



# GOVERNMENT GAZETTE

## OF THE

# REPUBLIC OF NAMIBIA

N\$25.60

WINDHOEK - 31 March 2025

No. 8611

### CONTENTS

*Page*

#### GENERAL NOTICE

No. 162	Regulations Prescribing Quality of Service Standards Applicable to Telecommunications Licensees: Communications Act, 2009 .....	1
---------	---	---

## General Notice

### COMMUNICATIONS REGULATORY AUTHORITY OF NAMIBIA

No. 162

2025

#### REGULATIONS PRESCRIBING QUALITY OF SERVICE STANDARDS APPLICABLE TO TELECOMMUNICATIONS LICENCEES: COMMUNICATIONS ACT, 2009

The Communications Regulatory Authority of Namibia has under section 37(5)(e) read with section 129(1)(e) of the Communications Act, 2009 (Act No. 8 of 2009) –

- (a) made the Regulations set out in the Schedule; and
- (b) repealed the Regulations Prescribing Quality Of Service Standards Applicable To Telecommunications Licensees published under General Notice No. 152 of 21 April 2015.

**T. MUFETI**

**CHAIRPERSON OF THE BOARD**

**COMMUNICATIONS REGULATORY AUTHORITY OF NAMIBIA**

**SCHEDULE****ARRANGEMENT OF REGULATIONS****PART 1****INTRODUCTORY PROVISIONS**

1. Definitions
2. Objects and application of Regulations
3. Application of Regulations
4. Submission of documents to the Authority

**PART 2****QUALITY OF SERVICE STANDARDS**

5. Quality-of-service performance indicators and quality-of-service parameters
6. Geographic scope

**PART 3****LICENSEE OBLIGATIONS**

7. Duty to customers
8. Performance obligations
9. Obligations relating to service interruption or degradation
10. Reporting obligations

**PART 4****MEASUREMENT AND MONITORING**

11. Measurement of quality-of-service obligations
12. Monitoring of quality-of-service obligations

**PART 5****ENFORCEMENT AND SANCTIONS**

13. Assessment of quality-of-service compliance report
14. Verification of quality-of-service compliance report
15. Audits
16. Offences and penalties for non-compliance
17. Remediation required by Authority

**PART 6****GENERAL**

18. Publication of quality-of-service information
19. Record keeping

**PART 1****INTRODUCTORY PROVISIONS****Definitions**

1. In these Regulations, any word or expression to which a meaning is assigned in the Act has that meaning, and –

“consumer” means any person who uses telecommunication services of a licensee and includes, where applicable a potential customer of a such licensee;

“data portal” means the electronic interface found on the landing page of the official website of the Authority by means of which a licensee is required to submit reports and other information required by the Authority;

“drive test” means the method of measuring and assessing the coverage, capacity and quality of service of a mobile radio network while the person conducting the test is being conveyed in any vehicle or uses any vehicle, including a drone to conduct the test;

“ETSI” means the European Telecommunications Standards Institute;

“ETSI EG” means a Guide issued by ETSI pertaining to quality of service as referenced in the Schedules;

“force majeure” means any unforeseeable event or effect outside a licensee’s control, which renders the performance of one or more of that licensee’s obligations under these Regulations impossible including, without limitation, acts of nature such as an earthquake, flood, lightning, storm, heat wave, epidemic or pandemic, and acts of people such as an act, law, decision or requirement of any governmental authority, riot, strike, lockouts or other industrial disturbances, civil disorder, declared state of emergency, terrorist actions, and war or any similar act;

“geographic area” includes any of the following: the entire country, a region, constituency, district, city, town or village, as the case may be;

“key performance indicator” means a measurable value that demonstrates how effectively a licensee is achieving quality-of-service objectives;

“licensee” means a service provider to whom the Authority issued a service license referred to in regulation 3;

“mobile test probe” refers to a specialised device or tool used to measure and monitor the performance and quality of mobile networks in real time and deployed to collect data on various quality-of-service parameters as set out in Schedules 1 to Schedule 5; and

“quality of service” in relation to a –

- (a) telecommunications service, means the totality of characteristics of such telecommunications service that bear on its ability to satisfy stated and implied needs of consumers; and
- (b) telecommunications network, means the main indicator of the performance of such telecommunication network and of the degree to which the network conforms to the standards of such quality of service as specified in these Regulations for specified quality-of-service parameters;

“quality-of-service data” means all data accumulated by a licensee or the Authority pertaining to the measurement of quality-of-service standards;

“quality-of-service measurement system” means the measures that licensee must implement to comply with the quality-of-service standards and licensee obligations set out in these Regulations;

“quality-of-service parameters” means the measurable indicators as determined in the Schedules that used to characterise the quality of a certain aspect of a service being offered; and

“quality-of-service standards” means the quality-of-service performance indicators and quality-of-service parameters established under Part 2; and

“the Act” means the Communications Act, 2009 (Act No. 8 of 2009).

### **Objects of Regulations**

2. The objects of these Regulations are to –
  - (a) implement a quality-of-service framework, which allows the quality of service delivered by licensees to be measured, reported and published based on specified quality-of-service parameters and quality-of-service standards stipulated in these Regulations;
  - (b) establish minimum mandatory performance requirements for licensees, and the methodology for measuring those minimum performance requirements in line with quality-of-service parameters and quality-of-service standards;
  - (c) improve the quality of services offered by licensees by specifying regulatory interventions to identify service deficiencies and by encouraging, enforcing, effecting, or requiring appropriate changes and solutions;
  - (d) create conditions of consumer satisfaction by prescribing the quality-of-service objectives which a licensee is required to meet and which a consumer has the right to expect;
  - (e) promote fairness and safeguard the interest of consumers of electronic communications services; and
  - (f) prescribe penalties for non-compliance with quality-of-service standards.

### **Application of Regulations**

3. These Regulations are applicable to the following licence categories prescribed by regulation 5(1) of the Regulations setting out Broadcasting and Telecommunications Service Licence Categories, published under General Notice No. 124 of 18 May 2011 as amended by regulation 3 of the Amendment of Regulations setting out Broadcasting and Telecommunications Service Licence Categories, published under General Notice No. 387 of 12 August 2015 –

- (a) Individual licence (comprehensive telecommunications service licence, ECNS or ECS);
- (b) Class –
  - (i) ECS licence;
  - (ii) ECNS licence;
  - (iii) Comprehensive telecommunications service licence (ECNS and ECS); and
  - (iv) Network facilities service licence.

### **Submission of documents to Authority**

4. In these Regulations, when persons are permitted or called upon to submit information to the Authority in writing, they may do so either physically or electronically –

- (a) by hand at the head offices of the Authority: CRAN at Freedom Plaza, Courtside Building (3rd and 4th Floors), c/o Fidel Castro and Rev. Michael Scott Streets, Windhoek;
- (b) by post to the head office of the Authority, namely Private Bag 13309, Windhoek 9000;
- (c) by electronic mail to QOS@cran.na;
- (d) on the Authority's data portal as found on its website; or
- (e) in any other manner or at alternative addresses set out by the Authority from time to time.

## PART 2 QUALITY OF SERVICE STANDARDS

### **Quality-of-service performance indicators and quality-of-service parameters**

5. (1) Non-technical quality-of-service performance indicators and quality-of-service parameters are set out in Schedule 1.
- (2) Technical quality-of-service performance indicators and quality-of-service parameters are set out in Schedule 2;
- (3) Voice measurement quality-of-service parameters are set out in Schedule 3;
- (4) Data measurement quality-of-service parameters are set out in Schedule 4;
- (5) Quality-of-service performance indicators and quality-of-service parameters for network facility licensees are set out in Schedule 5.
- (6) Quality-of-service performance indicators and quality-of-service parameters for Customer Satisfaction Attributes are set out in Schedule 6.
- (7) Nothing in these Regulations exempts a licensee that is required to provide any universal service from complying with the established quality-of-service indicators and quality-of-service parameters as set out in subregulation (1).

### **Geographic scope**

6. (1) Subject to subregulation (2), a licensee must report the quality-of-service measurements contained in these Regulations to the Authority in accordance with the geographical area specified in the licence of that licensee, unless otherwise stated in any of the Schedules.
- (2) The Authority may direct a licensee to take and report quality-of-service measurements in one or more geographic areas.

## PART 3 LICENSEE OBLIGATIONS

### **Duty to customers**

7. A licensee must –

- (a) establish and maintain information or data to assist customers with queries relating to the services offered, installation and access requirements, processes, and customer support facilities;
- (b) provide customers with equal access to similar or comparable services within the applicable geographic area at the same quality of service and at the same tariff;
- (c) notify all its customers of the terms and conditions of the contract referred to in section 79(3) and (4) of the Act and thereafter provide services based upon the contract;
- (d) submit to the Authority samples of the contract referred to in paragraph (c) which must contain the minimum quality-of-service standards customers are entitled to, and the remedies and compensation available when the quality of service is below such standards; and
- (e) notify each customer in writing of any modification to an existing contract.

### **Performance obligations**

8. (1) Every licensee must establish quality-of-service measurement systems consistent with these Regulations.

(2) Each licensee must deliver services at a performance level that meets or exceeds the quality-of-service parameters and quality-of-service performance indicators stipulated in these Regulations.

### **Obligations relating to service interruption or degradation**

9. (1) Subject to subregulation (2), a licensee must not in the normal course of business intentionally interrupt or hinder the operation of its services unless a force majeure event or scheduled maintenance hinders or interrupts the rendering of its services.

(2) Subject to subregulation (3), a licensee must report to the Authority all interruptions or degradations affecting its services in the form set out in the Annexure.

- (3) The report referred to in subregulation (2) must be made in the case of –
  - (a) scheduled maintenance, at least 48 hours before the outage;
  - (b) unplanned service interruptions or degradations lasting longer than three hours, within 12 hours after such interruption or degradation: Provided that in the case of a –
    - (i) level one service interruption, the licensee must make such report within one hour;
    - (ii) level two service interruption, the licensee must make such report within six hours;
    - (iii) level three service interruption, the licensee must make such report within 12 hours.
- (4) For purposes of subregulation (3) –

- (a) “level one service interruption” means a service interruption that affects more than 75% of a licensee’s services;
  - (b) “level two service interruption” means a service interruption that affects between 50% and 75% of a licensee’s services; and
  - (c) “level three service interruption” means a service interruption that affects less than 50% of a licensee’s services.
- (5) A licensee must give its customers at least two days’ notice in advance of any planned service interruption or degradation, by publishing a notice by text message, email, other online application or print media.
- (6) Where an unplanned service interruption or degradation occurs which may extend beyond three hours, the affected licensee must notify –
- (a) the Authority within 12 hours at the email address: QOS@cran.na;
  - (b) its customers via social media platforms, SMS, local radio stations, television or other appropriate means.
- (7) The notification referred to in subregulation (6) must include the following information:
- (a) The services affected by the service interruption or degradation;
  - (b) the expected duration of the service interruption or degradation;
  - (c) the geographic areas affected;
  - (d) network elements and nodes affected;
  - (e) percentage of traffic affected by the service interruption or degradation;
  - (f) the reasons for the service interruption or degradation; and
  - (g) the possible effects of the service interruption or degradation on the affected customers.
- (8) A licensee must within 10 days of an unplanned service interruption or degradation occurring submit a detailed report to the Authority setting out –
- (a) a qualitative description of the service interruption or degradation, including the initial causes thereof, affected network elements and nodes, affected transmission links and consequences for voice, data and internet traffic;
  - (b) a quantitative evaluation of the number of affected end users, network elements and nodes, transmission links and each telecommunication service or retail product sold by the licensee;
  - (c) the duration of the service interruption or degradation and whether it’s continuing; and
  - (d) a description of the long-term action plans the licensee will implement to improve network resilience to prevent a repeat of the service interruption or degradation.

## Reporting obligations

**10.** (1) For each reporting period described in subregulation (4), every licensee must prepare a quality-of-service compliance report that includes, as a minimum the following:

- (a) name and type of service;
- (b) geographic scope;
- (c) reporting results (e.g., values of the quality-of-service parameters in the reporting period);
- (d) history of previous results with comparison in time to follow the quality-of-service progression including a clear statement of improvements made;
- (e) details on the methodology, such as the source of network measurements; and
- (f) details on the calculation of the quality-of-service parameters, time span and spatial distribution of the observations made to arrive at the quality-of-service results indicated in the compliance report.

(2) If a licensee has not met the quality-of-service parameters and quality-of-service performance indicators referred to in regulation 5, the licensee must submit to the Authority the following:

- (a) Statement outlining the reasons including whether any force majeure events occurred during the reporting period;
- (b) the remedial actions undertaken or planned;
- (c) the time period within which the licensee will attain the required quality-of-service parameters and quality-of-service performance indicators; and
- (d) any preventive actions taken to avoid similar issues in the future.

(3) A licensee must submit quality-of-service compliance reports to the Authority on the data portal.

(4) A quality-of-service compliance report referred to in subsection (3) must be submitted to the Authority on a quarterly basis within one month after the end of each reporting period in accordance with the Table below:

Reporting period	Latest date for submission of quality-of-service compliance reports
1 January to 31 March	30 April of the same year
1 April to 30 June	31 July of the same year
1 July to 30 September	31 October of the same year
1 October to 31 December	31 January of the next year

(5) A licensee who fails or refuses to comply with the directive of the Authority issued under subsections (1), (2), and (3) commits an offence and on conviction is liable to a penalty provided for in regulation 16.



## PART 4 MEASUREMENT AND MONITORING

### Measurement of quality-of-service obligations

**11.** (1) Every licensee must, in accordance with its established quality-of-service measurement systems, measure across their networks all quality-of-service parameters stipulated in these Regulations.

(2) Measurement and monitoring of quality-of-service parameters must be done in accordance with the measurement mechanisms contained in Schedules 1 to 5, and any other methods that may be determined by the Authority from time to time.

### Monitoring of quality-of-service obligations

**12.** (1) In monitoring compliance, the Authority may use any one or more of the following methods:

- (a) a drive test;
- (b) a mobile test probe;
- (c) a consumer survey;
- (d) review and analysis of raw and processed data from the operation support systems of a licensee or other relevant sources; or
- (e) any other generally accepted monitoring method.

(2) The Authority will notify a licensee, where appropriate, which of the methods referred to in subregulation (1) it will use in monitoring compliance by a licensee and will also inform such licensee of the standards and processes the Authority will employ in a specific case.

## PART 5 ENFORCEMENT AND SANCTIONS

### Assessment of quality-of-service compliance report

**13.** (1) Within 30 days after a licensee submitted a quality-of-service compliance report in terms of regulation 10, the Authority must assess the report for compliance with these Regulations and in writing notify the licensee that the Authority –

- (a) accepts the quality-of-service compliance report; or
- (b) subject to regulation 14 rejects the quality-of-service compliance report, specifying reasons for such rejection including why the Authority disagrees with the reasons provided by the licensee for any failures to achieve quality-of-service obligations, or with any other matter in the quality-of-service compliance report.

(2) If the Authority provides a notice to a licensee under subregulation (1)(b) the licensee must, to the extent and by the date required by the Authority in the notice -

- (a) resubmit a revised quality-of-service compliance report, whereupon the Authority must assess the report and notify the licensee as set out in subregulation (1); and

- (b) comply with regulation 17 in respect of any remediation or other action specified by the Authority in the notice.

(3) If the Authority provides a notice to a licensee under subregulation (1)(a), or the Authority does not respond to a quality-of-service compliance report or a revision thereof within 30 days of its submission by a licensee, such report is deemed to be accepted.

#### **Verification of quality-of-service compliance report**

**14.** (1) The Authority may take the necessary steps and utilise the necessary methods to verify the accuracy of a quality-of-service compliance report submitted by a licensee under regulation 10(1).

(2) The Authority may direct a licensee in writing to submit additional information or documents to verify the information that the licensee submitted in a quality-of-service compliance report.

(3) A licensee must, within 14 days of receipt of a written direction from the Authority referred to in subregulation (2), submit the additional information or documents to the Authority in accordance with its directions.

(4) The Authority may conduct an investigation to verify the information submitted in a quality-of-service compliance report or any additional information submitted under subregulation (3).

(5) An investigation referred to in subregulation (4) may be triggered by –

- (a) inconsistencies between the measurements reported by a licensee and those measured by the Authority; or
- (b) a licensee's sustained non-compliance with quality-of-service parameters.

(6) Within seven days of receipt of written notification of an investigation by the Authority, a licensee must be prepared to demonstrate that -

- (a) the licensee's measurements and reporting requirements have been complied with;
- (b) the quality-of-service parameters are calculated in accordance with the methodology set out in the Schedules, as applicable;
- (c) its support systems involved in making, processing and reporting the quality-of-service measurements do so accurately; and
- (d) the operations of the licensee has performed in making, processing and reporting the quality-of-service measurements can be traced back for individual measurements.

(7) If the Authority is dissatisfied with the outcome of an investigation under subregulation (4), the Authority may require the licensee concerned to carry out any remediation or other action under regulation 17 to ensure that a licensee complies with these Regulations, failing which the Authority may seek the imposition of a penalty under regulation 16.

(8) On completion of the verification process set out in this regulation, the Authority may –

- (a) approve a licensee's quality-of-service compliance report for publication in accordance with regulation 18(2); or
- (b) rejects such quality-of-service compliance report whereupon regulation 13(1)(b) and 13(2) apply.

### **Audits**

**15.** (1) The Authority may conduct audits and may for that purpose contract a third party with the necessary expertise to assess a licensee's compliance with these Regulations.

(2) In conducting an audit, the Authority may perform validity controls –

- (a) to verify the accuracy and sufficiency of a licensee's quality-of-service results;
- (b) to verify the internal procedures and methodologies used by the licensee to collect quality-of-service measurements, including interviews with its staff members to verify that its internal procedures have been correctly followed; or
- (c) by launching queries on the licensee's system to obtain relevant raw data.

(3) The purpose of an audit conducted under this regulation is to -

- (a) verify if the licensee has accurately and sufficiently measured and reported quality-of-service results; and
- (b) determine if any remediation or other action is necessary under regulation 17 or if an investigation will be required under regulation 14(4).

(4) The Authority must provide to a licensee who has been subjected to an audit with an audit report within 30 days of concluding such audit, containing -

- (a) the results of the audit;
- (b) the Authority's determinations and conclusions from the audit;
- (c) directions to the licensee to furnish the Authority with written explanations regarding any issue identified during the audit, including reasons for any failure to accurately or sufficiently measure and report quality-of-service results;
- (d) any remediation that the licensee is required to carry out.

(5) A licensee must respond to any determination, conclusion or request for explanation in an audit report within 30 days of receipt thereof, failing which any determinations or conclusions contained in the audit report is deemed to be correct.

(6) If an audit report requires a licensee to carry out any remediation or other action under regulation 17, it will constitute a notice to the licensee under that regulation.

### **Offences and penalties for non-compliance**

**16.** (1) A licensee must comply with the obligations provided for in these Regulations.

(2) A licensee commits an offence if it –

- (a) fails to comply with subregulation (1);
- (b) fails to submit during a time period specified in these Regulations or by the Authority, information required under these Regulations;
- (c) submits or publishes false or misleading information relating to quality of service; or
- (d) obstructs or prevents an investigation by the Authority on the quality-of-service measurement, reporting or record keeping procedures.

(3) If a licensee fails to comply with subregulation (1), the Authority may direct the licensee to remedy its breach of these Regulations in accordance with regulation 17.

(4) If a licensee commits an offence referred to subregulation (2), the Authority may deal with the matter as contemplated by Chapter X of the Act.

(5) Upon conviction for an offence referred to in subregulation (2) a licensee is liable to –

- (a) a fine not exceeding N\$250,000; or
- (b) if the offence is a continuing offence, a further fine not exceeding N\$10,000 for every day that the offence continues after conviction; or
- (c) amendment or withdrawal of its licence as provided for in section 115(4)(c) of the Act.

### **Remediation required by Authority**

17. (1) Within 30 days of receipt of a written notice by the Authority requiring remediation within the period stated in the notice, or the carrying out of any other action in connection with –

- (a) an assessment of quality-of-service compliance report under regulation 13;
- (b) a verification of quality-of-service compliance report under regulation 14;
- (c) an audit under regulation 15;
- (d) an investigation under regulation 14(4);
- (e) a complaint or series of complaints,

the licensee must carry out the remediation or other action as required by the notice.

(2) If a licensee fails to carry out the remediation or other action as required by the notice referred to in subregulation (1), the Authority may deal with the matter as contemplated by Chapter X of the Act.

## **PART 6 GENERAL**

### **Publication of quality-of-service information**

18. (1) Without limiting the Authority's power to publish quality-of-service information, the Authority may publish on its website or in any other manner –

- (a) a licensee's quality-of-service results;
- (b) comments on a licensee's quality-of-service results which the Authority considers necessary to better explain the results in order to assist end users to understand the licensee's quality-of-service results or to put such results in context;
- (c) comparisons between the quality-of-service results of all licensees within the same sector;
- (d) international quality-of-service benchmarks.

(2) The Authority may include in its annual report referred to in section 26 of the Act a report on the state of quality of service in Namibia pertaining to licensees, based on their quality-of-service results for the preceding year as approved, measured, audited or otherwise determined by the Authority.

### **Record keeping**

**19.** (1) A licensee must retain quality-of-service records in English for a minimum period of five years after the end of the reporting period or until such time as the Authority may direct.

(2) For purposes of this regulation, "quality-of-service records" include any quality-of-service data, all measurements and any other document relating to the quality-of-service standards of a licensee.

(3) A licensee that contravenes or fails to comply with subsection (1) commits an offence is liable on conviction to a penalty provided for in regulation 16.

### **Extension of time**

**20.** (1) If a licensee is unable to comply with any period set out in these Regulations, it may request the Authority in writing for an extension of at least seven days prior to the time set out or within any other time agreed by the Authority upon good cause shown.

(2) The Authority must respond to the request for condonation as soon as practicable and may in its sole discretion either grant or deny the request taking into account the nature and the reasons for non-compliance with the time set out.

## ANNEXURE

NETWORK OUTAGE REPORT FORM	
<b>CONTACT INFORMATION</b>	
Name of Reporting Licensee:	License No.
Name of Primary Contact Person:	E-Mail Address: Contact No.:
<b>OUTAGE INFORMATION:</b>	
<b>TYPE OF OUTAGE:</b>  <input type="checkbox"/> Unplanned  <input type="checkbox"/> Planned  Date of Incident (dd/mm/yyyy): _____  Local Time Outage Began (24-hr hh:mm): _____  Outage Duration: ____ hrs ____ min  Outage status when filling this report: _____  Local Time Outage Resolved (24-hr hh:mm): _____	
<b>EFFECT OF OUTAGE:</b>  Network Element(s) Affected: _____  Percentage of Traffic Affected (If known): _____  Geographical Area Affected: <input type="checkbox"/> Cities: _____ <input type="checkbox"/> Affected Sites: _____	
<b>DESCRIPTION OF THE OUTAGE:</b> _____ _____ _____ _____ _____	
<b>EXPLANATION OF OUTAGE DURATION:</b> _____ _____ _____ _____ _____	
<b>CAUSE:</b> _____ _____ _____ _____ _____	
<b>ACTIONS:</b> _____ _____ _____ _____ _____	

**DECLARATION:**

Signed by: \_\_\_\_\_

at \_\_\_\_\_ in his/her capacity as: \_\_\_\_\_

\_\_\_\_\_ duly authorised and warranting such authority and declaring that the information provided herein is true and correct, on this \_\_\_\_\_ day of \_\_\_\_\_ 20 \_\_\_\_\_.

\_\_\_\_\_  
Signature**ACKNOWLEDGEMENT OF RECEIPT BY CRAN (OFFICIAL USE ONLY)**

Full name: \_\_\_\_\_

Date: \_\_\_\_\_

Place: \_\_\_\_\_

Signature \_\_\_\_\_

**SCHEDULE 1****Non-Technical Key Quality-of-Service Performance Indicators and Quality-of-Service Parameters**

For purposes of this Schedule –

“**fault**” means the failure of a service to the extent that the service or some aspects of the service is unavailable.

<b>QoS KPI</b>	<b>Definition</b>	<b>Measurement Method</b>	<b>Parameter</b>	<b>Applicability</b>
<b>Supply time for initial fixed line service connection-post-paid and prepaid (Voice/data/ADSL/Fibre/FTT)</b>	ETSI EG 202 057-1 (clause 5.1) The duration from the instant of a valid service order being received by a direct service provider to the instant a working service is made available for use. This should exclude cancelled orders.	Include the following scenarios - (a) A new connection. (b) An existing connection taken over by another customer. (c) An additional connection provided to a customer who already has an existing service, including any upgrades in service. (d) A valid service request may be in writing. Where a licensee and customer agree that an order for multiple connections each agreed delivery time counts as a separate service request for measurement purposes.	95% of service request to be completed within 7 elapsed days and 100% of service requests to be completed within 10 elapsed days.	Individual licensees Class Comprehensive ECS/ECNS licensees Class ECNS licensees

<b>Supply time for initial Mobile service connection- post-paid and prepaid</b>	ETSI EG 202 057-1 (clause 5.1)  The duration from the instant of a valid service order being received by a direct service provider to the instant a working service is made available for use. This should exclude cancelled orders.	Include the following scenarios- (a) A new connection. (b) An existing connection taken over by another customer. (c) An additional connection provided to a customer who already has an existing service, including any upgrades in service. (d) A valid service request may be in writing. Where a licensee and customer agree that an order for multiple connections each agreed delivery time counts as a separate service request for measurement purposes.	95% of service request to be completed within 3 elapsed days and 100% of service requests to be completed within 5 elapsed days.	Individual licensees Class Comprehensive ECS/ECNS licensees Class ECNS licensees
<b>Fault Repair Time</b> <i>(This is applicable to faults reported by users detected and reported by network monitoring elements.)</i>	The time (elapsed hours) by which a valid fault on network is repaired.	The time by which valid faults on networks are repaired and the percentage of faults cleared in the time specified in any service level agreement or contract must be reported separately.	(a) Fixed: 95% of faults to be repaired within 2 elapsed days from the time reported and 100% of faults to be repaired within 7 elapsed days. (b) Mobile: 95% of faults to be repaired within 24 elapsed hours from the time reported and 100% of faults to be repaired within 48 elapsed hours.	Individual licensees Class Comprehensive ECS/ECNS licensees Class ECNS licensees
<b>Response time for administration and billing enquiries</b>	Duration from the instant when the address information required for setting up a call is received to the instant the human operator answers the calling user to attend to the enquiry.	Enquiries attend to by Interactive Voice Response (IVR) only is excluded from this measurement. Any enquiry transferred from an IVR system to a human operator to attend to the enquiry is included in the measurement. The duration period in the definition includes waiting time because attendants are busy. Time duration handle the enquiry itself is excluded from the measurement. The parameter is applicable to all administration and billing enquiries made to a call centre by a customer via fixed, mobile, direct and/or indirect services.	95% of calls must be answered within 20 seconds.	Individual licensees Class Comprehensive ECS/ECNS licensees Class ECS licensees



<b>Billing Correctness</b>	ETSI EG 202 057-1 (clause 5.11) The proportion of bills resulting in a customer complaint about the correctness of a given bill per service.	ETSI EG 202 057-1 (clause 5.11.3) Measured by percentage of bills resulting in a customer complaint. A bill correctness complaint is an expression of dissatisfaction with the accuracy of the bill received from a customer. Statistics should include all billing complaints received in the reporting period regardless of the validity of the complaint and the dates of calls or any other form of communication that are the subject of the complaint.	Less than 2% of bills should result in customer complaints.	Individual licensees Class Comprehensive ECS/ECNS licensees Class ECS licensees
----------------------------	---	--	---	--

## SCHEDULE 2

### Technical Key Quality-of-Service Performance Indicators and Quality-of-Service Parameters

For purposes of this Schedule –

“**busy time**” means a set of the same three (3) hours in each of the same days in the reporting period, during which the highest average traffic for a service is measured or expected;

“**packet loss**” means the failure of one or more transmitted packets to reach their final destination;

“**SMS**” means Short Message Service.

QoS KPI	Definition	Measurement Method	Parameter	Applicability
<b>Mobile / Wireless Service Coverage per Cell</b>	Percentage of test route over which a minimum signal strength of -100 dBm is achieved per cell.	The test route will be determined by the Authority depending on the network coverage provided by licensees. Measurements will be taken in a reporting area within the network coverage area of the licensee from time to time as determined by the Authority.	A minimum of -100 dBm must be achieved for 95% outdoor and 85% indoor service coverage following a predetermined test route.	Individual licensees Class Comprehensive ECS/ECNS licensees Class ECS licensees Class ECNS licensees

<b>Unsuccessful Call Ratio</b> (% of call attempts)	ETSI EG 202 057-2 (clause 5.1) ETSI EG 201 769-1 (clause 5.4)  Unsuccessful call ratio is defined as the ratio of unsuccessful calls to the total number of call attempts in a specified time period.	ETSI EG 202 057-2 (clause 5.1.3) ETSI EG 201 769-1 (clause 5.4.2)  It is measured by:  (a) The percentage of unsuccessful calls for national calls; (b) The percentage of unsuccessful calls for international calls; (c) The number of observations used for national and international calls together with absolute accuracy.	(a) Less than or equal to 1% percentage On-Net National unsuccessful calls must be at busy time.  (b) Less than or Equal to 2% percentage of unsuccessful international call at busy time.	Individual licensees Class Comprehensive ECS/ECNS licensees Class ECS licensees Class ECNS licensees
<b>Call Setup Success Rate</b>	Portion of call attempts with an indication of call connection (alerting, busy tone or announcement) within 12 seconds from the instant the user initiates a request.	The number of unsuccessful call attempts should be divided by the total number of call attempts. The following category statistics should be provided separately:  (a) The percentage of unsuccessful calls for local calls/on-net (b) The percentage of unsuccessful calls for national calls cross-network (c) The statistics should be calculated from Measurements on all real traffic; or (d) Measurements on real traffic for outgoing calls in a representative population of local exchanges to a representative set of destinations; or (e) Test calls in a representative population of local exchanges or Network Termination Points to a representative set of destinations; or A combination of the above.	(a) No less than 95% for national calls. (b) No less than 95% for international calls.	Individual licensees Class Comprehensive ECS/ECNS licensees Class ECS licensees Class ECNS licensees
<b>International Call Connectivity</b>	The relationship between the number of seizures that result in an answer signal and the total number of seizures (ASR) for a specific country.	ASR to be measured on a country-by-country basis over time as determined by the Authority.	The ASR on a country-by-country basis should be more than 60%.	Individual licensees Class Comprehensive ECS/ECNS licensees Class ECS licensees Class ECNS licensees

<b>Dropped Calls Per Cell Ratio</b>	<p>ETSI EG 202 057-3 (clause 6.4.2) The proportion of incoming and outgoing calls which, once they have been correctly established and therefore have an assigned traffic channel, are dropped, or interrupted prior to their normal completion by the user, the cause of the early termination being within the operator's network.</p> <p>3GPP TS 32.454 clause 5.2.1</p> <p>Call drops for IMS session.</p> <p>Applicable for IMS (VoLTE KPI).</p> <p>The number of dropped sessions divided by the number of successful session establishments.</p>	<p>ETSI EG 202 057-3 (clause 6.4.2.2)</p> <p>When using the measurements based on network element counters, the following statistics should be provided: the percentage of dropped calls, calculated from all the calls in the period.</p> <p>When using test calls, the following statistics should be provided: the percentage of dropped calls, together with the number of observations used and the absolute accuracy limits for 95% confidence calculated from this number.</p> <p>3GPP TS 32.454 clause 5.2.1</p> <p>It is measured by a percentage.</p> <p><i>Note: Calls ended as a result of depleted credit shall be excluded from the numerator and denominator.</i></p>	<p>(a) No more than 5% of successfully established voice calls should be dropped per cell.</p> <p>(b) No more than 5% of successfully established video calls should be dropped per cell</p>	<p>Individual licensees Class Comprehensive ECS/ECNS licensees Class ECS licensees Class ECNS licensees</p>
<b>Successful SMS Ratio</b>	<p>ETSI EG 202 057-2 (clause 5.6.1) Probability that a user can send a Short Message successfully from a terminal equipment to a Short Message Centre.</p>	<p>ETSI EG 202 057-2 (clause 5.6.1.3) The percentage of successfully sent short messages, together with the number of observations used and the absolute accuracy limits for 95% confidence calculated from this number.</p>	<p>95% of SMS messages must be send successfully in busy time.</p>	<p>Individual licensees Class Comprehensive ECS/ECNS licensees Class ECS licensees Class ECNS licensees</p>
<b>SMS delivery time</b>	<p>ETSI EG 202 057-2 (clause 5.6.3) The end-to-end delivery time for SMS is the period starting when sending a SMS from a terminal equipment to a Short Message Centre and finishing when receiving the very same SMS on another terminal equipment. ETSI EG 102 250-2 (clause 7.4.5)</p>	<p>ETSI EG 202 057-2 (clause 5.6.3.3)</p> <p>It is measured by:</p> <p>(a) the mean value in seconds for sending and receiving short messages;</p> <p>(b) the time in seconds within which the fastest 95 % of short messages are sent and received;</p> <p>c) the number of observations performed. ETSI TR 102 529.</p>	<p>95% of SMS's must be completed successfully.</p>	<p>Individual licensees Class Comprehensive ECS/ECNS licensees Class ECS licensees Class ECNS licensees</p>

<b>Jitter</b>	ITU-T Y.2617 Jitter is measuring time difference in packet inter-arrival time. It is the variation in the latency on data packet inter-arrival time between the sending and receiving points. When some data packets take longer to travel from sending to the receiving end. The lower the measure of jitter the more stable a connection is and latency is important to VoIP and VoLTE end users. Jitter results from network congestion, timing drift and route changes	Measured by measuring the difference in the end-to-end latency, in milliseconds (ms), between data packets send and received.	(a) No more than 300ms difference in the end-to-end latency between data packets local specified server. (b) No more than 100ms difference in the end-to-end latency between data packets international specified server.	Individual licensees Class Comprehensive ECS/ECNS licensees Class ECS licensees Class ECNS licensees
<b>Latency</b>	ITU-T Y.2617 The time between the first bit of a packet of a source entering a network, being received by the destination, which immediately sent a bit back to the source, and then the last bit of the packet arriving at the source across the network (round trip delay).	It is recommended that delay is measured using: (a) UDP with ICMP or TCP as fall-back option, (b) at least 10 measurements, and (c) calculated as an average of recorded roundtrip time values (typically expressed in milliseconds).  The measurement server should return any UDP packet payload immediately, allowing the client to calculate delay. The Unix echo service could be used for this function. The measurement setup should be insensitive to (user) clock changes during the measurement.	(a) The average latency shall not be more than 300ms to transmit a data packet end to end from a public server (international IXP). (b) the average latency shall not be more than 100ms to transmit a data packet end to end from a public server (local IXP).	Individual licensees Class Comprehensive ECS/ECNS licensees Class ECS licensees Class ECNS licensees

<b>Packet Loss Ratio</b>	ITU-T Y.2617 The total number of packets failing to deliver through the network divided by the total number of transmitted packets within a specific time window.	Packet is not received back within a certain timeout (e.g. 3 seconds), it is considered as lost for the purpose of packet loss measurements. Recommended to send a large number of IP packets (e.g. at least 1000). Delay and packet loss measurements are typically performed over a longer period of time in order to allow for the time varying nature of network performance in packet-switched networks.	(a) Less than or Equal to 95% milliseconds (ms) for national. (b) Less than 250 Millisecond (ms) for international reference.	Individual licensees Class Comprehensive ECS/ECNS licensees Class ECS licensees Class ECNS licensees
<b>Unsuccessful data transmission ratio (As per package subscription)</b>	The ratio of unsuccessful data transmissions to the total number of data transmission attempts in a specified time period.	A data transmission is successful if a test file is transmitted completely and with no errors. The statistics should be calculated from test transmissions made according to the measurement set-up stipulated in ETSI EG 202 057-4. Additional measurements will be taken in a reporting area within the network coverage are of the licensee from time to time as determined by the Authority.	95% of all data transmissions must be successful within a specified time period.	Individual licensees Class Comprehensive ECS/ECNS licensees Class ECS licensees Class ECNS licensees
<b>Data transmission achieved (As per package subscription)</b>	The data transmission rate is achieved separately for downloading and uploading specified test files between a remote website and user equipment,	The test file shall have at least twice the size (in kb) of the theoretically maximum data transmission rate per second as advertised by the licensee for a specific service.  Additional measurements will be taken in a reporting area within the network coverage are of the licensee from time to time as determined by the Authority.	Data transmission speed achieved must be at least 80% of that advertised by the licensee during busy time.	Individual licensees Class Comprehensive ECS/ECNS licensees Class ECS licensees Class ECNS licensees

**SCHEDULE 3****Voice Measurement Quality-of-Service Parameters**

For purposes of this Schedule –

**“mean opinion score” or “MOS”** means a numerical indication of the perceived quality of received media after compression and/or transmission. The MOS is expressed, as a single number in the range 1 to 5, where 1 is lowest perceived quality, and 5 is the highest perceived quality.

<b>Voice Call Quality-of-Service Parameters</b>	<b>Description</b>
Accessibility: Short Call	Call Duration (10 seconds) + 30 seconds (for setup and release phase) + 30 seconds (for minimum pause interval)
Retainability: Long Call	Call Duration (120 seconds) + 30 seconds (for the setup and release phases) + 30 seconds (for the minimum paused interval)
Call setup Time	Time taken to setup a call – Target is 20 seconds
Voice Quality	Average Speech Quality of Mean Opinion Score (MOS must be greater than 3)

**SCHEDULE 4****Data Measurements Quality-of-Service Parameters**

For purposes of this Schedule –

**“FTP”** means file transfer protocol;

**“HTTP”** means Hypertext Transfer Protocol;

**“DL”** means Download

**“UL”** means Upload

<b>Test Description</b>	<b>3G</b>	<b>4G</b>	<b>5G</b>
FTP Download	FTP DL (5 MB)	FTP DL (15 MB)	FTP DL
FTP Upload	FTP UL (1 MB)	FTP UL (5 MB)	FTP UL
HTTP Download	HTTP Get (2 MB)	HTTP Get (15 MB)	HTTP Get
HTTP Upload	HTTP Put (1 MB)	HTTP Put (5 MB)	HTTP Put
Ping sessions with size of 32 bytes payload	Ping (32 Bytes)	Ping (32 Bytes)	Ping (32 Bytes)
Video streaming from YouTube for 60 seconds	Video: YouTube	Video: YouTube	Video: YouTube
Download content from the test server	HTTP Browsing: TBD	HTTP Browsing: TBD	HTTP Browsing: TBD
Download content from live web page	Live Web Browsing	Live Web Browsing	Live Web Browsing
Packet Delay ping to web pages e.g. www.google.com.na	Ping (32 Bytes)	Ping (32 Bytes)	Ping (32 Bytes)

**SCHEDULE 5**

Quality-of-service performance indicators and quality-of-service parameters for network facility licensees

<b>QoS KPI</b>	<b>Definition</b>	<b>Measurement Method</b>	<b>Parameter</b>	<b>Applicability</b>
<b>Fault Time Repair</b>	The time (elapsed hours) by which the owner of Network Infrastructure/facility to attend to the failure on the Fiber Optic Network.	The time by which valid faults on fibre optic networks are repaired and the percentage of faults cleared in the time.	80% faults must be repaired within 24 hours  100% faults must be repaired within 48 Hours	Network Facilities Service License
	The time (elapsed hours) by which the owner Network Infrastructure/facility to attend to the failure on the Network infrastructure/facility e.g. network elements.	The time by which valid faults on networks elements are repaired and the percentage of faults cleared in the time.	80% faults must be repaired within 24 hours  100% faults must be repaired within 48 Hours	
<b>Backup Power Reliability</b>		The uptime of power supply to the network equipment from backup generators.	Assesses the reliability of backup systems e.g. generators.  00	

**SCHEDULE 6**

## Customer Satisfaction Attributes

A licensee in respect of the following Quality-of-Service benchmarks will be subject to periodic assessment by the Authority through customer satisfaction surveys, which may be conducted by the Authority either through its own officers or employees or through any agency appointed by Authority.

<b>Parameter Name</b>	<b>Target</b>
% of customers satisfied with the service availability	>90%
% of customers satisfied with the service accessibility	>90%
% of customers satisfied with the reliability	>90%
% of customers satisfied with billing performance	>90%
% of customers satisfied with the help/ enquiry services	>90%

## ANNEXURE C

**COMMENTS IN TERMS OF THE NOTICE TO AMEND THE REGULATIONS  
RELATING TO QUALITY-OF-SERVICE STANDARDS APPLICABLE TO  
TELECOMMUNICATIONS LICENSEES: COMMUNICATIONS ACT, 2009**

COMMENTS	REPLY COMMENTS FROM CRAN
<b>Mobile Telecommunications Limited (MTC) Comments</b>	
Relate the definition of “consumer” to “consumer” and / or “user” in the Communication Act to clarify reference to “a potential customer” and “request a telecommunication service”.	<p>The Communication Act does not contain a definition of “consumer”. Only “customer” which reads- “<b>customer</b>” means any person who concluded a contract with the provider of telecommunications services for the provision of such services”.</p> <p>The Act contains a definition of “user” as follows: “<b>user</b>” means any natural or juristic person, including customers, who uses or requests a telecommunications service, whether or not that person pays for such service. The definition of consumer in the QoS Regulations states: “<b>consumer</b>” means any person who uses telecommunication services of a licensee and includes, where applicable a potential customer of a such licensee. The key focus is that QoS obligations also extend to potential customers.</p> <p>Perhaps the definition of “consumer” could be amended to state: “<b>consumer</b>” includes a user, customer and a potential customer of a licensee.</p>
Add cyber-attacks, electricity outage, theft of network elements, vandalism and regulatory orders under the definition of force majeure or make provision under a separate category.	<p>These categories are already included in the definition of “force majeure”, which states: “force majeure” means <u>any unforeseeable event or effect outside a licensee’s control, which renders the performance of one or more of that licensee’s obligations under these Regulations impossible</u> including, without limitation, acts of nature such as an earthquake, flood, lightning, storm, heat wave, epidemic or pandemic, and acts of people such as an act, law, decision or requirement of any governmental authority, riot, strike, lockouts or other industrial disturbances, civil disorder, declared state of emergency, terrorist actions, and war or any similar act; The underlined portion already caters for events such as cyber-attacks, electricity outage, theft of network elements etc</p>
Quality of service in relation to a telecommunications service, should exclude “implied needs of consumers”. Licensees will not be able to comply with unexpressed parameters. Consider the definition of quality of service as recommended by the International Telecommunications Union (ITU-T E.800).	<p>Having reconsidered the definition of quality of service as recommended by the International Telecommunications Union (ITU-T E.800) it only mentions “needs of users”. Perhaps the definition could be amended by deleting “stated and implied. The definition would then read: “quality of service” in relation to a - telecommunications service, means the totality of characteristics of such telecommunications service that bear on its ability to satisfy <del>stated and implied</del> the needs of consumers.</p>
The penalty provisions proposed are not in sync with the Penalty Regulations of 29 April 2020, and the two cannot be applied in tandem. Will these Regulations supersede the Regulations of 29 April 2020. It is suggested that the penalty provisions in these Regulations be removed entirely.	The Authority takes note of the suggestion. The Authority intends to review the Penalty Regulations of 29 April 2020 in the near future.
Clarify the exclusion of Non-Profit ECNS/ECS providing services to the public (apart from close-circuit video surveillance).	To date Non-profit ECNS/ECS licensees e.g. neighbourhood watches do not provide commercial services such as they are not subjected to QoS regulations. As such, they are not subjected to QoS regulations.
Prescribe that reports must be submitted on the data portal, and other methods are only alternatives or as directed by the Authority.	<p>All reporting on QoS parameters shall be submitted via the CRAN data portal. Consider definition of “data portal” as well as regulation 10(3) which states: “(3) A licensee must submit quality-of-service compliance reports to the Authority on the data portal”.</p>



COMMENTS	REPLY COMMENTS FROM CRAN
See comments on “Customer Satisfaction Attributes” parameters. This parameter is unenforceable.	Including “Customer Satisfaction Attributes” parameters in QoS Regulations are customary and common in other jurisdictions as well.
Give context to regulation 5(2). We suggest that this is remove entirely.	Regulation 5(2) provides: (2) Technical quality-of-service performance indicators and quality-of-service parameters are set out in Schedule 2. The regulation is a reference to Schedule 2 which contains the technical OoS performance indicators and parameters
A licensee may only report on the service it provides in the geography it is licensed to provide such services. Please provide context to regulation 6(1).	Reg 6(1) provides: “Subject to subregulation (2), a licensee must report the quality-of-service measurements contained in these Regulations to the Authority in accordance with the geographical area specified in the licence of that licensee, unless otherwise stated in any of the Schedules.” This is the manner in which the QoS report should be done as not all licensees hold a national service and spectrum licence, some licensees are licensed for a specific geographical area only.
Expand on regulation 6(2), to indicate instances under which the Authority may direct a licensee to “take and report quality-of-service measurements in one or more geographical areas”. It is assumed that for reporting purposes, a licensee must take and keep measurements for every calendar day.	When a licensee holds a licence for multiple geographic areas, the Authority may direct the licensee to take and report measurements for more than one geographic area.
The Authority should not amend or expand the Communications Act 2009, through rule-making process. The Authority should not correct or restate the provisions of sections 38(10) and 79 of the Communications Act, 2009, and cloth them with penalty provisions that are inconsistent with the Act.	There are no instances in the Regulations where the Authority seeks to amend the Act. However, Regulations are by their very nature intended to implement the provisions of the Act and thus expand enabling provisions.
Reporting obligations in regulation 7 should be clearly drafted, include reporting dates or periods.	It must be noted that regulation 7 contains general obligations that licensees owe to customers.
What are the required performance functionalities of the proposed system in regulation 8? Licensee should only be required to put in place measurement recording tools.	A “quality-of-service measurement system” envisaged under regulation 8 is defined to mean the measures that licensee must implement to comply with the quality-of-service standards and licensee obligations set out in these Regulations. The measures that licensees adopt to implement a quality-of-service measurement system may differ and by extension performance functionalities will similarly differ. regulation 8 is clear and the specific QoS standards and obligations are clearly set out.
Regulation 9(1) is of no consequence and suggest that it is removed entirely.	The general obligation is contained in regulation 9(1). The rest of the regulation 9 sets out the specific instances where service interruptions may occur.
Amend regulation 9(6)(b) to include “when known”. Most of the service interruptions are due to electricity outages or by theft of network elements.	It is not the source of the unplanned service interruption or degradation that must be notified; rather it is the fact that a service interruption occurred.

COMMENTS	REPLY COMMENTS FROM CRAN
<p>Clarify the use of the phrases “qualitative” and “quantitative” in regulations 9(7)(a) and (b).</p>	<p>There are no definitions of “qualitative” in the Regulations and therefore the normal dictionary meaning will apply. According to the Oxford Learners Dictionary-</p> <p>quali·ta·tive [ˈkwɒlɪtətɪv] <i>adjective</i> <b>qualitative</b> (<i>adjective</i>) relating to, measuring, or measured by the quality of something rather than its quantity. Often contrasted with quantitative. “a qualitative change in the undergraduate curriculum”</p> <p>○ <i>grammar</i> denoting an adjective that describes the quality of something in size, appearance, value, etc. Such adjectives can be submodified by words such as very and have comparative and superlative forms. quan·ti·ta·tive [ˈkwɒntɪtətɪv, ˈkwɒntɪteɪtɪv] <i>adjective</i> <b>quantitative</b> (<i>adjective</i>) relating to, measuring, or measured by the quantity of something rather than its quality. Often contrasted with qualitative. E.g. “quantitative analysis”</p>
<p>Clarify that information required under regulation 10(1)(a) - (f) will be submitted on the portal.</p>	<p>Regulation 10(3) does set out that information will be submitted on the portal.</p>
<p>Over the few years, the Authority has adopted a command-and-control regulatory approach that has made compliance an expensive burden. There is absolutely no reason as to why compliance reports must be submitted quarterly. Maintain the compliance reporting to twice every year.</p>	<p>QoS is becoming an important part of Universal Service reporting and obligations and at the same time it is important for the Authority to have a more continuous overview of the quality of services offered. It will therefore become part of the quarterly reporting obligations.</p>
<p>With reference to Chapter X of the Communications Act, 2009, rephrase regulation 10(5) to ensure that there is a clear and intentional difference between a regulatory offence and a criminal offence.</p>	<p>There is a difference between offences that regulations may prescribe and those provided for under Chapter X of the Act.</p> <p>In this regard reference is made to sec 129(2) which states- “(2) Regulations made under this Act may prescribe penalties for the contravention of their provisions or for the failure to comply with their provisions.”</p> <p>This section is independent from Chapter X.</p> <p>Nevertheless, regulation 10(5) states- “A licensee who fails or refuses to comply with the directive of the Authority issued under subsection (1), (2), and (3) commits an offence and on conviction is liable to a penalty provided for in regulation 16.”</p> <p>In turn regulation 16(4) states (4) If a licensee commits an offence referred to subregulation (2), the Authority may deal with the matter as contemplated by Chapter X of the Act.</p> <p>Thus, offences committed under regulation 16(4) would be prosecuted in the manner contemplated by Chapter X.</p>

COMMENTS	REPLY COMMENTS FROM CRAN
<p>With respect to regulation 12, kindly consider sections 119, 121, 122, 126 and 127 of the Communications Act, 2009.</p>	<p>Regulation 12 is entitled “<b>Monitoring of quality-of-service obligations</b>” and sets out which <u>methods</u> the Authority may use to monitor compliance with QoS obligations, which include-</p> <ul style="list-style-type: none"> <li>· a drive test;</li> <li>· a mobile test probe</li> <li>· a consumer survey</li> <li>· review and analysis of raw and processed data from the operation support systems of a licensee or other relevant sources</li> <li>· any other generally accepted monitoring method</li> </ul> <p>Section 121 sets out how the Authority can deal with the data sourced in terms of the regulation12. This section provides:</p> <p>(1) In order to monitor compliance with the provisions of this Act the Authority may-</p> <p>(a) use any radio apparatus to monitor telecommunications by radio waves;</p> <p>(b) connect any equipment to the network of any licensee or the provider of any telecommunications service in order to monitor any aspect of the network that may be relevant for the performance of any function of the Authority under this Act.</p> <p>(2) The Authority may require any licensee or any provider of telecommunications services to provide any information necessary to make any connection or in order to decrypt or interpret any information that the Authority may require in order to exercise the power referred to in subsection (1).</p> <p>(3) The power referred to in subsection (1) may only be exercised in order to gather general or statistical information relating to telecommunications or to determine any technical question relating to any network that may be relevant to the compliance with any provision of this Act, but the power may not be used to obtain the contents of any message or information transmitted over that network, or to obtain any information relating to the behaviour of any customer or user of any telecommunications service.</p>
<p>Remove consumer surveys as a parameter. Consumer surveys capture perceptions, which are inherently subjective and can vary widely between individuals. Consumer satisfaction with service quality can be influenced by factors outside the licensee’s control, such as device performance, individual preferences, or personal expectations.</p>	<p>Consumer satisfaction when aggregated can give a good picture of well a licensee complies with their QoS obligations.</p> <p>In comparative jurisdictions this metric is commonly tracked.</p> <p>Compare:</p> <p>Schedule IX of the Ghana National Communications Authority (Quality of Service) Regulations, 2019</p> <p>Second Schedule of Sierra Leone Telecommunications (Quality of Service) Regulations</p> <p>Schedule 3 of the Eastern Caribbean Telecommunications Authority (ECTEL) Electronic Communications (Quality of Service) Regulations</p>
<p>Considering that the compliance reports are to be submitted for a past period, please clarify the rational of regulations 13(2)(a) and (b).</p>	<p>The Authority is given the ability to compare past data that it obtained whether through inspections, monitoring methods or past reports and to accept or reject the quality-of-service compliance report.</p>

COMMENTS	REPLY COMMENTS FROM CRAN
<p>Have regard to sections 119 - 127 of the Communications Act, 2009, Common law and constitutional safeguards. It is ultra vires for the Authority to grant itself the powers outlined under regulation 14.</p>	<p>Regulation 14 allows the Authority to:</p> <p>(1) Verify the correctness of compliance reports. This is a general regulatory power that a regulator has to ensure the correctness of information submitted.</p> <p>(2) Require further information. Section 119 of the Act allows the Authority -</p> <p>“by notice in writing to direct a licensee or provider of telecommunications services to produce or furnish to the Authority, at the time and place specified in the notice, such <u>accounts, records or other documents or information specified in such notice and relating to any matter in respect of which a duty or obligation is imposed on that person under or by this Act or which has been prescribed or imposed as a condition to a licence.</u></p> <p>(3) Conduct an investigation to verify the information submitted. Section 122 of the Act allows the Authority to “conduct investigations with respect to any activity prohibited by this Act, or for the purposes of doing anything required or permitted to be done under this Act.” The Act includes its Regulations</p>
<p>it is ultra vires the Authority to create criminal offences and prescribe criminal penalties on conviction.</p>	<p>As earlier mentioned, section 129(2) states</p> <p>(2) Regulations made under this Act may prescribe penalties for the contravention of their provisions or for the failure to comply with their provisions.</p>
<p>The Authority is expanding the scope of section 131 of the Communications Act, 2009, through this rule making. The compounding of consumer protection and quality-of-service measurements will complicate the enforcement mechanisms. Consumer complaints remain mere allegations until the adjudication is finalized. Reference to section 131(2) will clearly guide the Authority that it may only act on consumer complaints that are authorized by the Act. We submit that the entire regulation 17, specifically regulation 17(1)(e) is ultra vires the Act.</p>	<p>It is important to note that section 129(3) provides- “(3) <u>Regulations made under this Act may impose duties on any person</u> which may be enforced in the manner provided for in section 116.”</p> <p>Clearly the duty to remediate is a duty which the Authority is entitled to impose on a licensee that fails to comply with the QoS obligations.</p>
<p>Publication should exclude licensee confidential information or trade secrets.</p>	<p>The Authority take notes of the suggestion. Publication of QoS reporting shall not include confidential, information or trade secrets of licensees</p> <p>Submission of compliance reports which contain confidential information is covered by section 28 and 29 of the Act.</p>
<p>Records should be maintained for a period of five years as per international best practice.</p>	<p>This input is reflected in regulation 19(1).</p>
<p>The Authority should invest in a digital form to streamline reporting.</p>	<p>The data portal facilitates online and digital reporting.</p>
<p>Clarify what is meant by Fixed Line under schedule 1.</p>	<p>Fixed Line means a connection to an end customer, by means of a cable (e.g. Fiber or Copper cable) through which user can make phone calls or connect to internet.</p>
<p>There is a need to consider factors affecting the feasibility of fault repair on all sites and allow for elapsed time within certain areas and sites. Some sites are not readily accessible due to conditions out of the licensee’s control.</p>	<p>The Authority makes such provision in terms of the fault repair parameters under Schedule 1.</p>
<p>Enquiries about all products and services are not received through a call centre. Use a generic term or define a call centre.</p>	<p>The Authority take notes of the suggestion.</p>

COMMENTS	REPLY COMMENTS FROM CRAN
It is impractical for enforcement purposes to amalgamate consumer protection with quality-of-service parameters. A bill that results in a complaint, does not indicate that the bill is incorrect. An analysis of the consumer complaints received by CRAN relating to billing will show the opposite. Can a licensee be held responsible for customers complaining about their bills to CRAN? Is this responsibility attributed to licensees after the conclusion of adjudication? When does adjudication end?	The Authority retained the 2016 QOS parameters to this regard.
Provide reasons why the compliance percentage is expected to be less than or equal to 1% for On-Net National unsuccessful calls. What informed the proposed change and for which technology (2G or 3G)? The Authority must consider the entire geographical area and the network feasibility, because of the limitations in the rural and remote areas where neighbouring sites are not available and where specific sites cover an extreme distance which affects the network experience.	The QOS aims to ensure quality of service Namibia. Licensees should ensure improved coverage.
It is impractical to determine and calculate the call setup success rate of international calls, due to the setup and feasibility as these connections are triggered by actual connections of an active response. This is dependent on routing and intermediary networks, cross-network dependencies, and call routing policies which are mostly out of the control of a licensee.	The Authority take notes of the suggestion.
For voice calls, please specify which technologies, since the reference document only provides calculations for 2G services. For video calls, VOLTE is not yet commercialized (the parameter refers to IMS).	The QOS Regulation must enable the Authority to plan for future technological changes that are available and may be commercialised before the next review and amendment.
Licensees cannot guarantee speeds as they do not advertise data transmission speeds, due to our Fair Use Policy.	Fair usage policies should not result in service delivery below QoS performance parameters.
Considering the download speeds set by the National Broadband Policy, it is not necessary to report on data measurements for 3G.	QoS regulations prescribers' parameters for all telecommunications service and is not restricted to broadband services.
Customer satisfaction surveys have obvious limitations, which include variation in customer interpretation of their experiences, reliability of survey results, and validity of survey results. At the core, the results are based on the perception of the attained experience vis-a-vi the dreamt criteria. The proposed regulations are not premised on quality-of-experience measurements.	The Authority take notes of the suggestion. Consumer satisfaction measure provides the Authority with data on consumer's/ public's view of the sector. Such data will assist the Authority with planning around consumer education, awareness and protection.
The Authority presupposes that once it surveys the perception of a licensee's customers, and somehow gets a percentage target of less than 90%, the licensee ought to be legally bound by that result or its implications. No business can achieve over 90% customer satisfaction and it is plausible for a perception survey to be legally consequent.	The Authority take notes of the suggestion.
Schedules 1-4 prescribe measurements for service availability, accessibility, reliability, billing and enquiries. It is thus not clear what further objectives the Authority ought to achieve with Schedule 5. Licensees will report on the factual measurements which do not need to be convoluted by perceptions or personal opinions. Schedule 5 be removed entirely.	The Authority take notes of the suggestion. Schedule 5 allows the Authority to understand the public and consumer view of the sector.
<b>Telecom Namibia comments</b>	
The regulator should consider European Telecommunications Standards Institute (ETSI) proposed parameters and the targets set.	ETSI references are provided throughout the regulations.
The regulations should apply to network facility licensees given the crucial role and the impact that the transmission services also have on service quality and service provisioning.	Network facility licenses are captured under regulation 3(c) which deals with "Application of Regulations".

COMMENTS	REPLY COMMENTS FROM CRAN
Maintain the current measurement methods where licensees report nationwide totals and if there is a need for a breakdown per region that it be done on ad hoc but not as a mandatory requirement for the QoS reposts. Also clarify in what format such data will be collected and how frequently?	The regulations are aimed to provide a true reflection of QoS on a per site basis, thereby eliminating distortion of QoS rendered by calculation of average performance
The proposal for the licensee to provide the same quality of service at the same price in a geographical area is too vague and not possible. Pricing considers customer investment e.g. investment made by that local authority. Similarly, the quality of the service depends on the access technology connecting the customer e.g. copper v fibre. The clause should therefore be deleted or rephrased.	Regulation 7(b) (Duty to customers) provides: “A licensee must ... provide customers <u>with equal access to similar or comparable services within the applicable geographic area</u> at the same quality of service and at the same tariff” This is to prevent discriminatory practices. In addition, all tariffs must be approved by CRAN based on cost information provided by Licensee and no licensee is prohibited from reporting based on technology used.
Regulation 9(2) read with 9(3) (b) implies that all interruptions that is not due to service should be reported within 12 hours even if it only lasted 10 minutes. It is not possible nor practical to report all service interruptions within 12 hours after each interruption. The Authority should stick to the practice and the threshold stipulated in Regulation 9(5) which only requires reporting in respect of interruptions lasting longer than 12 hours and not all interruptions. Regulation 9(2) and (3) (b) should therefore be deleted as it contradicts Regulation 9(5), and it is not practical.	Customers will be negatively affected within the 12 hours mark due to network interruptions. Regulation 9(3) does not refer to the duration of the interruptions but rather the fact that an interruption occurred. 12 hours is reasonable given that licensees are required to operate 365x24. Regulation 9(3) provides: “(3) The report referred to in subregulation (2) must be made in the case of - (a) scheduled maintenance, at least 48 hours before the outage; (b) unplanned service interruptions or degradations lasting longer than three hours, within 12 hours after such interruption or degradation: Provided that in the case of a- (i) level one service interruption, the licensee must make such report within one hour; (ii) level two service interruption, the licensee must make such report within six hours; (iii) level three service interruption, the licensee must make such report within 12 hours. Reg 9(4) clarifies further: (a) “level one service interruption” means a service interruption that affects more than 75% of a licensee’s services; (b) “level two service interruption” means a service interruption that affects between 50% and 75% of a licensee’s services; and (c) “level three service interruption” means a service interruption that affects less than 50% of a licensee’s services. There is no contradiction as Regulation 9(5) refers reporting or notifying consumers of such interruption, while Regulation 9(3) provides for reporting or notifying CRAN of such interruptions.
It is not clear from the draft regulations whether the reporting will be on the portal, on a report or both. The requirement seems to be used interchangeably throughout the draft Regulations, especially regulation 10,	Reporting shall be done on the CRAN data portal ONLY.
The word reject needs to be rephrased. The quality-of-service reports is system generated. The Authority cannot reject the report and request for a revised report. The Authority can audit the report as provided for in Regulation 14 to verify the accuracy of the report and issue the findings. As such, delete Regulation 13(1)(b) and replace it with it the provisions of Regulation 14 which covers the aspect adequately.	The Authority may have data at its disposal which may justify rejection of the QoS report. For instance, comparison of historical data, or data obtained through a drive test or other monitoring method may indicate that the results recorded in a QoS report is incorrect. Reports must be submitted on the portal in the format prescribed by CRAN.



COMMENTS	REPLY COMMENTS FROM CRAN
The regulations are vague with respect to the methodology to be used or referred to as “stated in the quality-of-service report” in regulation 14(6)(b). The methodology for each parameter should clearly shows what should be included and what should be excluded as highlighted in the ETSI guidelines.	Reg 14(6)(b) states: Within seven days of receipt of written notification of an investigation by the Authority, a licensee must be prepared to demonstrate that ... the quality-of-service parameters are calculated in accordance with the methodology set out in the Schedules, as applicable. The schedules set out what should be included or excluded in the calculations.
The word audit service providers be reflected in regulation 15(1). We can't have for instance technical companies who are not bound by any professional code of conduct bidding to provide these audit services to verification/ audit services to CRAN.	Regulation 15(1) provides: “The Authority may conduct audits and may for that purpose contract <u>a third party with the necessary expertise to assess a licensee's compliance</u> with these Regulations.” The Authority will therefore make use of technical auditors in compliance with ITU and ETSI standards.
Network availability and readiness should be considered, and orders received where the network is not ready yet should be excluded.	The Authority take notes of the suggestion. This will depend on the agreement between the Licensee and the consumer.
Where a customer applies for a service where there is no network, or the existing network cannot support the service that the customer wants. As such the operator needs to establish a network and this cannot be done in 10 days. Service can only be provided within the QOS timeline, in cases where the network is available and sufficient network capacity is available. Where a network is not in place, a licensee may need to get Local Authority and other authority approvals, procure civil contractors, materials and equipment and only after the customer applies for such service. These aspects all contribute to not being able to provide service within the regulatory proposed time frames.	Schedule 1 already provides for exceptional circumstances.
Where there is a requirement by the customer for the required service to be provided later, it should also be considered.	The Authority take notes of the suggestion. This will depend on the agreement between the Licensee and the consumer.
Measurement of service orders where delays are caused by customers or where delays are due to customer premises not being ready should be excluded.	This should be solved as per the provisions in Schedule 1
The compliance target of 95% & 100% should be reduced from the Supply Time for Fixed Line Service target within 7 days to 65% within 7 days and a reduction from 100% within 10 days to 90% within 10 days.	The regulations are aim at improving QoS not continuing with sub-standard service.
If a fault is reported on Saturday evening and the operator is only able to attend to repairs at customer premises by Monday, it will affect the time elapsed drastically. As such, customers without SLAs, where customer-specific faults are reported outside business hours on working days, weekends and public holidays, the measurement of such faults should exclude the initial outside business hours period. Network faults shall be attended to 24 hours/ 365 days a year as per the license conditions.	As per service licence conditions licensees are required to provide services e.g. 365x 24 not only working days.
We also propose a reduction from the Fault Repair Time target of 95% within 2 days to 60% within 2 days and a reduction from 100% within 7 days to 90% within 7 days.	See comment on supply time.
<b>Comments received during Public. Hearings</b>	
VSAT services should be separated and excluded from QOS.	Licensees must provide services as per minimum standards.
Latency is very high, and transmission should be measured separately.	Licensees must address shortcoming with satellite provide and ensure high quality services as per the objects of the Act.
Fault repairs: fibre repairs are longer than 6 hours.	Separate parameters have been specified for fixed services.

COMMENTS	REPLY COMMENTS FROM CRAN
Geographical reporting be done ad hoc and report national compliance as is. Service offered may differ in different geographical areas based on infrastructure.	Such reporting is aimed at providing the Authority with a clear picture of quality of service in any location.
Drive testing outside the service network range may provide false readings. The Authority should investigate and invest in smarter ways to correct data to cut costs.	The Authority take notes of the suggestion.
Amend the reporting guidelines to align to QOS regulations.	Reporting guidelines have been amended See regulation 9.
Address the specific license categories and clearly set out how the regulations shall apply to such categories.	The Authority take notes of the suggestion.
It is not clear as to what the intension of regulation 7.	The intention of regulation 7 is to establish the baseline obligations of licensees to their clients. Therefore, the regulation with the heading “Duty to customers” is contained under the Part entitled “Licensee obligations”.
Parameters at page 21 states data transmission at 80%, is the 80% for international or local transmission and why?	The parameters are for both local and international transmission.