UGANDA COMMUNICATIONS COMMISSION

GUIDELINES ON TYPE APPROVAL OF TELECOMMUNICATIONS AND RADIO COMMUNICATIONS EQUIPMENT IN UGANDA

1.0 INTRODUCTION

The public radio and telecommunications networks have been designed primarily for the transmission of information between subscribers, sometimes via complex switching networks. The networks usually consist of large numbers of switching points, interconnected by various transmission media such as copper cable, fibre optic cable and many other times, radio frequency waves. To give satisfactory overall performance on any network, the communication links must be built and maintained in such a way that their systems comply with both national and international signalling and transmission standards. In the same respect, it is essential that all the terminal equipment to be connected to these systems / networks also meets national and international standards and regulations and therefore does not cause degradation of the network or its established parameters. All the equipment that is intended for use in public radio and telecommunication networks, provided it meets national regulations and requirements, is granted what is known as Type Approval. The process of type approval is intended to ensure that radio communication and telecommunication equipment complies with a set of national and international regulatory standards and requirements.

Type approval of radio and telecommunications equipment in Uganda is defined as one of the functions of the Uganda Communications Commission under the Communications Act, Cap 106 Laws of Uganda and the regulations made there under (specifically the UCC Regulations of 2005).

This paper describes the process of granting type approval to radio communication and telecommunication equipment for use in Uganda.

2.0 WHY TYPE APPROVE?

The granting of type approval to radio communication and telecommunication equipment simply means that the equipment conforms to defined regulatory standards and requirements and is therefore least likely to cause disruptions when used in public communications networks.
As well as ensuring that the equipment conforms to defined national regulations, the type approval process is carried out to:

a) Protect public radio communication and telecommunication networks from any harm / damage that may be caused to the existing network equipment by the connection of new terminal equipment and / or any associated wiring procedures.

b) Protect the safety of end-users of telecommunications and radio communications equipment from possible dangers that may arise out of connection of new equipment to existing communication networks.
c) Prevent the connection of non-standard equipment to existing public communication networks, a practice that could easily compromise the integrity of an existing network.
d) Maintain the acceptable quality of service levels and end-to-end network performance of radio and telecommunications networks.
e) Protect the general public from harmful and sometimes fatal emissions from faulty or obsolete communications equipment.
f) Protect the environment from possible dangers arising out of sub-standard equipment connected to communication networks.
g) Enable the general public become aware of the need to ensure that all radio communication and telecommunication equipment conforms to national regulations and standards before use in both private and public communication networks.

It is important to note that type approval is not a term confined to a particular industry. Type-approval requirements exist for products as diverse as marine equipment, mobile phones, motor vehicles or medical equipment. Type approval simply means that the product is guaranteed to meet certain requirements for its ***type***, whatever that may be.

3.0 TYPE APPROVAL IN UGANDA

The process of type approval is considered to be very important, even in countries like Uganda that do not manufacture radio and telecom equipment on a large scale. Type Approval has hitherto been granted to communication equipment in Uganda after evaluating the equipment's expected performance with respect to a given set of specifications / standards, and verifying its compliance to these sets of standards and to other regulatory, environmental and safety requirements before it could be accepted for use in communication networks.

3.1 Who should seek type approval?

Any persons (individuals and business entities) intending to use radio communication and telecom equipment should first ensure that the equipment has been type approved for use in Uganda. UCC maintains a database of all radio communication and telecom equipment that has been type approved for use in Uganda. [This type approval database is soon to be made publicly available on the UCC website]. Any individual, company or any kind of corporate body is free to apply to UCC for type approval for any piece of communication equipment, provided it has does not appear in the UCC database of type approved equipment. In most cases however, type approval of equipment is requested for by the following groups of consumers

3.1.1 Manufacturers and vendors of radio communication and telecom equipment

Type approval is granted to any individual or companies for communication equipment intended for sale in Uganda. However, it is worth noting that since most communication equipment on Ugandan communication networks has been imported from other countries, most applicants seeking type approval have been agents / representatives of manufacturers or vendors of radio and telecommunications equipment, as well as individuals who bring in terminal equipment for their private use. In some cases, many small to medium enterprises (SMEs) procure some of this readily available equipment from international departmental stores and warehouses and then try to sell them to end-users in Uganda. Therefore, all importers or end-users of radio and telecommunication equipment in Uganda must first ensure that they seek and obtain type approval from UCC before importation of the equipment.

3.1.2 Public Service Providers

All radio communication and telecom service providers that have been licensed by UCC to provide communication services to the general public and to private entities are required to ensure that the equipment they are to use to provide any type of communication service has been type approved for use in Uganda. This therefore implies that they have to liaise with their equipment manufacturers / providers to ensure that the equipment is type approved before it can be used in the establishment of their networks to provide of services.

3.1.3 Customer Premises Wiring service providers

Companies that have been licensed as Customer Premises Wiring providers by UCC are required to ensure that the equipment that is to be installed at customer premises has already been type approved for use in Uganda. In most cases, these licensees also double up as equipment vendors in the category mentioned above and therefore are required to seek type approval of their equipment as soon as it is imported into the country. In the cases, where their customers have procured the radio communication / telecom equipment themselves, they are required to ensure that it is type approved before installation. In the same manner, the Customer Premises Wiring Service Providers are required to ensure that the equipment independently purchased by their customers, has been type approved for use in Uganda before they proceed to install it.

3.2 Equipment that requires Type Approval

In most cases, because Uganda does not have an accredited communications equipment testing laboratory, UCC usually relies on the expertise provided by our regulatory partners like FCC, CCK, TCRA and ETSI (who already have internationally recognised testing centres), so as to obtain laboratory test results of equipment that has to be type approved. In addition to the lab test results, UCC checks for compliance of the equipment with international and national standards as well as other regulatory requirements like licensed frequency spectrum bands operational parameters,

equipment operational requirements and environmental and public safety issues, if applicable.
A special type approval process called ***type acceptance*** is applied for equipment that has already been type approved for use within the region by the regional regulatory partners like CCK and TCRA. ***UCC*** then issues a certificate of approval for every model of equipment that it type approves, and updates these models into the type approval database.
In general, type approval is granted (***or rejected, when equipment does not qualify***) for:

a) telecommunications and radio communications equipment, devices or apparatus to be used in the delivery of communication services to end users through direct connection to public networks;
b) equipment, devices or apparatus that can be connected to telecommunications and radio communications networks or systems for private use by a telecommunication service subscriber at his or her premises;
c) equipment, devices or apparatus to be used for switching, transmission or interconnection purposes in public or private telecommunications and radio communications networks;
d) distribution, sale, lease, offer for sale or importation of telecommunications and radio communications equipment intended for use in any of the above scenarios;

Examples of telecommunication terminal equipment that require approval include (but are not limited to):

- Telephones (Ordinary, Cordless, Executive, Secretarial sets)
- Telephone Answering and Recording systems
- Mobile and Fixed line network system components
- Cellular telephones
- Payphones (Coin and Card operated)
- Call Monitoring and logging systems
- Subscriber Private Meters (SPMs)
- Facsimile Transceivers
- Call Routing Apparatus
- Private and Public Branch Exchanges (PBXs)
- Key Telephone System (KTS)
- Internet Protocol Telephone sets
- Small Business System (SBS)
- Multi line systems
- Voice Messaging Systems
- Data and fax Modem devices

Examples of radio communication equipment that require approval include (but are not limited to):

- Citizen Band radio equipment
- HF, VHF, UHF radio equipment

- Microwave radio transmission equipment
- Radio paging terminals & transmitters
- Alarm transmitters
- Satellite phone,
- VSAT network system components

4.0 TYPE APPROVAL PROCEDURES IN UGANDA

All individuals and business entities that wish to apply for type approval of radio and telecommunication equipment are required to first cross-check with the UCC type approval database for the list of already type approved equipment. If they decide to proceed to proceed with the application for type approval, they are required to adhere to the following procedures:

4.1 All applications for type approval are made in writing to the Executive Director, Uganda Communications Commission.

4.2 The applications for type approval of radio communications and telecom equipment may include the following:

a) Sample of the equipment to be marketed or/and installed (the applicant bears the costs of transporting the equipment sample to UCC and UCC does not guarantee the return of the equipment sample, as it may be destroyed during testing)
b) Letter from equipment manufacturer or manufacturer's representative authorizing vendor to act as agent, if the vendor is an agent of an equipment manufacturer
c) Technical/operational documentation (including details of transmission parameters, operating media, interface specifications, fulfilment of service technology requirements, etc) in the English language
d) Copy of test report from manufacturer or an accredited test laboratory, if available
e) Proof of previous type approvals granted by other regulators, if available.
f) Type Approval application processing fee, which is non-refundable

4.3 UCC then assesses and evaluates the application. Where necessary, laboratory tests are carried out on the sample terminal. After the laboratory tests, UCC may provide the test results to the applicant although it is under no obligation to return the sample equipment. This is because of the high probability of destruction of the sample equipment during the testing process.

4.4 UCC then compiles an evaluation report for each piece of equipment submitted and then provides an appropriate technical decision as to whether the equipment complies with the mandatory standards and requirements or not. This is an internal report and is not usually availed to the applicant.

4.5 If the applicant satisfies UCC requirements in all aspects, then UCC advises the applicant within twenty-one (21) working days from the date of submission of the application, on the type approval fee to be paid. [If laboratory tests are required, then the number of days may increase, but the applicant will be duly informed in advance]. Please note that the type approval fee is paid after the evaluation of the application and is different from the application processing fee which is paid upfront and is non-refundable.

4.6 If the applicant pays the type approval fee, then UCC grants the equipment type approval. For approved cases, a ***type approval letter*** is issued to the applicant.

4.7 If the application is rejected, UCC informs the applicant of the rejection and advises the applicant to re-export all the models of the type of rejected equipment within 30 days.