Assessment report for the Workshop on Conformity and Interoperability testing centres, Nairobi 2-4 August 2010

At the kind invitation of the Communications Commission of Kenya (CCK), the Telecommunication Development Bureau (BDT) organised a workshop on NGN conformity and interoperability testing centres and testbeds which took place in the Intercontinental Hotel, Nairobi, Kenya from 2nd to 4th August, 2010.

Information on the Workshop may be found at:
http://www.itu.int/ITU-D/tech/network-infrastructure/index.html

The Workshop was held back to back with the ITU-TSB's conference on consultation on Conformity Assessment and Interoperability testing, from 30th to 31st July, 2010

Participation to the workshop was opened to ITU Member States, Sector Members and Associates as well as to any individual from international, regional and national organizations. The workshop was intended for executives from National Regulatory Bodies, from Telecommunication Operators, and Service Providers from AFR who need to be kept abreast of the latest development in the telecommunications, related aspects of conformance and interoperability of equipment and systems and who need to be familiar with the future technologies, applications and trends for bridging the development gap and fostering the implementation of Next Generation Networks and Broadband Networks for developing countries.

Additionally, the workshop highlighted ways and means to enhance cooperation and participation in ITU's activities related to conformance and interoperability

The workshop gave also emphasis on exchanges of experience in regard to the technical, economic and regulatory aspects of building conformance and interoperability test labs in AFR, The event was attended by more than 40 delegates from many countries of the whole Africa continent (list of participants http://www.itu.int/ITU-D/tech/network-infrastructure/index.html

Scope of the Workshop

During the ITU-D Regional development Forum held in Lusaka in May 2009, whose theme was "NGN and Broadband Networks - Opportunities and Challenges", the Forum consensus requested ITU to assist in establishing NGN conformity and interoperability testing centre(s) and testbeds in Africa. It was very clear during the Forum that the evolution taking from legacy to NGN networks had completely placed new requirements on telecommunications/ICTs networks' conformity and interoperability. The WTDC-10 in its Resolution 47 reaffirmed the importance to:

- assist developing countries in building their capacity, in collaboration with ITU-T, so as to be able to perform conformance testing of equipment and systems, relevant to their needs, in accordance with the relevant Recommendations;
- conduct conformance assessment and interoperability testing events, preferably in the developing countries, and encouraging developing countries to attend these events .

Further to the request of the Forum held in Lusaka in May 2009 and with the scope of sharing opinions with the African Countries for planning future activities in line with the results of the WTDC-10 Res. 47, the BDT organised the workshop in Nairobi, with a view of establishing testing centres, to initially disseminate information concerning the current situation in the NGN industry in both networks and services and the need to

establish testing centres and testbeds, especially in Africa where countries, including the industry, are developing. The workshop gave also emphasis on the role of various stakeholders ranging from academia, Government like ministries, regulators, operators to end users.

The main objective of this workshop was to inform the attendees in the following subjects: experience of NGN introduction in African countries, 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 of protocols, equipment and services conformance testing, experience from international testing projects, how building a test lab.

Subjects discussed during the Workshop

The following aspects were addressed and discussed during the Workshop (see whole Program http://www.itu.int/ITU-D/tech/network-infrastructure/index.html)

- Session 1: BDT and TSB activities on Conformance and Interoperability

- Session 2: Global Approaches of Testing

- Session 3: Building Testing Labs

- Session 4: ITTC Testing Experience

- Session 5: Approach of Service and QoS Testing

- Round table: steps to be undertaken to create capacity building opportunities and to facilitate the creation of regional test labs

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 between countries and ITU. Sharing of a number of ICT development experiences between all stakeholders for fostering the implementation and the interoperability of Next Generation Networks and Broadband Networks for developing countries.Definition of the Action plan for 2011 for the implementation of WTDC-10 Resolution 47: finalization of a **Questionnaire aiming at collecting information from Countries on the status of Conformance and Interoperability of Equipment and System** and finalization of the content of the "**Guidelines on establishing conformity assessment test labs in the Region"**(http://www.itu.int/ITU-D/tech/network-infrastructure/index.html)

Sharing of results and experiences in the Region on conformance and Interoperability was very well received from the participants

Strengths: The workshop was very well attended in terms of number of participants and interest demonstrated by the attendees during all sessions. The discussions were among the most constructive ever, with high participation providing interesting proposals to go forward in the implementation of the WTDC-10 Resolution 47 in close collaboration with TSB (WTSA-08, Resolution 76). Collaboration and availability of participants in finalizing two documents **Questionnaire** to be sent for receiving the opinion of the AFR countries on building Testing Center for Africa; Content of the **Guidelines** for assisting AFR countries for building testing centers. Strong support from Developing Countries for the immediate implementation of the Resolution 47 and the finalization of the Guidelines

The BDT has increased the regional presence demonstrating readiness and capability to assist countries in the important issue of conformance and interoperability. High quality of content of the presentations of the Speakers. Good internal coordination inside ITU

Participants came from regulators, operating companies, certification authorities, governments, representatives of consumers

Challenges faced: Some problems in allocating the slot 2-4 August were faced due to a number of events planned in the Region. Lack of coordination with HRD that organized a workshop on Equipment Standards and Certifications for Spanish and Portuguese Speaking Countries in Africa, Sao Tome and Principe, 26-30 July 2010, just the week before the workshop in Nairobi was held.

Recommendations and Follow up: The Achievements and results of the workshop can be considered positive on the whole.

The necessary resources should be recovered as appropriate inside TND/Programme 1 for the implementation and follow-up of the following recommendations and results coming from the workshop (implementation of WTDC-10 Resolution 47):

Conduct training activities for increasing capacity building in and assisting countries for establishing testing centers for ensuring conformance and interoperability of new equipment and system. Increasing awareness and knowledge on conformance and interoperability will allow countries choosing/installing equipment and system from different vendors in order to increase competition among them. Consequently the prices of new equipment and systems to be installed in the Telecommunication networks will decrease;

Finalization of the **"Guidelines on establishing conformity assessment test labs in the Region"** It is recommended the Guidelines to be finalized by the end of 2011. The Guidelines shall include:

1. Process required for building test labs, Roadmap for building test labs + sustainability issues
2. Situation in the Region and Economic Analysis
3. Financing opportunities
4. Collaboration mechanisms
5. Best practices
6. Reference Recommendations

(for more information on the content of the Guidelines see http://www.itu.int/ITU-D/tech/network-infrastructure/index.html)

The Questionnaire that has been finalized during the workshop will be shared with TSB for further comments and input before being sent to the countries;

The African countries in consultation with ATU should identify the locations for test centres in the region / sub region;

Operators from Africa were recommended to participate in the work of ITU to learn more about standards and how to implement them. The products selected to be installed in their networks will benefit from a high degree of interoperability;

Mutual Recognition Agreements and/or Arrangement (MRAs)are recommended in order to reduce testing costs, increase competition, increase confidence of end users to products (tested once tested everywhere, expensive and time-consuming duplication of testing effort can be avoided);

The List of contents of the guidelines will be further revised with the collaboration of experts and partners to be involved for the finalization of the guidelines (see list of topics http://www.itu.int/ITU-D/tech/network-infrastructure/index.html) ;

Participation of High level BDT Management in similar Events is also recommended.