

Combating Counterfeit ICT Devices through C&I Testing and Market Surveillance

Speaker: Dr. Roland Yaw Kudozia

Presentation Outline

- ❑ Background
- ❑ C&I Regime -The Case of Ghana
 - The objective of Ghana's C&I Regime
 - Components of Ghana's C&I Regime
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 - Regulatory Requirements
 - C&I Testing Infrastructure
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 - C&I Awareness
- ❑ Joint Program with ITU and Technical Cooperation
 - Overview of ITU-NCA C&I Training for Africa
 - Observations
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- ❑ Recommendations

Background

Counterfeit trademark goods refer to "any goods, including packaging, bearing without authorization a trademark which is identical to the trademark validly registered in respect of such goods, or which cannot be distinguished in its essential aspects from such a trademark, and which thereby infringes the rights of the owner of the trademark in question under the law of the country of importation"¹.

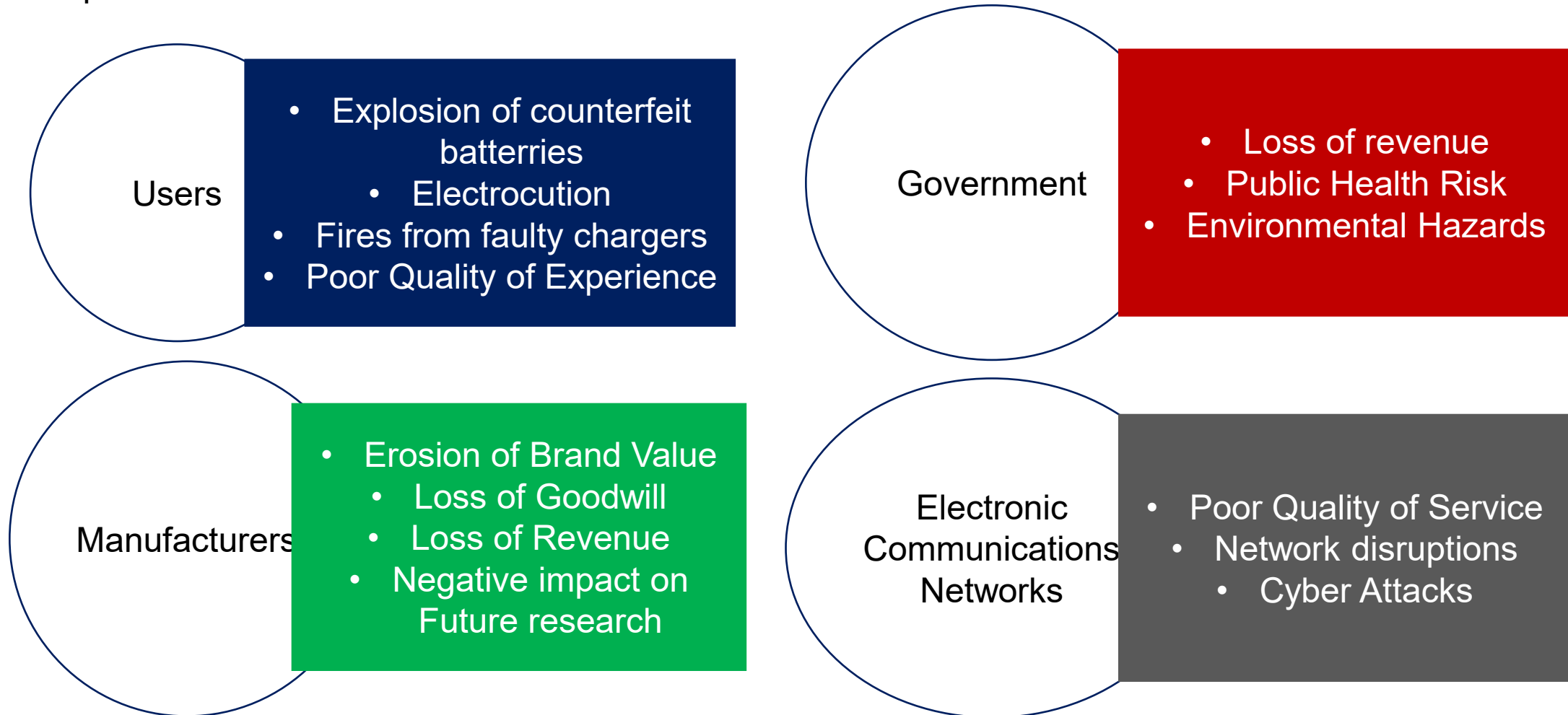
Counterfeit ICT devices are often cheaper, making them a preferred choice for most consumers compared to original devices which are relatively expensive².

However, counterfeit ICT devices are mostly not tested to rigorous technical and regulatory requirements, and therefore pose many challenges to users, original manufactures, networks and governments, particularly in the Africa region².

*Source: 1. The WTO's Agreement on Trade-Related Aspects of Intellectual Property Rights (the TRIPS Agreement, 1994)
2. ITU-T STR-QTR-CICT 2017*

Background

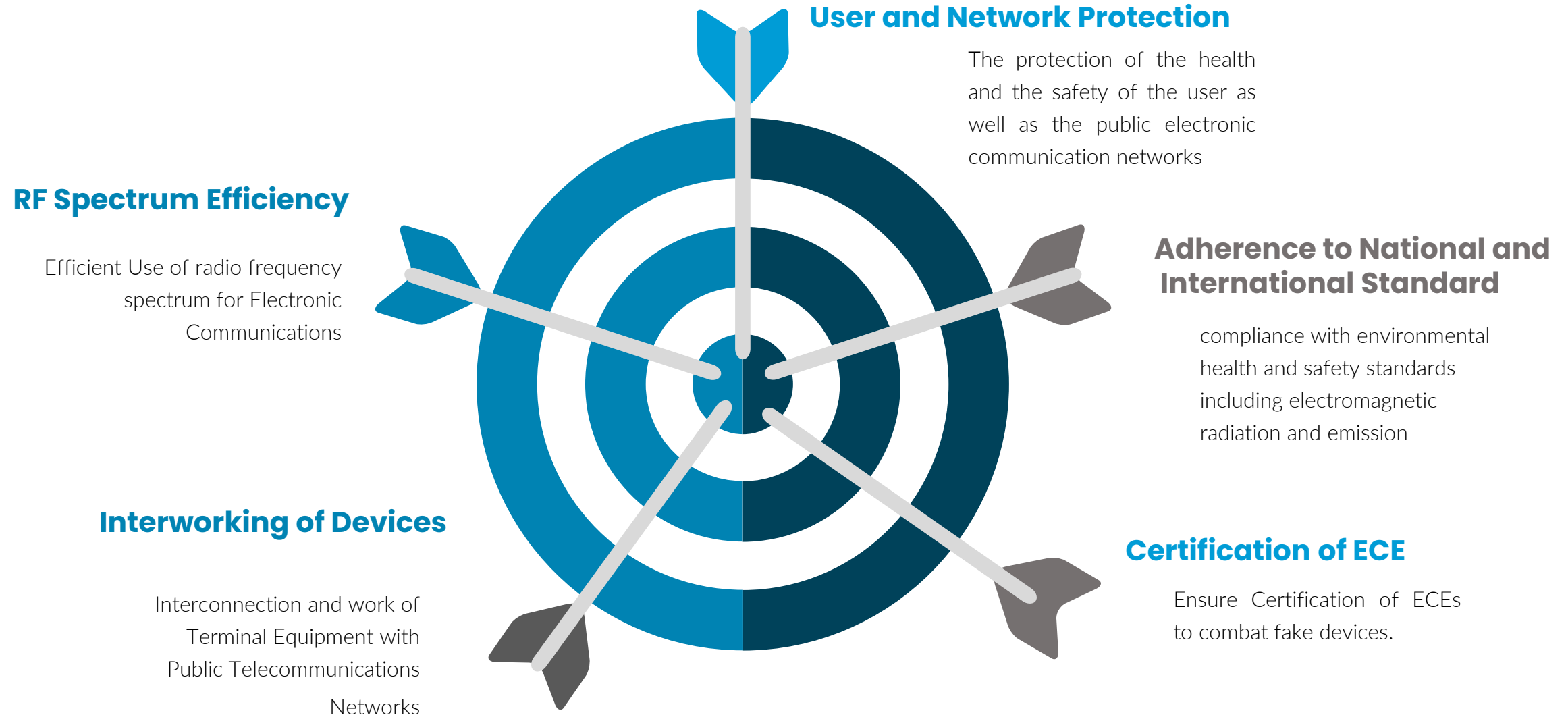
Impact of counterfeit ICT devices in Ghana:



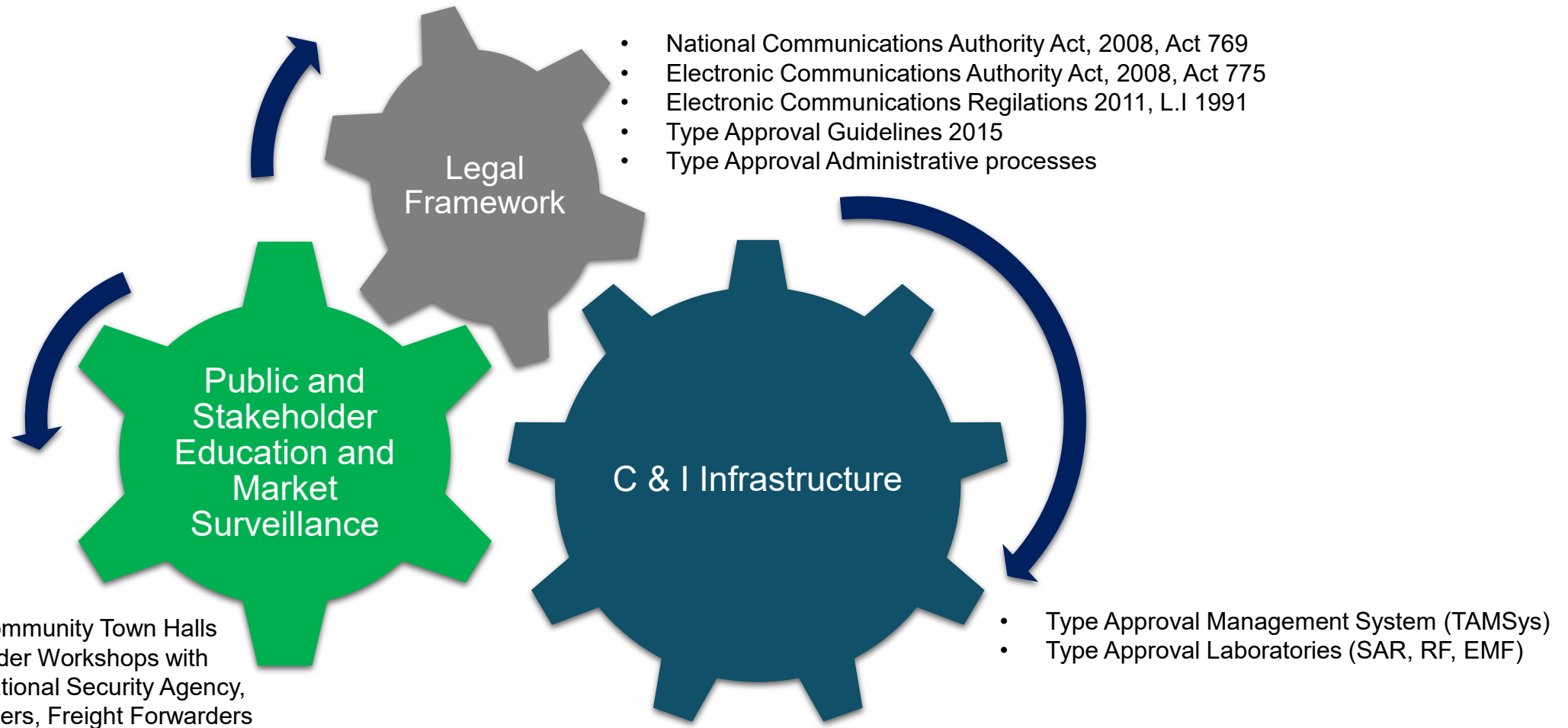
THE GHANA SCENARIO

Objectives of Ghana's C & I Regime

Outlined in Type Approval Guidelines, 2015

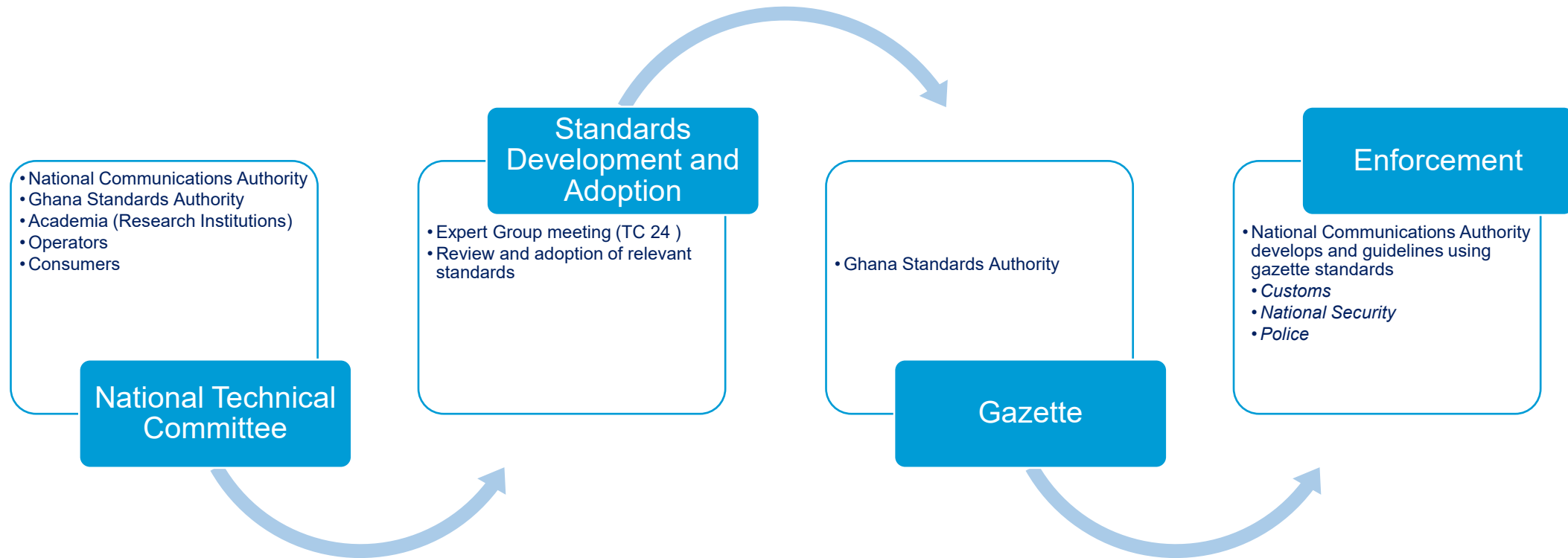


Components of Ghana's C&I Regime



Technical Standards and Requirements

Electronic Communication Equipment Standards in Ghana are developed by an inter-agency body called National Technical Committee for ICT/ Telecom Equipment (TC 24).



Technical Specifications Documents (TSD)

Establishment of General Committee for Technical Specifications Development

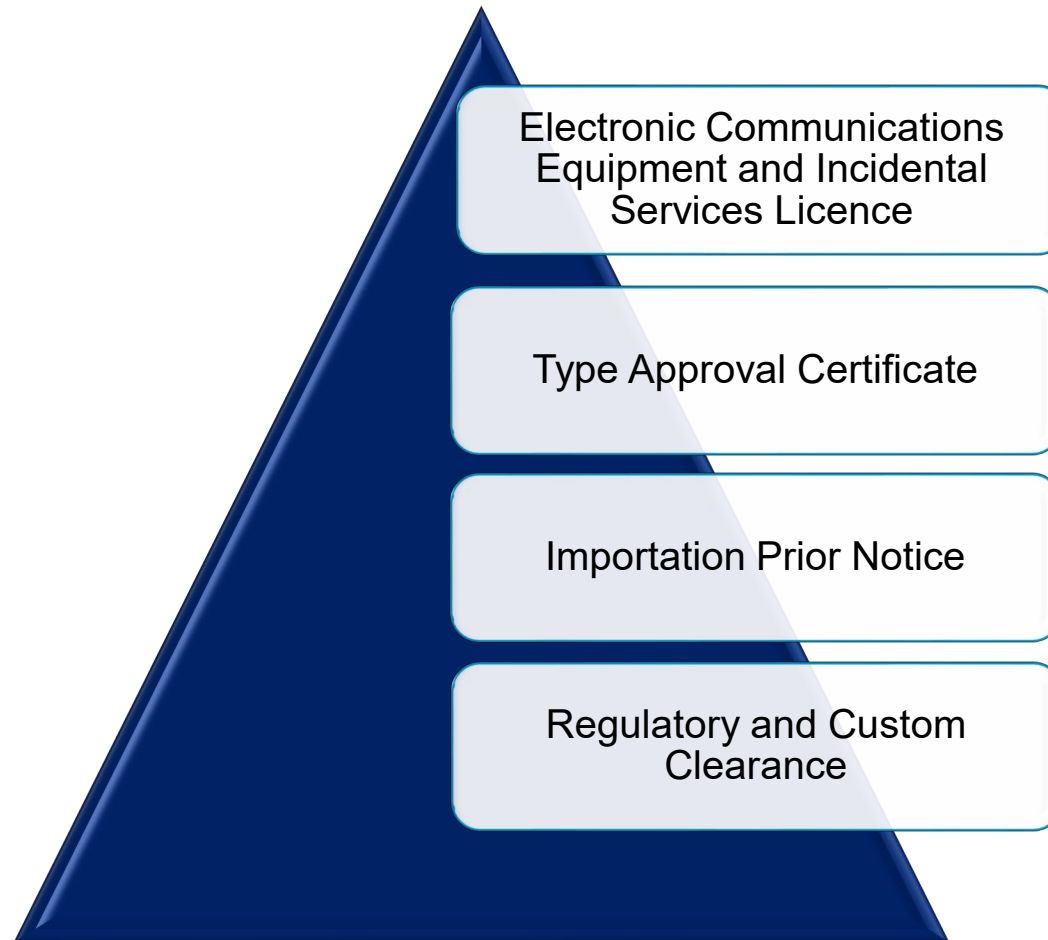
12 Subcommittees developing various technical Specification documents to aid the C & I regime

TSDs contain specific regulatory and technical requirements for various ECE/ICT devices

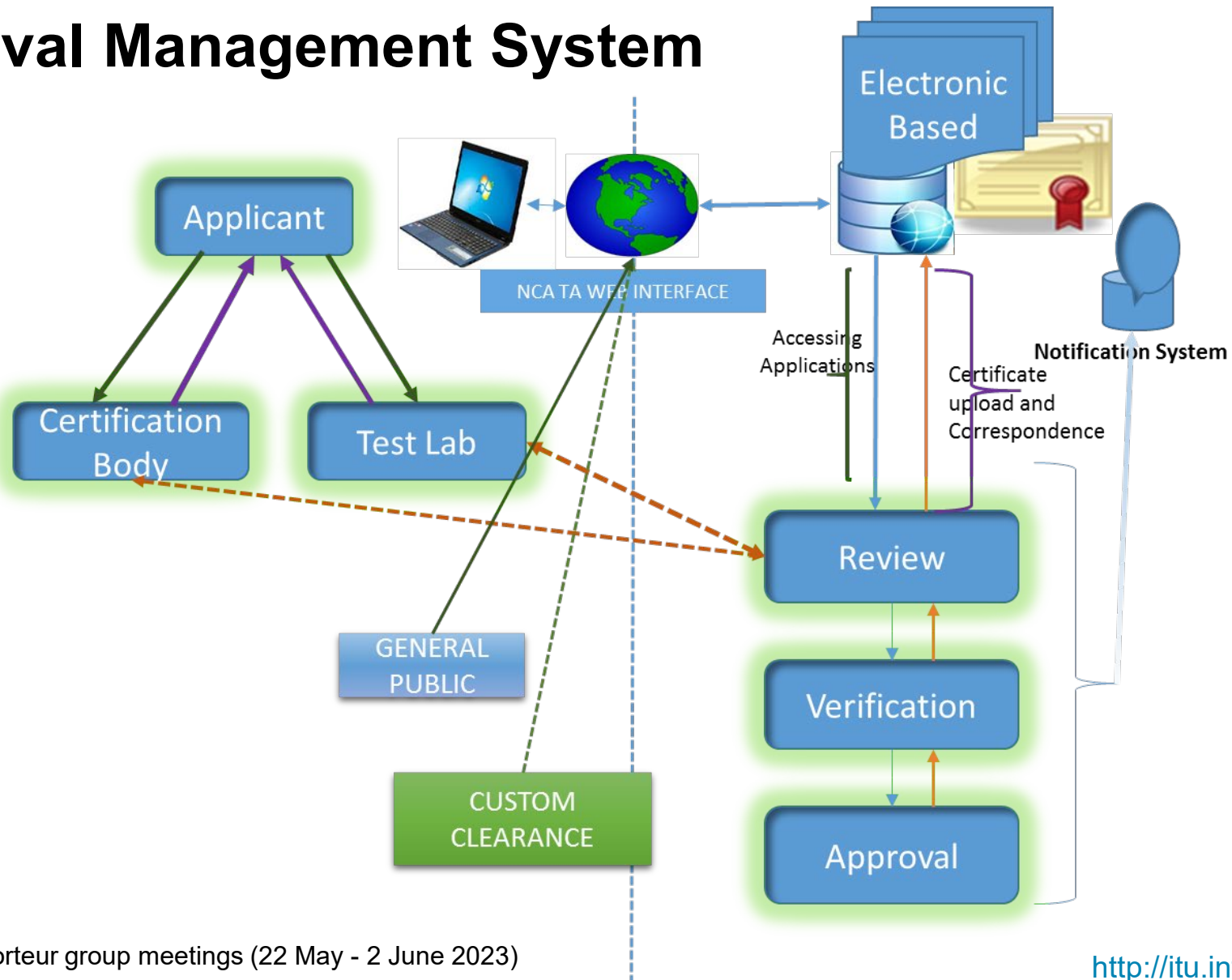
Referenced Standards are submitted to the TC24 for review and adoption as National Standards

TSDs are published to guide Manufacturers

Regulatory Requirements



Type Approval Management System



C&I TESTING INFRASTRUCTURE

C&I Testing in Ghana

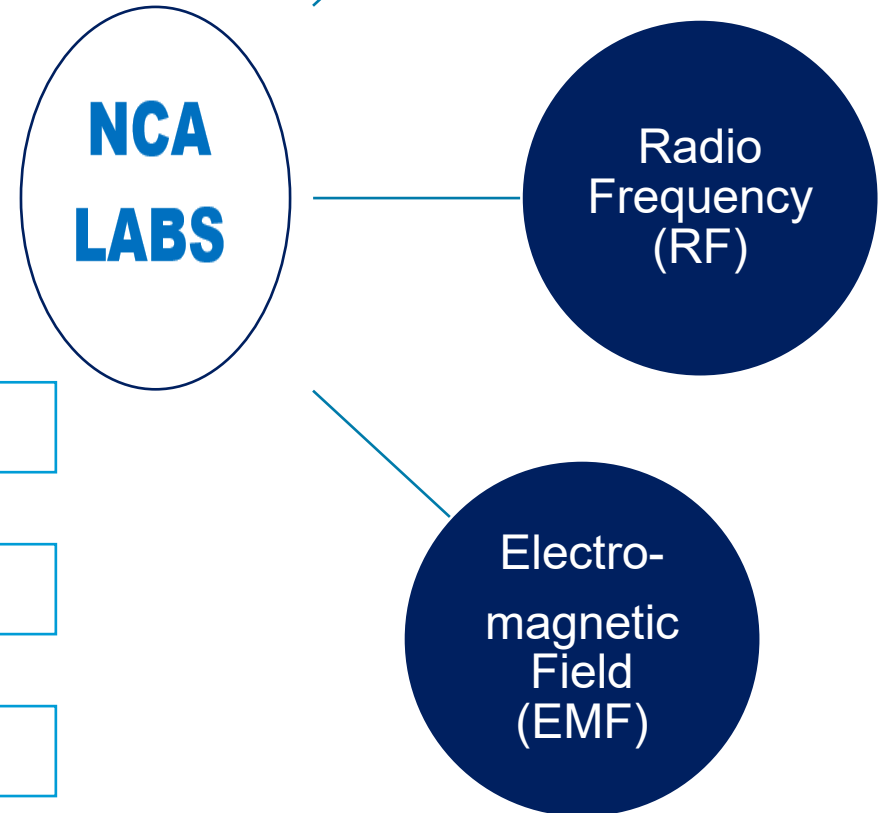
- ❑ Three testing laboratories set up and managed by National Communications Authority (NCA)
- ❑ General Objective: To support the Type Approval Regime, in-country market surveillance activities, academic research and training

Tests undertaken include:

Interoperability

Conformance and Functional

Health and Safety



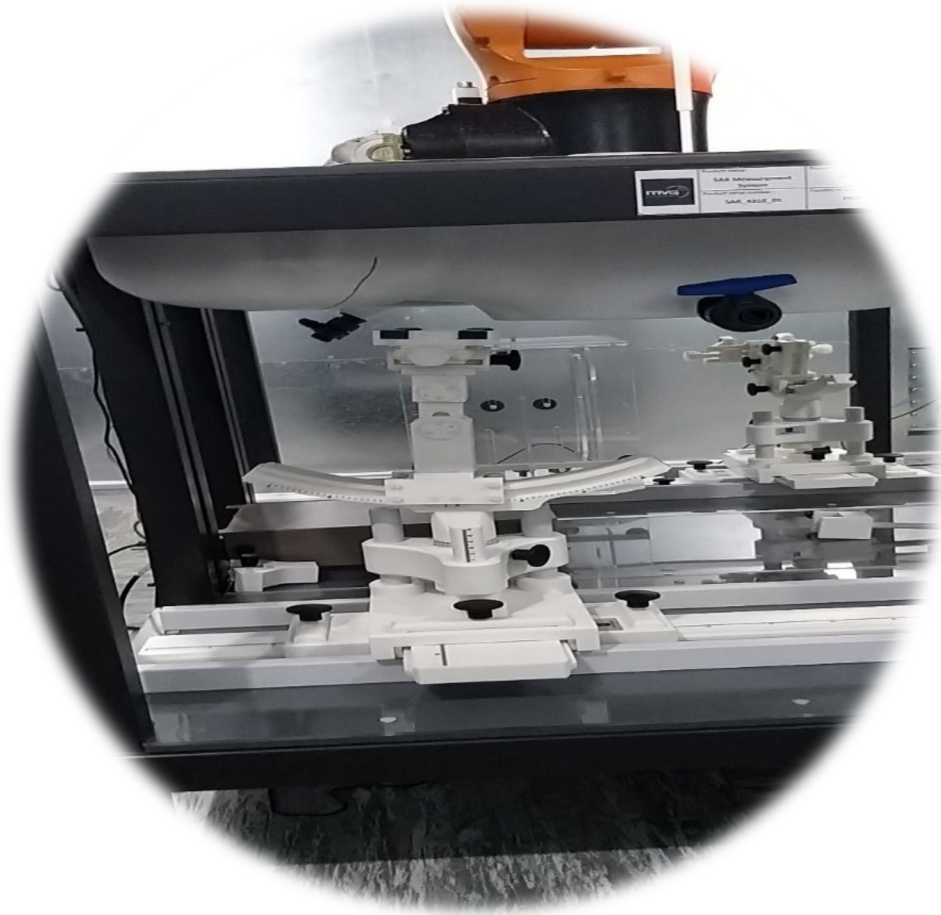
Functions and Scope of the Lab

S.N	Laboratory	Scope
1	Radio Frequency and Signalling (RF&Sig) Lab	Checks if User Equipment implements the required protocols for as per the adopted standards for: GSM, UMTS, LTE, WLAN/WIFI, and UE Intra/Inter Technology Handover.
2	Specific Absorption Rate (SAR) Lab	Measures the amount of radiation absorbed by the head or body when using wireless transmitting devices. FCC Limit 1.6 W/Kg EU/ICNIRP 2W/Kg
3	Electromagnetic Field Lab	Measures emission levels from Mobile Base Stations, FM and TV transmitters. Frequency Range : 100kHz -6GHz

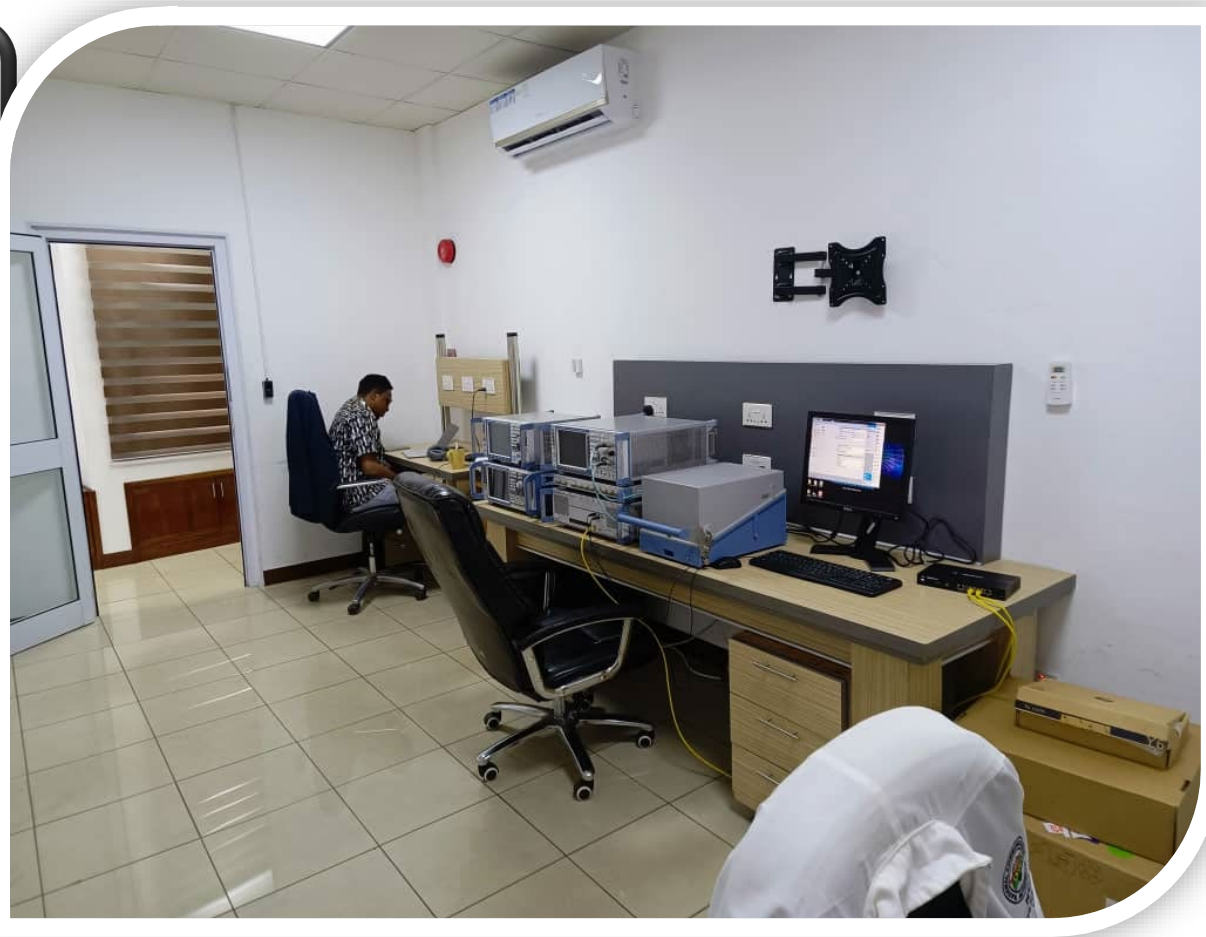
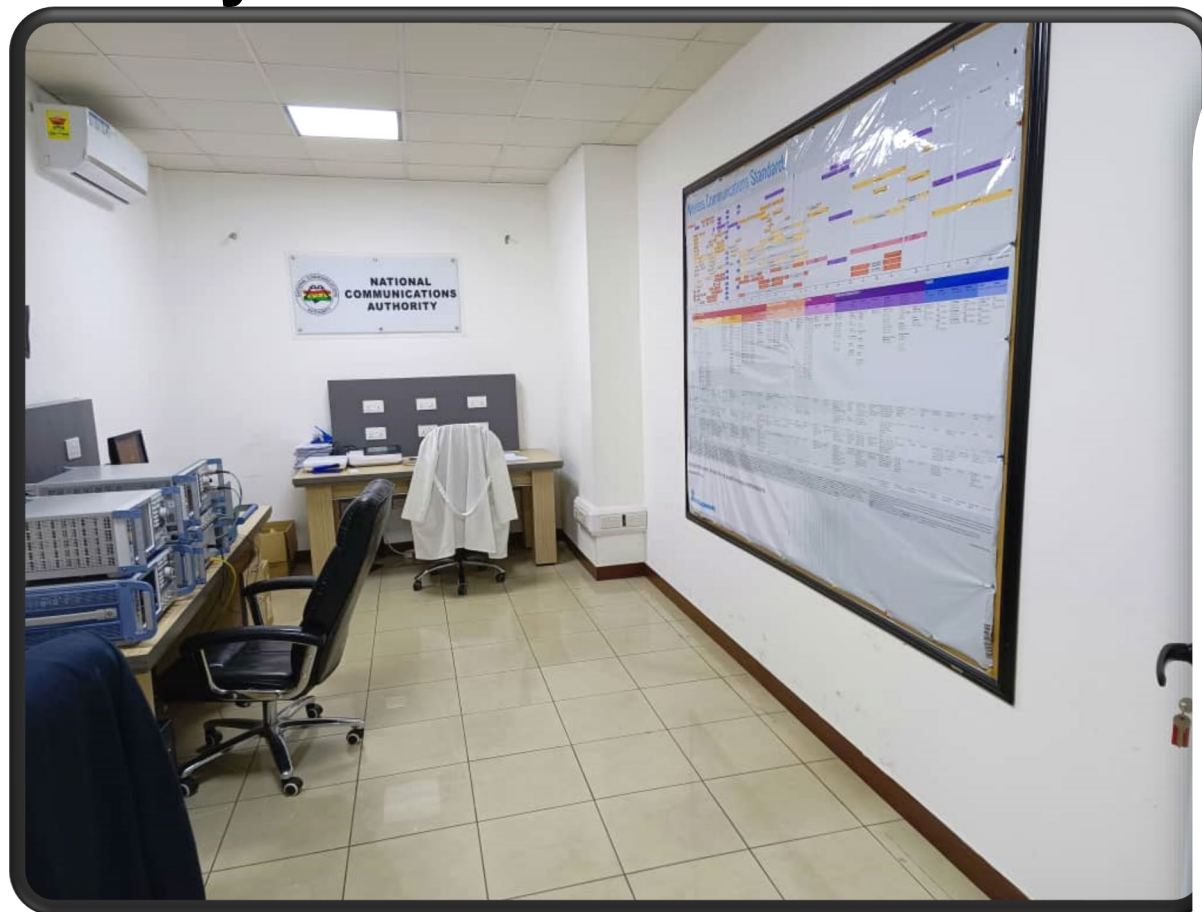
SAR System



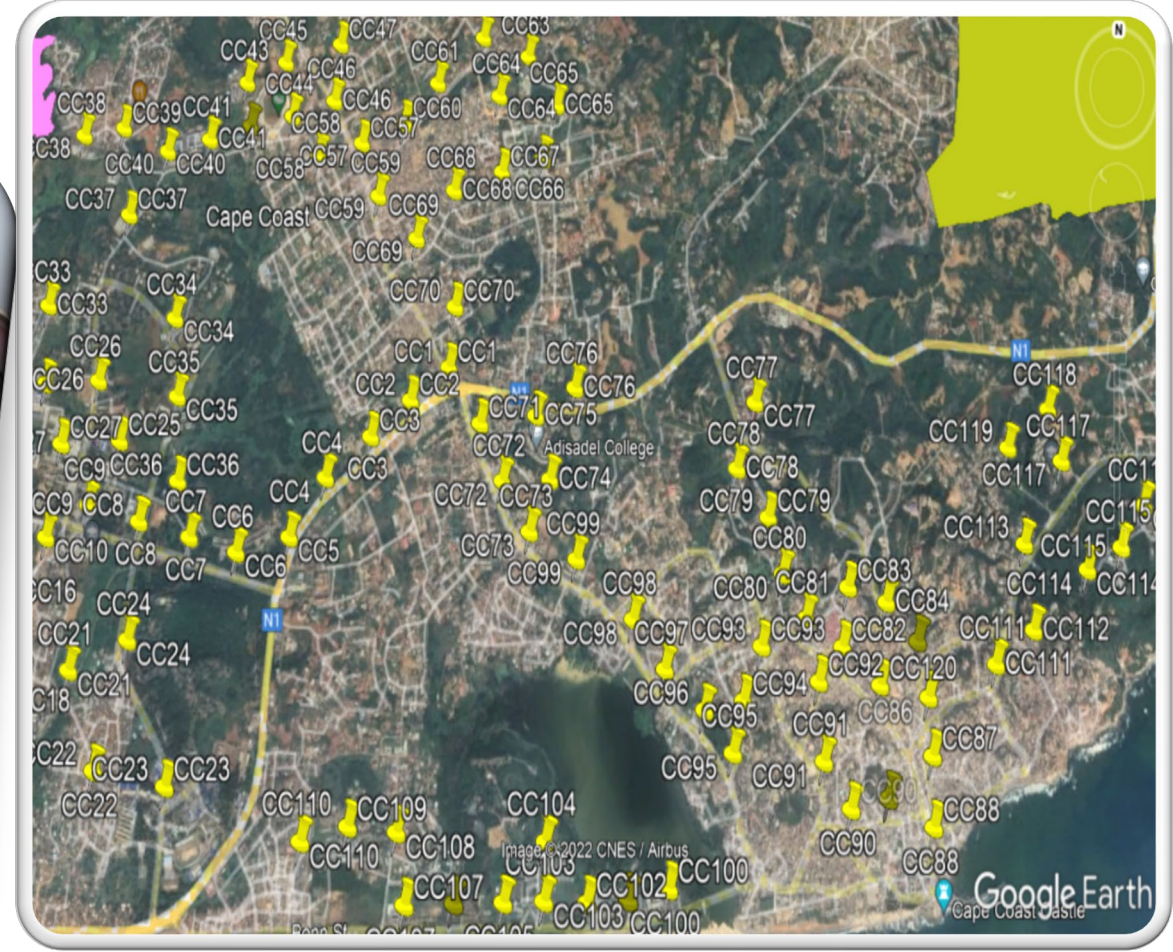
SAR System



RF System



EMF System



EMF System



MARKET SURVEILLANCE

Market Surveillance

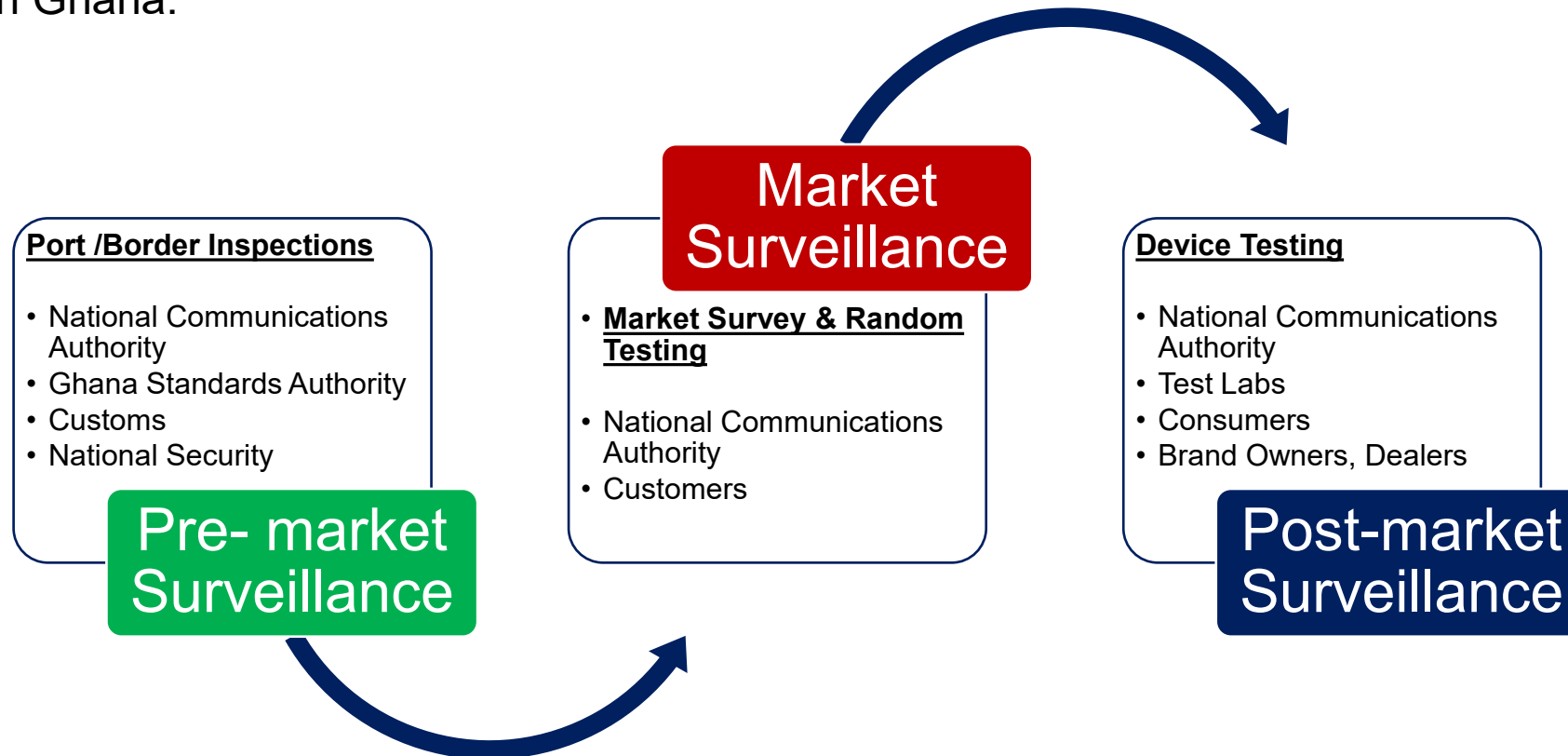
This procedure is conducted to ensure that electronic communications equipment placed or used on the market conform to the pre-market approved standards.

Three-pronged Approach:

- Pre-market surveillance - Entry clearance procedures, physical port inspection
- Market Surveillance – Market Survey and Random Testing
- Post-market surveillance activities

Market Surveillance

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



Market Surveillance - Challenges

Parallel Imports

Government
Bureaucracy

Multiple Entry Points

Rotation of Border
Officials

C&I Awareness

Community
Townhalls

C&I Workshops
for Government
Agencies

Engagement
with
Manufacturers
and Dealers

Engagement
with Electronic
Communications
Networks

Engagement
with Media

Joint Program with ITU and Technical Cooperation

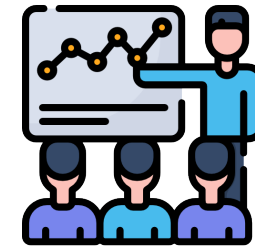
ITU-NCA C&I Training for Africa



- Six (6) training programs since 2018
- Undertaken by NCA Labs under the sponsorship of ITU and NCA



Over 100
participants from
over 22 Countries



- In-person
- Virtual

C & I Training Activities: Topics Covered

- Policy and regulation of Conformity and Interoperability establishment/development
- The legal aspect of Conformity and Interoperability
- Guidelines of Type Approval Regulation
- Mutual Recognition Agreement/Arrangement (MRA)
- Group Sessions on Case Studies
- Test reports interpretation
- Regulatory aspect of electromagnetic compatibility (EMC)
- Establishing C & I Infrastructure - Cost and Equipment
- Knowledge sessions (Country experiences)
- Conformity and Interoperability of the Internet of Things in the 4th Industrial Revolution
- Establishing Conformity and interoperability Regimes
- ISO 17025 Standard for Conformance Laboratories

C&I Training - Observation

- ❑ The team noted participants had (prior to training):
- ❑ Difficulty in the interpretation of relevant Standards
- ❑ Difficulty in the interpreting test reports
- ❑ Lack of basic C & I Infrastructure to aid type approval and market surveillance
- ❑ Difficulty in developing terms of reference for acquiring basic C & I infrastructure
- ❑ Lack of a comprehensive C & I regime to deal with the pressing issues of mobile theft and counterfeits devices although there are legal frameworks
- ❑ Lack of practical experience in C & I test domains
- ❑ Lack of MRA's among the African countries

C&I Training - Outcomes

- ❑ Acquisition of Basic C&I infrastructure
- ❑ Technical cooperation among participants
- ❑ Interpreting Test Reports of various telecom equipment

Recommendations

ITU continue to support the training program and encourage participation to help build capacity of African Telecommunications Regulators in practical aspects of C&I testing

ITU should facilitate establishment of Mutual Recognition Agreement (MRA) among Member States within the sub-region to leverage existing C&I testing infrastructure to curb counterfeit devices.

Facilitate the harmonization of Standards and Technical Specifications among Countries in the Sub-Region.

Acknowledgements

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THANK YOU