

ITU-D Study Groups

Question 4/2 Session on ICTs and Conformance & Interoperability: challenges for developing countries

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(Room K, ITU)

C&I Activities in the Africa Region

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Topics

- Introduction
- Pillars 1, 2, 3, and 4
- Activities in Africa
- Challenges
- Suggested way forward

INTRODUCTION

- **WTSA-08 of the ITU passed Resolution 76.** A major concern raised by the TSB Director at [WTSA-08](#) was the lack of conformance and interoperability of equipment being placed on the market, especially in developing countries. This resulted in the adoption of [Resolution 76](#) *“Studies related to conformance and interoperability testing, assistance to developing countries.*
- Recognizing that widespread conformance and interoperability of telecommunication/ICT equipment and systems through the implementation of relevant programmes, policies and decisions can increase market opportunities, competitiveness and reliability as well as encouraging global integration and trade;

INTRODUCTION Cont'd

WTDC 2017 declared

- That policy-makers and regulators should continue to promote widespread, affordable access to telecommunications/ICTs, including Internet access, through fair, transparent, stable, predictable, non-discriminatory enabling policies and legal and regulatory environments, including common approaches to conformance and interoperability , while at the same time providing investment incentives at national, regional and international levels;

INTRODUCTION Cont'd

- that increased participation of developing countries in ITU activities to bridge the standardization gap is needed, in order to ensure that they experience the economic benefits associated with technological development, and to better reflect the requirements and interests of developing countries in this area;
- Have resulted in Conformance and Interoperability program.

INTRODUCTION Cont'd

- **Conformance and Interoperability programme** provides an effective way to further the aims of Resolution 47 (Rev. Buenos Aires, 2017) of the World telecommunication Development Conference (WTDC), Resolution 76 (Rev. Hammamet, 2016), Resolution 96 (Hammamet, 2016) and Resolution 97 (Hammamet, 2016) of the World telecommunication Standardization Assembly (WTSA) and Resolution 177 (Rev. Busan, 2014) and Resolution 188 (Busan, 2014) of the Plenipotentiary Conference.

PILLARS 1, 2 3 and 4

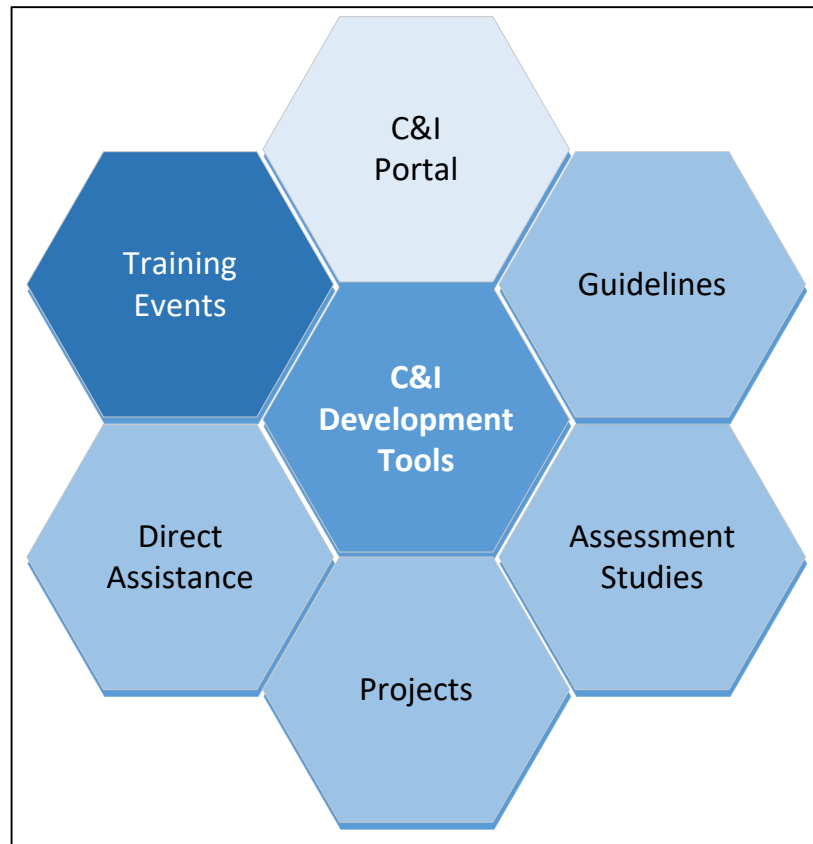
- 1 Conformance Assessment
- 2 Interoperability
- 3 Capacity Building
- 4 Testing Centers (Labs/MRAs)

Activities in Africa

- Assessment Studies
- Capacity Building
- Testing centers

Activities in Africa Pillars 3 and 4

Capacity Building and Assistance



Activities in Africa - Guidelines

Guidelines for developing countries on Establishing Conformity assessment Test Labs in Different Regions (2012)

This set of guidelines is the first publication on C&I, its valuable content includes information concerning: The process required for building testing labs; A site analysis (e.g. existing testing labs, know-how); Collaboration mechanisms; Best practices; Reference standards and ITU Recommendations

Activities in Africa - Guidelines

Guidelines for the Development, Implementation and Management of Mutual Recognition Arrangements/Agreements on Conformity Assessment (2013)

- These guidelines promote the understanding and establishment of Mutual Recognition Agreements (MRAs)
- on conformity assessment that are intended to promote efficiency and resource sharing as well as to streamline the flow of products among participating Parties such as ITU Member States and private sector organizations, such as testing laboratories

Activities in Africa - Guidelines

Feasibility Study for the establishment of a Conformance Testing Centre (2013)

- This feasibility study describes environments, procedures and methodologies to be adopted to establish, manage and maintain a testing center covering different kinds of conformance and interoperability testing areas

Activities in Africa - Guidelines

Establishing Conformity and Interoperability Regimes – Basic Guidelines (2014)

- These Guidelines address challenges faced by developing countries as they plan and review their own C&I regimes. Aspects covered by this publication include, inter alia, conformity assessment procedures; legislation to promote an orderly equipment marketplace; surveillance; coordination across regulatory agencies; and relevant international standards.

Activities in Africa – Direct Assistance on C&I

A number of countries have expressed strong interest and requested direct assistance (e.g. Zambia, Ghana, Malawi, Kenya, Tanzania) in establishing C&I infrastructure and procedures

The Direct Assistance provided through Africa Regional Office has provides support taken into consideration all C&I aspects, as:

- **Regulatory framework**
- **Institutions roles and typical procedures**
- **Mutual Recognition Agreements**
- **C&I Framework**
- **National and Regional test centres and harmonized C&I programmes: Roadmap and Feasibility Study**

Activities in Africa - C&I Regional Assessment Studies

- The C&I Assessment Studies promotes the establishment of Harmonized C&I Programmes, whenever possible.
- It collaborates to improve regional integration and fosters the availability of highly qualified institutions (as Laboratories, Certification and Accreditation Bodies)
- In an overall analysis, the Assessment Studies contributes to:
 - **Bridging the Standardization Gap,**
 - **reducing the Digital Divide, and**
 - **as is inherent to ICT technologies development, strengthens business environment for global players**

Activities in Africa - C&I Regional Assessment Studies

- C&I infrastructure in regions/sub-regions/countries have been assessed (SADC and EAC, ECOWAS in progress)
- Analysis of the status in the regions(SADC and EAC) have been conducted
- Looking for promoting regional agreements about possible locations for resources (Labs), agreements and testing capabilities

Activities in Africa - C&I Regional Assessment Studies

- Close collaboration with regional experts in addressing capacity building activities, accreditation and type approval testing.
- Moving forward to establishing regional test centers and/or MRAs as appropriate

Activities in Africa - C&I Regional Assessment Studies

Promoting the following Roadmap

- Conformity Assessment Bodies to contribute with an orderly telecom apparatus market place
- Once standards and procedures are in place, test labs and/or MRAs can approve equipment for compliance

Activities in Africa - C&I Regional Assessment Studies

Promoting the following Roadmap

- Sharing test labs resources and using same procedures amongst countries and regions, lowers overall costs while continues addressing regional priorities
- Setup of a robust framework (based on international procedures – ITU, ISO, IAF, ILAC, etc.) needed for trust and confidence in test results and among test labs

Activities in Africa – Pillar 3 Capacity building

(https://itu.int/go/CI_events) Training on Conformity and Interoperability

- MoUs/Collaboration Agreements signed with Testing Centers in the Regions to promote human capacity building in real testing laboratories
- Objectives:
 - Enhance knowledge;
 - increase awareness;
 - promote experience-sharing;
 - present practical learning on standards, regulations, and accreditation procedures;
 - real lab experience.
- Lectures on C&I Regimes (e.g. Regulatory framework, market surveillance); and C&I Testing Domains (e.g. mobile, EMC, broadband, and NGN)
- Hands on practical testings

Activities in Africa – Pillar 3 Capacity building



Activities in Africa – Pillar 3 Capacity building



Activities in Africa – Capacity building 2019

- 2nd – 6th September 2019 for the English speaking African countries C&I training in Accra, Ghana
- 4th – 8th November 2019 for French speaking African countries C&I training in Accra, Ghana

Activities in Africa – 2019

Direct Assistance

- C&I Framework establishment for Malawi
- C&I Framework establishment for Kenya

Regional Assessment Studies

- Regional C&I assessment for ECOWAS

Challenges

- Counterfeit products faced by everyone.
- Proper systems made available to end users
- Capacity building and awareness to the public
- Budget constraints and limited financial resources to set up basic C&I test centers
- Authenticating test reports
- Tempering with test reports
- Insufficient Regional Harmonized Standards and approach
- Insufficient capacity building and Digital Skills
- Ever increasing number of applications and Devices (i.e. Smart Devices)
- No testing and conformity assessment laboratory. Hence samples are not tested.
- approval is conducted based on document screening only.
- Lack of Technical skill to conduct type approval.

Challenges

Counterfeit and substandard ICT devices, especially mobile phones have been a global challenge for the users, manufacturers as well as the governments. The negative impact including but not limited to:

- loss of revenue due to non-payment of customs duties and sales taxes to the Government
- danger to public security (phones with invalid IMEI or “no IMEI” number are potentially attractive for criminal activity and terrorism)

Challenges

- Losses for owner's rights : unfair competition, loss of sales, price may be affected, copyright and trademark infringement, adverse effect on brand value and reputation
- low quality : performance degradation, high % of dropped calls and compromised quality of service, access failures, handover problems)
- low device reliability

Challenges

- Failed warranty and technical support
- Potential hazard to health: use of hazardous substances, higher SAR (Specific Absorption Rate), batteries' explosion etc.
- security and privacy issues : in cases of theft or stolen phone, it is difficult to track the phone with invalid IMEI or “no IMEI” number ID).

Way Forward

- Continue Technical Assistance (Direct Assistance) to Member States
- Continue Capacity building and Regional assessment studies
- Ensure that Regions are free of illegal / counterfeit devices.
- Establish MRAs (Mutual Recognition Agreements) between countries and between regions
- Establish Regional centralized illegal monitoring equipment/system.
- Establish Regional testing centers with different and complementing testing domains

**THANK YOU VERY MUCH
FOR YOUR ATTENTION**