



# GOVERNMENT GAZETTE

## OF THE

# REPUBLIC OF NAMIBIA

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WINDHOEK - 21 April 2015

No. 5713

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## General Notices

### COMMUNICATIONS REGULATORY AUTHORITY OF NAMIBIA

No. 151

2015

#### NOTICE IN TERMS OF THE REGULATIONS REGARDING THE SUBMISSIONS OF INTERCONNECTION AGREEMENTS AND TARIFFS

The Communications Regulatory Authority of Namibia, in terms of sections 53(10) of the Communications Act, 2009 (Act No. 8 of 2009) read with regulation 8(1) of the “Regulations Regarding the Submission of Interconnection Agreements and Tariffs”, in Government Gazette No. 4714, General Notice No. 126, dated 18 May 2011, herewith gives notice that **MWireless (Pty) Limited t/a Africa Online (Pty) Limited** has filed a tariff with the Authority as set out in Schedule 1 hereto.

Any person may examine copies of the tariffs submitted at the head offices of the Authority during normal business hours and copies may be made on payment of a fee determined by the Authority. Copies are also available at [www.cran.na](http://www.cran.na) where copies may be downloaded free of charge.

The public may submit in writing to the Authority written comments within fourteen (14) days from the date of publication of this notice in the *Gazette*.

**MWireless (Pty) Limited t/a Africa Online (Pty) Limited** may submit, in writing to the Authority, a response to any written comments within fourteen (14) days from the lapsing of the time to submit written submissions.

All written submissions must contain the name and contact details of the person making the written submissions and the name and contact details of the person for whom the written submissions is made, if different and be clear and concise.

All written submissions and reply comments must be made either physically or electronically –

- (1) by hand to the head offices of the Authority, namely Communication House, 56 Robert Mugabe Avenue, Windhoek;
- (2) by post to the head offices of the Authority, namely Private Bag 13309, Windhoek 9000;
- (3) by electronic mail to the following address: [legal@cran.na](mailto:legal@cran.na); and
- (4) by facsimile to the following facsimile number: +264 61 222790.
- (5) by fax to e-mail to: 0886550852.

**L.N. JACOBS**  
**CHAIRPERSON OF THE BOARD OF DIRECTORS**  
**COMMUNICATIONS REGULATORY AUTHORITY OF NAMIBIA**

#### SCHEDULE 1

**MWIRELESS (PTY) LTD t/a AFRICAONLINE**  
**PACKAGES AND PRICING:**

| Product                                     | Downlink     | Uplink        | Volume | Price Ex VAT |
|---|--------------|---------------|--------|--------------|
| Name  | k CIR (kbps) | Target (kbps) | (GB)   | N\$          |
| Afri KA - Consumer500                       | 512          | 128           | 5      | 480          |
| Afri KA - Consumer1000                      | 1024         | 256           | 15     | 649          |
| Afri KA - Consumer2000                      | 2048         | 512           | 20     | 999          |
| Afri KA - Consumer4000                      | 4096         | 1024          | 25     | 1499         |
| Afri KA - Consumer6000                      | 6144         | 1536          | 35     | 1999         |
| Afri KA - Consumer10000                     | 10240        | 2048          | 40     | 2799         |
| Afri KA - Consumer15000                     | 15360        | 2560          | 50     | 3499         |
| Afri KA - Professional2000                  | 2048         | 512           | 50     | 2999         |
| Afri KA - Professional4000                  | 4096         | 1024          | 75     | 4299         |
| Afri KA - Professional6000                  | 6144         | 1536          | 125    | 6599         |
| Afri KA - Professional10000                 | 10240        | 2048          | 250    | 11999        |
| Afri KA - Professional15000                 | 15360        | 2560          | 350    | 15999        |
| Afri KA - Professional1000                  | 1024         | 512           | UNLTD  | 7999         |
| Afri KA - Activation Charge                 |              |               |        | 500          |
| Afri KA - Charge per excess GB              |              |               |        | 149          |
| Afri KA - Consumer - Private/Carrier NAT IP |              |               |        |              |
| Afri KA - Consumer - Public IP /32          |              |               |        | 99           |
| Afri KA - Professional IP /32 (Free)        |              |               |        |              |

|                               |  |  |  |      |
|-------------------------------|--|--|--|------|
| Afri KA - Professional IP /30 |  |  |  | 99   |
| Afri KA - Professional IP /29 |  |  |  | 299  |
| Afri KA - Professional IP /28 |  |  |  | 799  |
| Afri KA - Professional IP /27 |  |  |  | 1499 |
| Hardware Kit                  |  |  |  | 8000 |
| Installation                  |  |  |  | 1500 |
| Per km charge                 |  |  |  | 5.5  |

## COMMUNICATIONS REGULATORY AUTHORITY OF NAMIBIA

No. 152

2015

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

The Communications Regulatory Authority of Namibia in terms of section 129 of the Communications Act, 2009 (Act No. 8 of 2009) read with regulation 4(3) of the Regulations Regarding Rule-Making Procedures published as General Notice No. 334 of 17 December 2010, hereby publishes these “Regulations Prescribing Quality of Service Standards Applicable to Service Licensees”, effective from the date of publication of in the *Gazette*.

#### 1. Definitions

In these regulations, any word or expression to which a meaning is assigned in the Act, shall have the same meaning and –

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

“Authority” means the Communications Regulatory Authority of Namibia;

“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;

“Elapsed day” means a twenty-four (24) hour time period;

“Electronic communications” means any emission, transmission or reception of sound, pictures, text or any other information by wire, radio waves, optical media, electromagnetic systems or any other means of a like nature;

“Fault” means the failure of a service to the extent that the service or some aspects of the service is unavailable;

“Licensees” means licensees issued with licences in terms of regulation 5(1) (a) & (b)(i)(ii)(iii) of the Regulations Setting Out Broadcasting and Telecommunications Service Licence Categories, as published in Government Gazette No. 4714, Notice No. 124, dated 18 May 2011, as amended in Government Gazette 5148, General Notice No. 74, dated 13 March 2013;

“Log-in” means multi-step process including, both authentication and authorization, as well as other system start-up tasks in order to provide a user with access to services and/or resources

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

“Reporting period” means the period of one (1) month starting from the 1<sup>st</sup> day of every applicable calendar month to the last day of the month for measurements to be submitted by the licensee or a specified time period as determined by the Authority to conduct quality of service measurements;

“Reporting area” means the geographical area as determined by the Authority from time to time within which quality of service standards are measured;

“Service coverage” means the state of indoor and outdoor radio access within the network coverage area of the licensee;

“SMS” means Short Message Service;

“Telecommunications services” means services whose provision consists wholly or partly in the transmission or routing of information on telecommunications networks by means of telecommunications processes but does not include broadcast services; and

“Quality of Service data” means all data accumulated by the Authority pertaining to the measurement of quality of service standards.

## **2. Submission of documents to the Authority**

- (1) 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 -
- i) by hand to the head offices of the Authority, namely Communication House, 56 Robert Mugabe Avenue, Windhoek;
  - ii) by post to the head offices of the Authority, namely Private Bag 13309, Windhoek 9000;
  - iii) by electronic mail to the following address: operations@cran.na
  - iv) by facsimile to the following facsimile number: +264 61 222790; or
  - v) in any other manner or at alternative addresses set out by the Authority from time to time.

## **3. Applicability**

- (1) These regulations are applicable to the following service licence categories set out in the Regulations Setting Out Broadcasting and Telecommunications Service Licence Categories, published as General Notice No. 124 in Government Gazette No. 4714 dated 18 May 2011 as amended in General Notice No. 74 in Government Gazette No. 5148 dated 13 March 2013 –
- i) Individual (Comprehensive telecommunications service licence ECNS and ECS); and
  - ii) Class
    - a. ECS;
    - b. ECNS; and
    - c. Comprehensive telecommunications service licence (ECNS and ECS);
    - d. Class Comprehensive Multiplex and Signal Distribution service licence;
    - e. Commercial Broadcasting service licence;
    - f. Community Broadcasting service licence;
    - g. Multiplex service licence;

- h. Public Broadcasting service licence; and
- i. Signal Distribution service licence.

#### **4. Minimum Quality of Service Standards**

- (1) Licensees must maintain the minimum quality of service standards in accordance with the requirements contained in Appendix A to these regulations.

#### **5. Reporting Requirements**

- (1) Licensees must submit a report to the Authority, in the format set out in Appendix B, on a bi-annual basis. Bi-annual reports are to be submitted on or before 31 July for the period January to June, and on or before 31 January for the period July to December.
- (2) The licensee shall take the measurements according to the standards stipulated in Appendixes A and B to these regulations.
- (3) The Authority may publish quality of service performance indicators in any form or format that it deems reasonably appropriate.
- (4) If the Authority publishes the quality of service performance indicators as indicated in subsection 5 (3), the Authority may request comments from licensees on quality of service performance indicators prior to publication.
- (5) The Authority may conduct surveys or other studies to assess customer satisfaction with the quality of service provided by licensees.
- (6) The Authority may audit some or all of the quality of service data submitted by a licensee.
- (7) The Authority may investigate the quality of service measurement, reporting and record keeping procedures of the licensee.
- (8) Licensees shall submit any additional information requested by the Authority to verify or clarify quality of service measurements including time periods and geographical areas within thirty (30 days) from receiving the request from the Authority.
- (9) Licensees must retain all quality of service data, including all measurements and related records for a minimum period of five (5) years, after the end of the reporting period, or for a time period as may be directed by the Authority.
- (10) The Authority shall determine the geographical area and time period for drive testing conducted on behalf of the Authority to measure quality of service standards.
- (11) The Authority shall measure and ensure compliance to quality of service standards using any or all of the following methods:-
  - (a) Drive testing by the Authority, and/or an independent party appointed by the Authority; and/or
  - (b) Data collection and statistical reports from licensees; and/or
  - (c) Any other reasonable means.

#### **6. Condonation**

- (1) In the event a licensee is unable to comply with any time set out in these regulations, it may request from the Authority an extension of time at least seven (7) days prior to the time set out or within such other time period agreed by the Authority upon good cause shown.

- (2) The Authority will respond to the request for condonation as soon as practicable, and may either grant or deny the request, in its sole discretion, based on, among other things, the nature of the information and the reasons for non-compliance with the time set out.

#### **7. Failure to submit information**

- (1) If a licensee fails to submit in the manner and format prescribed by the Authority, as set out in these regulations or to submit the reports required to be submitted by these regulations the Authority may:
- (a) Issue a written request for submission of outstanding information within a prescribed time; and
  - (b) Require the licensee to implement a remedial plan within a time frame agreed with the Authority and again submit the outstanding and/or additional information to the Authority.
- (2) If after the measures set out in (1) above, the licensee still fails submit the information requested, the Authority will deal with the matter in terms of sections 114 and 115 of the Act.

#### **8. Penalties**

- (1) Any licensee who fails to maintain the minimum quality of service standards set out in these regulations or to submit the reports required to be submitted by these regulations, shall be guilty of contravening these regulations.
- (2) Where a licensee contravenes one or more of these regulations or quality of services standard contained herein, the Authority may-
- (a) issue to a licensee a written warning and final date for submitting outstanding reports where the licensee is guilty of not submitting reports as required by these Regulations; or
  - (b) require the licensee to implement a remedial plan within a time frame agreed with the Authority and again submit additional information about the quality of the relevant service to be compared against performance data collected by the Authority; or
  - (c) order the licensee to compensate subscribers or consumers for poor quality of service; or
  - (d) impose a penalty of not more than N\$500,000.00 for-
    - (i) failure by a licensee to perform measurements for reporting purposes as contained in these regulations;
    - (ii) submitting or causing the submission of false or misleading information to the Authority;
    - (iii) each contravention of a quality of service standard as set out in section 2 of Annexure A hereto; or
  - (e) impose a penalty not exceeding N\$1,000,000.00 for-
    - (i) each contravention of a quality of service standard as set out in sections 1 and 3 of Annexure A hereto;

- (ii) each repeated contravention of a quality of service standard as set out in Annexure A hereto; or
  - (f) impose a penalty not exceeding N\$5,000,000.00 for failure to implement a remedial plan agreed with the Authority for compliance with any quality of service standard within such time frame the Authority may direct; or
  - (g) take any other measure the Authority regards as reasonable in the circumstances.
- (3) Any amount of penalty payable in terms of paragraphs (d), (e) or (f) of subregulation (2) constitutes a debt due to the Authority by the relevant licensee concerned and may be recovered by the Authority by means of proceedings instituted in any competent court.
- (4) Notwithstanding the provisions of sub regulations (2) and (3), the Authority may waive the payment of or refund the whole or any part of a fine payable.
- (5) Before imposing any penalty as contemplated by paragraphs (d), (e) or (f) of subregulation (2), the Authority must give an affected licensee the opportunity to be heard, whereafter the Authority may-
  - (a) decide not to impose any penalty; or
  - (b) impose such penalty the Authority deems fit.

**L.N. JACOBS**  
**CHAIRPERSON OF THE BOARD OF DIRECTORS**  
**COMMUNICATIONS REGULATORY AUTHORITY OF NAMIBIA**

## APPENDIX A: MINIMUM QUALITY OF SERVICE STANDARDS

## 1. SERVICE QUALITY

| Service                                       | Definition  | Parameter  | Measurement   | Applicability   |
|---|---|--|---|---|
| Supply time for fixed line initial connection | The duration (elapsed days) from the instant a valid service request has been received to the instant a working service is made available for use | 95% of service requests to be completed within 5 elapsed days and 100% of service requests to be completed within 7 elapsed days | <p>Include the following scenarios-</p> <ul style="list-style-type: none"> <li>• A new connection</li> <li>• An existing connection taken over by another customer</li> <li>• An additional connection provided to a customer who already has an existing service, including any upgrades in service</li> </ul> <p>A valid service request may be made in writing. Where a licensee and a customer agree that a service request for multiple connections or at various sites will be completed in stages, each agreed delivery time counts as a separate service request for measurement purposes</p>             | Individual licensees<br>Class Comprehensive ECS/ECNS licensees<br>Class ECNS licensees                        |
| Supply time for internet access               | The duration (elapsed days) from the instant a valid service request has been received to the instant a working service is made available for use | 95% of service requests to be completed within 5 elapsed days 100% of service requests to be completed within 7 elapsed days     | <p>Include the following scenarios-</p> <ul style="list-style-type: none"> <li>• A new connection</li> <li>• An existing connection taken over by another customer</li> <li>• An additional connection provided to a customer who already has an existing service, including any upgrades in service</li> </ul> <p>A valid service request may be made verbally or in writing. Where a licensee and a customer agree that a service request for multiple connections or at various sites will be completed in stages, each agreed delivery time counts as a separate service request for measurement purposes</p> | Individual licensees<br>Class Comprehensive ECS/ECNS licensees<br>Class ECS licensees<br>Class ECNS licensees |



|   |   |   |  |   |
|---|---|---|--|---|
| Supply time for initial mobile services connection (postpaid/prepaid) | The duration (elapsed days) from the instant a valid service request has been received to the instant a working service is made available for use | 95% of service requests to be completed within 5 elapsed days<br>100% of service requests to be completed within 7 elapsed days                     | <p>Include the following scenarios-</p> <ul style="list-style-type: none"> <li>• A new connection</li> <li>• An existing connection taken over by another customer</li> <li>• An additional connection provided to a customer who already has an existing service, including any upgrades in service</li> </ul> <p>A valid service request may be in writing.<br/>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</p> | Individual licensees<br>Class Comprehensive licensees<br>Class ECS Licensees<br>ECS/ECNS  |
| Supply time for subscription based television service connection      | The duration (elapsed days) from the instant a valid service request has been received to the instant a working service is made available for use | 95% of service requests to be completed within 5 elapsed days<br>100% of service requests to be completed within 7 elapsed days                     | <p>Include the following scenarios-</p> <ul style="list-style-type: none"> <li>• A new connection</li> <li>• An existing connection taken over by another customer</li> <li>• An additional connection provided to a customer who already has an existing service, including any upgrades in service</li> </ul> <p>A valid service request may be in writing.<br/>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</p> | Commercial Broadcasting licensees<br>Public Broadcasting licensees  |
| Fault Repair Time   | The time (elapsed hours) by which valid faults on networks are repaired   | 90% of faults to be repaired within 24 elapsed hours from time reported<br>100% of faults to be repaired within 48 elapsed hours from time reported | 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  | Individual licensees<br>Class Comprehensive licensees<br>Class ECNS licensees<br>Signal Distribution licensees<br>Class Comprehensive Multiplex and Signal Distribution licensees<br>Commercial Broadcasting licensees<br>Public Broadcasting licensee<br>Community Broadcasting licensee<br>ECS/ECNS |

|   |  |   |   |  |
|---|--|---|---|--|
| Proportion of problems with number portability procedures | Number of requests with a deviation from the normal porting procedure divided by the total number of requests for number portability | Number of requests with deviations from the normal porting procedures must be less than 5% of total number of requests for number portability | <p>A deviation from the normal porting procedures occurs when-</p> <ul style="list-style-type: none"> <li>All the services from the donor has to be restore temporarily whilst problems are resolved</li> <li>There is a gap of more than 1 hour in either or both incoming our outgoing services</li> <li>The recipient operator has to open a trouble ticket as a consequence of an event that does not permit to consider number portability completed after the time period agreed between operators</li> </ul> | Individual licensees<br>Class Comprehensive ECS/ECNS licensees<br>Class ECS licensee |
|---|--|---|---|--|

## 2. BILLING AND CUSTOMER SERVICE

| Service  | Definition   | Parameter   | Measurement   | Applicability   |
|--|--|---|---|---|
| Response time for administration and billing enquiries | 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                    | 95% of calls must be answered within 20 seconds                     | Enquiries attend to by IVR only is excluded from this measurement.<br>Any enquiry transferred from an IVR system to a human operator to attend to the enquiry is included in the measurement<br>The duration period in the definition includes waiting time because attendants are busy.<br>Time duration handle the enquiry itself is excluded from the measurement.<br>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 | Individual licensees<br>Class Comprehensive ECS/ECNS licensees<br>Class ECS licensees   |
| Customer/Licensee Complaints Resolution Time           | The time period taken to resolve a customer complaint from the instant the customer complaint is notified to the published point of contact to the instant the cause for the complaint has been resolved | 90% of customer complaints must be resolved within 24 elapsed hours | Statistics should include all customer complaints received in the data collection period.<br>Where more than one complaint is made by the same customer, even on the same subject, each instance must be counted separately.<br>If a customer complains again before the existing complaint has been resolved, it must be treated as a continuation of the first unclosed complaint.<br>When calculating the resolution time the licensee may subtract an delay introduced by the customer from the measured time                       | Individual licensees<br>Class Comprehensive ECS/ECNS licensees<br>Class ECS licensees<br>Class ECNS licensees<br>Class Comprehensive Multiplex and Signal Distribution ILicensees<br>Multiplex Licensees<br>Signal Distribution licensees<br>Commercial Broadcasting licensees<br>Public Broadcasting licensee<br>Community Broadcasting licensee |

|                     |  |  |  |  |
|---------------------|--|--|--|--|
| Billing Correctness | The proportion of bills resulting in a customer complaint relating to the accuracy of a given bill | Less than 2% of bills should result in customer complaints | 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 | Individual licensees<br>Class Comprehensive licensees<br>Class ECS licensees<br>ECS/ECNS |
|---------------------|--|--|--|--|

### 3. NETWORK QUALITY

| Service                           | Definition  | Parameter   | Measurement  | Applicability  |
|-----------------------------------|---|---|--|--|
| Mobile /Wireless Service Coverage | Percentage of test route over which a minimum signal strength of -100 dBm is achieved   | A minimum of -100 dBm must be achieved for 95% outdoor and 85% indoor service coverage following a predetermined test route | 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 are of the licensee from time to time as determined by the Authority  | Individual licensees<br>Class Comprehensive licensees<br>Class ECNS Licensees<br>ECS/ECNS                        |
| Unsuccessful Call Ratio           | Ratio of unsuccessful calls to a total number of call attempt in a specified time period  | Percentage of unsuccessful calls must be less than 2% in busy time  | An unsuccessful call is a call attempt to a valid number within the licensees' coverage area where neither called party busy tone, nor ringing tone, nor answer signal is received within 30 seconds from the instant when the last digit of the destination subscriber number is received. 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 | Individual licensees<br>Class Comprehensive licensees<br>Class ECS licensees<br>Class ECNS licensees<br>ECS/ECNS |
| International Call Connectivity   | The relationship between the number of seizures that result in an answer signal and the total number of seizures (ASR) for a specific country | The ASR on a country by country basis should be more than 60%   | ASR to be measured on a country by country basis over time as determined by the Authority  | Individual licensees<br>Class Comprehensive licensees<br>Class ECS licensees<br>Class ECNS licensees<br>ECS/ECNS |

|                         |   |  |   |   |
|-------------------------|---|--|---|---|
| Dropped Call Ratio      | The percentage of incoming and outgoing calls which once they have been successfully established are dropped/interrupted prior to the call being terminated by the user, the cause of the early termination being within the operator's network | Percentage of dropped calls must be less than 3%           | Percentage of dropped calls, calculated from all the calls in the time period as determined by the Authority<br>Additional 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   | Individual licensees<br>Class Comprehensive ECS/ECNS licensees<br>Class ECS licensees<br>Class ECNS licensees |
| Successful SMS Ratio    | Probability that a user can send a SMS successfully to a short message centre from user terminal equipment  | 95% of SMS messages must be send successfully in busy time | Statistics to be collected by Authority and provided by the licensee within a given time period to consist the total number of originating SMS attempts and number of successfully send SMS's<br>Additional 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  | Individual licensees<br>Class Comprehensive ECS/ECNS licensees<br>Class ECS licensees<br>Class ECNS licensees |
| Completion Rate for SMS | The ratio of successfully send and received SMS's between terminal equipment of two users during busy time  | 95% of SMS's must be completed successfully                | Sending and receiving from SMS's from and to international destinations are excluded from this measurement.<br>Statistics to be collected by Authority and provided by the licensee within a given time period to consist the total number of originating SMS attempts and number of successfully send and receive SMS's<br>Additional 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 | Individual licensees<br>Class Comprehensive ECS/ECNS licensees<br>Class ECS licensees<br>Class ECNS licensees |

|                                      |   |   |   |  |
|--------------------------------------|---|---|---|--|
| Successful Internet Log-in ratio     | The ratio of successful log-ins to access the Internet when both the access network and the licensees' network are available                      | 95% of internet log-ins by the user of data services must be successful in busy time                      | <p>Statistics to be collected by Authority and provided by the licensee within a given time period to consist the total number of log-in attempts and number of successful log-ins to access the Internet</p> <p>This measure is applicable to all licensees providing services allowing internet access irrespective of technology. An attempt to log-in is unsuccessful, if it fails for any reason independent whether the fault is caused by the access network or the licensee</p> <p>A log-in is successful if after completion of the log-in process the use is able to use a valid IP-address(dynamic or static) to use services offered via the Internet including DNS resolution allowing to exchange data via the Internet</p> <p>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</p> | <p>Individual licensees</p> <p>Class Comprehensive ECS/ECNS licensees</p> <p>Class ECS licensees</p> <p>Class ECNS licensees</p> |
| Packet Loss Ratio                    | Ratio of packets lost to the total packets transmitted between two designated points  | Packet Loss Ratio may not be more than 3% for any class of service offered                                | <p>Statistics to be collected by Authority and provided by the licensee within a given interval per class of service as determined by the Authority</p> <p>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</p>   | <p>Individual licensees</p> <p>Class Comprehensive ECS/ECNS licensees</p> <p>Class ECS licensees</p> <p>Class ECNS licensees</p> |
| Unsuccessful data transmission ratio | The ratio of unsuccessful data transmissions to the total number of data transmission attempts in a specified time period                         | 95% of all data transmissions must be successful within a specified time period                           | <p>A data transmission is successful if a test file is transmitted completely and with no errors.</p> <p>The statistics should be calculated from test transmissions made according to the measurement set-up stipulated in ETSI EG 202 057-4</p> <p>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</p>   | <p>Individual licensees</p> <p>Class Comprehensive ECS/ECNS licensees</p> <p>Class ECS licensees</p> <p>Class ECNS licensees</p> |
| Data transmission speed achieved     | The data transmission rate is achieved separately for downloading and uploading specified test files between a remote web site and user equipment | Data transmission speed achieved must be at least 80% of that advertised by the licensee during busy time | <p>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</p> <p>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</p>   | <p>Individual licensees</p> <p>Class Comprehensive ECS/ECNS licensees</p> <p>Class ECS licensees</p> <p>Class ECNS licensees</p> |

## References

The following references are indispensable for the application of this document. For undated reference, the latest edition of the referenced document (including any amendments) applies. For dated references, only the edition cited applies.

- (i) ETSI EG 202 057-1 *Speech Processing, Transmission and Quality Aspects (STQ): User related QoS parameter definitions and measurements; Part 1: General*
- (ii) ETSI EG 202 057-2 *Speech Processing, Transmission and Quality Aspects (STQ): User related QoS parameter definitions and measurements; Part 2: Voice telephony, Group 3 fax, modem data services and SMS*
- (iii) ETSI EG 202 057-3 *Speech Processing, Transmission and Quality Aspects (STQ): User related QoS parameter definitions and measurements; Part 3: QoS parameters specific to Public Land Mobile Networks (PLMN)*
- (iv) ETSI EG 202 057-4 *Speech Processing, Transmission and Quality Aspects (STQ): User related QoS parameter definitions and measurements; Part 4: Internet Access*
- (v) ITU-T Rec. Y.1541 *Series Y: Global Information Infrastructure, Internet Protocol Aspect and Next Generation Networks, Internet protocol aspects-Quality of service and network performance, Network performance objectives for IP-based services*
- (vi) ITU-T Rec. E.425 *Series E: Overall network operation, telephone service, service operation and human factors, Network management – Checking the quality of international telephone service, Internal automatic observations*
- (vii) ITU-T Rec. E.426 *Series E: Overall network operation, telephone service, service operation and human factors, International telephone network management and checking of service quality –Checking the quality of international telephone service, General guide to the percentage of effective attempts which should be observed for international telephone calls*
- (viii) ITU-T Rec. E.437 *Series E: Overall network operation, telephone service, service operation and human factors, Quality of service, network management and traffic engineering –Network management – Checking the quality of the international telephone service, Comparative metrics for network performance management*



**5. Proportion of problems with number portability procedures**

Parameter: Number of requests with deviations from the normal porting procedures must be less than 5% of the total number of requests for number portability

|  | Month 1 | Month 2 | Month 3 | Month 4 | Month 5 | Month 6 |
|--|---------|---------|---------|---------|---------|---------|
| Total number of number portability requests  |         |         |         |         |         |         |
| Number of requests with deviations from normal porting procedures  |         |         |         |         |         |         |
| Percentage of requests with deviations from the normal porting procedures vs total number of number portability requests |         |         |         |         |         |         |

**6. Response time for administration and billing enquiries**

Parameter: 95% of calls must be answered within 20 seconds

|  | Month 1 | Month 2 | Month 3 | Month 4 | Month 5 | Month 6 |
|--|---------|---------|---------|---------|---------|---------|
| Total number of calls related to administration and billing enquiries            |         |         |         |         |         |         |
| Total number of calls answered within 20 seconds                                 |         |         |         |         |         |         |
| Percentage of calls answered within 20 seconds vs total number of calls received |         |         |         |         |         |         |

**7. Customer complaints resolution time**

Parameter: 90% of customer complaints must be resolved within 24 elapsed hours

|   | Month 1 | Month 2 | Month 3 | Month 4 | Month 5 | Month 6 |
|---|---------|---------|---------|---------|---------|---------|
| Total number of customer complaints received                                      |         |         |         |         |         |         |
| Number of customer complaints resolved within 24 elapsed hours                    |         |         |         |         |         |         |
| Percentage of customer complaints resolved vs total number of customer complaints |         |         |         |         |         |         |

**8. Billing correctness**

Parameter: Less than 2% of bills should result in customer complaints

|  | Month 1 | Month 2 | Month 3 | Month 4 | Month 5 | Month 6 |
|--|---------|---------|---------|---------|---------|---------|
| Total number of bills issued to customers  |         |         |         |         |         |         |
| Number of bills resulting in customer complaints                                     |         |         |         |         |         |         |
| Percentage of bills resulting in customer complaints vs total number of bills issued |         |         |         |         |         |         |



**9. Service Coverage**

Parameter: A minimum of -100 dBm must be achieved for 95% outdoor and 85% indoor service coverage following a predetermined test route

Note: Measurement will be done by the Authority after which the Authority may request more information or clarification from the licensee in terms of section 5 of the regulations.

**10. Unsuccessful Call Ratio**

Parameter: Percentage of unsuccessful calls must be less than 2% in busy time

Note: Additional measurements will be done by the Authority after which the Authority may request more information or clarification from the licensee in terms of section 5 of the regulations.

|   | Month 1 | Month 2 | Month 3 | Month 4 | Month 5 | Month 6 |
|---|---------|---------|---------|---------|---------|---------|
| Hours defined as busy time for calls              |         |         |         |         |         |         |
| Percentage of successful calls during busy time   |         |         |         |         |         |         |
| Percentage of unsuccessful calls during busy time |         |         |         |         |         |         |

**11. International Call Connectivity**

Parameter: The ASR on a country-by-country basis should be more than 60%

|   | ASR Rate |         |         |         |         |         |
|---|----------|---------|---------|---------|---------|---------|
| Destination Country                     | Month 1  | Month 2 | Month 3 | Month 4 | Month 5 | Month 6 |
| List of countries in alphabetical order |          |         |         |         |         |         |

**12. Dropped Call Ratio**

Parameter: Percentage of dropped calls must be less than 3% in busy time

Note: Additional measurements will be done by the Authority after which the Authority may request more information or clarification from the licensee in terms of section 5 of the regulations.

|  | Month 1 | Month 2 | Month 3 | Month 4 | Month 5 | Month 6 |
|--|---------|---------|---------|---------|---------|---------|
| Hours defined as busy time for calls         |         |         |         |         |         |         |
| Percentage of dropped calls during busy time |         |         |         |         |         |         |

**13. Successful SMS ratio**

Parameter: 95% of SMS messages must be send successfully in busy time

Note: Additional measurements will be done by the Authority after which the Authority may request more information or clarification from the licensee in terms of section 5 of the regulations.

|                                      | Month 1 | Month 2 | Month 3 | Month 4 | Month 5 | Month 6 |
|--------------------------------------|---------|---------|---------|---------|---------|---------|
| Hours defined as busy time for calls |         |         |         |         |         |         |

|                                       |  |  |  |  |  |  |
|---------------------------------------|--|--|--|--|--|--|
| Number of originating SMS attempts    |  |  |  |  |  |  |
| Number of successfully send SMS's     |  |  |  |  |  |  |
| Percentage of successfully send SMS's |  |  |  |  |  |  |

#### 14. Completion Rate for SMS

Parameter: 95% of SMS messages must be completed successfully during busy time

Note: Additional measurements will be done by the Authority after which the Authority may request more information or clarification from the licensee in terms of section 5 of the regulations.

|  | Month 1 | Month 2 | Month 3 | Month 4 | Month 5 | Month 6 |
|--|---------|---------|---------|---------|---------|---------|
| Hours defined as busy time for calls           |         |         |         |         |         |         |
| Number of originating SMS attempts             |         |         |         |         |         |         |
| Number of successfully send and received SMS's |         |         |         |         |         |         |
| Percentage of successfully completed SMS's     |         |         |         |         |         |         |

#### 15. Successful internet log-in ratio

Parameter: 95% of internet log-in's by the user of data services must be successful during busy time

Note: Additional measurements will be done by the Authority after which the Authority may request more information or clarification from the licensee in terms of section 5 of the regulations.

|                                      | Month 1 | Month 2 | Month 3 | Month 4 | Month 5 | Month 6 |
|--------------------------------------|---------|---------|---------|---------|---------|---------|
| Hours defined as busy time for calls |         |         |         |         |         |         |
| Number of log-in attempts            |         |         |         |         |         |         |
| Number of successful log-in's        |         |         |         |         |         |         |
| Percentage of successful log-in's    |         |         |         |         |         |         |

#### 16. Packet loss ratio

Parameter: Packet loss ratio may not be more than 3% for any class of service offered

Note: Additional measurements will be done by the Authority after which the Authority may request more information or clarification from the licensee in terms of section 5 of the regulations.

|   | Packet Loss Ratio |         |         |         |         |         |
|---|-------------------|---------|---------|---------|---------|---------|
| Destination Country                           | Month 1           | Month 2 | Month 3 | Month 4 | Month 5 | Month 6 |
| List of class of services offered by licensee |                   |         |         |         |         |         |

#### 17. Unsuccessful data transmission

Parameter: 95% of all data transmissions must be successful within a specified time period

Note: Additional measurements will be done by the Authority after which the Authority may request more information or clarification from the licensee in terms of section 5 of the regulations.

|   | Month 1 | Month 2 | Month 3 | Month 4 | Month 5 | Month 6 |
|---|---------|---------|---------|---------|---------|---------|
| Number of test data transmissions           |         |         |         |         |         |         |
| Number of successful data transmissions     |         |         |         |         |         |         |
| Percentage of successful data transmissions |         |         |         |         |         |         |

**18. Data transmission speed achieved**

Parameter: Data transmission speed achieved must be at least 80% of that advertised by the Licensee, during busy time

Note: Additional measurements will be done by the Authority after which the Authority may request more information or clarification from the licensee in terms of section 5 of the regulations.

|   | Month 1 | Month 2 | Month 3 | Month 4 | Month 5 | Month 6 |
|---|---------|---------|---------|---------|---------|---------|
| Hours defined as busy time for data   |         |         |         |         |         |         |
| Data speed advertised to be listed for each product or class of service offered by the licensee |         |         |         |         |         |         |
| Data speed achieved to be listed for each product or lass of service offered by licensee        |         |         |         |         |         |         |

SCHEDULE 1

**PURPOSE OF THE PROPOSED REGULATIONS  
REGARDING MINIMUM QUALITY OF SERVICE STANDARDS APPLICABLE TO  
SERVICE LICENCES: COMMUNICATIONS ACT, 2009**

The proposed regulations set out the quality of service standards that are applicable to Individual (Comprehensive telecommunications service licence (ECNS and ECS), Class ECS, ECNS and Class Comprehensive telecommunications (ECNS and ECS).), Class Comprehensive Multiplex and Signal Distribution, Multiplex and Signal Distribution Licences. Commercial Broadcasting service licence, Community Broadcasting service licence and Public Broadcasting service licence.

The regulations also set out reporting requirements applicable to licensees and mandate a specific reporting format and the consequences for failure to comply with the quality of service standards and reporting requirements.