

## STANDARDS & EQUIPMENT TYPE APPROVAL

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## The CCK's Regulatory Role

The Communications Commission of Kenya (CCK) is the regulatory authority for the communications sector in Kenya.

Established in 1999 by the Kenya Communications Act (KCA) No. 2 of 1998,

- Licensing all systems and services in the communications industry, including telecommunications, postal/courier and broadcasting.
- Managing the country's frequency spectrum and numbering resources,
- Facilitating the development of e-commerce.
- Type approving/accepting communications equipment meant for use in the country

## The CCK's Regulatory Role

- Protecting consumer rights within the communications environment
- Managing competition in the sector to ensure a level playing ground for all players,
- Regulating retail and wholesale tariffs for communications services.
- Managing the Universal Access Fund
- Monitoring the activities of licensees to enforce compliance with the licence terms and conditions as well as the law.

## Standards & Type Approval - Brief

### Mandate

The Kenya Communications Act 1998 and the Kenya Communications Regulations, 2010 mandates CCK to:

- Type approval equipment, make telecommunications standards, inspect installations and enforce quality of service
- manage and administer the national telecommunications numbering plan.

### Functions

- Formulation of Technical Standards Rules and Regulations
- Development of Technical Standards on various **equipment**
- **Inspection and Approval** of Telecommunications Systems and Equipment
- Inspection of Telecommunications **Installations** carried out by Registered Contractors
- **Enforcement** of implementation of the Standards
- Evaluation of Equipment against relevant Technical Standards

## What is a Standard?

With regards to Type Approval, a ‘standard’ is a published specification.

**A Standard is a published document which sets out specifications and procedures designed to ensure that a material, product, method or service is fit for its purpose and consistently performs the way it was intended to.**

## Adopting International Standards

- The Commission adopts International Standards wherever possible. This policy is in line with Kenya’s obligations under the World Trade Organization’s Code of Practice that requires the elimination of technical Standards as barriers to international trade.
- As a result the Commission Recognizes standards from the following international bodies:
  - ❖ **ANSI** American National Standards Institute
  - ❖ **CENELEC** European Committee for Electro-technical Standardisation

## Adopting International Standards Cont'd

- ❖ CISPR International Special Committee for Radio Interference
- ❖ IEC International Electro-technical Commission
- ❖ ITU International Telecommunications Union
- ❖ ETSI European Telecommunications Standards Institute
- ❖ ATEX EXplosive ATmospheres Directive

## What is Type Approval?

- Type Approval is the process by which an RTTE is authorized by CCK to be used in Kenya, and involves verification of the equipment's compliance with the applicable standards and requirements. The main goal of the type approval regime is to ensure that all Radio Equipment and Telecommunications Terminal Equipment ("RTTE") that are used in Kenya comply with the applicable technical standards in Kenya relative to:
  - ❖ Effective Use of radio frequency spectrum for radio communication equipment

## Type Approval cont'd

- ❖ Interconnection of Telecommunication Terminal Equipment with Public Telecommunications Networks.
- ❖ The protection of the health and the safety of the users.
- ❖ Electromagnetic Compatibility

## Objectives of Type Approval

- a) To protect public telecommunications networks from damage from customer-owned terminal equipment connected to it, and vice versa
- b) To ensure coherent communications over the public telecommunications networks.
- c) To ensure safety of public from dangerous equipment.
- d) To promote the efficient utilisation of the radio frequency spectrum.
- e) To protect the general public as well as network operators from poor quality terminal equipment which do not meet public telecommunications network interface requirements.



## Objectives Cont'd

- f) To protect the general public by ensuring that telecommunications equipment vendors are able to offer adequate technical support and after sales maintenance backup.
- g) to ensure safety of telecommunication operator's line plant staff from high voltages that may be fed on line by substandard equipment arising from inadequate isolation
- h) To facilitate interconnection
  - **Customers** : irrespective of the network operator they subscribe to, or the Customer Premises Equipment (CPE) they use.
  - **Network Operators**: To make their own services available to customers of other networks, or to avail to their users those services that are not available in their networks, but are readily available in other networks.

## Equipment Requiring Type Approval

- Any equipment used or to be used in connection with the provision of electronic communication, unless explicitly exempted by the Authority, is subject to Type Approval by the Commission

## Who requires to seek type approval?

- a) Local and International Manufacturers of equipment proposing to sell their equipment in Kenya.
- b) Registered/Licensed vendors of equipment proposing to sell equipment on behalf of their principals.
- c) Individual users or organizations who procure non-type approved equipment for their own use (i.e. not for marketing/commercial purposes)
- d) Licensed Network operators and service providers.

## Standard Type Approval Procedure

- A Type Approval application must be accompanied by the following:
  - Test reports confirming compliance with the applicable standards recognized by CCK
  - Photographs of the Equipment, installation and user manual
  - A functional description of the Equipment
  - Schematic diagram. Printed circuit board layout (PCB) layout; and Proof of payment of the prescribed non-refundable Type Approval fee.

## Standard Type Approval Procedure Cont'd

- The Commission may, where it deems it necessary, request the Applicant to submit additional supporting documents and a sample.
- A successful outcome will result in the Commission issuing a Type Approval Certificate.
- An unsuccessful outcome will result in the Commission issuing a letter containing reasons for rejecting the application.
- The applicant may, subsequent to addressing issues stipulated in the rejection letter re-apply for Type Approval.

## Simplified Type Approval/Type Acceptance

- The simplified Type Approval process has to be followed in the case that the RTTE has already obtained suitable evidence either from a National Regulatory Authority (NRA) in countries belonging to ITU Region 1 or a Conformity Assessment Body (CAB) recognized by CCK showing that the considered RTTE complies with the required standards recognized by CCK
- An application for Type Approval under the simplified type approval process must be accompanied by the following supporting documentation



## Simplified Type Approval/Type Acceptance Cont'd

- A duly signed and dated Certificate of Compliance certifying that the equipment complies with the appropriate standards, issued by the entity which had tested or type approved the RTTE and which must be either a National Regulatory Authority recognized by CCK or a Conformity Assessment Body recognized by CCK
- Proof of payment for the prescribed Type Approval fee. The Type Approval fee covers CCK processing fee, is not refundable, and must be paid before applying for Type Approval

## Simplified Type Approval/Type Acceptance Cont'd

- Under the Simplified Type Approval process it is not required to submit any other supporting documentation or sample units of the RTTE unless requested to do so by CCK

## Provisional Type Approval

- The Commission may award a Provisional Type Approval permit, for a period of up to 6 months for the following purposes:
  - ✓ Use of Equipment for a trial, demonstration or research purpose on a non-commercial basis; and
  - ✓ Testing the Equipment in an ATL in Kenya.
- The Equipment submitted for Provisional Type Approval must be used exclusively by the applicant.

## Provisional Type Approval Cont'd

- When requesting Provisional Type Approval the Applicant must submit information regarding:
  - ✓ Purpose of the test, trial, research or demonstration;
  - ✓ Details of the units to be tested, including the number;
  - ✓ Details of the proposed recipients of the units;
  - ✓ Duration of the test, trial, research or demonstration;
  - ✓ Geographical area where the tests, trial, research or demonstration are to be performed; and
  - ✓ Proof of payment of the applicable fee.

## Provisional Type Approval Cont'd

- The applicant must furnish the Authority with a report of the test, trial, research or demonstration, within thirty (30) days from the lapse of the permit period.
- In the event that the Applicant does not wish to apply for Type Approval within or after the permit period, the Applicant is obliged to ensure that all the units that were deployed or used are withdrawn at the applicant's own cost, within thirty (30) days from the lapse of the permit period

## Specific documentation for Standard Type Approval process

- **Technical Construction File**
- The Standard Type Approval process is based on the submission of a Technical Construction File (TCF) which contains all suitable test reports and other supporting documents demonstrating compliance of the RTTE with the required standards recognized by CCK. Its contents must be written in English
- The format of the TCF must be flexible to accommodate the needs of different RTTE types but it must comply with the format and other requirements of the relevant ISO/IEC standard. It must have a unique identification number or other unique identifier which is cross-referenced in the Declaration of Conformity (DoC).

## TCF Cont'd

- In any event, it must prove the conformity of the RTTE with the applicable requirements to be assessed. It must cover the design, manufacture and operation of the RTTE and include the following documentation:
  - An index or table of contents;
  - A Declaration of Conformity (DoC) issued by the manufacturer of the RTTE. A more detailed description of the Declaration of Conformity.
  - Technical/operational documentation of the RTTE including a brief explanation describing how the RTTE is intended to be used and any information related to the installation of the RTTE and relevant compliance;

## TCF Cont'd

- Identification of any communications networks and/or any radio interfaces (antennas or connection points for antennas) concerned, along with any intentional radio spectrum usage;
- Where software or firmware may affect compliance of any network interface or have an effect on radio frequency emissions, it should be explicitly referenced and any user configurable options explained;
- If the equipment is an interface card or module for installation in host equipment, the description must give sufficient information for compatible hosts to be determined.
- Circuit diagrams, PCB layouts, parts lists and other design and construction information for those parts of the RTTE which have a direct impact on compliance with the technical requirement

## TCF Cont'd

- Photographs or illustrations showing external features and internal layout. These should be in sufficient detail to permit reliable visual identification of the RTTE concerned
- Test reports issued by accredited Testing Laboratories recognized by CCK demonstrating that the RTTE complies with the standards adopted in Kenya with respect to:
  - ❖ Effective use of radio frequency spectrum for radio communication equipment
  - ❖ Interconnection with Public Telecommunication Networks (in case the equipment is to be interconnected with PTNs)
  - ❖ The protection of the health and the safety of the user
  - ❖ Electromagnetic Compatibility

## Declaration of Conformity

- A Declaration of Conformity (DoC) is a document issued by the manufacturer of the RTTE on company letterhead or stationery, signed by an authorized representative of that company, confirming that the RTTE complies with relevant standards (telecoms and radio, health and safety, EMC) . The DoC forms part of the Technical Construction File (TCF).
- Any DoC included in the TCF must be issued and maintained in accordance with the relevant ISO/IEC standard.
- As stated in the relevant ISO/IEC standard, a Declaration of Conformity (DoC) must include the following information:
  - ❖ Unique identification of the DoC.



## Declaration of Conformity Cont'd

- ❖ The name and contact address of the issuer of the DoC.
- ❖ The identification of the object of the DoC (e.g. name, type, date of production or model number of the product, and other relevant supplementary information).
- ❖ The statement of conformity.
- ❖ A complete and clear list of product standards or other specified requirements, as well as the selected options, if applicable.
- ❖ The date and place of issue of the Declaration of Conformity.
- ❖ The signature (or equivalent sign of validation), name and function of the authorized person(s) acting on behalf of the issuer.
- ❖ Any limitation on the validity of the DoC.

## Declaration of Conformity Cont'd

- ❖ The name and address of any accredited Testing Laboratory involved (e.g. testing or calibration laboratory, inspection body, certification body) recognized by CCK.
- ❖ Reference to relevant conformity assessment reports, and the date of the reports.
- ❖ Reference to the existence of associated supporting documentation such as that described in the relevant ISO/IEC standard.
- In submitting a DoC confirming that the equipment complies with identified standards, the applicant must ensure that the DoC is authentic and properly applies to the RTTE that is the subject of the application.



## Verify devices are type approved

In order that the public is able to discern whether a device is compliant with the CCK's regulatory schemes, devices are required to be Type Approved and listed in a central database (available on CCK website: [Type Approved Equipment](#)); to indicate compliance and, in some cases, non-compliance. Any person is free to consult CCK on this in case of any doubt.



# THE END

# Thank You