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# THE TANZANIA COMMUN ICATIONS REGULATORY AUTHORITY ACT, 2003 (No. 12 of 2003)

# THE TANZANIA COMMUNICATIONS (BROADBAND SERVICES) REGULATIONS, 2005

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# TANZANIA COMMUN ICATIONS REGULATORY AUTHORITY ACT, 2003 (No. 12 of 2003)

## **REGULATIONS**

(Made under section 47(1))

THE TANZANIA COMMUNICATIONS (BROADBAND SERVICES) REGULATIONS, 2005

### PART I

### PRELIMINARY PROVISIONS

Citation

1. These Regulations may be cited as the Tanzania Communication (Broadband Services) Regulations, 2005.

Application

2. These Regulations shall apply in respect of broadband services.

Interpretation
Acts Nos. 6 of
1993, 18 of
1993
and 12 of 2003

3. In these Regulations, unless the context otherwise requires"Acts" means the Tanzania Communications Regulatory Authority Act,
2003, the Broadcasting Services Act, 1993 and the Tanzania
Communications Act, 1993;

"Authority" means the Tanzania Communications Regulatory Authority established under the Tanzania Communications Regulatory Authority Act:

"annual network service availability" means the total operational hours of the service, less the total transmission downtime or disruption due to service failure over the period of twelve months;

"bandwidth: means a measure of capacity in bits per second, bps;

"bit:" means a binary digit which is the smallest unit of digital transmission;

"bits per second" means the number of bits transmitted each second;

- "busy hour" means the time when a network of a service is maximum utilized;
- "broadband" means the information transmission scheme capable of sending or receiving a large volume of data packets originating from or destined for different customers over a single medium at a high speed, achieving an upstream or downstream data flow of at least 256 Kbps to provide services to such customers simultaneous;
- "broadband services" means an always-on bandwidth service that has a downstream capacity of at least 256Kbps;
- "broadband over power line" also referred by acronym "BPL" means a technology that utilizes existing high and medium voltage power lines to transport data at broadband speeds;
- "dark fiber" means a fiber optic cable that is installed but does not have the lasers installed to "light" the fiber;
- "frequency" means the number of complete cycles or waves per second, as measured in cycles per second or hertz, Hz;
- "internet exchange point" means a technical point where internet traffic is being exchanged between carriers of internet traffic on noncommercial basis;
- "kilobit per second also known by acronym kbps" means thousand bits transmitted in each second;
- "licensee" means an entity licensed by the Authority to provide electronic communication or postal services;
- "network service provider" also known by acronym "NSP" in the context of this regulation means a legal entity holding a licence to provide internet service and supplies path to the World Wide Web without controlling the content;
- "network latency" means the round trip delay for traffic within the local broadband network from the customer to the nearest serving internet access services provider node, which is based on a standard packet size of 32 bits and is also known as "ping time";
- "optical fibre" means the technology of using an extremely thin strand of glass to conduct pulsed light signals of one or more different wavelengths without amplification over a distance of up to 70 miles;
- "packet loss" means the percentage of packets lost between two designated routers within the local access services provider nodes;

"quality of service" also known by acronym "qos" means the indicator of performance of a network and of the degree to which the network conforms to the stipulated norms;

"satellites" means a wireless communications services through receiver and transmitter that orbits the earth;

"throughput or bandwidth utilization" means the amount of data moved successfully to and from the customer and to the nearest serving access service provider node in a given period of time.

### PART II REGULATORY POWERS OF THE AUTHORITY

# Power of the Authority

- 4. The Authority shall maintain control of all broadband services to protect consumer interest and ensure fair and efficient use of the available national resources by-
  - (a) performing proper planning, allocations and monitoring of scarce resources; and
  - (b) performing and maintaining market survey for the usage of the services.

# Applicable services

- **5**.-(1) The broadband services shall include the following-
- (a) provision of multiple services over single medium; and
- (b) broadband data information transmission scheme, as defined in regulation 3.
- (2) The Authority defines broadband speeds to be upstream or downstream data flow of a minimum of 256 Kbps.
- (3) The network services with data rate equal or more than 256Kbps shall be referred to as broadband services.

#### Registration

**6**. Any licensee intending to provide broadband services shall register with the Authority.

### Quality measurement and control

7.-(1) The licensee shall, within sixty days of the date of commencement of broadband services, establish a quality measurement and control system for the service which shall include those standards referred to in regulation 8 and other parameters related to the standards of quality of

service to be provided to the customers and shall be presented to the Authority bi-annually for recording and publishing.

- (2) Complete and accurate records of installation orders shall be maintained by the relevant Network Service Provider in the form and format as may be prescribed by the Authority from time to time.
- (3) Each report shall be accompanied by a declaration signed by an officer of the Network Service Provider duly authorized by the board of directors, stating that the report is true and accurate.
- (4) The reports shall be submitted to the Authority not later than six weeks after 30<sup>th</sup> June of each year for reporting period of January to June, and 31<sup>st</sup> December of each year for reporting period of July to December, respectively.

Purpose of laying down quality of service parameters

to:

- **8**. The purpose of laying down Quality of Service Parameters shall be
- (a) ensure customer satisfaction by laying down norms of network performance, which the service provider is required to achieve by proper dimensioning of his network;
- (b) measure the quality of Service from time to time and to compare that with the specified norms so as to monitor the level of performance, provided by various service providers; and
- (c) protect the interests of subscribers of the internet services.

Compliance with radio frequency plan

- **9**.-(1) The licensee shall abide by, and apply the frequency plan as prescribed by the Authority from time to time.
- (2) Prior to the frequency plan being prescribed by the Authority, the licensee and the Authority shall consult with each other with respect to-
  - (a) the arrangement for the allocation and re-allocation of frequency within the initial frequency plan; and
  - (b) any development of, or additions to, or replacement of the initial frequency plan.
- (3) The Authority shall not prescribe a new frequency plan until it has given at least three months notice to the licensee.

### Obligations

- **10**.-(1) A broadband service provider shall ensure that a service passing through its network is delivered at the level of quality prescribed under regulation 8.
- (2) A broadband service provider shall ensure that the prescribed quality of service is not impaired on other licensed service providers.
- (3) A licensee shall provide connectivity to internet exchange points(s) for all public internet protocol based services provided to its customers.

# Information register

11. A licensee shall keep a register of the standard for network performance parameters as prescribed in the Schedule and be submitted to the Authority on bi-annually basis for publications.

# Network upgrading

- 12. In order to achieve the quality of operating the network to the prescribed level, a broadband service provider shall-
  - (a) notify the Authority and a customer, of any planned change in the network capacity, technology, structure and configuration, within one month of effecting the intended change; and
  - (b) provide details relating to any change in the services provided including traffic and any other changes to the Authority.

#### Penalties

- 13.-(1) Any person who contravenes any of the provisions of these Regulations where no penalty is expressly provided under the Acts, shall be liable to pay a fine of the equivalent in Tanzanian shillings of United States dollars five hundred.
- (2) Provided that the Authority shall not impose a fine in sub regulation (1) unless the licensee fails to rectify such contravention on the instruction of the Authority.

## **SCHEDULE**

#### STANDARD ON FIXED NETWORK PERFORMANCE

The Network Performance shall be measured based on the following criteria-

- (a) network latency- network latency from the broadband customer to all connections within the local broadband network shall be no more than 85ms, 95% of the time during busy hours;
- (b) throughput or bandwidth utilization- throughput or bandwidth utilization between the customer and the nearest serving local node shall be no less than 70% of the subscribed level for 95% of the time during busy hours; both for the purposes of uploading and downloading;
- (c) packet loss- packet loss shall not exceed 1%. Packet loss is measured by averaging sample measurements over the reporting period, and
- (d) network service availability shall be 99% for all users and easurement of the standard is described by the ratio:

Network service availability is equal to (total operational hours over the given period minus total downtime over the given period) of the total operational hours over the given period.

Dar es Salaam, 3<sup>rd</sup> September 2005 MARK J. MWANDOSYA

Minister for Communications and Transport