




Committed to Connecting the World




Harmonization and Improvement of Standards to be adopted at Regional /Sub-regional level

Workshop for SADC Countries to Promote the Development and Implementation of Conformity Assessment Programmes
Livingstone, 13-15 October 2014

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National Communications Authority, Ghana & Vice Chairman ITU-T SG11



Background



- ❑ **ITU-D Organized C&I training for the African Group**
 - ❑ Commitment to realization of ITU Pillars 3 & 4
 - ❑ 3rd consecutive time; recently on 23-27 June' 14
 - ❑ Participants recommended technical Specifications and Priority Areas for C&I Programmes

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Non Exhaustive List of technical Priority Areas for C&I 1/3



| Public Mobile | | | | |
|----------------------------|--|---|--|---|
| Service defined in NFAP | Frequency Band | Applicable Sub section | Reference standards for conformity | |
| GSM DCS | 880-915MHz 925-960 MHz 1705-1785 MHz 1805-1880 MHz | GSM Base Station and Ancillary equipment | EN 301 489-8 EN 301 502 EN 301 489-7 EN 301 511 | |
| | | GSM Handsets, terminals and ancillary equipment | | |
| DECT | 1880-1900 MHz | DECT cordless telecoms Equipment | EN 301 489-6 EN301 406 | |
| IMT | 1900-1920 MHz 1920-1980 MHz 2110-2170 MHz | UMTS handsets and related equipment | EN 301 908-1 | EN 301 908-2 EN 301 908-6 EN 301 489-34 EN 301 908-3 EN 301 908-11 EN 301 489-23 |
| | | UMTS base stations | | |
| Private Mobile | | | | |
| TETRA | 380-399.9 MHz 410-430 MHz | TETRA radio equipment | EN 301 489-18 EN 303 035-1 EN 303 035-2 | |
| Amateur Radio | 3.5-3.8 MHz 7.0-7.2 MHz 14-14.35 MHz 21-21.45 MHz 24.89-24.99 MHz 144-146 MHz | Amateur radio and ancillary Equipment | EN 301 489-15 EN 301 783-2 | |
| CB Radio | 26.985-27.405 MHz | Citizen band radio and ancillary Equipment | EN 301 489-13 | EN 300 135 EN 300 135-1 EN 300 135-2 |
| Private Mobile Radio | 430-470 MHz | Analogue and digital PMR Equipment Short range PMR and ancillary Equipment | EN 300 295-2 EN 301 166-2 | EN 301 489-5 EN 300 793 EN 300 471-2 EN 300 096-2 EN 300 113-2 EN 300 390-2 |
| Maritime Radio | 156.025-174 MHz | Maritime Radio | EN 300 698 EN 301 025 EN 301 178 | |
| Radar for Radio navigation | 1.260-1.350 GHz 2.700-3.300 GHz 9.3 - 9.5 GHz 76-77.5 GHz | Radar for radio-navigation | TBC EN 302 248 EN 302 194 | |

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Technical Priority Areas 2/3



| Fixed Wireless | | | | | |
|-------------------------|--|---|-------------|--|--|
| RLAN, Wi-Fi, WLAN | 5.725-5.85 GHz | 5GHz high performance RLAN and ancillary equipment | EN 301489-1 | EN 301 489-17 EN 301 893 | |
| WiMax | 2.495-2.690 GHz 3.40-3.80 GHz | WiMAX equipment | | EN 301 753 | |
| FWA BWA | 10.60-10.68 GHz 1.429-1.452 GHz 2.3-2.4 GHz 4.8-5.0 GHz | Fixed Wireless Access and ancillary equipment | | EN 301 489-4 EN 302 217-2-2 EN 302 217-3 | EN 301 753 EN 302 326-2 EN 302 326-3 |
| Digital Microwave Radio | 10.7-11.7 GHz 12.75-13.25 GHz 14.40-15.35 GHz 17.70-19.70 GHz 21.20-23.60 GHz 27.50-29.50 GHz 31.80-33.40 GHz 37.0-39.5 GHz | Point-to-point radio fixed link equipment and antenna | | | EN 302 217-4-2 |



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Technical Priority Areas 3/3

| Satellite Terminals | | | |
|----------------------------------|--------------------------|--|--|
| Fixed Terminals | C-Band/Ku-Band | VSAT | |
| Mobile Satellite Systems | C-Band/Ku-Band | Terminals/GMPCS | |
| | | | |
| Short Range Radio Devices (SRRD) | | | |
| | 11.5kHz/433MHz/ISM bands | Remote Keyless Entry Systems RFID systems NFC Bluetooth Telematics Vehicle Radar Systems | |
| | | | |
| Broadcasting | | | |
| | 87-108 MHz | FM Receivers/Transmitters | |
| | Band I to Band IV | TV Transmitters IDTV Set-top boxes (STB) | |
| | | | |
| Terminals | | | |
| | | Fixed Phones PBX Analogue Modems Fax Machines ISDN Systems xDSL Leased lines VoIP VoLTE Routers Switches | |
| | | | |
| Cables | | | |
| | | Fibre Copper | |
| | | | |

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Regional and Subregional Approach (SADC, ECOWAS, EACO, etc.)

- ✓ Regional and Subregional approach in C&I testing
- ✓ Harmonized/MRA Approach reference to ITU guidelines for implementation and management of MRA on C&I
- ✓ An ITU assessment study in each of the sub regions taking into consideration the use case in SADC region
 - ✓ Study existing infrastructure
 - ✓ Cost of building labs
- ✓ At least one lab in each ITU region is recommended

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Actions and/or assistants required from ITU

- ✓ Feasibility Study
- ✓ Technical Support
- ✓ Personnel training

Recommendations for ITU

- The role of ITU C&I Programme in the Regional/Subregional level
 - ✓ Subregional C&I approach (MRA and Labs)
 - ✓ Strategies for partnership with private investors
 - ✓ Forum of C&I experts at regional/sub-regional level
 - ✓ Facilitate the participation of African groups in the ITU SGs (eg. Fellowship Support)
 - ✓ Facilitate the establishment of regional forums on C&I.
 - ✓ Provide implementation guide on ITU Recommendations/Standards
 - ✓ ITU to collaborate with other standard bodies (e.g. ETSI) in organizing Workshops on standards
 - ✓ Implementation of C&I database

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Recommendations at National levels



- ✓ Establishment of National Committee on Standards
- ✓ Capacity building exercise
- ✓ Bilateral/ MRA development among countries
- ✓ Strategies for partnership with private investors
- ✓ Support the participation of staff in the ITU SGs and activities on C&I
- ✓ Facilitate the establishment of national forums /workshops / stakeholder discussions on C&I.
- ✓ Development of framework for implementing ITU Recommendations/Standards on C & I
- ✓ Review Type Approval regulations/procedures and guidelines in line with international best practice.

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NCA Adopted Standards



Microsoft Word Document

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NCA Procedures to Assess Conformity to Adopted Standards

- The minimum essential requirements are to meet the objectives of
 - International Standards
 - Environmental Health And Safety Standards
 - Electromagnetic Radiation And Emissions
 - Radio Frequency Requirements
 - Network Compatibility
 - Quality of Network Support
 - Verification of Stated Technology support

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Application Requirements



- Fill a completed TA Application either manually or through our online application system plus the following documents:
 1. Application Cover letter
 2. Technical Documentation /Technical Construction File
 - a. A general description of the electronic communication equipment
 - b. Design information /results of design calculations made
 - c. A list of the adopted standards and/or other relevant technical specifications
 - d. The declaration of conformity;
 - e. Certificate of conformity from CAB;
 - f. Test reports issued by accredited testing laboratories
 - i. RF Test Report
 - ii. EMC Test Report
 - iii. Health and Safety Reports
 3. Sample of electronic communication equipment where necessary

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Type Approval Milestone



- Application form was introduced in July 2013
- A guidelines for type approval was launched in January 2014.
- There was close to four weeks public consultation involving various labs, CABs, and other consultants in the industry.
- Final Guidelines came to effect on January 9, 2014
- The guidelines introduced the element of marking and dealership in ECES
- Paper based process was transformed into electronic based in March 2014
- Electronic communication equipment were categorised in May 2014.
- Type Approval Application and evaluation fees were completely reduced in May 2014
- Vendors, manufacturers, customs, operators and other major stakeholder meetings were held to educate all on the process of type approval as required by law
- Type Approval online portal yet to be launched
 - Manufacturers would be allowed to showcase their products that have been type approved

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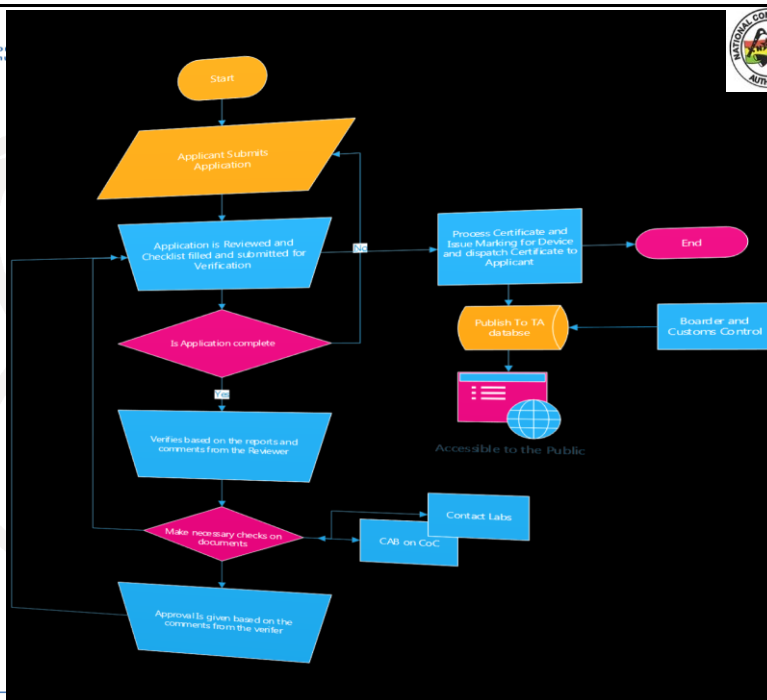


Application review process



- Three stages of Processing of Application
 - Review Stage – Comprehensive analysis of lab reports and accompanying documentation
 - Verification Stage – verification of submitted documents and review reports and if necessary contact the cabs and labs issues relating to CoC and Lab Reports
 - Approval Stage –
 - Provisional Approval
 - Final Approval
 - Rejected

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Marking/Label requirement



- All Type Approved Equipment are now given a Equipment Identity clearly displayed on the device/Box

RTTE CC TAT IY SN
"NCA APPROVED: XXX - XX- XX- XXX"

| | | |
|--------|---|--------------------------------------|
| ECE CC | : | ECE COLOUR CODE |
| TAT | : | TYPE APPROVAL TYPE (modular or host) |
| IY | : | ISSUE YEAR |
| SN | : | SEQUENCE NUMBER |

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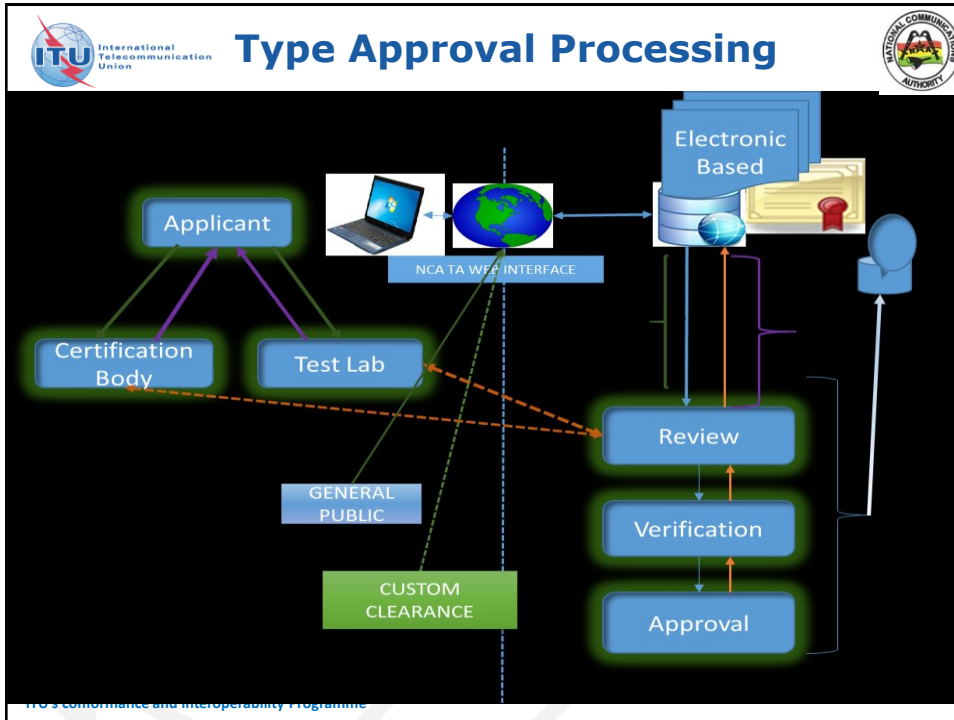


The Authority Of The Mark



- Electronic Communication Equipment Meets all essential requirements by the Authority
- Electronic Communication Equipment is not fake/counterfeit
- Electronic Communication Equipment meets manufacturer's own stated requirements (consumer protection)
- Manufacture/Dealer bears responsibility of breach of rules/conditions under which Type Approval Certificate was issued.


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Sample Of TAC

NCA PRODUCT IDENTIFIER: 772-SH-0E-09C

TYPE APPROVAL CERTIFICATE

ISSUED BY

NATIONAL COMMUNICATIONS AUTHORITY

UNDER THE ELECTRONIC COMMUNICATIONS ACT 2008, ACT 772 AND THE ELECTRONIC COMMUNICATIONS REGULATIONS 2011, L.I. 1991

Attention (Where Available): *Patience Street* **Date of Issue:** *June 13, 2014*

The National Communications Authority hereby grants this Certificate to
Roland Communications, Inc.
(Hereinafter called the Certificate Holder)
No. 55A Building, 177, Theres Road, Citi Park, Accra, Ghana

Based on the favourable assessment of the Test Reports and other relevant Documents submitted to the Authority, This Certificate is **VALID ONLY** for the under mentioned product:

| | |
|--|--|
| APPROVED PRODUCT TYPE | TABLET COMPUTER |
| MODEL NUMBER | 166700-SH |
| BRAND/TRADE NAME | ROLAND |
| PRODUCT NAME | ROLAND 166700-SH PORTABLE TABLET COMPUTER |
| FREQUENCY RANGE (WHERE NECESSARY) | 655900 /DCS 1800 / WCDMA 2100/ GPS 1575/WLAN & BT 2400 |
| EFFECTIVE RADIATED POWER (WHERE NECESSARY) | Band I: 21.75dBm/Band VII: 23.31dBm /R02: 13x: 36.26dBm/ R02: 13x: 14.50dBm /R02: 13x: 14.50dBm/ BT: 4.01dBm |

INTENDED USE OF PRODUCT

The product, ROLAND 166700-SH, is a Portable tablet computer with Wi-Fi, BT, GSM, WCDMA, and GPS and is to be used for data processing and network communication within the stated frequencies and the power levels provided.

The Certificate Holder is hereby authorized to use or sell the above-mentioned product in the Ghanaian Market directly or through its licensed dealers or agents. The Certificate Holder must at all times abide by the provisions in the Type Approval Guidelines and other relevant regulations. The stamp is null and void when the equipment is altered in function and no longer falls within the parameters verified from the accredited Test Lab.

DIRECTOR GENERAL

This Certificate is issued in Pursuance of Section 56(a) of the National Communications Authority Act 2008, Act 780, Section 66 of the Electronic Communications Act 2008, Act 775, Regulation 75-89 of the Electronic Communications Regulations 2011, L.I.1991

PLEASE NOTE: THE MARK "NCA APPROVED- 772-SH-0E-09C" MUST BE VISIBLE ON THE PRODUCT PER THE TYPE APPROVAL GUIDELINES

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Enforcement



- One Requires Dealership license or an appropriate authorisation in order to import or sell electronic communication equipment (ECE).
- They are bound by conditions of license to deal only in Type Approved ECE.
- Importers must inform the NCA of any importation ahead of time
- Two levels of clearance
 - Customs Clearance
 - Regulatory Clearance
- Destination Inspectors from NCA go to the point of entries to inspect all communication equipment being imported into the country.
- Consumer Education on the need to buy approved equipment
- Market Surveillance will be integral part of process.

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Technical Regulations



- Consultation with Ghana Standards Authority to Gazette standards and to be referenced
- Draft Technical regulations underway

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International
Telecommunication
Union

Contribution To ITU-D SG 2



- Submitted NCA TA Procedure as contribution
- Recommended as baseline document for regional harmonization and development MRA for W/A region.

Challenges

- Without a lab, verification and market surveillance are big challenge
- Marking Requirement- liabilities
- NDA – Non Disclosure Agreement request by Vendors
- Porous Ports

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THANK YOU

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