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**Conformance and Interoperability (C&I)
Validation Workshop, Laico Regency Hotel,
Nairobi, Kenya 21st – 23rd October 2015**

**S5-2 Situational Analysis – Status of Conformity and
Interoperability and related initiatives in EAC
countries. Awareness and Capacity on C&I in EAC
countries, Centres of Excellences, Assistance
required and Training capabilities**

Dr. Thomas A. Senaji
ITU Expert/ Conformance and Interoperability Study
tсенaji@gmail.com
+254722772400



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Outline of presentation

- Introduction
- Methodology for the C&I Study in EAC/EACO
- Status of Conformity and Interoperability in EAC
- C&I Related initiatives in EAC countries
- Awareness and Capacity on C&I in EAC countries
- Centres of Excellences
- Assistance required and Training capabilities



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INTRODUCTION, PREAMBLE AND TERMS OF REFERENCE

- According to the ITU C&I assessment studies undertaken in 2014 for Southern Africa and North Africa and EAC countries, the majority of African countries have not yet developed C&I regimes, which adversely affects the competitiveness of African markets.
- ITU assessment studies further identify the urgent need for capacity building on C&I and implementation of Common Policy and Regulatory procedures through establishing Mutual Recognition Agreements (MRAs) at the regional and sub-regional levels.
- These studies recommend that model MRAs be established under a Task Force coordinated by the concerned REC/RO to promote the harmonization of conformity assessment practices and procedures.



Preamble

- There is a relationship between C&I project and the EU-Africa Roadmap 2014-2017



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- The proposed approach to the establishment of a common C&I regime will be based on the following EU model setting out assessment procedures to be used in the Community Harmonization Legislation: Decision no 768/2008/EC of the European Parliament and of the Council of 9 July 2008 on a common framework for the marketing of products, and repealing Council Decision 93/465/EEC. Decision No 768/2008/EC is containing all references to the Conformity Assessment model in place at European level.
 - In conclusion to this problem and strategic analysis, given the various challenges and problems identified “it is evident that establishing Common C&I strategies is both timely and necessary to enhance ICT markets in Africa and advance the harmonization of ICT policy and regulatory framework in the region”



C&I and EU-Africa Roadmap 2014-2017

- The EU-Africa Roadmap 2014-2017 promotes the “harmonization of appropriate policies, reducing technical barriers to trade by building capacity to improve, certify and assure the quality and standards of goods”.
- Likewise, it is recognized that widespread conformity and interoperability (C&I) of ICT equipment and systems through the implementation of relevant policies and regulatory decisions can increase market opportunities and reliability, improve affordability and access to ICTs, quality of service and consumer satisfaction and encourage global integration and trade.



BACKGROUND TO C&I IN EAC/ EACO

- In the framework of collaboration among regional and sub-regional organizations for establishing a common conformity and interoperability (C&I) regime and mutual recognition agreements (MRAs) the ITU, upon request of the East African Communications Organization (EACO), is carrying out a C&I assessment study on the five countries of the East African Community (EAC): Burundi, Kenya, Rwanda, Tanzania and Uganda.
- Even though some of these countries have made greater strides in the development of their ICT systems especially in the areas of Conformity assessment, others still need to catch up with those that have made relatively greater progress.
- It is worth mentioning that C&I of systems within the overall framework of collaboration in the standardization of systems and networks can make a significant contribution to the development of ICT industry hence the need for these assessments in the regions.
- The assessment involves identifying actions necessary to realize greater contribution of ICTs to socio-economic development in EAC by removing the bottlenecks (such as barrier to trade and investment in the ICT industry) associated with lack of conformance and interoperability among/ between systems and networks



TERMS OF REFERENCE FOR THE EAC/ EACO C&I ASSESSMENT STUDY

- To undertake the Conformity and Interoperability Assessment on Regional Basis
- To identify all the necessary C&I elements and promote the Collaboration among Regional and Sub-regional Organizations for establishing a common C&I Regime and Mutual Recognition Agreements (MRAs)
- To identify most of the EAC countries requirements and existing gaps in the areas of Conformity Assessment Testing and present some possible and harmonized scenarios to meet the needs and interests of Member States in the EAC Region



METHODOLOGY THE C&I STUDY IN EAC/EACO

- Preparation and circulation of C&I questionnaires to focal points in EAC/EACO
- Meetings with the EAC secretariat and with the EACO and their input received
- Meetings with all National ICT Regulatory Authorities (NRAs) in the EAC on C&I Assessment study and their input received
- Analysis of survey data for all the five EAC member states: Burundi, Kenya, Rwanda, Tanzania and Uganda
- Preparation and sharing of C&I Assessment reports have with all stakeholders for comments
- Incorporation of stakeholder inputs/ comments into the C&I Report and finalization and circulation of the EAC C&I Assessment Report
- A validation workshop on the C&I Assessment study report is taking place in Nairobi in October 2015



Updating of C&I progress

- During the 21st EACO Conference that was held in Kampala (June 2015):
 - EAC Member States were updated on the progress of the C&I project and encouraged to provide any further information that may be pending for incorporation in the final draft C&I assessment report ahead of the workshop (Nairobi October, 2015); this was received
 - EAC/EACO were requested to consider and discuss the support for the EAC C&I project with AU in the framework of the EC and AU funding for the project "**HARMONIZATION OF ICT POLICIES, LEGAL AND REGULATORY FRAMEWORKS IN AFRICA (HIP-AFRICA)**"



C&I Problem

- The C&I problem in EAC affects consumers, importers, operators, yet there is limited capacity to check for conformity to facilitate importations and to guarantee interoperability of systems once they are deployed in the country. Some of the areas of concern are:
 - **Capacity constraints**
 - **Digital migration**
 - **Dealing with counterfeits including phones**
 - **Inadequate C&I awareness even among customs officials**
- Lack of a common C&I Regime is a barrier to trade and regional integration



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C&I RELATED INITIATIVES IN EAC COUNTRIES

Initiatives:

- Cooperation in the Communications sector is mandated by Articles 98 and 99 of the treaty for the Establishment of the East Africa Community (EAC).
- The following are the four major strategic objectives of projects and programs of the sector –
 - Harmonization of ICT policies, laws and regulations among the EAC Partner States. An integral component of this strategic objective is the coordination and enhancement of associated institutions.
 - Promote the establishment of communications infrastructure and services such as communications networks, e-government and e-commerce services and geo-spatial information systems.



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- Standardization of technologies and services to allow internetworking and interoperability.
 - Communications markets – Investment strategies, competition management, quality of service and consumer welfare.
 - Like most of the developing economies EAC are currently recipients in terms of gadgets/equipment as all are manufactured outside the region and under International licences/patents and standards. In this regard, most of the standards are either set by manufacturers or other International standards bodies. Therefore, EACO ensures harmonized Policies and/or regulatory frameworks on these standards but does not carry out standardization activity.

Some Implementations of C&I

- Participation in ITU study standardization activities including ITU-T SG11 and other forums, conferences related to standardization.
- TCRA in consultation with ITU, embarked on a plan to establish a Type Approval Laboratory (TAL) Project
- ICT NRAs have MoUs with SDOs on issues concerning electronic communication have been signed by some countries
- CA has test equipment for STBs for which standards against which type approval is done are published on CA websites for the public; the test equipment has capacity to serve the rest of the EAC region.
- CA is in the process of procuring test equipment from mobile phones.

Implementation of C&I cont.

- In some instances, Type approval (TA) is carried out based on international standards such as those by ITU, ETSI;
- MRAs are not yet signed with other organisations
- Enforcement of compliance needs more capacity to ensure compliance and C&I test beds/ labs can improve compliance.

AWARENESS AND CAPACITY ON C&I IN EAC COUNTRIES

- EAC/EACO very urgently need complete C&I capacity building
- Further, from the discussions with EAC/EACO Telecommunications/ICT officials it emerged that:
 - There appeared to be inadequate dissemination of information regarding the ITU test centre in Tanzania; this is need to have the stakeholders in the SADC region fully updated of the status and scope;
 - EAC views C&I within the overall context of digital migration, implementation of the digital dividend programme and standards sensitization in the region
- **Inadequate awareness** – Further, there appears to be inadequate awareness among broadcasters of the emerging and future trends in broadcasting subsector; and why interoperability is important.

KEY FINDINGS OF THE EAC C&I ASSESSMENT STUDY

- There is limited Capacity for C&I on EAC. Specifically, there is:
 - No training on migration among EAC member states
 - Limited C&I test facilities in EAC member states
 - No training for/or trained trainers (TOT) on C&I within EAC
 - No C&I training for consumers of ICTs
 - Very limited ICT test beds
 - Existing SDOs do not deal with telecom/ equipment.



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ASSISTANCE REQUIRED AND TRAINING CAPABILITIES

- In order to enhance their functions EACO needs:
 - ICT data base for EAC region
 - Capacity building on C&I
 - C&I infrastructure including labs
- EACO's expectations of C&I project are as follows:
 - Capacity building by ITU because there is limited capacity on C&I
 - Roadmap of the C&I project including for MRAs
 - Action plans and roles of various stakeholders - EAC, EACO, Regulators, operators
 - How the project will be financed
 - Identification of the project champion i.e., the organization that should drive the project - EAC (see also the Southern Africa Development Community [SADC] experience)



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- Case Example of C&I Problem (Uganda)

Broadcasting

- **Standards** – there is a diversity of standards and different broadcast operators have historically aligned with differing standards. The differing standards are often non-interoperable.
- **Interoperability** – broadcasters have little motivation not to interoperate among their systems.
- **The Cost of the interoperable receivers** – The receivers that are adaptable to different encryption and delivery platforms are much more expensive than the locked ones.
- **Incompatible broadcast standards** – It should also be noted that unlike telecom which has upward and downward compatibility as new standards and technologies emerge, the same is NOT true for broadcasting.

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- **Digital migration** – there is opportunity for multi-stakeholder engagement with regard to digital migration to ensure that it progresses smoothly. The policy makers need information on emerging issues (such as the C&I project and related matters – counterfeits, digital migration, quality of service etc.) on regular basis to assist them make decisions that can support the development of the ICT sector.

Human capacity constraints

- This is a cross cutting issue which affects the whole of the ICT sector. There is inadequate capacity among technicians who install, operate and maintain the equipment; there is need for accreditation of technical staff to deal with the equipment
- Though centres of excellence exist there are limited courses to support digital migration and broadcasting as a whole.

e-waste management

- Another problem associated with lack of conformance to standards is how to manage e-waste
- Importation of counterfeit equipment contributes to e-waste which can be reduced through a comprehensive C&I regime in EAC

Telecoms

- Compared to the broadcasting sub-sector, the telecom subsector has motivation to interconnect and interoperate with each other. This is partly because of their business models – namely they have to serve customers across various networks.
- **Counterfeits** - equipment can conform to standards but still be counterfeit hence technical and commercial considerations are necessary. There is need for genuine but cheaper equipment in the EAC region.
- **Substandard equipment** - The current situation is that manufacturers have different standards of equipment for the region depending on the disparate compliance requirements of each country; as well as the perceived affordability of that particular receiver in different countries

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- **Mobile phones** - mobile phones are the most affected by counterfeit, there is need to strengthen the market surveillance such as by closely working with the manufactures, GSM Association (GSMA) and Customs agencies for purposes of identifying and enabling the barring of counterfeits,
 - **Customer and counterfeits** - there are two categories of consumers; those who are unhappy with the regulator for not protecting them early enough, and those who are 'happy' with counterfeits because they cannot afford the genuine equipment. There is a third category of those who would want and can afford a product but cannot differentiate between a counterfeit and a genuine one - education is needed.

Dumping of equipment into the country

- As part of extension of the lifecycle of their products, most suppliers are exporting this equipment into the Region (EAC).

EAC C&I Needs

- Capacity building on C&I is needed in the EAC region
- Conformance and interoperability Test labs for various scopes of tests are required in the countries and in the region
- Mutual recognition agreement regimes to promote ICT diffusion and use
- Collaboration with academia on establishment of test beds needs exploration



Key Recommendations

- Based on the assessment of the C&I situation in EAC and on experiences on similar assessments in SADC it is recommended as follows:
 - To establish a EAC C&I expert committee (Draft Term of References – **Appendix VIII**) to guide the realization of the common C&I regime among EAC through MRA and / or building of national/ regional labs
 - To establish in-country/ regional conformance and interoperability Test labs for various scopes of tests are necessary in the countries and in the region
 - To establish Mutual recognition agreement regimes in EAC
 - To develop programmes for capacity building on C&I for EAC region
 - To collaborate with academia on establishment of test beds and capacity building
 - Use of the institutional capacity at EAC/EACO to progress the establishment of a common EAC C&I Regime.
- **An economically viable C&I solution should be ensured**



Thank you for the collaboration

