



TANZANIA COMMUNICATIONS REGULATORY AUTHORITY

TELECOMMUNICATION DATA COLLECTION AND DISSEMINATION

**ITU REGIONAL WORKSHOP ON ICT INDICATORS & MEASUREMENTS FOR AFRICA
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PRESENTED BY MARCEL BATHOLOMEW

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LAY OUT OF THE PRESENTATION

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- Data collection tools and Methods

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- Internet Tariffs
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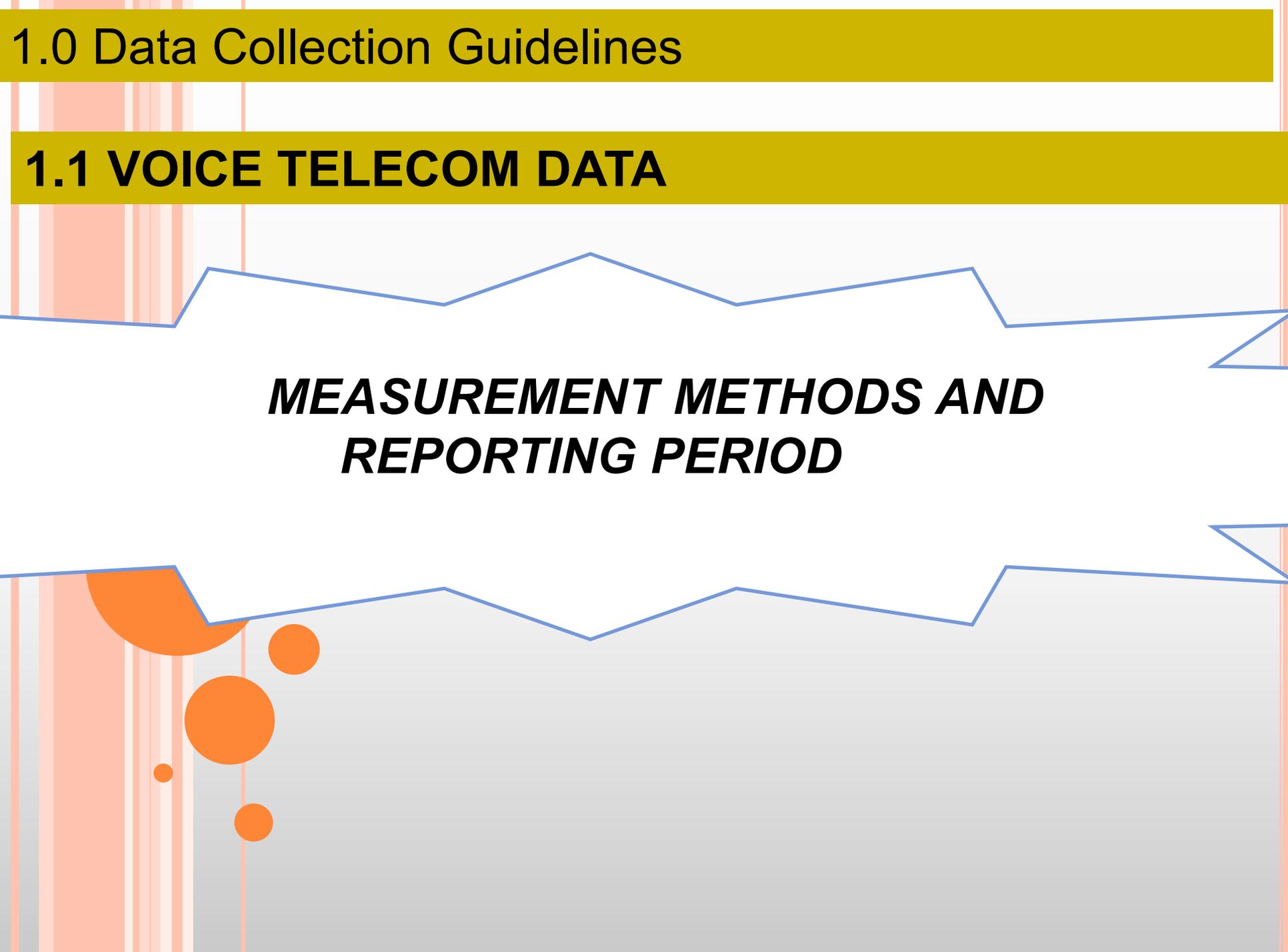
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1.0 Data Collection Guidelines

1.1 VOICE TELECOM DATA

***MEASUREMENT METHODS AND
REPORTING PERIOD***

The slide features a decorative background with a blue jagged line that runs horizontally across the middle. On the left side, there are vertical stripes in shades of orange and red, along with several orange circles of varying sizes. The text is centered in a bold, italicized, black font.

1.1.1 TELECOM SUBSCRIPTIONS

(a) :Fixed Line Subscriptions

Measurement Method

The fixed line Subscriptions is obtained by counting all active lines which have registered an activity/have been used at least once in the past three months.

The data to be reported is

-A monthly number of Active Fixed Lines

Reporting & Publication

- The data is reported not later than 15th of the following Month
- The data for each Operator may be made available for public use



(b): Mobile Cellular Subscription

Measurement Method

- The Mobile Line Subscriptions should be obtained as a count of all active lines which have registered an activity/ have been used at least once in the past three months.
- The counts should be made in pre-paid and post-paid categories

The data to be reported are:

- ***A monthly number of active Pre-paid Mobile Lines***
- ***A monthly number of active Post-paid Mobile Lines***

Reporting & Publication

- The data should be reported not later than 15th of the following Month
- The data for each Operator may be made available for public use

2.1.2: NETWORK TRAFFIC

(a): On Net Traffic

Measurement Method

- The minutes should be counted from call pickup to the call termination.

- The data to be reported is on

- Monthly Volume of minutes of On Net Traffic (On Net Traffic)***

Reporting Time & Publication

- The data should be reported not later than 15th of the following Month

- The data for each Operator may be made available for public use



(b). Off Net Traffic

Measurement Method

- The minutes should be counted from call pickup to the call termination

The data to be reported are:

- Monthly Volumes of Off Net Traffic in minutes to other local mobile*
- Monthly Volumes of Off Net Traffic in minutes to other local fixed Networks*

Reporting & Publication

- The data should be reported not later than 15th of the following Month
- The data for each Operator may be made available for public use



(c). Incoming Traffic

Measurement Method

The minutes should be counted from call pickup to the call termination

The data to be reported are:

- *Monthly Volume of Incoming Traffic minutes from other local mobile Networks*
- *Monthly Volume of Incoming Traffic minutes from other local fixed Networks*

Reporting & Publication

- The data should be reported not later than 15th of the following Month
- The data for each Operator may be made available for public use



(d) : Traffic to East African Countries (EAC)

Measurement Method

- The minutes should be counted from call pickup to the call termination
- The data to be reported are:
 - Monthly Volume of Outgoing Traffic minutes to other EAC mobile Networks*
 - Monthly Volume of Outgoing Traffic minutes to other EAC fixed Networks*

Reporting & Publication & Publication

- The data should be reported not later than 15th of the following Month
- The data for each Operator may be made available for public use



(e). Traffic from EAC

Definition

- Number of minutes for a call originating from EAC mobile/fixed Networks and terminating to local mobile/fixed networks

Measurement Method

- The minutes should be counted from call pickup to call termination
- The data to be reported are:

- *Monthly Volume of Incoming Traffic minutes from EAC mobile Networks*
- *Monthly Volume of Incoming Traffic minutes from EAC fixed Networks*

Reporting & Publication

- The data should be reported not later than 15th of the following Month
- The data for each Operator may be made available for public use



(f). Traffic to International Networks

Definition

Number of minutes for a call originating from local mobile/fixed Networks and terminating to other International mobile/fixed networks

Measurement Method

- The minutes should be counted from call pickup to the call termination
- The data to be reported are:
 - Monthly Volume of Outgoing Traffic minutes to International mobile Networks*
 - Monthly Volume of Outgoing Traffic minutes to International fixed Networks*

Reporting & Publication

- The data should be reported not later than 15th of the following Month
- The data for each Operator may be made available for public use

1.1.3: VOICE TELEPHONE TARIFFS

(a): On Net Peak/Off peak Tariff

Measurement Method

- The price should be in Tshs per second/minute without taxes
- The data to be reported and published are:
 - *On Net peak Tariff per second/minute without taxes*
 - *On net off-peak tariff per second/minute without taxes*

Reporting & Publication

- These data should be reported on every occasion when a new tariff plan is issued
- The data for each Operator may be made available for public use



(b). Off Net Peak/Off peak Tariff

Measurement Method

- The price should be in Tshs per second/minute without taxes

The data to be reported and published are:

- Off Net peak Tariff per minute without taxes***
- Off net off-peak tariff per minute without taxes***

Reporting & Publication

- These data should be reported on every occasion when a new tariff plan is issued
- The data for each Operator may be made available for public use



(c). East Africa Tariff

Measurement Method

- The price should be in Tshs per second/minute without taxes

The data to be reported and published is:

EAC Tariff per minute without taxes

Reporting & Publication

- This data should be reported on every occasion when a new tariff plan is issued
- The data for each Operator may be made available for public use



(d). International Zones Tariffs

Measurement Method

- The price should be in Tshs per second/minute without taxes

The data to be reported and published is:

- International Zones Tariffs per minute without taxes*

Reporting & Publication

- These data should be reported on every occasion when the new tariff plans are issued
- The data for each Operator may be made available for public use



(e). On Net SMS Tariff

Measurement Method

- The price should be in Tshs and without taxes

The data to be reported and published is:

On net SMS Tariff without taxes

Reporting & Publication

- This data should be reported on every occasion when a new tariff plan is issued
- The data for each Operator may be made available for public use



(f). Off Net SMS Tariff

Measurement Method

- The price should be in Tshs and without taxes

The statistic to be reported and published is:

-Off Net SMS Tariff without taxes

Reporting & Publication

- This data should be reported on every occasion when a new tariff plan is issued
- The data for each Operator may be made available for public use



(g). East Africa SMS Tariff

Measurement Method

- The price should be in Tshs and without taxes

The data to be reported and published is:

EAC SMS Tariff without taxes

Reporting & Publication

- This data should be reported on every occasion when a new tariff plan is issued

The data for each Operator may be made available for public use



(h). International SMS Tariffs

B482. Measurement Method

- The price should be in Tshs and without taxes
- The statistic to be reported and published is:

-International SMS Tariff without taxes

Reporting & Publication

- This data should be reported on every occasion when the new tariff plan is issued
- The data for each Operator may be made available for public use



1.1.4: DATA COLLECTION TOOLS



(a): TeleCom Subscriptions and Traffic

Data Collection Form

Form **TelCom STAT1** shown below is used to collect subscriptions, traffic air time and traffic data (SMS & MMS) from all Voice Telecom Operators.

The form **TelComSTAT1** is filled monthly by all Voice Telecom Services Providers and be submitted to TCRA in soft copy by electronic transmission via e-mail system

[Monthly Subs & Traffic Data.xlsx](#)



Data Collection Form

There are three types of tariffs forms

BASIC TARIFFS Data Form (Stat-TR1)

Prices for voice, SMS and data are provided separately either per minor second

[Quarterly TelCom Tariffs.xlsx](#)

BUNDLE TARIFFS Data Form (Stat-TAR2)

Separate bundle prices for voice, SMS and data are provided

BUNDLE TARIFFS Data Form (STAT- TAR3)

This bundle include voice, SMS and data for the same price

[Bundle Tarif Data Form-Stat-TAR2&TAR3.xlsx](#)

Data Collection Method

The forms **are** filled quarterly by all Voice Telecom Services Providers and submitted to TCRA in soft copy by electronic transmission via e-mail system

1.2 Internet Data

***MEASUREMENT METHODS AND
REPORTING PERIOD***



1.2.1: INTERNET SUBSCRIPTIONS

(a) Cable Modem Internet Subscriptions

Measurement Method

The Subscriptions should be obtained as a count of Individuals, Households, Internet Cafes and Business firms/offices/organizations using Cable Modem Internet.

The data to be reported and published are

- ***A Monthly Number of Individuals/Households***
- ***A Monthly Number of Internet Cafes***
- ***A Monthly Number of Business Firms/Offices/organizations***

Reporting & Publication

These data should be reported not later than 15th of every January

The data for each Operator may be made available for public use.

(b): Fixed Wireless Internet Subscriptions

Measurement Method

The Subscriptions should be obtained as a count of Individuals, Households, Internet Cafes and Business firms/offices/organizations using fixed wireless internet.

The Statistics to be reported and published are

- *A Monthly Number of Individuals/Households*
- *A Monthly Number of Internet Cafes*
- *A Monthly Number of Business Firms/Offices/organizations*

Reporting & Publication

- These data should be reported not later than 15th of every January
- The data for each Operator may be made available for public use.



(c). Mobile Wireless Internet Subscriptions

Measurement Method

The Subscriptions should be obtained as account of Individuals, Households, Internet Cafes and Business firms/offices/organizations using mobile wireless internet.

The data to be reported and published are

- ***A Monthly Number of Individuals/Households***
- ***A Monthly Number of Internet Cafes***
- ***A Monthly Number of Business Firms/Offices/organizations***

Reporting & Publication

- These data should be reported not later than 15th of every month
 - The data for each Operator may be made available for public use.
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(d). Satellite (VSAT) Internet Subscriptions

Measurement Method

Subscriptions should be obtained as a count of Individuals, Households, Internet Cafes and Business firms/offices/organizations using satellite broadband technology (VSAT) to access internet connections.

The data to be reported and published are

- ***A Monthly Number of Individuals/Households***
- ***A Monthly Number of Internet Cafes***
- ***A Monthly Number of Business Firms/Offices/organizations***

Reporting & Publication

These data should be reported not later than 15th of every January

The data for each Operator may be made available for public



(e): Fibre-to-Building Internet Subscriptions

Measurement Method

The subscriptions should be obtained as a count of Individuals, Households, Internet Cafes and Business firms/offices/organizations using fibre-to-home to access internet connections.

The data to be reported and published are

- *A Monthly Number of Individuals/Households*
- *A Monthly Number of Internet Cafes*
- *A Monthly Number of Business Firms/Offices/organizations*

Reporting & Publication

- This data should be reported not later 15th of every January
- The data for each Operator may be made available for public use



(f). Other Broad band Internet Subscriptions

Measurement Method

The subscriptions should be obtained as count of Individuals, Households, Internet Cafes and Business firms/offices/organizations using other Broadband technologies to access the internet other than Cable modem, Dial-up and Fixed wireless mobile wireless, satellite and Fibre-to-the-home.

The data to be reported and published are

- ***A Monthly Number of Individuals/Households***
- ***A Monthly Number of Internet Cafes***
- ***A Monthly Number of Business Firms/Offices/organizations***

Reporting & Publication

These data should be reported not later 15th of every January
The data for each Operator may be made available for public use.

1.2.2: INTERNET CONNECTION CHARGES AND TARIFFS

(a): Connection Charges

Measurement Method

- Charges should be in Tshs

The data to be reported and published is

-Connection charges for various internet access type

Reporting & Publication

- These statistics should be reported on every occasion when the new charges are issued
- The data for each Operator may be made available for public use



(b): Internet Tariffs

Measurement Method

- Prices should be in Tshs per bandwidth or month

The data to be reported and published is

Tariffs for various internet access type

Reporting & Publication

- These data should be reported on every occasion when a new tariff plan is issued
- The data for each Operator may be made available for public use.



1.2.3: INTERNET BANDWIDTH CAPACITY

(a). Down Link Capacity

Measurement Method

- The bandwidth capacity should be obtained as a count of total number of Mbps for downloads.

The data to be reported and published are

-Total Available Download Capacity in Mbps

-Total Used Download Capacity in Mbps

Reporting & Publication

- These data should be reported not later than 15th of every January
- The data for each Operator may be made available for public use.



(b). Up Link Capacity

Measurement Method

The bandwidth capacity should be obtained as a count of total number of Mbps for uploads

The data to be reported and published are

- ***Total Available Upload Capacity in Mbps***
- ***Total Used Upload Capacity in Mbps***

Reporting & Publication

- These data should be reported not later than 15th of every January
- The data for each Operator may be made available for public use



1.2.4 DATA COLLECTION TOOLS



(a): Internet Subscriptions

Data Collection Form

Form **Internet STAT** shown below shall be used to collect Internet Subscribers and bandwidth capacity.

The form **Internet STAT** shall be filled Annually by all Internet and Data Services Providers and be submitted to TCRA in soft copy by electronic transmission via e-mail system or TCRA web based Database.



INTERNET AND DATA SERVICE PROVIDERS

Internet STAT

Monthly Report

<i>Operator Name</i>	<i>Year</i>

1. Number of Subscriptions

<i>Type of Subscriptions</i>	<i>Number of Internet cafes</i>	<i>Number of Business firms /Organizations/offices</i>	<i>Number of Individuals/Households</i>
Cable modem internet			
Fixed Wireless Internet			
Mobile Wireless internet s			
Satellite (VSAT) Internet			
Fibre-to-Home Internet			
Other Broad band Internet			

2. Bandwidth Capacity in Mbps

<i>Type of Link</i>		<i>Actual</i>	<i>Used</i>
DOWNLINK	Satellite		
	Fibre		
UPLINK	Satellite		
	Fibre		

(b): Internet Tariffs

Data Collection Form

There are no official form from TCRA. The officially published internet tariffs shall be collected directly from ISP's websites. A standard format to be used for publishing the tariffs shall be agreed upon by Operators and TCRA.

Data Collection Method

The Tariffs shall be extracted from officially published ones.



2: Data Collection and Submission Process

- On the regulator side, data collection is coordinated by the Department of Consumer and Industry Affairs which designs questionnaires, develop database, analyze, and disseminate reports on quarterly basis
- On the operator's side, data collection and Submission are coordinated by Legal departments (Regulatory Directors/Managers)
- Furthermore, on traffic data, operators are required to submit the filled forms on subscriptions and traffic data on monthly basis on or before 15th of the following month. All submissions are done via e-mail system
- On tariffs data, operators are required to submit filled forms on quarterly basis on or before 15th of the following month at the end of a given quarter



3. Data Analysis and Dissemination

- After submission, filled forms are directly uploaded to the database and analysis is done on quarterly basis
- After analysis and report writing , the final report is submitted to Director General for approval. After approval, the report is uploaded on website with address www.tcra.go.tz



4. Challenges associated with Data Collection

- Late submission of telecom data by some operators
- Some operators do not submit internet data at all even after several e-mails and phone calls reminder
- Lack of standard format for tariffs zones
- Lack of fund to undertake ICT household Survey
- No online data collection system

