



Report of the Public Inquiry on Quality of Service Regulations

INTRODUCTION

The Nigerian Communications Commission (“the Commission”) pursuant to the powers conferred on it by Sections 70 and 104 of the Nigerian Communications Act, 2003 (“the Act”) developed and issued the draft Quality of Service Regulations on September 19, 2006. The draft Regulations were published on the website for comments from the general public especially, operators and stakeholders.

The notice of the public inquiry was also advertised on October 6, 2006 in two National Newspapers. The notice required members of the public to submit their comments and observations on the draft Regulations to the Commission before the close of business on 25th October, 2006.

By the close of business on the 25th of October 2005, the Commission received submissions and comments from:

- MTN Nigeria Communications Limited
- Vee Networks Limited (now Celtel Nigeria Limited)
- Nigerian Mobile Telecommunications Limited (M’Tel)
- Association of the Licensed Telecommunications operators of Nigeria (ALTON)
- GSM Operators Association of Nigeria
- TALK Nigeria Limited

THE INQUIRY

The Inquiry took place on November 3, 2006 at the Conference Hall, Nigerian Communications Commission, Abuja and it started at 11:15am.

The Executive Vice Chairman (EVC) welcomed the operators and stakeholders and thanked them for attending the Public Inquiry which he said was aimed at providing clear rules and ensuring a level

playing field in the industry as enshrined in the Nigerian Communications Act, (the Act) 2003. He remarked that the Regulation is intended to serve as a guide for improvement in the quality of service in the telecommunication industry.

The EVC also acknowledged that the telecommunications industry has achieved much within a period of five years, however, poor Quality of Service to subscribers cannot be justified. He stated that Nigerian subscribers have been patient with poor quality of service but cannot continue to be patient indefinitely.

He stated that the process of consultations in respect of the regulations was on-going hence any additional comments received after the Public Inquiry will be considered before the finalization of the Regulations, as the Commission's processes are open, transparent and participatory.

The Director of Standards and Technical Research Department analyzed the draft Regulations and made a presentation on issues raised by the stakeholders who had made submissions on the draft Quality of Service Regulations as requested by the Commission prior to the holding of the public inquiry.

All comments made by the stakeholders at the Public Inquiry are also covered by this report.

CONSIDERATION OF COMMENTS

The Commission hereby summarizes all the comments received and the Commission's responses. These comments and those received before the inquiry have been duly considered.

1. Comment

There was a comment on Regulation 8 to the effect that the quality of Service meeting convened in Lagos by the Commission at its Zonal Office at Bankole Oki Street, on April 25, 2006, Mobile operators had pointed out to the Commission that it would not be feasible to have separate reporting areas as proposed by the Commission due to the technical limitations of the equipment deployed by operators across their network. Mobile operators noted that the equipment utilized are only capable of providing a single national figure, which records the specific parameter across the entire network.

Operators proposed systems based measurement/reports based on the network architecture and equipment of the Licensee/Operator's and bearing in mind the coverage provided for in the operator's specific License.

Response

QoS Key Performance Indicators (KPI) vary across regions and it is necessary for a regulator to have the picture of each region and how the operators are performing on the QoS indicators.

Equipment deployed by operators must be capable of polling regional KPI statistics from regional switches. These are some of the capabilities that are evaluated during equipment Type Approval

2. Comment

An operator expressed concern that the requirement to publish measurement within two months from the end of a Reporting Period in regulation 10 (d) is a duplication of a similar obligation placed on the Commission in Regulation 11. A requirement that both Licensees and the Commission publish the same measurement at the same time will lead to confusion in the minds of end-users and the public at large. Operator recommended that Regulation 10 (d) be deleted.

Response

There is no duplication in these paragraphs in Regulation 10 and 11. The Licensee's publication is different from that of the Commission. The Commission shall publish the data supplied by all the operators together to give a comparative perspective for the benefit of the end-user, whereas publication by an operator will be confined to its own network.

3. Comment

While operators welcome the publication of Quality of Service information for the education of the end-user, and for the purpose of Network Quality Assurance by operators/Licensees, there should be caution in the publication of the wholesale version of the Reports submitted by Licensees.

Response

The primary purpose for publishing QoS information is to provide end-users timely, relevant, accessible, accurate and comparable information that would enable them make informed decisions. The information to be published by the Commission is not whole sale information but the Commission will extract and publish the information in line with the provisions of Regulation 2 of the draft Regulations.

4. Comment

An operator expressed concern that the release of above information may unduly put an operator/Licensee at a disadvantage, and may defeat the purpose of using QoS information as a platform for the promotion of investment and innovation in the provision of telecommunications services and invariably stifling competition.

Response

Same as in comment above.

5. Comment

In the interest of transparency and fairness, inclusion of the following sub-provisions is recommended:

- a. Prior to publication due notice should be given to Licensees of reasons for rejecting any explanation for not meeting targets
- b. The objectives criteria to be used in evaluating the appropriateness of other information provided by Licensees.

Response

Regulation 13 already provides factors to be considered in approving explanatory remarks.

6. Comment

A comment was made to the effect that it runs counter to the era of light handed regulation and co-regulatory spirit of Quality of Service Regulations to penalize a Licensee for failing to meet targets set by the regulatory authority. For this reason operators have always advocated the establishment of minimum thresholds for Licensees to uphold as opposed to targets to be met; invariably over time as networks grow and stabilize these thresholds can be increased to provide a higher grade of service for end-users.

Response

The Commission believes in light handed and participatory regulation. This is why we have always consulted widely in making regulations. Once we have consulted and the industry has agreed to the thresholds, it behoves on operators to meet the threshold and acts of non-compliance will be sanctioned.

These targets are the minimum required of grade of service demanded by the Commission and Licensees are encouraged to exceed these targets

7. Comment

There was a comment on regulation 15 (d) that network equipment and systems are subject to downtimes which affect systems stability, and the reliability of measurement taken at such material times. Accordingly, it was proposed that where a Licensee is to be sanctioned on this ground, it must be as a result of a deliberate attempt to misinform and mis-lead the Commission.

Response

The Commission notes that downtimes do occur. However, measurement is not expected to be taken during downtime. Any planned downtime by a Licensee is expected to be widely published.

8. Comment

Without prejudice to the Commission's statutory authority to conduct investigations/inspection, it was recommended that the Commission send notices to affected Licensees prior to the commencement of any investigation in order to ensure that such Licensee is informed in a timely manner and to forestall any unwarranted embarrassment of either of the parties. A 14 day notice from the Commission to any affected Licensee was proposed.

Response

The procedure for conducting investigation is stated in the Nigerian Communications Act, 2003 and the Commission will abide by it in conducting investigation.

9. Comment

The discretionary element in Regulation 16 gives cause for much concern. The phrase in issue is ambiguous and liable to misconstruction, mis-application and could be subject to subjective measurement. It is believed that in keeping with the need for regulatory certainty, any sanctions imposed under the Regulations should be stated in a clear and unambiguous language.

Response

The Commission has reviewed the implication of this and accepts to revise the regulation.

10. Comment

It was reiterated that further to deliberations at the QoS meeting convened in April by the Commission, operators had expressed preference for the adoption of a co-regulatory regime where operators were granted the liberty to decide the measurement methodology, while the Commission in line with its statutory obligations would provide general oversight.

Response

The Commission has severally set up committees made up of staff of the Commission and operators but such Committees have failed due to lack of interest resulting in poor attendance by operating companies of duly convened meetings. The measurement methodology set up in the draft Regulation is subject to consultations. The Commission expected operators to specify alternative measurement methodology in the comments submitted to it. However we did not receive any submissions to that effect.

11. Comment

It was noted that network statistics measured at the switch would substantially differ if same were measured on the radio network, or even at the SMS Centre (SMSC). For each, the same benchmarks cannot apply and would need to be adjusted accordingly; otherwise the statistics measured will mean different things and would not be comparable.

Undoubtedly, comparability of statistics is therefore an essential element for any meaningful QoS regime. There is an urgent need to institute technical and administrative arrangement that will ensure common measurement methodology across all operators, that may be changed only

by the consensus of all parties at agreed times, in accordance with duly established administrative and regulatory provisions. In this regard, the industry calls for a QoS working group with membership from the Commission and industry, as an industry group on QoS.

Response

The Commission notes this view. Industry group should provide a consensus methodology to the Commission. The Commission would like to see the framework.

12. Comment

As required by objective 2 (b) of the draft Regulations, it is imperative that proposed QoS targets (standard) are benchmarked to take cognizance of the local environment and operating conditions.

Response

The Commission notes this comment. The local operating conditions were considered in the derivation of the QoS KPI targets.

13. Comment

The importance of an audit mechanism in any QoS regime cannot be overemphasized as it serves to validate/certify QoS schemes and equipment in use by operators. This ensures the credibility of the entire arrangement and the resulting statistics. While the draft Regulations is devoid of any audit arrangements, operator draws attention on the need for consultation to agree appropriate audit arrangement.

Response

Regulation 14 provides that the Commission investigate the measurement provided by the operators. This is a sufficient audit mechanism in addition to powers provided under the Act.

14. Comment

For purposes of regulatory certainty and propriety, there is need for a due process of consultation and rulemaking leading to the issuance or enactment of rules, regulations guidelines and determinations etc, by the Commission.

Response

The Commission notes this comment. The development of a rule making process is going on. However the Commission has always adopted due process of wide consultations and Public enquiries before regulations are enacted and also in the development of Guidelines.

15. Comment

We note and welcome the shift on the part of the Commission from the ongoing regime of QoS interventions targeted at Mobile services alone, to a regime of QoS regulations covering the

entire gamut of telecommunication services for both the retail (end-user) and wholesale (interconnection and transmission) ends of the market.

Response

Operator's observation is noted by the Commission. The Commission assures operators that it would continue to adopt industry best practices in QoS Regulations. It must however be acknowledged that over 95% of subscribers in the national network are Mobile subscribers and therefore emphasis on Mobile QoS is in order

16. Comment

The one-day Public Inquiry planned by the Commission on 25 October 2006 cannot and should not replace more in-depth consultation with the industry on the subject matter. It is noted that besides introductory meeting on 15 September 2005 between the Commission, operators and McCarthy Tetrault, the Consultants appointed by the Commission to develop the said draft Regulations, no consultations has taken place on this subject matter.

Response

Contrary to operator's claim that no further QoS consultation has taken place since the introductory meeting of 15th September, 2005, a successful QoS forum took place in Lagos on 25th April, 2006. The Commission also published the draft Regulations on its web-site since July 10, 2006 and operators were expected to have taken advantage of this and made their comments.

17. Comment

There is need to strike a fair balance in the QoS regime between the informational requirements and the burden and cost to the operators of supplying these. It is noted that the requirements are considerably burdensome and need to be streamlined in accordance with principle 4 (a) of the draft Regulations. It is notable that the mobile market segment and indeed the entire Nigeria telecommunication industry is highly competitive. This obviates the need for such arduous QoS requirements. Operator is convinced that detailed consultation is invaluable for reaching consensus on the streamlining requirement.

Response

In developing the draft Regulations and the measurement parameters, the Commission took note of the cost of the implementation by operators and operators are expected to devote resources to ensure good QoS in the whole country. The Commission is of the opinion that the cost is not burdensome to operators, which is why the Commission opted for participation by the industry to decide these measurement parameters.

These parameters and their thresholds are the minimum, the Commission expects operators to surpass some of the thresholds.

18. Comment

It is considered that the requirement to report statistics on certain parameters, for instance, account complaints and resolved complaints, etc, “regardless of the validity of the complaint” is unwarranted as it would only serve to entrench a perception of poor QoS over and above the factual QoS that is delivered. At best, invalid complaints should be reported as such.

Response

The Commission needs to have a total picture of complaints both resolved and unresolved to maintain proper records.

19. Comment

With the advent of the Unified License regime, many operators will begin to provide services other than those they currently provide.

Expectedly, there will be commencement or start-up challenges to such service provision. International best practice dictates that existing operators and the new entrants to any market segment should be exempted from the QoS standards requirements within the start-up phase. This is to enable the company build-out infrastructure to levels that can meet and sustain the QoS targets specified under the Regulations. A period of 2 years is internationally acceptable, but given the challenges in the local operating environment, a 3 year period is recommended, consistent with the objective of 2 (b) of the draft Regulations.

Response

Obligations on Unified License to submit QoS shall be considered on the nature of the respective service offered by the Operator.

20. Comment

To afford enhanced document management for the benefit of all concerned parties and the general public during and after the consultation period, a document trail should be provided on the document.

Response

Comment is noted and will be implemented.

21. Comment

For consistency in the use of the term “Network Termination Point” in the definition of “Interconnecting Licensee”, it is recommended that the following clause be appended to the definition of “Network Termination Point”: “or the point of interconnection or interface of one network to another”.

Response

The Commission notes this comment and the provision of the regulation will be amended accordingly.

22. Comment

IP should mean the Internet Protocol and not the Internetwork Protocol as included in the definition.

Response

The Commission notes this comment and the provisions of the regulation will be amended accordingly

23. Comment

Mean opinion Score (MOS) is a subjective measure that cannot be independently verifiable. The liberty granted operators to use either MOS or PESQ would negate the requirement for comparability of statistics as required by Regulation 4 (b) as the resulting statistics would be incomparable. A choice needs to be made of the one methodology, either MOS or PESQ that will be used. For obvious reasons, each operator cannot be allowed to choose the listening panel in an MOS test. To ensure the credibility of an MOS test, a single, duly certified listening panel is required rather than panels established by each operator. Detailed consultation is required to agree on the most appropriate technique, the set-up and relevant certification for this controlled experiment in order to assure meaningful measurement and credible statistics.

Response

MOS is subjective but there are other technical dimensioning parameters on a mobile network where there exists a compromise between capacity and good voice quality (e.g. use of half-Rate or Full-Rate channels).

The Commission recognizes that three basic families of techniques exist – MOS, PESQ and E-Model. Operators should agree on a single consensus technique and report to the Commission within six weeks.

GENERAL COMMENTS

Consequent upon the persistent call by participants for an industry working group to ensure proper analysis of parameters and QoS issues and the Commission's commitment to assist in establishing sustainable QoS, it was agreed that the working group will be set up by the Commission in conjunction with the operators and the report of the working group will be considered when finalizing the regulation.

The Commission reiterates that the contribution and participation by operators in quality of service issues needs to be improved upon by the operators. Considering the importance of quality of service, the Commission looks forward to timely response and participation in all duly convened quality of service meetings.

Dated this ...20th...Day of December, 2006

Engr. E. A. Ndukwe (OFR)

Executive Vice-Chairman/CEO