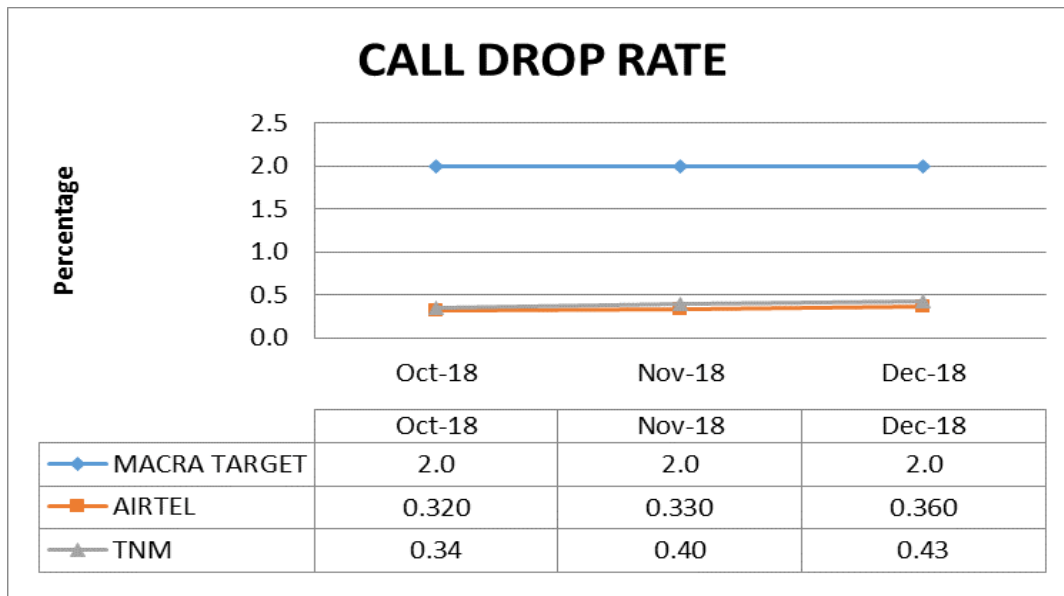
2.3 TRAFFIC CHANNEL (TCH) CONGESTION



Graph 3 Showing Traffic Channel Congestion

NOTE: Both Airtel and TNM managed to meet the target during the whole period under review.

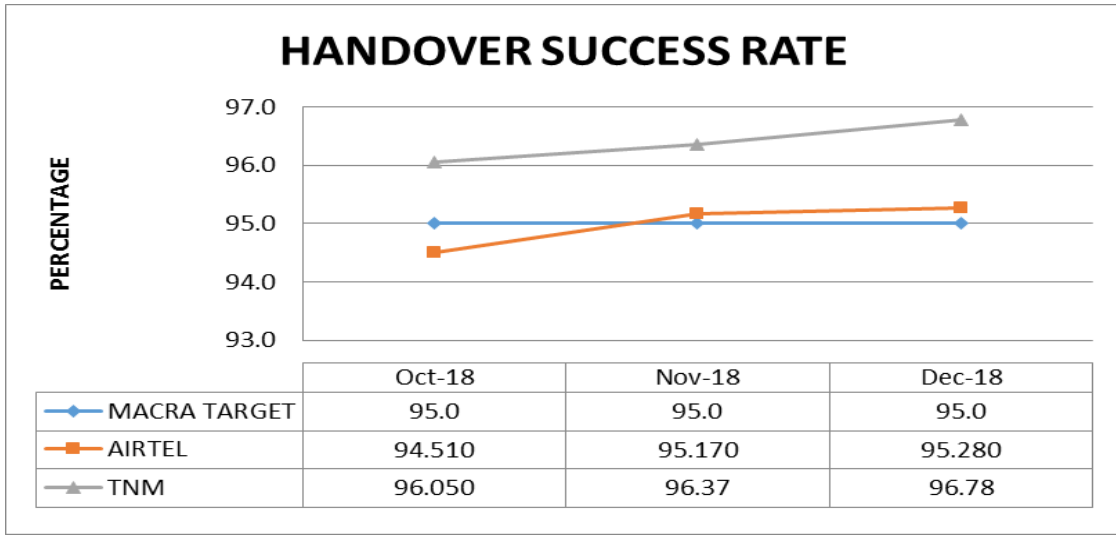
2.4 CALL DROP RATE



Graph 4 Showing Call Drop Rate

NOTE: Both TNM and Airtel managed to meet the target during the whole period under review.

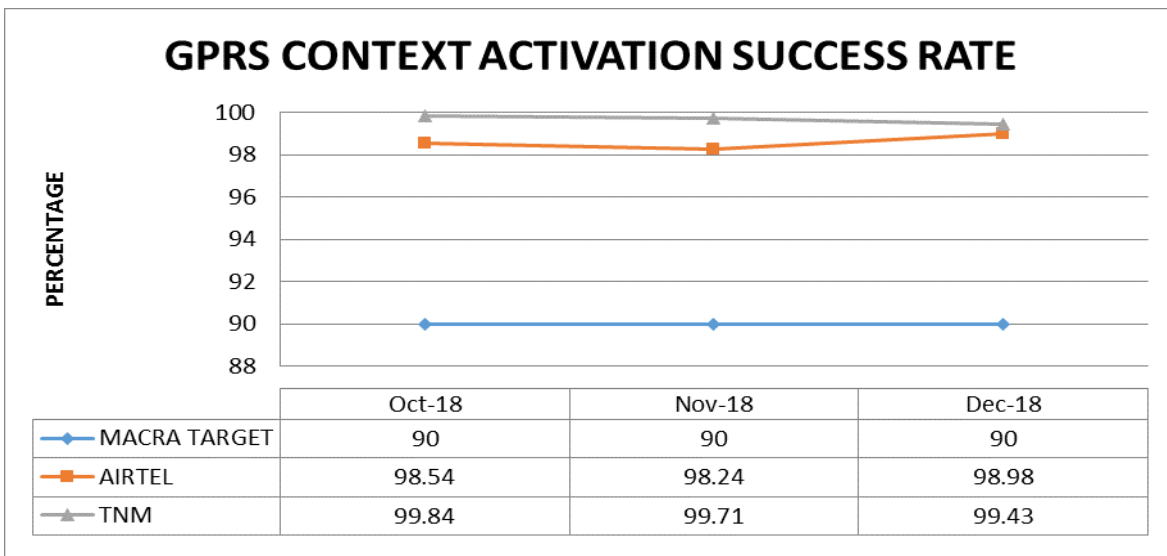
2.5 HANDOVER SUCCESS RATE



Graph 5 Showing Handover Success Rate

NOTE: TNM managed to meet the target during the period under review and Airtel failed to meet the target during the month of October but managed to meet the target during the month of November and December for the period under review.

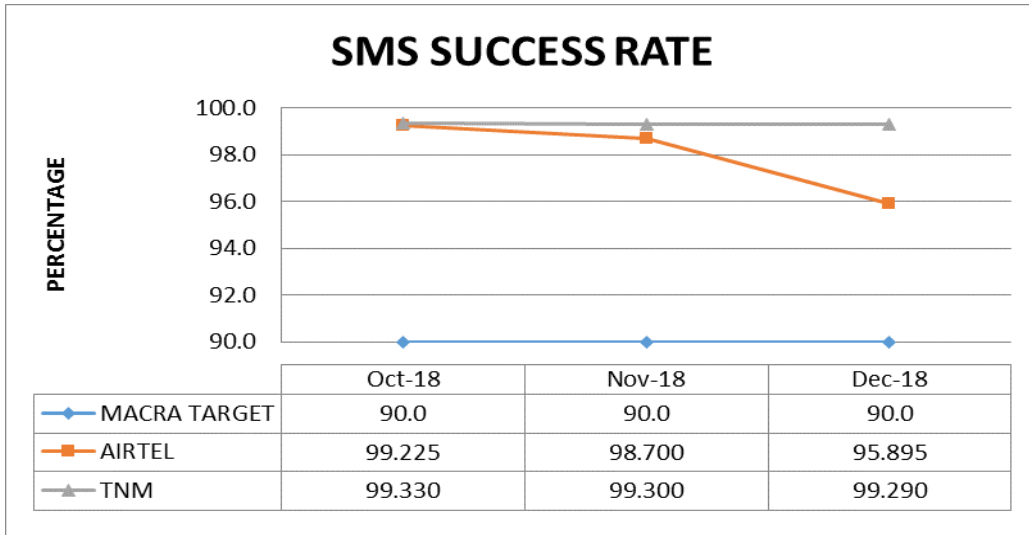
2.6 GPRS CONTEXT ACTIVATION SUCCESS RATE



Graph 6 Showing GPRS Context Activation Success Rate

NOTE: Both TNM and Airtel managed to meet the target during the whole period under review.

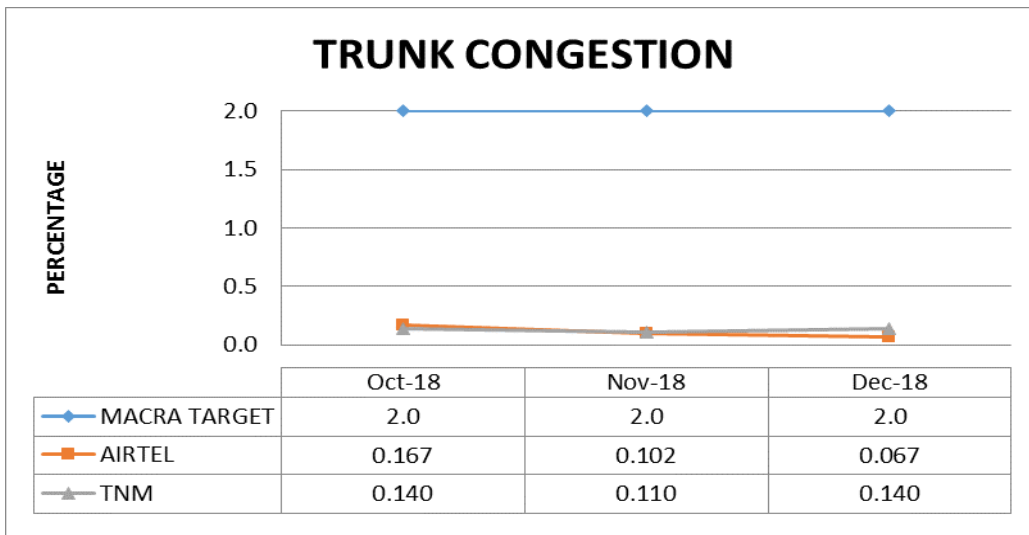
2.7 SMS SUCCESS RATE



Graph 7 Showing SMS Success Rate

NOTE: Both TNM and Airtel managed to meet the target during the whole period under review as shown in the graph above.

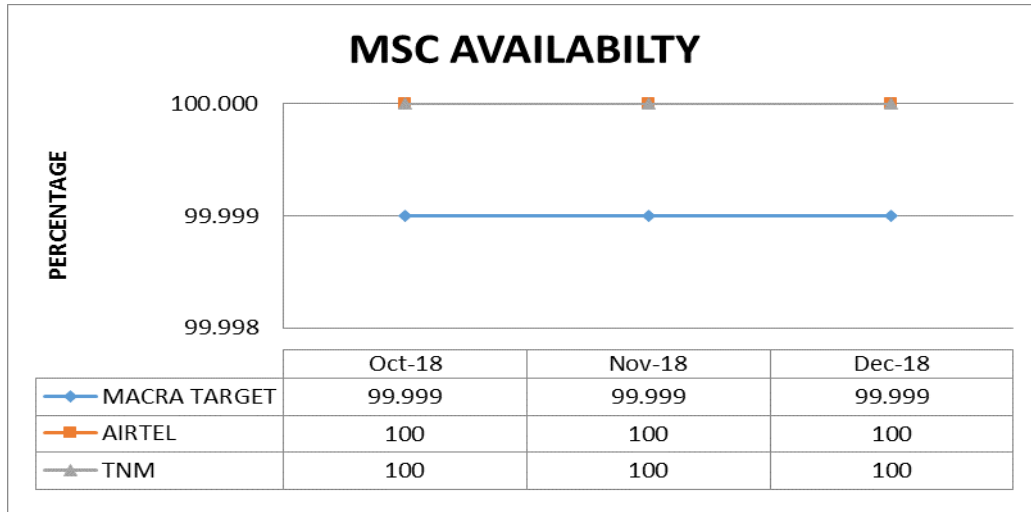
2.8 TRUNK CONGESTION



Graph 8 Showing Trunk Congestion

NOTE: Both TNM and Airtel managed to meet the target during the whole period under review as shown in the graph above.

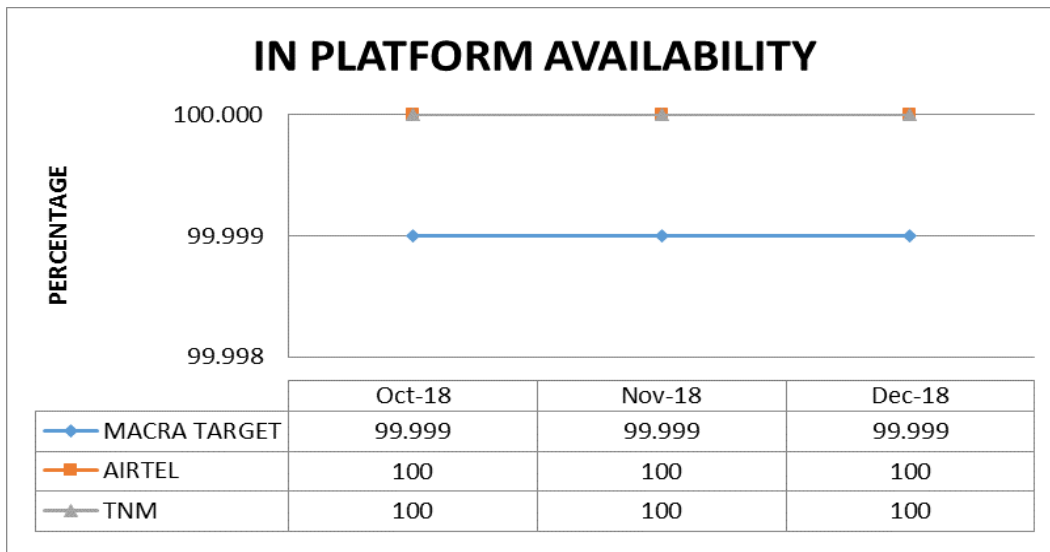
2.9 MOBILE SWITCHING CENTRE (MSC) AVAILABILITY



Graph 9 Showing MSC Availability

NOTE: Both TNM and Airtel managed to meet the target during the whole period under review as shown in the graph above.

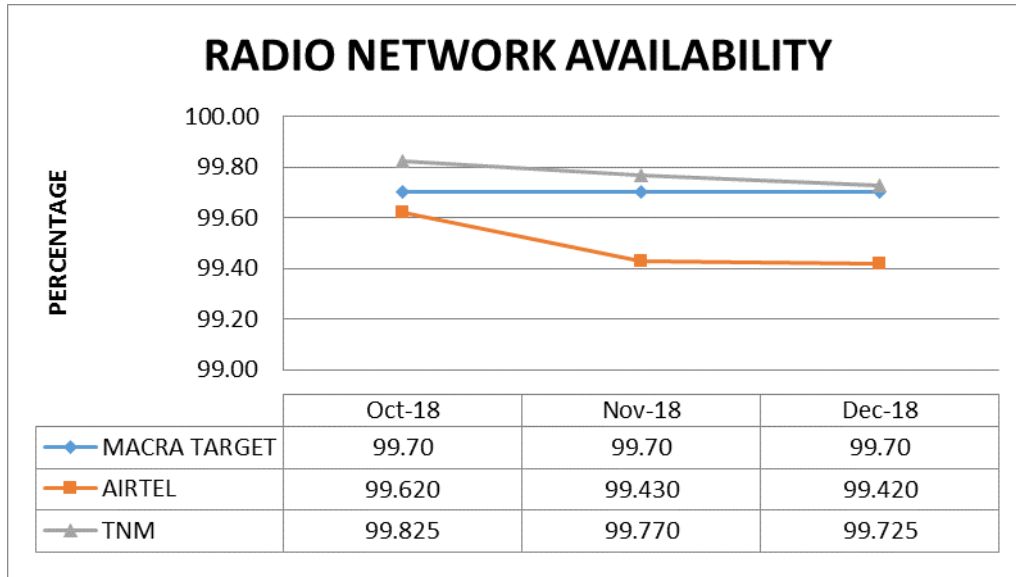
2.10 IN PLATFORM AVAILABILITY



Graph 10 Showing In Platform availability

NOTE: Both TNM and Airtel managed to meet the target during the whole period under review as shown in the graph above.

2.11 RADIONETWORK AVAILABILITY



Graph 11 Showing Radio Network Availability

NOTE: TNM managed to meet the target for the whole period under review while Airtel failed to meet the target for the period under review as shown in the graph above.

3.0 CONCLUSION

Both operators need to be commended for all the key performance indicator targets they managed to meet within the quarter under review.

Airtel performance needs to improve in the Call Setup Success Rate (CSSR), SDCCH Congestion, Handover Success Rate and Radio Network Availability as their performances in these Key Performance Indicators were below acceptable levels.

While the KPI averages look good on paper after aggregated quartely averages, MACRA is aware that consumers are getting sub-standard services from the operators in some areas. MACRA would therefore like to assure the general public that it is doing its utmost best to facilitate the introduction of independent means of verifying the submitted data from operators so as to achieve quality of service delivery to facilitate the promotion of universal ICT access.