

Legal Aspects of Conformity and Interoperability

“Legal, Policy and Regulatory Aspects of C&I”
15th to 19th November, 2021

**NATIONAL
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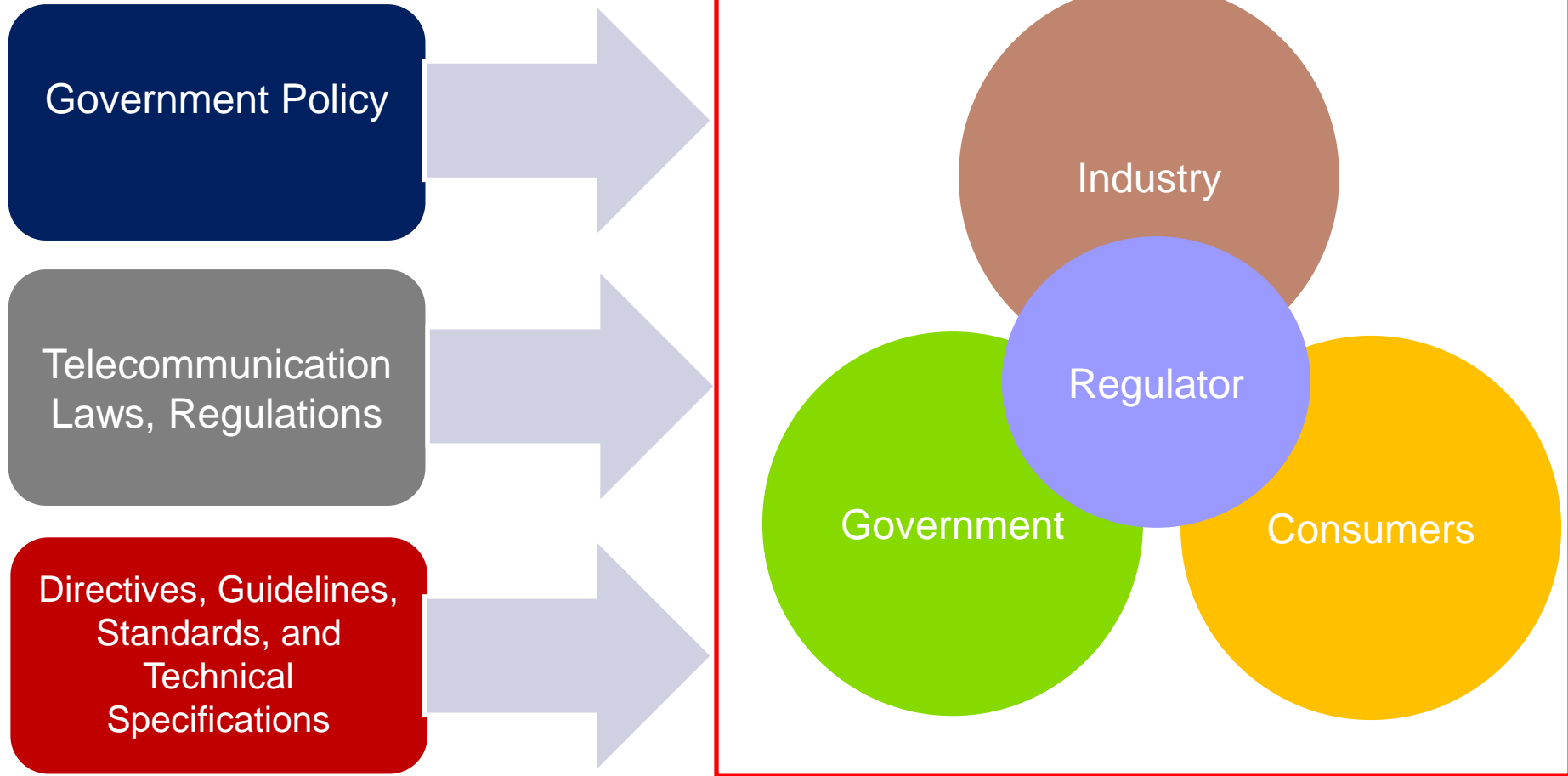


Presentation Outline

- Introduction
- Global C&I outlook, EU, USA, Kenya, Nigeria
- Legal Framework in Ghana
 - Acts and Regulations
 - Guidelines and Directives
 - Standards and Technical Specifications
- On-going Type Approval Regulations
- Inter-Agency Coordination
- Legislation to Promote Market Surveillance
- Sanctions
- Challenges



Introduction



C&I LEGAL FRAMEWORK EU



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Global C&I Outlook – EU

- The Radio Equipment Directive 2014/53/EU (RED) Directive (199/5/EC)¹
 - defines a harmonised regulatory framework for the approval of terminal equipment in the European Union.
- It is based on supplier declaration of conformity to basic requirements intended to ensure that the equipment is safe to use and does not cause interference with other equipment.
- Some countries provide a database of equipment approved in accordance with the EU RED directive³

1. https://ec.europa.eu/growth/sectors/electrical-engineering/red-directive_en

<https://www.itu.int/en/ITU-D/Regional>

[Presence/AsiaPacific/Documents/Session%204%20Telecommunications%20equipment%20approval.pdf](https://www.itu.int/en/ITU-D/Regional/Presence/AsiaPacific/Documents/Session%204%20Telecommunications%20equipment%20approval.pdf)

3. The Croatian Post and Electronic Communications Agency. <http://www.hakom.hr/default.aspx?id=561>

Global C&I Outlook – EU

- The Radio Equipment Directive 2014/53/EU (RED) Directive (199/5/EC)

- Key articles:
 - Essential requirements (Article 3)
 - Provision of information on the compliance of combinations of radio equipment and software(Article 4)
 - Registration of radio equipment types within some categories(Article 5)
 - Making available on the market (Article 6)
 - Conformity assessment procedures (Article 17)
 - Declaration of Conformity (Article 18)
 - CE marking (Article 19)
 - Notified Authorities(Article 23)
 - surveillance Authorities (Article 39)

Source: EU Directive 2014/53. https://ec.europa.eu/growth/sectors/electrical-engineering/red-directive_en



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Global C&I Outlook – EU

- The Radio Equipment Directive 2014/53/EU (RED) Directive (199/5/EC)

- Essential Requirements:
 - 3.1 (a) Protection of health and safety of persons and of domestic animals. (2014/35/EU)
 - 3.1 (b) adequate levels of electromagnetic compatibility. (2014/30/EU)
 - 3.2 Radio equipment shall be so construed that it both effectively uses and supports the efficient use of radio spectrum to avoid harmful interference.

Source: EU Directive 2014/53



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- The Radio Equipment Directive 2014/53/EU (RED) Directive (199/5/EC)

- Essential Requirements:
 - 3.3 Certain categories or classes should also comply with
 - Interworking with accessories, in particular common chargers
 - Interworks via networks with other radio equipment
 - Connected to interfaces of appropriate type throughout union
 - No harm to the network
 - Safe guard and ensure the protection of personal data
 - Protect from fraud
 - Support features to facilitate the usage by disabled users.
 - Radio equipment supporting certain features in order to ensure that only software can be loaded into radio equipment where the compliance of the combination of radio equipment and software is demonstrated

Source: EU Directive 2014/53



Global C&I Outlook – EU

■ EMC Standards

- EN 55022 / EN 55011 (emission)
- EN 61000-4-(2, 3, 4, 5, 6, 8, 9, 10, 11, 12, 13, 16 et 17) (immunity)
- EN 61000-3-2 (Harmonics) / EN 61000-3-3 (Flickers)
- EN 61000-6-(1 - 4) (generic standards)
- EN 55013 (Audio-video)
- EN 55024 (Information technology equipment ITE)
- EN 60945 (maritime equipment)

RADIO-EMC standards

- EN 301 489-(01, 03, 05, 07, 09, 12, 13, 15 et 22) et associated ETSI standards
- EN 300 339 / EN 300 385 / EN 300 386-2

<https://www.itu.int/en/ITU-D/Regional-Presence/AsiaPacific/Documents/Session%204%20Telecommunications%20equipment%20approval.pdf>

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Conformity Assessment Procedures

- Manufacturer may choose:
 - Internal production control
 - EU-type examination
 - Full quality assurance

<https://www.itu.int/en/ITU-D/Regional-Presence/AsiaPacific/Documents/Session%204%20Telecommunications%20equipment%20approval.pdf>

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Internal production control

- Manufacturer must:

1. Ensure all applicable essential requirements are met:
 - i. by applying in full applicable harmonised standards and performing all test suites described in the harmonised standards themselves; or
 - ii. by using other means of his own choice (for example by means of any existing technical specifications, by using partly an applicable harmonised standard, etc.).
The manufacturer has to describe and explain the solutions adopted to meet the essential requirements
2. Document how the essential requirements have been met (including test results)
3. Take all measures necessary in order that the manufacturing process ensures compliance of the manufactured apparatus with the essential requirements

<https://www.itu.int/en/ITU-D/Regional-Presence/AsiaPacific/Documents/Session%204%20Telecommunications%20equipment%20approval.pdf>

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Internal production control -2

- Can only be used for radio equipment and if the manufacturer has used fully harmonised standards
- As for Internal production control plus:
- Perform all essential radio test suites described in the applicable harmonised standard and, if the applicable harmonised standard does not describe all essential radio tests suites, consult a notified body that will define them.

<https://www.itu.int/en/ITU-D/Regional-Presence/AsiaPacific/Documents/Session%204%20Telecommunications%20equipment%20approval.pdf>

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EU-Type Examination

- The manufacturer submits a technical construction file consisting of the results of test suites for all applicable essential requirements to a Notified Body that will issue an opinion within 4 weeks on whether conformity with the requirements of the Directive has been demonstrated.

<https://www.itu.int/en/ITU-D/Regional-Presence/AsiaPacific/Documents/Session%204%20Telecommunications%20equipment%20approval.pdf>

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Full quality assurance

- Can be used for both TTE and radio equipment.
- The manufacturer must operate an approved quality system for design, manufacture, final product inspection and testing which has been assessed by a Notified Body.

<https://www.itu.int/en/ITU-D/Regional-Presence/AsiaPacific/Documents/Session%204%20Telecommunications%20equipment%20approval.pdf>

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Declaration of Conformity

- Whichever conformity assessment route is chosen, the manufacturer must:
- Prepare a declaration of conformity; and
- Affix the CE mark (including notified body number and alert sign, where appropriate) on the apparatus, packaging and accompanying documents.

<https://www.itu.int/en/ITU-D/Regional-Presence/AsiaPacific/Documents/Session%204%20Telecommunications%20equipment%20approval.pdf>

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Testing

- Tests may be performed by the manufacturer or by a third party. The manufacturer remains responsible in all cases for the compliance of his apparatus.

<https://www.itu.int/en/ITU-D/Regional-Presence/AsiaPacific/Documents/Session%204%20Telecommunications%20equipment%20approval.pdf>

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Notified Bodies

- Designated by Member States
- Member States verify that they demonstrate the required level of resources, competence, independence, impartiality and integrity. This is subject to surveillance at regular intervals.
- They identify essential radio test suites, review and give opinions on technical construction files, and assess manufacturers quality assurance systems
- They do not perform testing, prepare test reports, design equipment, or sign or issue a manufacturer's declaration of conformity

<https://www.itu.int/en/ITU-D/Regional-Presence/AsiaPacific/Documents/Session%204%20Telecommunications%20equipment%20approval.pdf>

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Surveillance Authorities

- Appointed by Member States.
- May check and test products sampled in the market or distribution chain under their jurisdiction in accordance with national laws.
- Surveillance activities may be performed as a result of a complaint, random check or as part of a systematic programme.

<https://www.itu.int/en/ITU-D/Regional-Presence/AsiaPacific/Documents/Session%204%20Telecommunications%20equipment%20approval.pdf>

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C&I LEGAL FRAMEWORK USA



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Global C&I Outlook - USA

The Federal Communications Commission (FCC) oversees the authorization of equipment using the radio frequency spectrum in the USA [<http://transition.fcc.gov/oet/ea/>].

- Such equipment may not be imported or marketed unless it meets the technical standards specified by the FCC. Depending upon its capabilities equipment may be subject to:
 - verification (in which manufacturers test the device),
 - declaration of conformity (which requires testing by an accredited test laboratory) or
 - certification (which is issued by the FCC or a designated Telecommunications Certification Body based on test results submitted by the supplier).

- FCC provides a database on equipment authorisations
 - [<https://apps.fcc.gov/oetcf/eas/reports/GenericSearch.cfm>]

[https://www.itu.int/en/ITU-D/Regional-](https://www.itu.int/en/ITU-D/Regional-Presence/AsiaPacific/Documents/Session%204%20Telecommunications%20equipment%20approval.pdf)

[Presence/AsiaPacific/Documents/Session%204%20Telecommunications%20equipment%20approval.pdf](https://www.itu.int/en/ITU-D/Regional-Presence/AsiaPacific/Documents/Session%204%20Telecommunications%20equipment%20approval.pdf)

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FCC Codes of Regulation

- FCC PART 22, 24 & 27 for GSM/WCDMA devices
- FCC PART 15.247 for Bluetooth devices and WLAN (2.4 GHz)
- FCC PART 15.407 for WLAN 802.11a (5GHz)
- FCC PART 15.245 (902-928 MHz band, ISM bands)
- FCC PART 15.225 for RFID (13.56 MHz)
- FCC PART 25 for Satellite communications devices
- FCC PART 90 for Private land mobile devices
- FCC PART 95 for Personal radio devices



Global C&I Outlook - USA

Code of Federal Regulations –(CFR 47) Part 15,

Sets out regulations including technical specifications, administrative requirements and other conditions relating to the marketing of radio frequency devices:

- Labelling requirements
- Inspection by the Commission
- Special Accessories
- Measurement Standards
- User Installation Requirements



Global C&I Outlook - USA

FCC Orders

Order (FCC14-208) adopted December 17, 2014 provides for

- Certifying equipment (Through designated TCBs)
- Pre-grant approvals
- Post-market surveillance
- Updated ISO/IEC standard references
- Laboratory accreditation for certification applications

Source: <https://transition.fcc.gov/oet/ea/presentations/files/nov17/21-EA-First-Report-and-Order-BAR-.pdf>

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Global C&I Outlook - USA

- Electronic Labelling:

Mandates electronic labelling for information required under US rules, such as the FCC identification number and compliance statement, to be displayed on products or otherwise provided with products.

Source: <https://transition.fcc.gov/oet/ea/presentations/files/nov17/21-EA-First-Report-and-Order-BAR-.pdf>

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C&I LEGAL FRAMEWORK CHINA



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Global C&I Outlook - China

People's Republic of China Radio Transmitters
Type Approval consist of three schemes:

- CCC (China Compulsory Certificate):
- SRRC (State Radio Regulatory Commission):
- NAL (Network Access Licence):

Source: [appluslaboratories.com/global/en/what-we-do/service-sheet/china-radio-type-approval-\(ccc,-srrc,-nal\)#:~:text=The%20SRRC%20Type%20Approval%20certification,compliance%20with%20Chinese%20mandatory%20standards.](http://appluslaboratories.com/global/en/what-we-do/service-sheet/china-radio-type-approval-(ccc,-srrc,-nal)#:~:text=The%20SRRC%20Type%20Approval%20certification,compliance%20with%20Chinese%20mandatory%20standards.)

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Global C&I Outlook - China

CCC CERTIFICATION PROCESS

CCC is a conformity marking assessment system, which serves as a **quality and safety mark**. A CCC label can be attached to products to demonstrate compliance with Chinese mandatory standards. The CCC Certificate has a **5-year validity period**. In order to get the CCC mark, there are **three possible routes** depending on product type:

1. CCC Approval: CCC Approval is mandatory for the 158 types of products included in the [CCC approval catalogue](#), which are divided into 22 categories. Factory Inspection is required. The Authority providing CCC Approval is [CNCA](#) (Certification and Accreditation Administration of the People's Republic of China).

2. Self-Declaration of Conformity (SDoC): SDoC is the mandatory route for all the products included in the [CCC SDoC Product List](#). CCC SDoC serves as a declaration by the manufacturer or their Chinese legal representative stating that the product complies with the proper Chinese Standard. For SDoC no factory inspection is required.

3. Voluntary Certification: Voluntary certification applies to products that are not covered by the CCC Approval scope. Voluntary Certification may be obtained via [CCAP](#) (China Certification Center for Automotive Products) Mark Certification. Obtaining the CCAP voluntary mark will serve as compliance proof.

Source: [appluslaboratories.com/global/en/what-we-do/service-sheet/china-radio-type-approval-\(ccc,-srrc,-nal\)#:~:text=The%20SRRC%20Type%20Approval%20certification,compliance%20with%20Chinese%20mandatory%20standards](http://appluslaboratories.com/global/en/what-we-do/service-sheet/china-radio-type-approval-(ccc,-srrc,-nal)#:~:text=The%20SRRC%20Type%20Approval%20certification,compliance%20with%20Chinese%20mandatory%20standards)
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CCC CERTIFICATION STEP-BY-STEP



CCC Product Marking

Once the above process has been approved by CNCA, a CCC certificate will be issued and the manufacturer will be able to mark the product including the product certificate scope defined below. Note that CCC marking needs to be renewed annually.



For mark sizing, the manufacturer has two options:

- Purchase a standard-sized mark from CNCA
- Submit a drawing to CNCA for approval with the CCC mark application and print their own.

Source: [appluslaboratories.com/global/en/what-we-do/service-sheet/china-radio-type-approval-\(ccc,-srrc,-nal\)#:~:text=The%20SRRC%20Type%20Approval%20certification,compliance%20with%20Chinese%20mandatory%20standards](https://appluslaboratories.com/global/en/what-we-do/service-sheet/china-radio-type-approval-(ccc,-srrc,-nal)#:~:text=The%20SRRC%20Type%20Approval%20certification,compliance%20with%20Chinese%20mandatory%20standards)
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SRRC CERTIFICATION PROCESS

The SRRC Type Approval certification is **mandatory** in order to state compliance with Chinese standards **for radio transmission equipment**. Products shall be marked with the SRRC mandatory label to demonstrate compliance with Chinese mandatory standards. The label can be affixed either to the equipment or to the product manual. The SRRC Certificate is issued by [MIIT](#) (Ministry of Industry and Information Technology) and has a **5-year validity period**.

■ SRRC PRODUCT SCOPE:

- The Radio Transmission Equipment category includes but is not limited to:
 - Equipment for radio communications
 - Public mobile communication devices
 - Special Network Devices
 - Satellite equipment
 - 2.4GHz/5GHz wireless devices
 - Low power devices SRD
- **Excluded** from SRRC Scope are ISM equipment, medical devices, electrical transportation systems, high voltage electricity lines and other electrical appliances that emit electromagnetic waves.

Source: [appluslaboratories.com/global/en/what-we-do/service-sheet/china-radio-type-approval-\(ccc,-srrc,-nal\)#:~:text=The%20SRRC%20Type%20Approval%20certification,compliance%20with%20Chinese%20mandatory%20standards.](http://appluslaboratories.com/global/en/what-we-do/service-sheet/china-radio-type-approval-(ccc,-srrc,-nal)#:~:text=The%20SRRC%20Type%20Approval%20certification,compliance%20with%20Chinese%20mandatory%20standards.)

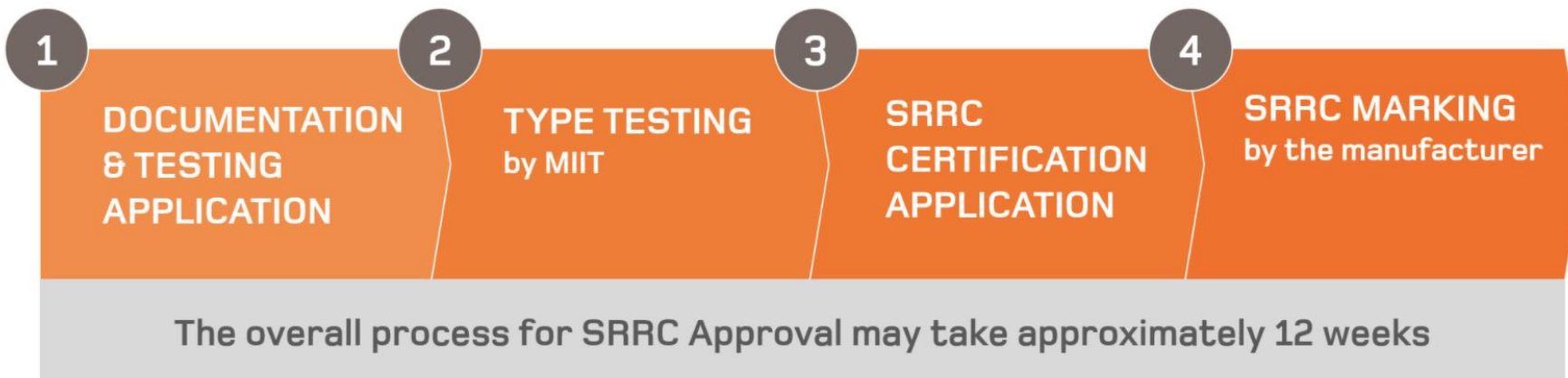
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SRRC CERTIFICATION STEP-BY-STEP



CMIIT ID

- CMIIT ID is a product code, which will be issued on the SRRC Certificate and will serve as the equipment's mandatory label.
- **CMIIT ID format: XXXXYZNNNN. Example: 2019DJ1114**
2019: Year of Approval
D: Equipment Category Code (D is for SRD Code)
J: Manufacture Location (J Represents "Import")
1114: SRRC Approval Serial Number

CMIIT ID: XXXXYZNNNN

Source: [appluslaboratories.com/global/en/what-we-do/service-sheet/china-radio-type-approval-\(ccc,-srcc,-nal\)#:~:text=The%20SRRC%20Type%20Approval%20certification,compliance%20with%20Chinese%20mandatory%20standards.](http://appluslaboratories.com/global/en/what-we-do/service-sheet/china-radio-type-approval-(ccc,-srcc,-nal)#:~:text=The%20SRRC%20Type%20Approval%20certification,compliance%20with%20Chinese%20mandatory%20standards.)

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SRRC MODULE APPROVAL

Modular approval will only be valid if it meets the following requirements:

- The module shall have a data buffer/modulation unit
 - The RF unit of the module should be completely shielded with a shielding cover
 - The module shall use an integrated antenna
 - The module should have clear power supply requirements, and
 - The module complies with other relevant national laws and regulations.
- The manufacturer must indicate on the label (CMIIT ID) that the product uses a SRRC-approved radio module.
- Family approval for module-based equipment is possible for specific products (changes that do not affect RF performance of the product).
 - The embedded modules (WLAN, including Bluetooth) and public mobile communication (including NB-IoT, eMTC) must already be SRRC certified.
 - The State Radio Administration will intensify its supervision and inspection of relevant radio transmitting equipment.

Source: [appluslaboratories.com/global/en/what-we-do/service-sheet/china-radio-type-approval-\(ccc,-srrc,-nal\)#:~:text=The%20SRRC%20Type%20Approval%20certification,compliance%20with%20Chinese%20mandatory%20standards.](http://appluslaboratories.com/global/en/what-we-do/service-sheet/china-radio-type-approval-(ccc,-srrc,-nal)#:~:text=The%20SRRC%20Type%20Approval%20certification,compliance%20with%20Chinese%20mandatory%20standards.)

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NAL/CTA CERTIFICATION PROCEDURE

NAL/CTA (Network Access License) is mandatory for all **telecommunications equipment intended to connect to the public telecommunications network** and has a **3-year validity period**. A NAL application can only be issued once SRRC certification has been successfully granted, since SRRC test results are the basis for the NAL Certification. MIIT is also responsible for NAL Certificate issuance.

Note that modular certifications are not allowed, NAL certification is for end-use product only.

NAL/CTA PRODUCT SCOPE

The NAL product scope is made of the following three categories:

- Telecommunications Terminal Equipment (i.e, Fax machine, BP Machines, ...)
- Radio Telecommunication Equipment (i.e, Radio Station, Satellite Earth Stations, ...)
- Internet devices between the network (i.e, Optical Transmission Equipment, Network Access Equipment, ...)

Source: [appluslaboratories.com/global/en/what-we-do/service-sheet/china-radio-type-approval-\(ccc,-srrc,-nal\)#:~:text=The%20SRRC%20Type%20Approval%20certification,compliance%20with%20Chinese%20mandatory%20standards.](http://appluslaboratories.com/global/en/what-we-do/service-sheet/china-radio-type-approval-(ccc,-srrc,-nal)#:~:text=The%20SRRC%20Type%20Approval%20certification,compliance%20with%20Chinese%20mandatory%20standards.)

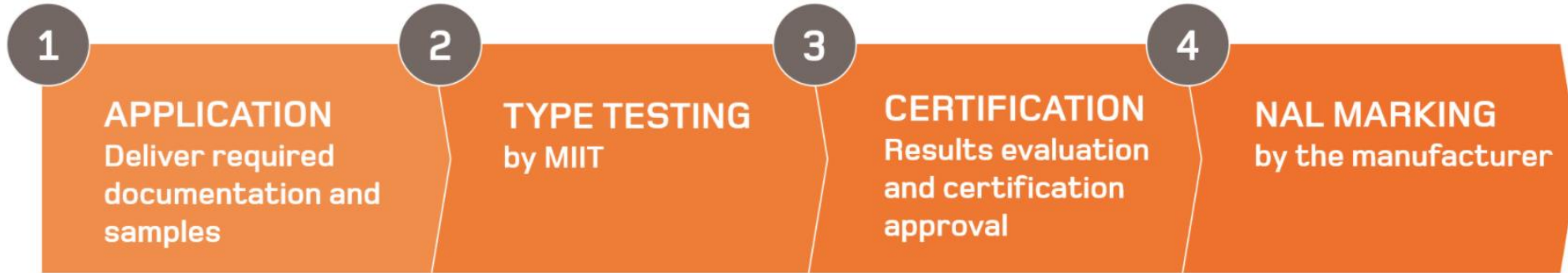
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Global C&I Outlook - China

NAL/CTA CERTIFICATION STEP-BY-STEP



The overall process for NAL Approval may take approximately 16 weeks

NAL MARKING BY MIIT

- The NAL label is issued by MIIT once the application for certification is validated and the certificate is granted. The product must be marked before it is imported, sold, and commercialized in China. The label will include the certification number of the equipment and a specific code.



Source: [appluslaboratories.com/global/en/what-we-do/service-sheet/china-radio-type-approval-\(ccc,-srrc,-nal\)#:~:text=The%20SRRC%20Type%20Approval%20certification,compliance%20with%20Chinese%20mandatory%20standards.](http://appluslaboratories.com/global/en/what-we-do/service-sheet/china-radio-type-approval-(ccc,-srrc,-nal)#:~:text=The%20SRRC%20Type%20Approval%20certification,compliance%20with%20Chinese%20mandatory%20standards.)

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C&I LEGAL FRAMEWORK RUSSIA



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Global C&I Outlook - Russia

The Russian regulations that must be met by the products to be introduced in the Russian market are divided into different certification schemes or approval systems.

Products may be subject to one or a combination of several mandatory approval systems. Approval is mandatory for radio transmitting devices and telecom terminal devices.

The different schemes products may be subject to are:

- EAC
- FSS Notification
- FAC
- RFC Statement

Source <https://www.appluslaboratories.com/global/en/what-we-do/service-sheet/russia-radio-type-approval>



Global C&I Outlook - Russia

SUMMARY OF EAC PROCESS

- The EAC certificate or EAC declaration is the key document required for companies wanting to export to CU (Custom Union) countries, also known as EAEU (Russia, Belarus, Kazakhstan, Armenia and Kyrgyzstan). This document is needed both for sales and customs clearance procedures. The EAC certificates of the EAEU apply in all member states within the EAEU and are valid for up to 5 years.
- The Certification or Declaration may be applicable depending on product type. A Local Representative is required.
- The EAC certification process is based on in-country testing, performed by accredited labs. The accredited certification bodies are responsible for reviewing and assessing all technical documentation (test reports included) and issuing the EAC certificate.
- The EAC declaration process can make use of the already performed CE testing. Therefore, neither in-country testing nor assessment by a Certification Body are required.

Source <https://www.appluslaboratories.com/global/en/what-we-do/service-sheet/russia-radio-type-approval>

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Global C&I Outlook - Russia

THERE ARE TWO MAIN REGULATIONS UNDER EAC APPROVAL:

- **Technical regulation TR CU 004/2011** on safety of low voltage systems, which applies to all low-voltage devices intended for an alternating current of 50 to 1,000 volts and a direct current of 75 to 1,500 volts. According to TR CU 004/2011, the following devices are subject to the EAC Certification:
 - household electrical appliances
 - personal electronic data processing machines
 - devices that can be connected to electronic data processing machines
 - electrical tools
 - electronic musical instruments
 - cables
 - automatic and safety switches
 - electrical distribution
 - electrical control units

- **Technical Regulation TR CU 020/2011** applies to all devices that can generate electromagnetic interference or whose functionality is dependent on the influence of external electromagnetic interference. According to TR CU 020/2011, the following products are subject to the EAC Certification [5]:
 - household electrical appliances
 - personal electronic data processing machines
 - devices that can be connected to electronic data processing machines
 - electrical tools
 - electronic musical instruments

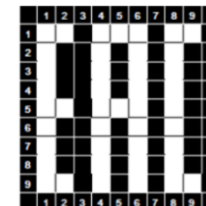
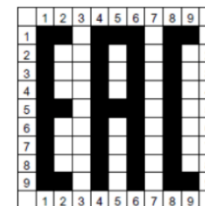
Source <https://www.appluslaboratories.com/global/en/what-we-do/service-sheet/russia-radio-type-approval>



Global C&I Outlook - Russia

EAC Labelling Requirements

- The EAC certification mark confirms the compliance of the goods with the norms of the Eurasian Customs Union. EAC marking indicates that marked products have passed all assessment procedures. Special requirements apply to EAC marking:
- The EAC logo must be put on products covered by the EAC certificate or declaration.
- The label must contain three letters ('E', 'A' and 'C') written in a single font. Marking should be applied to a contrasting background and must be at least 5 mm of size.
- The label should be placed on each product unit, the packaging and the documentation and, if possible, located next to the manufacturer's trademark. The label should be clearly visible during the lifetime of the product.
- The label must be placed directly on the product unit (if possible) and/or tag (if any) as well as on the packaging and technical documentation



The EAC label should be put on products before passing customs clearance.

Source <https://www.appluslaboratories.com/global/en/what-we-do/service-sheet/russia-radio-type-approval>

Global C&I Outlook - Russia

FSS NOTIFICATION PROCESS

- FSS Notification is a mandatory permission for the use of products with cryptographic (encryption) capabilities in Russia. The encryption notification issued by the Federal Security Service (FSB – Federalnaya Sluzhba Bezopasnosti) – is an approval document proving the notification of the State regarding the use of cryptographic (encryption) technology by a product/device that is to be imported to, or exported from, a country member of the Eurasian Community.
- The list of product categories subject to the registration of the FSS Notification is stipulated by the Decision of the Eurasian Economic Commission No. 30 as of April 21 2015. Generally, if the communication device has any encryption functions it will require the FSS Notification. The list of products subject to FSS Notification depends on products' HS Codes.
- A Local Representative is required and no testing activity is needed to obtain the FSS Notification. A power of Attorney shall be signed from the petitioner in order to apply to the Federal Security Service. Lead-time is typically from 15 to 20 working days and the validity period is typically 5 years. This scheme is applicable to all Custom Union countries.

Source <https://www.appluslaboratories.com/global/en/what-we-do/service-sheet/russia-radio-type-approval>

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Global C&I Outlook - Russia

FAC APPROVAL PROCESS

- FAC (Federal Agency of Communication) approval is required for most telecom and wireless equipment devices. This document is required for products that connect to a fixed network or wireless network.
- The form type of conformity assessment can be FAC Certificate or FAC Declaration depending on the product type. For equipment not listed for FAC Certification, the FAC Declaration is required.
- The **FAC Certification** requires in-country testing performed by accredited test laboratories. Typically one sample with RF antenna connector(s) conducted is needed for carrying out the test activity required tests. The FAC certification allows for the approval of product series or families under a single certificate. The FAC Certification allows for series or families of approvals into under one certificate. The lead time can easily take be between 3-4 months. The validity of the FAC Certificate is 3 years.
- The **FAC Declaration** does not require in-country testing. Only a single model product type shall be specified can appear on the FAC Declaration (no series or/no families of approvals are allowed). The lead time to get the FAC Declaration is typically takes 4-6 weeks. The declarant establishes the validity of the Declaration of Conformity, which is (typically 5 years). There are no special national markings for the FAC Declaration / FAC Certification and both cases require a Local Representative.

Source <https://www.appluslaboratories.com/global/en/what-we-do/service-sheet/russia-radio-type-approval>

NATIONAL COMMUNICATIONS AUTHORITY

Division



Global C&I Outlook - Russia

RFC STATEMENT RADIO TYPE APPROVAL PROCESS

The RFC (Radio Frequency Conclusion) Statement **issued by the Government Radio Frequency Center** is a document required for the importation of radio electronic, high-frequency devices (HFD) and their components to the Russian Federation. The statement confirms that the product complies with the specifications and operating conditions approved by the State Commission for Radio Frequencies (SCRF) (also known as GKRCH). This approval can only be used in Russia.

The RFC Statement is required for the registration of the license of the Ministry of Industry and Trade (Minpromtorg License).

The following steps must be followed when applying for the RFC Statement:

- Applying to Roskomnadzor (Federal Telecommunication authority) for a Samples Import Licence. When the license has been obtained, the product can be imported over the next 6 months to be tested.
- Applying to the Radio-Frequency Center for testing. In-country testing is required by the National Authority itself.
- Preparing relevant technical documentation for Authority experts.
- The RFC performs in-country testing and issues a test report. The scope of the tests is determined individually for each product according to GKRCH's decision and Roskomnadzor's requirements. The most frequently tested parameters are general RF aspects, including: transmission power, maximum EIRP, maximum spectral density, channel width, etc.
- Reporting the tests and preparing the RFC Conclusion.
- After the RFC Conclusion has been obtained, it can be added to the Roskomnadzor register in order to confirm that the product meets all necessary requirements and can be legally imported.

No family approval is allowed for the RFC Statement. In the case of different variants coexisting within a product family, each model will need to be tested in order to obtain this specific RF approval. One modified sample is typically required for carrying out the test activity. The lead time is between 30 and 40 working days. The validity of the RFC Statement is indefinite and there are no special national markings for the RFC Conclusion.

NATIONAL COMMUNICATIONS AUTHORITY

Division

Source <https://www.appluslaboratories.com/global/en/what-we-do/service-sheet/russia-radio-type-approval>



C&I LEGAL FRAMEWORK KENYA



NATIONAL COMMUNICATIONS AUTHORITY

Division

Global C&I outlook- Kenya

- Kenya Information and Communications (Importation, Type Approval and Distribution of Communications Equipment) Regulations, 2010
- Entities are required to apply for Type Approval according to administrative procedures specified in the Regulations and through an application form on the Authority's website.

Source: <https://www.ca.go.ke/>

NATIONAL COMMUNICATIONS AUTHORITY

Division



Global C&I outlook- Kenya

- Key Sections in the Regulations
 - Type Approval label for terminal or network equipment
 - Conditions for importation and distribution
 - List of equipment
 - Re –exportation of equipment
 - Capacity of the importer or distributor
 - Import and sale restrictions
 - Dsiposal of used equipment

Source: Kenya Information and Communications (Importation, Type Approval and Distribution of Communications Equipment) Regulations, 2010



NATIONAL COMMUNICATIONS AUTHORITY

Division

Global C&I outlook- Kenya

- Type approval label for terminal or network equipment.
 1. A service provider shall affix a type approval label in its entire communications terminal or network equipment.
 2. Every supplier, importer or distributor shall ensure that all equipment offered for sale or private use have valid type approval or type acceptance certificates issued by the Commission and is clearly affixed with a type approval label issued by a recognized Commission containing
 - (a) the logo of the Commission;
 - (b) the type of the equipment; and
 - (c) the alphanumeric identifications of the equipment

Source: Kenya Information and Communications (Importation, Type Approval and Distribution of Communications Equipment) Regulations, 2010



NATIONAL COMMUNICATIONS AUTHORITY

Division

Global C&I outlook- Kenya

■ 17. Conditions for importation and distribution.

1. A person shall not supply, import or distribute electronic communications equipment unless that person has a licence granted by the Commission
2. A licensed supplier, importer or distributor of electronic communications equipment shall ensure that
 - (a) the equipment is type approved by the Commission; and
 - (b) customers for radio communications equipment have radio communications licences from the Commission.
3. Notwithstanding paragraph (1), a person may import into Kenya any type approved terminal electronic communication equipment where the equipment is solely for personal use.
- 4 A person shall not sell electronic communication equipment sell at a place other than a shop or a distribution centre of a licensed supplier, importer or distributor.

Source: Kenya Information and Communications (Importation, Type Approval and Distribution of Communications Equipment) Regulations, 2010



NATIONAL COMMUNICATIONS AUTHORITY

Division

Global C&I outlook- Kenya

■ Lists of equipment.

1.The Commission shall from time to time publish a list of prohibited equipment.(2) A service provider shall not supply, import or distribute for use any equipment prohibited by the Commission.19.

■ Re-exportation of equipment.

1. A supplier, importer or distributor who wishes to import and re-package equipment for re-exportation or transshipment shall apply for a permit from the Commission.
2. Prior to the importation of any equipment under this regulation, the supplier, importer or distributor shall furnish or cause to be furnished to the Commission full particulars of the respective equipment and the business the supplier, importer or distributor is involved in.
3. A supplier, importer or distributor who imports and repackages equipment for re-exportation or transshipment, equipment imported without a permit issued under paragraph (1) commits an offence

Source: Kenya Information and Communications (Importation, Type Approval and Distribution of Communications Equipment) Regulations, 2010



NATIONAL COMMUNICATIONS AUTHORITY

Division

Global C&I outlook- Kenya

- Capacity of the importer or distributor.

The Commission shall not issue a permit to a supplier, importer or distributor unless the Commission is satisfied that the supplier, importer or distributor:

- (a) is capable of conducting the business;
- (b) has qualified and competent technical and supporting staff;
- (c) has a suitable shop or distribution centre; and
- (d) meets any other criteria determined by the Commission.

- Import and sale restrictions.

The Commission may in consultation with the relevant Government agencies, restrict the importation or sale within Kenya of any communications or other apparatus, where it is of the opinion that the equipment or apparatus may cause damage or harmful interference to communications networks or is a risk to human health or the environment.

Source: Kenya Information and Communications (Importation, Type Approval and Distribution of Communications Equipment) Regulations, 2010



Global C&I outlook- Kenya

- Disposal of equipment.

(1) The equipment which has been brought for type approval and which due to destructive tests or other reasons the Commission determines as not being suitable for return to the applicant, may be destroyed by the Commission after giving thirty days notice for objection to the applicant.

(2) A person who is aggrieved by the decision of the Commission made under this Regulation may appeal to the Tribunal

Source: Kenya Information and Communications (Importation, Type Approval and Distribution of Communications Equipment) Regulations, 2010



NATIONAL COMMUNICATIONS AUTHORITY

Division

C&I LEGAL FRAMEWORK NIGERIA



NATIONAL COMMUNICATIONS AUTHORITY

Division

Global C&I Outlook - Nigeria

■ Nigerian Communications Act 2003

- mandated the Nigerian Communications Commission (NCC) to establish and enforce standards for all telecommunications equipment in operation in the Federal Republic of Nigeria to ensure that they operate seamlessly and safely within the Nigerian telecommunications environment.

- NCC largely implements international standards and recommendations from:
 - The International Electrotechnical Commission (IEC) and its International Special Committee on Radio Interference (CISPR);
 - The European Committee for Electrotechnical Standardization (CENELEC); and
 - The European Telecommunications Standards Institute (ETSI).

- Type Approval Regulations, 2008

- Type Approval Guidelines issued pursuant to the Type Approval Regulations

Source: www.ncc.gov.ng

NATIONAL COMMUNICATIONS AUTHORITY

Division



Global C&I Outlook - Nigeria

- Type Approval Regulations, 2008

Key sections

Section 6 – Working Group on Equipment standards

Section 9 – Conditions for supplying Communications Equipment

Section 12 – Labelling of approved Equipment Types

Section 21,21, 23 - Investigations

Source: www.ncc.gov.ng



NATIONAL COMMUNICATIONS AUTHORITY

Division

Global C&I Outlook - Nigeria

- Type Approval Regulations, 2008

Working Group on Standards

The Commission shall convene a Working Group on Equipment Standards, comprising knowledgeable industry representatives and other stakeholders to ensure that timely recommendations are made to the Commission regarding the list of Equipment Types, applicable Type Approval Standards and processes, and other implementation of these Regulations.

Source: www.ncc.gov.ng



NATIONAL COMMUNICATIONS AUTHORITY

Division

Global C&I Outlook - Nigeria

■ Type Approval Regulations, 2008

Conditions for Supplying Communications Equipment

1 An Equipment Holder may use or supply communications equipment for a communications network in Nigeria if

- (a) the Commission has approved the Equipment Type of the equipment ; or
- (b) the Equipment Type is exempted from Type Approval pursuant to Regulation 19 or Regulation 20.

2 For the avoidance of doubt, the Equipment Holder does not need to be the applicant for the Type Approval of the Equipment Type.

Source: www.ncc.gov.ng



NATIONAL COMMUNICATIONS AUTHORITY

Division

Global C&I Outlook - Nigeria

■ Type Approval Regulations, 2008

Labelling

12.(1) Every Equipment Holder shall ensure that each item of communications equipment sold and having an approved Equipment Type has a label in one or more of the following places :

- (a) on the equipment itself ; or
- (b) in the accompanying documentation.

(2) Labels shall comply with the format and other requirements identified in the Type Approval Guidelines



Global C&I Outlook - Nigeria

■ Type Approval Regulations, 2008

Investigations

21 The Commission may at any time perform tests on communications equipment or request the supply of test and other supporting documentation assembled by an Equipment Holder under these Regulations and the Type Approval Guidelines.

22. If test results obtained under Regulation 21 are unsatisfactory or inconclusive the Commission may require that further tests be performed at the cost of the Equipment Holder.

23. The Commission may investigate the use or supply of communications equipment by an Equipment Holder pursuant to section 61 of the Act and in so doing, it may exercise its powers of information gathering pursuant to section 64 of the Act.

Source: www.ncc.gov.ng

NATIONAL COMMUNICATIONS AUTHORITY

Division



C&I LEGAL FRAMEWORK GHANA



NATIONAL COMMUNICATIONS AUTHORITY

Division

Legal framework Ghana

Acts and Regulations which govern Electronic Communication Equipment (ECE) placement on the Ghanaian market

S.N	Laws
1	National Communications Authority Act, 2008, Act 769
1.a	Section 3 (n) of the Act 769 empowers the NCA to certify and ensure the testing of communications equipment for compliance with national and international standards; environment, health and safety standards including electromagnetic radiation and emissions.
2	Electronic Communications Act, 2008, Act 775
2.a	Sections 66 and 67 of the Electronic Communications Act of 2008, Act 775, on developing standards for Terminal Equipment

S.N	Regulations
3.	Electronic Communications Regulations, 2011, L.I. 1991
3.a	Regulations 78 and 79 of the Electronic Communications Regulations, 2011, L.I. 1991 empowers the Authority to approve communications equipment and also put in place both the standards and mechanism for the approval.
3.b	Regulation 12 (5) of the Electronic Communications Regulations, 2011, L.I. 1991 “A person who provides equipment and incidental services to operators of private communications services on an individual contract basis, and who either does or does not request and use radio spectrum allocation from the Authority, shall require a dealer's licence to provide the equipment or services. “
4	Electronic Communications (Rules of Procedure of the Electronic Communications Tribunal) Regulations 2016, LI 2235 To hear disputes related to electronic communications



Legal Framework Ghana - Cont.

- The Authority also issues Guidelines and directives to operators in the telecommunications industry under Section 3 (r) of Act 769, for the purpose of enforcing its mandate under the Act.

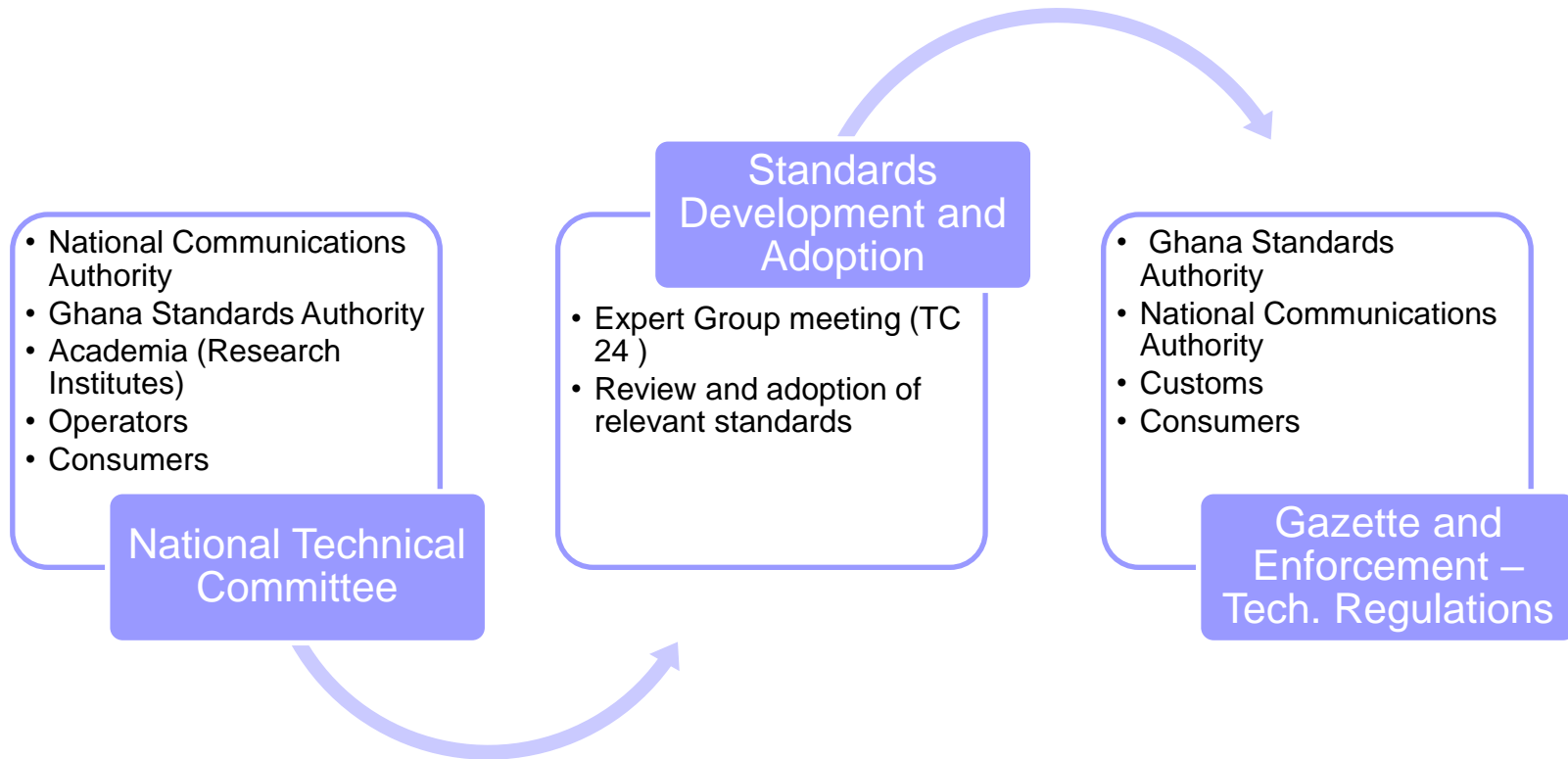
S.N	Guidelines and Directives
1	Type Approval Guidelines, 2015

- Pursuant to the Electronic Communications Equipment (ECE) Regulations, the NCA will also make available the following guidelines:
 - Guidelines on Submission of Samples of ECE to the NCA
 - Guidelines on Marking of Type Approved ECE



Standards Setting

- ❑ Electronic Communication Equipment Standards in Ghana are developed by an inter agency National Technical Committee.



Technical Specifications (TS)

- Develops specifications for electronic communication equipment intended to be imported/manufactured for used in Ghana.
- Used as technical basis for proof of compliance by equipment with essential requirements specified by the NCA.

Developed through:

- I. General Committee
- II. Sub-committees



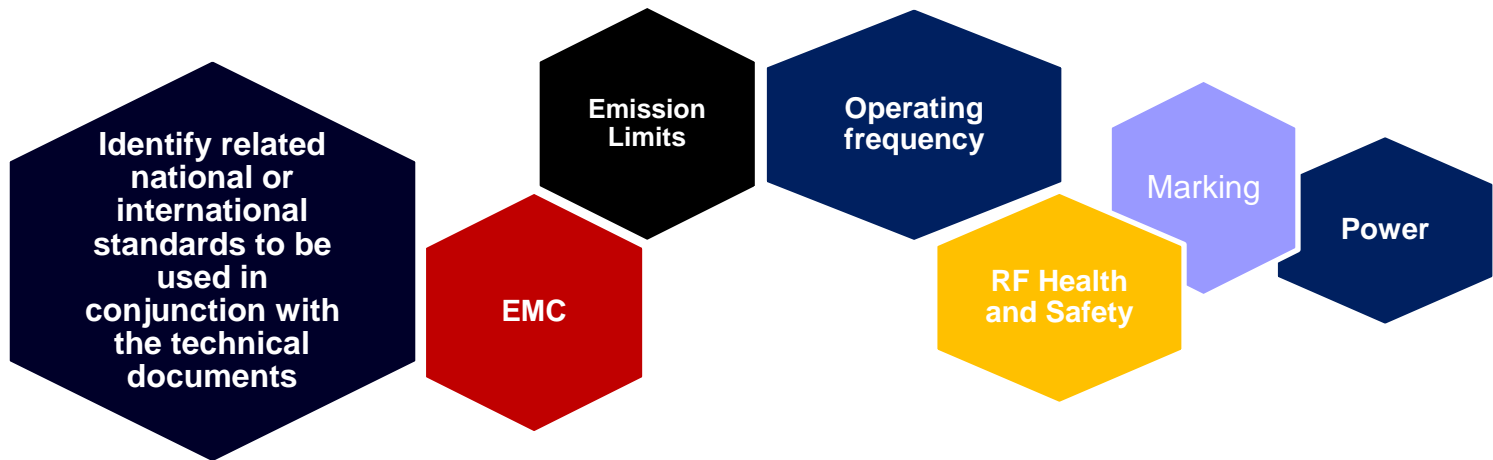
TS - Objective

specify technical requirements to serve as input to the equipment compliance work of the NCA, as well as to the standardization of the telecommunications/ICT industry in Ghana.



TS Scope

The scope of the specification cover minimum technical requirements



TS – Current Sub-Committee's

1. Ultra Wide Band (UWB) devices
2. TV White Space equipment
3. Landmobile equipment
4. Short Range Radio Devices (review)
5. Wireless Broadband Access (WBA) equipment
6. Electronic Communication Equipment Labelling
7. Internet of Things (IoT)
8. Dedicated Short Range Communications and Intelligent Transport Systems
9. Cordless Telephone and Telecommunications Systems
10. Cellular Mobile Terminals
11. Cellular Base Stations and Repeater systems
12. Telecom Dealers Guidelines
13. Cyber Security Systems – (Machine-to-Machine (M2M), Network Functions Virtualisation, etc.)



Upcoming Type Approval Regulations

Draft Regulations

5 Electronic Communications Equipment (Type Approval) Regulations

Scope of
the
Regulations

Testing of Electronic Communication Equipment (ECE)

Marking

Monitoring and Surveillance

Port Inspections

Consumer Guarantees

Obligation of Market Players

Type Approval Application Requirements and Procedure

Importation, Distribution, Use and Disposal of Used ECE



Obligations of Manufacturers

When passed into Law, the Regulations shall ensure Manufacturers of Electronic Communication Equipment:

- ❑ take action to eliminate risk posed by Electronic Communications Equipment they place on the market.
- ❑ ensure that Electronic Communication Equipment bears a type, batch, or their elements allowing for their identification.
- ❑ affix approved NCA marking on all approved Electronic Communication Equipment to allow for their identification.



Obligations of Dealers

When passed into Law, the Regulations shall ensure Dealers of Electronic Communication Equipment :

- ❑ place only type approved Electronic Communications Equipment on the market
- ❑ indicate their name, registered trade name or trade mark and the address at which they can be contacted on the Electronic Communications Equipment.
- ❑ cooperate with the Authority on any action taken to eliminate the risks posed by Electronic Communications Equipment which they have placed on the market.



Consumer Guarantees

When passed into Law, the Regulations shall enshrine the following guarantees for consumers of Electronic Communication Equipment irrespective of the form in which the purchase is done :

- Statutory Warranty
- After Sales Service
- Repair/Replace/Refund/reduced where Electronic Communication Equipment purchased turns out to faulty or do not work as advertised

Inter-Agency Coordination

Ministry of Communications and Digitalisation (MoCD)

- Policy

National Communications Authority (NCA)

Ghana Standards Authority (GSA)

Radiation Protection Institute (RPI)

- Standardisation
- Pre-market Surveillance

Custom Excise and Preventive Service (CEPS)

National Security Council

Ghana Police Service

Ghana Immigration Service

Ghana Ports and Harbours Authority

- Market Surveillance
- Post-market Surveillance



NATIONAL COMMUNICATIONS AUTHORITY

Division

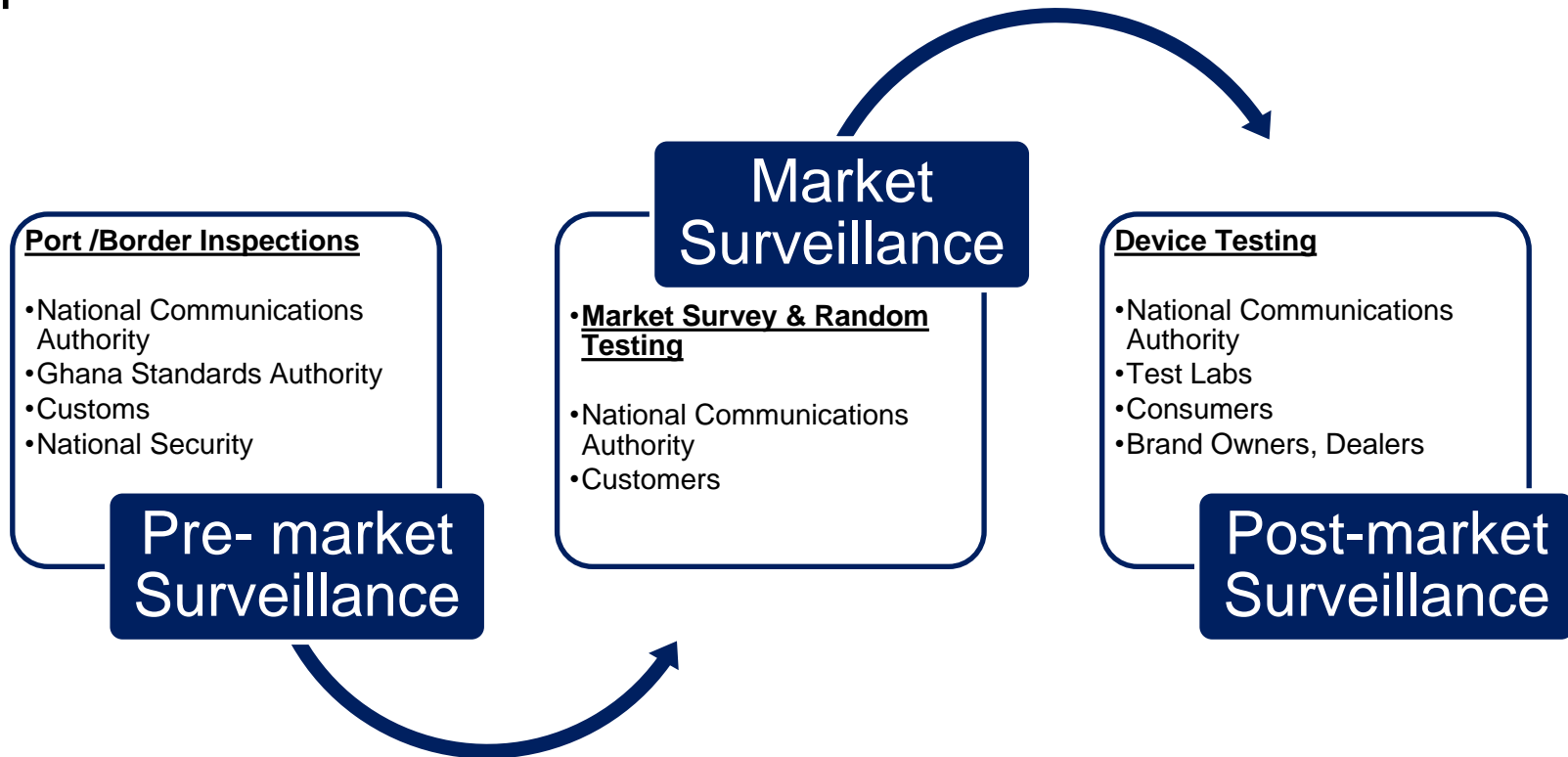
Inter-Agency Coordination

S.N	Description	Agencies
1	Policy	Ministry, NCA
2	Acts and Regulations	Parliament, Ministry, NCA
3	Directives and Guidelines	NCA
4	ECE Authorisation & Market Placement	NCA, Customs
5	Standards Setting	NCA, Ghana Standards Authority, Academia, Industry
6	Market Surveillance	NCA, Customs, Ghana Police Service, Ghana Immigration Service, Customs, National Security



Market Surveillance

The Type Approval Regulations makes provision to promoted market surveillance of ECE in Ghana.



Market Surveillance Cont.

When passed into Law, the Regulations shall mandate the National Communications Authority to:

- perform market surveillance activities from time to time to ensure that only type approved Electronic Communications Equipment are sold in Ghana
- request for sample units of Electronic Communication Equipment and supporting documentation for testing at the Authority's Labs or designated Laboratory.
- Seize into its custody equipment that are not in compliance to the Regulations



Sanctions

Importation, distribution and sale of Electronic communications equipment which are not type approved by the Authority attract a penalty in accordance with the Authority's Schedule of Penalties.



Sactions – Sale of Unapproved Communication Equipment

- Importation, distribution and sale of electronic communications equipment that are not certified by the Authority.
- Penalty-
 - A fine ranging from GH¢20,000 to GH¢50,000



Sactions - Illegal Operations

- Selling or manufacturing any system, equipment, card, plate or other device or offering for sale, producing, distributing electronic communications service without a licence contrary to Section 73(1) of the EC Act 775.

- Penalty-
 - An offence which is liable on summary conviction to a fine of not more than 3000 penalty units or to a term of imprisonment of not more than five years or to both.

 - Where the offence is committed by a corporate entity that entity is liable to a fine of not more than 9000 penalty units and each director of that entity shall be deemed to have committed the offence.

Sanctions– Communication Equipment and Systems

- Installation, establishment and operation of communications equipment and systems without authorisation from the Authority.
- Assembling or manufacturing of communication equipment and systems without authorisation from the Authority (Regulation 87 of the L.I. 1991)
- Penalty -
 - Seizure and confiscation of communications equipment and systems by the Authority.



Sanctions - False Information

- Knowingly giving false or misleading information to the Authority contrary to Section 74 of Act 775.
- Penalty-
 - An offence which is liable on summary conviction to a fine of not more than one thousand penalty units or to a term of imprisonment of not more than three years or to both.

Challenges

Parallel Imports

Government Bureaucracy



Thank You!!! Any Questions?

