



**TANZANIA COMMUNICATIONS REGULATORY
AUTHORITY**

**GUIDELINES FOR TYPE APPROVAL OF ELECTRONIC
COMMUNICATIONS EQUIPMENT**

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THE UNITED REPUBLIC OF TANZANIA
TANZANIA COMMUNICATIONS REGULATORY
AUTHORITY



GUIDELINES FOR TYPE APPROVAL OF ELECTRONIC COMMUNICATIONS
EQUIPMENT

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Approved by	Title	Signature	Date
Dr. Jabiri K. Bakari	Director General		23/11/2023

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List of Abbreviations

CDMA	Code Division Multiple Access
CPE	Customer Premises Equipment
ECE	Electronic Communications Equipment
EPOCA	Electronic and Postal Communications Act
GSM	Global System for Mobile communication
ILAC	International Laboratory Accreditation Cooperation
LAN	Local Area Network
LTE	Long Term Evolution
PBX	Private Branch Exchange
RFID	Radio Frequency Identification Device

PART I PRELIMINARY

1.0 Citation and Commencement

These guidelines shall be cited as Guidelines for Type Approval of Electronic Communications Equipment, 2023 and shall come into force on the date of the signature of the Director General.

2.0 Interpretations

For the purpose of these guideline, unless the context requires otherwise: -

Authority means the Tanzania Communications Regulatory Authority, which is also known by its acronym as “TCRA”, established under the Tanzania Communications Regulatory Authority Act No.12 of 2003;

Electronic Communications Equipment (ECE) means any communications equipment, whether network or terminal intended for use with communications and broadcasting services;

Electronic labeling (e-labeling) means an optional alternative method for manufacturers to communicate compliance information, traditionally conveyed through physical labeling methods, by displaying the same information on device screens;

Host Product means any equipment which at least one module can be added to it to make it an electronic communication equipment or add a communication functionality;

Importer means a person or company which arranges for electronic communications equipment to be imported into the United Republic of Tanzania for sale or distribution;

ISM Band means portions of the radio spectrum reserved nationally for industrial, scientific, and medical (ISM) purposes, including applications in telecommunications;

Jammer means the device that can disrupt radio signals through use of an over-powered signal in the same frequency range or a device that stops a radio signal from reaching an intended receiver;

Manufacturer's Declaration of Conformity means a formal declaration by a manufacturer, or the manufacturer's representative, that describe the product to which it applies meets all relevant requirements of all product directives applicable to that product;

Manufacturers means a person or company that makes electronic communications equipment for sale;

Module means a stand-alone equipment that incorporates in a single unit, all the components required to support a particular communication technology and can be installed in a host device;

National Frequency Allocation Table means a compendium of frequency allocations to services applicable to Tanzania as well as a depiction of frequency usage;

SIM Box means a device used as part of VoIP gateway installation that can house a large number of Subscriber Identity Module (SIM) cards which may be used to divert international calls to a cellular device through the internet;

Software means a set of instructions, data or programs used to operate an equipment and execute specific tasks;

Suppliers means a person or company that provides service or product to another company or person;

Test Report means a report that contains sufficient information to verify the equipment has been tested as per test specifications or standards, and meets or exceeds the applicable standards or equipment specifications;

Type Approval means a method of checking for compatibility of all ECE with any operating electronic communications networks as well as conformity to standards;

Type Approval Agents means a person or company that acts on behalf of another person or company in processing type approval applications;

3.0 Introduction

This document, “Guidelines for Type Approval of Electronic Communications Equipment,” is issued in accordance with the Electronic and Postal Communications Act (Principal Legislation) Revised Edition 2022 and The Electronic and Postal Communications (Electronic Communication Equipment Standards and E-Waste Management) Regulations, 2020.

In accordance with section 83. - (1) of the Electronic and Postal Communications Act (Principal Legislation) Revised Edition 2022; any equipment to be used for connection to any electronic communications network for the purpose of receiving and, or transmitting electronic communication signals shall be approved by the Authority.

Regulations 5 (1) of the Electronic and Postal Communications (Electronic Communication Equipment Standards and E-Waste Management) Regulations, 2020, requires Electronic Communication Equipment intended for sale in the United Republic to be subjected to certification and type approval by the Authority.”

Therefore, it is important for manufacturers, importers and vendors of communications equipment to ensure their equipment undergoes TCRA’s Type Approval process before such equipment are imported for sale or use in the United Republic of Tanzania.

4.0 Scope and Purpose

This document aims to guide applicants who wish to obtain Type Approval for their ECE and describes the associated procedures to be followed. It shall apply to all instances where Type Approval is required for ECE imported for sale or use in the United Republic of Tanzania.

5.0 Objectives of the guidelines

The objectives of the guidelines are: -

- (a) To streamline the Type Approval procedures in Tanzania in accordance to the Act and Regulations;
- (b) To develop and align type approval process with international best practice.

PART II REQUIREMENTS

6.0 Type Approval Applicants

Type Approval may be requested by:

- (a) Local and international manufacturers
- (b) Individuals or companies in Tanzania wishing to import and/or distribute Electronic Communications Equipment for their use or commercial purposes.
- (c) Type Approval Agents

7.0 Equipment which requires Type Approval

All ECE which include but not limited to the one indicated in Annex 1 requires Type Approval. The Authority publishes from time to time a list of technical specifications and corresponding equipment types that requires approval. If an equipment type does not appear in the list or there is no an applicable technical specification, the Authority will decide, on a case by-case basis, whether an application for type approval may be made and what technical requirements will apply.

8.0 Technical Standards and Specifications

In the process of Type Approval, The Authority shall use the available standards prepared by recognized international, regional and national standards development organizations. The Authority will publish minimum technical specifications that a particular type or category of equipment shall comply. In the absence of a relevant specification, The Authority may specify technical requirements on a case-by-case basis. In any case, it is required that the approved equipment: -

- (a) Is electrically safe for users, or the occupational workers of the telecommunications system operators;
- (b) Is electromagnetically compatible with other equipment to which it is or will be connected or used;
- (c) Is fitted with a device that will protect that electronic communication system of which it is a part or to which it is connected against electrical, electromagnetic or other similar damage;
- (d) Makes efficient use of the radio spectrum where applicable; and

- (e) Is capable of interworking with other telecommunication equipment in all required aspects

PART III TYPE APPROVAL PROCESS AND PROCEDURES

9.0 Type Approval Applications

An applicant who applies for Type Approval of ECE shall use Online Type Approval System which is accessible at Tanzanite platform <https://tanzanite.tcra.go.tz/index.htm>

10.0 Type Approval Process

The online platform has been established to enhance the type approval process through electronic means. Applicants who require type approval of their equipment shall use this platform to apply for type approval and receive their certificates. The Type Approval process procedures shall include;

- (a) Registration with the Portal;
- (b) Submission of application;
- (c) Application evaluation by the Authority;
- (d) Issuing of electronic invoice to a successful application;
- (e) Payment by the applicant; and
- (f) Issuing of a Type Approval Certificate.

11.0 Application Submission

Before application submission, the applicant shall confirm whether the model has been type approved already through the database found in tanzanite portal. For the type approved equipment model, there is no need to type approve the equipment again. If the model is not yet type approved, the applicant shall follow the following steps to apply:

- (a) Applicant logs in to his account (register with Tanzanite portal first if not registered);
- (b) Applicant fills the online application form, attach necessary documents, declares that the information given is correct and submits the application;
- (c) On successful submission, the applicant will be able to view application status;

- (d) Applicant can then wait for further online correspondences (including invoices and certificates)

11.1 Technical Documentation

- (a) The Type Approval Procedures shall be based on the submission of a Technical Documentation which contains all suitable test reports and other supporting documents demonstrating compliance to standards and technical specifications.
- (b) The Technical Documentation shall contain all relevant data or details used by the manufacturer to ensure that ECE complies with the requirements. The technical documentation shall, wherever applicable, contain at least the following:
- i. Declaration of Conformity(DoC)
 - ii. Test reports issued by ISO/IEC 17025 accredited Testing Laboratories demonstrating that the ECE complies with the applicable standards.
 - iii. Technical document consisting of a general description of equipment and technical data.
 - iv. User or operational manual
 - v. Photographs of equipment
- (c) Technical Documentation drawn up in accordance with the corresponding specifications of the adopted national standard that implements the relevant harmonized standard and/or technical specification shall be presumed to provide an adequate basis for the assessment of conformity.

11.2 Application Evaluation

This is the process which is done by the Authority. It involves detailed scrutiny of the submitted application. When successfully completed, the applicant will be issued with an invoice for payment of the relevant fees. The applications that fails in the evaluation process are returned back to an applicant with the reasons or comments and applicants are therefore required to resubmit the application for evaluation to be done again. The application will be rejected if the applicant fails to provide the required documentation or the equipment fails to conform to applicable requirements.

11.3 ECE Testing

- (a) Applicants shall, for all set-top boxes and terminal ECE connecting to cellular networks, submit a sample unit of equipment to the Authority for testing or evaluation. For other equipment the applicant can submit sample upon request.
- (b) The sample submitted shall be accompanied with all necessary accessories required to ensure successful testing. The accessories shall include but not limited to power cables, charging adapters and cables, power battery etc.
- (c) The applicant shall, within 60 days after testing, be required to collect any sample of equipment submitted, and the Authority shall not be obliged to return to the applicant any sample of equipment and associated documentation submitted for the purpose of type approval.
- (d) Where any sample of equipment submitted to the Authority for testing is not collected after twelve months from the date of submission, it shall be subject to disposal.

11.4 Invoicing

When the submitted application is found to be in order, from the evaluation process, the applicant will be issued with an invoice.

11.5 Payment

Upon receipt of an invoice for the payment of type approval fee, the applicant should make payment to the Authority's bank account as indicated in the invoices.

11.6 Certificate Issuance

When the Authority confirms the payment, the applicant will be issued with a certificate which can be downloaded from the tanzanite portal through applicant's account.

12.0 Other Conditions

- (a) With continuous development and improvement in network services and standards, specifications may be changed without prior notice. Applicants are advised to check from the Authority website or its offices for the latest standards and specifications published from time to time.
- (b) Type approval shall in no case be construed as a guarantee by the Authority for the proper functioning, performance or quality of the equipment. Suppliers shall

ensure that the approved equipment inter work properly with other public telecommunication networks;

- (c) The Authority shall not be liable for any interference caused to any other equipment, injury, loss of life and damages to property as the direct or indirect result of the use of any approved equipment. The approval granted does not of itself confer immunity from legal obligations;
- (d) In cases of doubt relating to the interpretation of type approval specification, the method of carrying out the tests and the validity of the statements made by the manufacturers of the equipment, the decision of the Authority shall be final.
- (e) Where installation of type approved equipment is required, only qualified registered technician/engineer shall conduct the installation.
- (f) Where applicable, measurements and tests for the compliance with applicable standards shall be done in the Authority's premises or at any other place designated by the Authority;
- (g) In cases of equipment with communication technologies used in other regulated sectors such as (Medicine, Mining, Electrical etc.), the importers or manufacturers shall make sure that the type approved equipment comply to other regulators' requirements as per country regulations. Type approval process alone may not make it legal to import, distribute and use equipment with communication technologies which are subject to approval from other industry regulators.
- (h) Type approval in and of itself does not grant authorization for the provision of particular communication services using the approved equipment. Companies, including equipment vendors, that intend to offer communication services using such type-approved equipment are required to obtain and maintain all necessary licenses essential for the delivery of these services before starting to provide the services to the customers.

13.0 Applicable Fees

Type approval applicants shall be required to pay fees for their applications to be processed. There are two types of fees for type approval of communications equipment

namely application fee and the approval fee. The equipment type approval fees shall be as per the Electronic and Postal Communications (Licensing) Regulations, 2018, and its amendments.

14.0 Other Information on Type Approval Fees

- (a) The applicable type approval fees are charged on per model and type basis
- (b) The Authority may determine, from time to time, the type approval fees for equipment covered and not covered in the list;
- (c) The Authority shall classify equipment into one of the types given in the list to determine the fee(s) that is applicable;
- (d) Every application of an equipment model for type approval is subject to a separate fee unless determined otherwise by the Authority.
- (e) In cases of doubt relating to classification of the equipment category to determine the applicable fees, the decision of the Authority shall be final.

15.0 Modular Type Approval

Electronic communication equipment can comprise of different modules. The modules may add some functionalities or communication technology to the equipment. The modules can be installed in different products/equipment (referred to as a host, host product, or host device) by the grantee or other equipment manufacturer. The following shall apply to equipment with modules; -

- (a) A host product or equipment itself shall be required to comply with all applicable type approval requirements (i.e. the host device should be type approved) even if the module installed in it is already type approved.
- (b) The compliance shall be applicable to all equipment with modules that can process and transmit electronic communication signal wirelessly or by any other means.
- (c) For all modules, a host product manufacturer shall be responsible for ensuring that the module(s) installed is fully operational and comply with the applicable requirements.
- (d) The module, which is used in type approved host equipment shall be subject to type approval if it is intended to be imported separately.

16.0 Software Approval

Electronic Communication Equipment may have different functionalities depending on the software installed in them. In this case the equipment model hosting a particular software shall be type approved by considering applicable requirements. Where applicable, TCRA may request manufacturers or type approval applicants to provide information on software security to prevent an unauthorized software changes that may alter the operation parameters of the device. This information may include but not limited to; -

- (a) Description of the procedures that ensures third parties (Professional installers, qualified personnel, authorized certified technicians, end users, etc. – not direct employees) cannot operate the approved equipment in unauthorized frequencies, or parameters as described in the technical specifications.
- (b) Description on how the software updates are distributed and what procedures ensures that an approved product can only operate as granted on allowed frequencies and at authorized radio or any other parameters.
- (c) If the product cannot be modified by third parties and can only operate as granted on Tanzania frequencies with authorized radio or any other parameter, and explain how this is achieved.
- (d) If a third parties can make factory level changes to reload new software, etc.

17.0 Equipment Operating Frequency

All type approved equipment shall be allowed to operate only at frequencies which are allowed in Tanzania. These frequencies are listed in the Tanzania National Frequency Allocation Table available in the Authority's website.

18.0 Validity of the Type Approval

- (a) The Type Approval for any particular ECE is granted with an unlimited period of time provided no modifications have been made to the approved equipment.
- (b) A new application for Type Approval shall be made according to the requirements of these Guidelines whenever an existing Type Approved ECE is modified with respect to manufacturing brand name and model number.

- (c) Whenever changes to the Type-Approved ECE may affect compliance with the applied standards and requirements to which it has been previously tested and validated, a new application for Type Approval must be made according to the requirements of these Guidelines.
- (d) Whenever changes to the Type-Approved ECE may affect a network interface or have an effect on the specific essential requirements relating to safety, EMC or radio frequency behavior of the concerned ECE, a new application for Type Approval must be made according to the requirements of these Guidelines.
- (e) If changes to Type-Approved ECE are essentially cosmetic and are non-network affecting or have no effect on the specific essential requirements relating to safety, EMC or radio frequency behavior, a new application for Type Approval is not required provided that the information recorded in the Type Approval Register remains unchanged.

19.0 Revocation of Type Approval

The Type Approval for any particular ECE shall be revoked in the following cases:

- (a) In the event that the ECE listed in the Type Approval register has undergone one or more of the changes described in the section above (15.b, 15.c, 15.d) without applying for a new Type Approval.
- (b) In the event of a regulation change, including but not limited to change in the assignment of a frequency band in which the Type Approved ECE operates.

TCRA shall publish a notification on its website about the cancellation of a Type Approval and the reasons of annulment of the same. The ECE in question will be removed from the Type Approval register. Only the original applicant who requested the Type Approval for the ECE will be individually notified.

Upon cancellation of Type Approval, any party responsible for placing the ECE on the Tanzania market shall have to withdraw the non-compliant ECE from the market

20.0 Exemption from Type Approval

All ECE in the United Republic of Tanzania need to be Type Approved. This shall also include equipment that operates at Industrial, Scientific and Medical (ISM) bands.

21.0 Monitoring and Market Surveillance

The Authority shall conduct market surveillance to promote continued compliance of ECE with applicable standards and technical specifications. The Authority will monitor the market to ensure that ECE available in the market have been type-approved in accordance with established procedures.

22.0 Prohibited Devices

The following lists of ECE are prohibited: -

- (a) Jammer (GSM, CDMA, 3G, LTE, Wi-Fi and anything based on the frequency Jamming)
- (b) SIM Box
- (c) Any ECE which is not in compliance with the applicable technical standards

PART IV TYPE APPROVAL LABELLING

23.0 Display of label

Labelling involves affixing a label and a specified Type Approval number on the Type Approved ECE which is made or imported into the Tanzania market, indicating its compliance with the Authority's technical standards and requirements for the purpose of improving consumer's confidence in products and services in Tanzania.

Every importer or distributor shall ensure that an equipment offered for sale or for private use is clearly affixed with the type approval label.

24.0 Type of Labels

Labelling of ECE shall be done either by using physical label or e-label (electronic label). Physical labelling shall be implemented using materials such as a sticker, tag, or any other related material that is attached or affixed to an ECE, packaging, or surface. An e-label shall be displayed electronically, usually on a screen or a digital interface.

25.0 Labeling Requirements

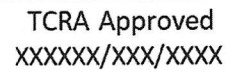
- (a) All equipment that have been type approved and received a type approval certificate, before being imported and placed in the market, must have a legible label permanently affixed to such equipment.
- (b) The label may be physically or electronically affixed (e-label) or embedded to the type approved equipment. For the case of e-labelling, it is the sole responsibility of the manufacturer to ensure that such label is not altered.
- (c) The label may also be affixed to the packaging and or included in the user manual, although such placement is not obligatory unless, due to constraints related to the product's size or other design characteristics, the ECE itself cannot be labelled directly. In such instances, it is mandatory to affix the label to both the product package and the user documentation accompanying the ECE before it is displayed or made available for sale.
- (d) Physical label must be protected against damage, such as scratching and ultraviolet (UV) exposure that may lead to the information on the labelling becoming illegible.
- (e) The label shall be affixed under the responsibility of the manufacturer, his authorized representative in Tanzania, or the party responsible for placing the ECE on the Tanzania market.

26.0 Label Design

The label for type-approved electronic communications equipment shall be designed to meet both physical and digital requirements as follows: -

- (a) The text on the label shall have an Arial font style with the size of at least 5, and shall guarantee readability under varying lighting conditions.
- (b) The label shall employ either black or white fonts, with the choice determined by the surface on which it is to be presented to ensure that the label is readable under different conditions.
- (c) The e-label shall mirror the same requirement and design principles as physical label adapting the same font style, color and size on various screen sizes, assuring clarity and clear viewing across devices.

- (d) The label shall be designed to appear as below. XXXXXX/XXX/XXXX are alphanumeric characters drawn from the issued type approval certificate number for the equipment.



TCRA Approved
XXXXXX/XXX/XXXX

- (e) The label will be provided after type approval of a particular equipment, and shall be accessible from the online portal.

ANNEX 1

EQUIPMENT WHICH REQUIRES TYPE APPROVAL

S/N	EQUIPMENT CATEGORY	EQUIPMENT LIST
1	Terminal Electronic Communication Equipment	Telephone Sets, Data Modems, Mobile Phones, VHF/UHF Radio, Wireless Modules, Wireless Sensors, Remote controls, Digital and IP Camera, Car Audio/Infotainment system, Wireless Access Points Land Mobile Cellular, Non-manageable switches, Personal Computers, Tablets/Personal Digital Assistant, IoT devices, Short Range Devices (SRDs) Smart TV, GPS tracking devices, Digital Radio, Set-Top-Boxes (STBs), VSAT, etc.
2	Office Communications Systems (PABX)	PBX with Up to 50 Extensions, and PBX with 51 extensions and above
3	Network Electronic communication Equipment	Cellular Network Access and Core Network equipment (Base Transceiver Stations(BTS), Radio Network Controllers(RNC), Base station controller(BSC), Core and other related equipment), Microwave Radios, Active Antenna with Radio Unit etc., Network routers, Network switches, Network Servers, Storage Systems, Optical Transmission Network equipment,
4	Broadcasting Equipment	Broadcasting Transmitters, Studio Transmitter Link (STL) Radio

Contact Us

Tanzania Communications Regulatory Authority,

Mawasiliano Towers, 20 Sam Nujoma Road,

P.O Box 474, Dar Es Salaam

+255 22 2199760 - 9 / +255 22 2412011 - 2 / +255 784558270 - 1