

## **Regional Seminar for the Africa Region on Conformance and Interoperability Testing Centre(s), Accra (Ghana) from 4 to 6 July 2011.**

### **Scope of the Seminar**

At the kind invitation of the Ministry of Communications of the Republic of Ghana, the International Telecommunication Union (ITU) a Regional Seminar for the Africa Region on Conformance and Interoperability Testing Centre(s) was organised in Accra (Ghana) from 4 to 6 July 2011.

<http://www.itu.int/ITU-D/tech/events/index.html>.

The Seminar was held back to back with the ITU Symposium on ICTs, the Environment and Climate Change that was held from 7 to 8 July 2011. Information on the Symposium may be found at: <http://www.itu.int/ITU-T/go/ghana>.

The main objective of this Regional Seminar was to inform the attendees in the following subject areas : status of the needs of developing countries for building testing labs for conformance and interoperability testing; existing testing labs and their areas of activities in the ICT field; assessment of the needs and the opportunities to establish type approval testing labs in the countries; criteria and characteristics to establish accredited bodies/labs in the regions for type approval/homologation based on international standards and also best practices; the ILAC, IAF and accreditation bodies, MRAs (Mutual Recognition Agreements/Arrangements) reference documents, frameworks and procedures for mutual recognition of conformity assessment of telecommunication equipment and systems; ITU testing approaches including ITU experience, conformance testing experience in different countries and technologies to be tested, application of model networks for conformance testing, proposed methodologies for testing protocols, equipment and services conformance testing, experience from international testing projects, steps to be undertaken to facilitate the creation of regional test labs and to create capacity building opportunities at a regional level; establishment of further actions on economical, technical and regional presence.

Moreover, the Seminar addressed relevant Resolutions from WTDC-10 (Res 47), WTSA-08 (Res 76) and PP-10 Resolution 177 on Conformance and Interoperability.

The Seminar brought together leading specialists in the field, from top policy-makers to engineers, designers, planners, government officials, regulators, standards experts, testing lab operators, funding agencies, service providers, regional associations and others.

The welcoming address from the Hosting Administration was given by Mr. Kofi Totobi Quakyi, Chairman of the Board of National Communications Authority of Ghana (NCA). The Seminar was opened by the Director of TSB, Mr. Malcolm Johnson.

More than 150 registered participants from 23 African Countries participated in the Seminar

Discussions were held in English and French with simultaneous interpretation provided.

**Achievements:** Strengthening standard-making capabilities, enhancement of knowledge and effective application of ITU Recommendations. Introduction of best practice application of ITU Recommendations. Improvement of the regional presence of ITU and improvement of interaction among countries and with the ITU. Sharing of a number of ICT development experiences among all stakeholders for fostering the implementation of a programme for assisting developing countries to assess needs and required resources to establish testing labs.

**Strengths:** Seminar very well attended in terms of number of participants and interest demonstrated by the attendees during all sessions. High quality of content of the presentations of the Speakers. Good internal coordination inside ITU and good participation of speakers from TSB and BDT

### **Round Table Discussion**

The Seminar ended with a panel discussion on “How to establish a Conformance and Interoperability regime in the Region”. Topics dealt with during the panel discussion were:

1. Possible approaches and scenarios for establishing a conformance and interoperability scheme in the region. Building labs in each country vs. use of MRAs to share regional and sub regional labs. Role of Regional and International Organizations (ATU, ILAC, etc.). Reference documentation. Recommendations
2. How Policy makers and Regulatory bodies can facilitate the establishment of an appropriate Conformance and Interoperability regime in the Region. National Laws and Regulations creating and underpinning an orderly telecom marketplace. Recommendations
3. Conformance and Interoperability: Experience and future plans: Case of Tanzania. Recommendations

4. Conformance and Interoperability experience and future plan. Case of Zambia. Recommendations
5. Conformity assessments and Interoperability testing. Importance of ITU Interoperability testing events and ITU hosting on its database the references and links to results. Recommendations
6. Increasing capacity building on Testing, Conformance and Interoperability in the Region, and possible approaches. Training and access to expert support and financial support program. Recommendations

## RECOMMENDATIONS

Approaches to establishing C&I

### **FRAMEWORK FOR CONFORMANCE AND INTEROPERABILITY IMPLEMENTATION (ITU Consultants)**

1. ITU to prepare a framework for C&I testing centres for Africa
2. Africa to agree on an MRA framework to be championed by e.g. ATU similar to the case for the APEC region where a regional organization plays an essential coordination and support role.

### **POLICY AND REGULATIONS (ITU Consultants):**

1. ITU to identify policy and regulatory imperatives to accelerate the support for and provide a robust foundation for creation of the C&I programme and mutual recognition agreements/arrangements in order to realise the C&I test centres and related benefits
2. ITU, UNIDO and others to assist and accelerate establishment of the funding, training and realisation of the C&I programme in the region
3. Preparations of specifications and check whether systems meet the specs ???

### **MUTALE (ZAMBIA):**

1. Accreditation and institutional set up – SADC is planning for this, ZBS is a member of ILAC and will be used
2. Business plans
3. Laboratory services that the labs must provide, including implementation plan, and detailed technological analysis with a focus on wireless and IPTV;
4. Legal and regulatory framework to facilitate the C&I programme and establish an enforceable QoS framework
5. Standards are an essential component of the C&I programme and this is an on-going requirement as technology continues to evolve at a rapid pace. Africa needs to adopt international standards and needs to participate in and belong to international standards bodies

#### TANZANIA:

1. ITU to assist those projects that can be shown to be viable
2. ITU to work on a recommendation requiring countries to establish and use facilities in their region to achieve the goals of the C&I programme.
3. One way to avoid duplication and have a more efficient delivery of the C&I programme is to have African sub-regions concentrate on particular aspects of C&I e.g. EAC, SADC, etc. and share expertise and use of conformity assessment facilities.

#### **Assessment of C&I (ITU Consultants):**

1. Interoperability events by ITU: Two aspects of this (i) marketing aspect, and (ii) technical aspect - ITU to have a record of the results of interoperability events and to identify which features have been shown to be interoperable
2. Conformity data bases need to be maintained up to date and available 24/7
3. ITU needs to establish test specifications in a timely manner to complement the Recommendations.

#### **CAPACITY DEVELOPMENT (ITU):**

1. More aggressive awareness creation to be conducted needed (Supported by Uganda)

2. ITU to assess the type of training needed and provide the training including hands-on training
3. Training sessions of fellows from Developing Countries proposed and supported by ITU are recommended to be held in the premises of Testing Labs

**BUKINA FASO (SIMILAR TO UGANDA):**

1. Africa to approach the C&I programme in the context of regional economic blocks.
2. Therefore the ITU needs to implement an aggressive awareness campaign on the importance and needs of the C&I programme for the economic communities in Africa e.g. ECOWAS, EAC, SADC e.g. regulatory assembly can champion the cause
3. African countries and regions need to prioritise the C&I programme efforts depending on their needs in various areas and for which practical programs and schemes can be developed (study to arrive at the priority list).

**KENYA:**

1. Collaboration on curricula by academia (Ref. pp. 2010) and suggestion for review of Masters and PhD programs to cover C&I issues
2. To conduct an audit and consolidation (a review) of the situation including relevant expertise, systems, institutions and then establish a coordinated plan organized into one or two projects
3. To propose a structured multi-stakeholder involvement in the establishment of C&I test beds
4. Africa to actively participate in the work of the ITU e.g. established regional group meetings to review and develop positions on priority issues going on in the ITU domain.

## COMMENTS

### NIGERIA:

1. Strategies to create C&I test beds, protocol training, expertise and understanding of diverse wireless technologies. Need support in capacity building across the whole C&I programme scope.

### GHANA:

1. Supports Kenya (collaboration among the training institutions and with the ITU); established Ghana Telecom University - training institute and collaborating with the industry
2. Ghana standards board has put in place a committee on telecom standards

### IVORY COAST:

1. Comment: The C&I programme task is complex and efforts should not be scattered

### CONGO:

1. Expressed concerns about the issues of sharing results amongst countries of the region and pointed out that we need somehow to involve senior officials at all steps in the process to ensure excellent collaboration.

**Director TSB: Mr. Malcolm Johnson**

Gratitude for the MOC of Ghana, Minister is very supportive of ITU and a very good friend of ITU

Africa to collaborate and avoid duplication by having test centres specialising in different areas and potentially located in different areas

ATU to assist in helping to coordinate the effort

Africa to prioritise the areas in which to commence implementation of the C&I programme

TSB to request the ITU council to provide more resources for the C&I programme

Recommendations of this meeting will help to accelerate the process; the recommendations will be posted on the ITU website

Regarding the ITU mark project, one view of this could be that each entry into a conformity database will have its ITU reference number, starting with the acronym ITU, followed by the numbers which identify to which Recommendations, versions and options it is claiming compliance.

Gratitude to the ministry of communications round table panellists, presenters, all participants, interpreters