



Conformance and Interoperability (C&I) Validation Workshop for EAC Region

(Nairobi, Kenya, 21-23 Oct. 2015)

C&I Approach in Ghana; The New Type Approval Management System

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The New Type Approval Management System

□What is it?

- An electronic or a web-based application for Type Approval Authorisation for an Electronic Communications Equipment (ECE) to be assembled, used or sold in Ghana
- A search engine for NCA approved ECEs

□The Type Approval;

- The process or a proof by a manufacturer or its Authorised agent of a product that specific essential technical and regulatory requirements have been fulfilled
- Type Approval Certificate is granted to a product that meets a minimum set of regulatory, technical and safety requirements.



The minimum essential technical requirements are to meet the objectives of;

- ❑ International, Regional and National Standards
- ❑ Environmental, Health and Safety requirements
- ❑ Proof of Genuineness
- ❑ EMC requirements
- ❑ Radio Frequency requirements
- ❑ Network Compatibility/Interoperability
- ❑ Quality of Service
- ❑ Consumers value for money of ECE they Buy

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Authority for Action

- ❑ The Authority is empowered under Section 3(n) of NCA Act 769 of 2008
 - ❑ to certify ECE based on compliance with National and International standards
- ❑ Regulations 78 and 79 of the Electronic Communications Regulations L.I.1991
 - ❑ Requires the Authority to ensure that ECE for radio transmission are duly type approved

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Regulatory requirements (1/2)

- ❑ Manufacturers or their Authorized Agents require Type Approval Certificate to manufacture, assemble or sell any ECE in Ghana.
- ❑ Dealers are also required to deal in only Type Approved and Genuine ECE.
- ❑ The approved equipment models come with NCA Type Approval Certificate (TAC) with its unique identifier
- ❑ Importers must inform the NCA of any ECE importation into the country for checks, TAC and final clearance
- ❑ Two levels of clearance
 - ❑ Customs Clearance based on the GC Net Process
 - ❑ Regulatory Clearance

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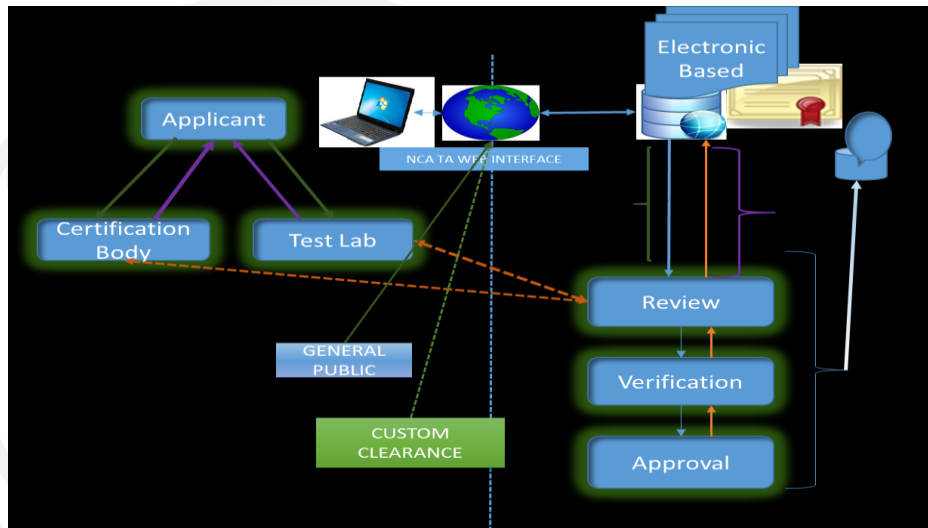


Regulatory requirements (2/2)

- ❑ TAC must always be displayed and visible to the public
- ❑ All communication equipment coming into the country must be inspected and passed by NCA
 - ❑ Destination Inspectors go to the point of entries for inspection
- ❑ Market Surveillance will soon part of the enforcement.
 - ❑ Establishment of a Type Approval Lab

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New Type Approval Management System Architecture



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Application requirements

- ☐ Application Letter on a Company letter head
- ☐ RF, EMC and Safety Test Reports in compliance with adopted Standards
- ☐ Technical description of equipment
- ☐ Certificate of Compliance by CAB or NRA
- ☐ Technical files including schematics, block diagram, component placement and photos
- ☐ Power of attorney where applicable
- ☐ Sample where required
- ☐ Proof of Unique Identifiers (e.g. IMEI, MAC etc..) where applicable
- ☐ Proof of payment of Type Approval fees

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The Application Portal

NCA Application Portal for Type Approval Certificate and Dealership Licence

To apply for Type Approval Certificate or Dealership Licence, [Login](#) to your account OR Contact typeapproval@nca.org.gh for any help.

Type Approval Certificate

Type Approval Certification is proof that specified requirements relating to any ICT product has been fulfilled. The NCA grants Type Approval Certificate to ICT products that meet the minimum set of regulatory, technical and safety requirements.

The NCA Type Approval Certificate is required before any ICT product is allowed onto the Ghanaian market. This is in accordance with section 3 (n) of the NCA Act, Act 769 of 2008, sections 66 and 67 of the Electronic Communications Act, Act 775.

Type Approval Certification is intended for the following group of people:

1. Local and International Vendors and Assemblers;
2. Dealers of ICT equipment for marketing/commercial use;
3. Licensed Operators and Service Providers;
4. Individuals or Companies wishing to import ICT equipment for their own use (i.e. not for marketing/commercial use).

The essence of Type Approval Certification is to ensure the following:

List of Some Approved ECE (1/3)

Type Approval Search


Back

Show entries


Search:


Equipment Type Number	Name of Manufacture	Brand Name	Product Type	Model Number	Details
	Lenovo PC HK Limited	Lenovo	Mobile Phone	P1a42	Details
	SAMSUNG ELECTRONICS CO. LTD	SAMSUNG	MOBILE PHONE	SM-G928C	Details
	SAMSUNG ELECTRONICS CO. LTD	SAMSUNG	MOBILE PHONE	SM-N920C	Details
	Lenovo PC HK Limited	Lenovo	Portable Tablet Computer	Lenovo YT3-X50M	Details
	Lenovo PC HK Limited	Lenovo	Portable Tablet Computer	Lenovo PB1-750M	Details
	RLG COMMUNICATIONS (SHENZHEN LIMITED)	RLG	GSM MOBILE PHONE	EASY95	Details
	Apple Inc.	Apple	iPhone 6S	A1688	Details
	Apple Inc.	Apple	iPhone 6S Plus	A1687	Details
	Apple Inc.	Apple	iPad Mini 4 Cellular	A1550	Details
	Apple Inc.	Apple	iPad mini 4 WiFi	A1538	Details

Product Details (2/3)


MAIN SITE	USER ACCOUNT	APPROVED EQUIPMENT	DEALERSHIP LICENCE
Home / Application Home			
Type Approval:	Product Details		
Back			
Details of Equipment: 			
Product Type:	Dongle		
Brand Name:	SHARP		
Model Number:	SC 112		
NCA Equipment No.:	1X0-7M-0E-0C1		
Product Name:	Dongle		
Intended Use:	Dongle for remote use		
Additional Details for Radio Equipment:			
Frequency Range:	2405-2475		
RF Output Power Radiation:	Tx: 6.061dBm, Rx: 6.100dBm		
RF Output Power Conducted:			
RF Channel Spacing:	71Hz		
RF Output Impedance:			
Type Of Modulation:	GFSK		
Bandwidth:	2MHz		
Software Version:			
Antenna Type:	PCB printed antenna		
Antenna Gain:	2dB		
Technical Variants:	NA		
Details of Certificate of Compliance:			
Issuing Body:	Top Victory Electronics (Taiwan) Co., LTD Self Doc		
Issuing Date:	07/22/2014		
Validity:	Indefinite		
Standards:			
EMC:	EN 301 489-1 V1.9.2 (2011-09) EN 301 489-3 V1.4.1 (2003-08)		
Radio:	EN 300 440-1 V1.6.1 (2010-08) EN 300 440-2 V1.4.1 (2010-08)		
Health And Safety:	EN 62479:2010 EN 60950-1:2006+A11:2009+A12:2011		
Manufacturer's Information:			
Name Of Manufacturer:	Top Victory Electronics (Taiwan) Co., Ltd.		
Address Of Manufacturer:	10F., No 230, Liancheng Rd., Zhonghe Dist., New Taipei City 23553, Taiwan		

Product Details (3/3)

MAIN SITE	USER ACCOUNT	APPROVED EQUIPMENT	DEALERSHIP LICENCE
Home / Application Home			
Type Approval:	Product Details		
Back			
Details of Equipment: 			
Product Type:	Mobile Phone		
Brand Name:	Apple		
Model Number:	A1507		
NCA Equipment No.:	1X0-7H-0C-013		
Product Name:	Apple iPhone 5C		
Intended Use:	This device is a Mobile Phone with multimedia functions (music, application support and video)		
Additional Details for Radio Equipment:			
Frequency Range:	BT-2402-2480 MHz WPL:2412-247		
RF Output Power Radiation:	23dBm(max)		
RF Output Power Conducted:	23dBm(max)		
RF Channel Spacing:	1/5/20/40 MHz		
RF Output Impedance:			
Type Of Modulation:	GFSK, GMSK, QPSK, BPSK, GMSK, QP		
Bandwidth:	1/5/20/40 MHz		
Software Version:	iOS 7.0.1		
Antenna Type:	Internal		
Antenna Gain:	1.31 dBi		
Technical Variants:	NA		
Details of Certificate of Compliance:			
Issuing Body:	CETECOM ICT services GmbH		
Issuing Date:	06/03/2013		
Validity:	Indefinitely		
Standards:			
EMC:	EN 301 511 v.9.0.2, EN 301 908-1 v5.2.1 EN 301 908-2 v5.2.1, EN 301 908-13 v5.2.1		
Radio:	EN 301 511 v.9.0.2, EN 301 908-1 v5.2.1 EN 301 908-2 v5.2.1, EN 301 908-13 v5.2.1 EN 300 440-2 v1.6.1, EN 300 440-2 v1.4.1 EN 300 328 v1.7.1, EN 301 893 v1.7.1 EN 301 489-1 v1.3.1 EN 301 489-17 v2.2.1, EN 301 489-24 v1.5.1		
Health And Safety:	EN 50360:2001 & EN 62311:2008, (IEC 62209-1:2005, IEC 62209-2:2010) EN 60950-1:2006+A11:2010+A12:2011 IEC 60950-1:2009, 2nd Ed)+ A1:2009		
Manufacturer's Information:			
Name Of Manufacturer:	Apple Inc.		
Address Of Manufacturer:	1 Infinite Loop, Cupertino, CA 95014, California, USA		



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Classification of ECE

https://webmail.nca.org.gh/service/home/~/?auth=co&loc=en_US&id=35219&part=3

Equipment Category	Category Name	Category Examples	Fees US\$
Category One	Terminal Equipment	PDA's, Mobile handset s, POS, Tablet s, Telephone set s, IP Phones, Mobile Dongles, etc.	900.00
Category Two	Modular and Low powered Devices	Wi-Fi, Bluetooth, NFC Readers, RFID , Keyless entry cards et c	750.00
Category Three	Class 1 Network Equipment	Routers, Switches, Modems, PBX, tracking devices, etc.	1,100.00
	Class 2 Network Equipment	BSCs, MSCs, BTS , PSTN S switches, Media gateways etc.	1,800.00
Category Four	Radio, Broadcast, Satellite Equipment	UHF/VHF, FM/TV Transmitters, Microwave, VS AT Transceivers)	1,100.00
Category Five	Frequency Dependent Medical Devices	Diagnostic, Ultrasound imaging, visualization and measurement devices	1,600.00
Request to change/replace Type Approval Certificate			200.00

ITU's conformance and interoperability Programme

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A View of the TAC

NCA PRODUCT IDENTIFIER: 7T2-SH-0E-09C

TYPE APPROVAL CERTIFICATE

ISSUED BY



NATIONAL COMMUNICATIONS AUTHORITY

UNDER THE ELECTRONIC COMMUNICATIONS ACT 2008, ACT 778 AND THE ELECTRONIC COMMUNICATIONS REGULATIONS 2011, L.I. 1991

Attention (Where Available): *Peper, Srijoseet*

Date of Issue: *June 13, 2014*

The National Communications Authority hereby grants this Certificate to
Roland Communications Inc.
(Hereinafter called the Certificate Holder)
 of
No. 31A Building, 179, Tropic Road, C/o Park Africa, 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	L66700-KH
BRAND/TRADE NAME	ROLAND
PRODUCT NAME	ROLAND L66700-KH PORTABLE TABLET COMPUTER
FREQUENCY RANGE (WHERE NECESSARY)	GSMD900 /DCS 1800 / WCDMA 2100/ GPS 1575/WLAN & BT 2400
EFFECTIVE RADIATED POWER (WHERE NECESSARY)	Band 1: 22.74dBm/Band V08: 23.13dBm /B02: 13.13-14.16dBm / B02.11g: 14.90dBm /B02.11n: HT20 (2.4GHz):14.80dBm/ BT: 6.01dBm

INTENDED USE OF PRODUCT

The product, ROLAND L66700-KH, 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 same 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 51(d) of the National Communications Authority Act 2008, Act 769, Section 66 of the Electronic Communications Act 2008, Act 775, Regulations 75-79 of the Electronic Communications Regulations 2011, L.I.1991

PLEASE NOTE: THE MARK "NCA APPROVED: 7T2-SH-0E-09C" MUST BE VISIBLE ON THE PRODUCT PER THE TYPE APPROVAL GUIDELINES



TAC Unique Identifier

- ☐ Type Approved Equipment models are now given unique identity marks on the Certificate

ECE 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



Why the TAC Unique Identity?

- ☐ To show that the Certificate is for specific equipment model/category/type
- ☐ ECE meets essential minimum requirements of the Authority
- ☐ Provides public confidence in the Regulator
- ☐ Manufacturer's/Dealer's own declaration that ECE is genuine
- ☐ Manufacture/Dealer bears responsibility for any breach under which TAC was issued.
 - ☐ If equipment is found to be Fake/Counterfeit
 - ☐ If certain key functions (both software and hardware) of the ECE is altered



Awareness

- ☐ Stakeholder forums on the importance of Type Approval
 - ☐ Include GSA, Telcos, Customs, Vendors, Dealers, Freight Forwarders, Consumer Groups etc...
- ☐ Online search for NCA approved ECEs
- ☐ Planned news paper, radio and TV announcements of NCA approved ECE.
- ☐ Planned name and shame



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And now Sanctions!

- ☐ The sanctions specified in the NCA Schedule of Penalties Gazette on 20th April 2015 states that;

“Importation, distribution and sale of ECE which are not certified by the Authority shall attract a penalty ranging from GhC20,000.00 to GhC 50, 000.00”.



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Challenges

- ❑ Lack of testing facilities or access to databases for verification, market surveillance & enforcement, a challenge.
- ❑ Porous port of entries and un-approved routes
- ❑ Less consumer education; budget constraints
- ❑ How to balance b/n universal access obligation, purchasing power and proliferation of un-approved ECEs found in the market

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What Next?

- ❑ **Establishment of a mini type approval labs** to aid in market surveillance activities to cover telecom & broadcast devices
 - ❑ SAR and EMF measurement
 - ❑ RF and Signaling testing for low power devices
 - ❑ DVB-T2 Receivers

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What has been achieved so far?

- ❑ Business plan/feasibility study and proposals conducted - **Sept. 2014**
- ❑ Secured Board Approvals – **Jan. 2015**
- ❑ Budget for equipment approved - **March 2015**
- ❑ Secured (60x60)m office space in the new NCA Ultra Modern building – **July 2015**
- ❑ Technical specifications for procurement of equipment prepared – **Aug. 2015**
- ❑ Contacted known vendors for submission of profile – **Sept. 2015**

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Pending

- ❑ Vendors submission of business profiles – **Oct 2015**
- ❑ Submission of profiles to Public Procurement Authority of Ghana for consideration – **Nov. 2015**
- ❑ Purchases & Delivery of equipment – **March 2016**
- ❑ Installation & Testing – **May 2016**
- ❑ Commissioning & full implementation of Labs- **end of 2Q16**

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The New NCA Ultra Modern Building – Head Office



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NCA web sources related to Type Approvals

- ❑ portal.nca.org.gh
- ❑ www.nca.org.gh
- ❑ Type Approval Guidelines

❑ Contact

- ❑ Typeapproval@nca.org.gh

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Thank you!

isaac.boateng@nca.org.gh

**National Communications
Authority, Ghana**

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