

BDT activities on Conformance and Interoperability

World Telecommunication Development Conference 2010 Hyderabad, India

Programme 1 Resolution 47

**ITU Regional Seminar for the Africa Region on
Conformance and Interoperability Testing Centre(s)
Accra (Ghana), 4-6 July 2011**

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PROGRAMME 1: Programme on information and communication infrastructure and technology development

Purpose

The objective of this programme is to assist ITU Member States and ITU-D Sector Members and Associates to maximize the utilization of appropriate new technologies for the development of their information and communication infrastructures and services, by taking due account of broadband deployment, transition from analogue to digital broadcasting, traffic and demand forecasting, spectrum management and radio monitoring, [interconnectivity](#), [interoperability](#), network management, security, and quality of service standards for wired and wireless networks, including mobile telecommunications, next-generation networks, rural and satellite telecommunications and the accelerated convergence of the telecommunication networks and services.

Particular attention will be given to [capacity building in the development and use of ICT networks through training activities and sharing of information and know-how](#), as well as to developing and making openly available relevant guidelines, manuals and case studies

PROGRAMME 1: Priority areas

- **Spectrum management and radio monitoring**
- **Broadcasting**
- **Next-generation networks**
- **Mobile communications (2G, 3G, 4G, etc.)**
- **Broadband networks**
- **Rural communications**
- **Outside plant**

PROGRAMME 1: Deliverables and means

- **Creation of tools and guidelines:-**
- **Creation of training material and delivery of training**
- **Direct assistance to members:- provide assistance on network management, interconnectivity, interoperability and quality of service standards and alternative routing systems, for wired and wireless networks**
- **Implementation Res.47**

RESOLUTION 47 (REV. HYDERABAD, 2010)

Promotes enhancement of knowledge and effective application of ITU Recommendations in developing countries, including conformance and interoperability testing of systems manufactured on the basis of ITU Recommendations

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instructs the Director of the Telecommunication Development Bureau, in close collaboration with the Directors of the Telecommunication Standardization Bureau and the Radiocommunication Bureau

- 1. to encourage the participation of developing countries in training courses and workshops organized by ITU-D so as to introduce best practices in the application of ITU-R and ITU-T Recommendations, for example by providing fellowships;*
- 2. 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;*
- 3. to assist the Director of TSB, and in collaboration with the Director of BR, and as appropriate, with equipment and systems manufacturers, internationally and regionally recognized standards development organizations, in conducting conformance assessment and interoperability testing events, preferably in the developing countries, and encouraging developing countries to attend these events; and to collaborate with the Director of TSB to build capacity of the developing countries to effectively participate and be involved in these events, and to provide views of developing countries on this issue following a questionnaire addressed by Programme 1 to the ITU members;*

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4. to coordinate and facilitate participation of specialists from developing countries in the work of international or regional test laboratories of organizations or entities specialized in conformance assessment and interoperability testing, in order to gain on-the-job experience;
5. to collaborate with the Director of TSB in order to implement the recommended actions on Resolution 76 (Johannesburg, 2008) as endorsed by the ITU Council in 2009;

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- 6 to assign to Programme 1 the responsibility for following up implementation of this resolution, to conduct a field study on the economic feasibility of and need for creating regional laboratories in areas which may need them (the Africa region, the Arab region and the RCC, the Americas region and the Asia and Pacific region) for conformance and interoperability testing of manufactured systems in relation to ITU-R and ITU-T Recommendations, and to report to Council on the results of this field study;
- 7 to submit a periodic report to the Telecommunication Development Advisory Group on the implementation of this resolution as well as a report to the next WTDC in 2014 on implementation of this resolution, which shall also contain lessons learned with a view to updating the resolution for the phase after 2014.

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In collaboration with TSB

First Step:

Prepare the Questionnaire. Content of the Questionnaire:
feedback from the workshop 2-4 August 2010

Second Step:

Define the framework of the Field study on the economic feasibility of and need for creating regional laboratories in areas which may need them (the Africa region, the Arab region and the RCC, the Americas region and the Asia and Pacific region) for conformance and interoperability testing of manufactured systems in relation to ITU-R and ITU-T Recommendations, and to report to Council on the results of this field study;

Third Step

Identify partners for conducting the Field Study and Training Activity Region by Region.

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Questionnaire. Content of the Questionnaire

feedback from the workshop 2-4 August 2010

- Questionnaire is available on the following link;-
(<http://www.itu.int/ITU-D/CDS/gq/generic/questionnaire.asp?ProjectID=193>)
- ***Purpose of the Questionnaire: to collect information from ITU Members on the status of Conformance and Interoperability of Equipment and Systems***
- Replies to the Questionnaire will be presented during the Seminar

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Guidelines for Developing Countries on establishing conformity assessment test labs in different Regions

The Guidelines shall include

- ***Process required***
- ***Situation in the Region and Economical analysis***
- ***Financing opportunities***
- ***Collaboration mechanisms***
- ***Best practices***
- ***Reference Recommendations***

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Content of the Guidelines

(to be presented during the Seminar)

- ***Collecting information from Developing Countries on the need to build testing labs for conformance and interoperability to test equipment and systems***
- ***Collecting information on existing testing labs and their areas of activities in the ICTs field***
- ***Collecting views on opportunities to establish type approval testing labs in the countries and to implement Mutual Recognizing Agreements / Arrangements for ICTs products.***
- ***Identifying the criteria and characteristic to establish accredited Bodies/Labs in the Regions for Type Approval/Homologation based on rules and recommendation, best practice (e.g. ISO/IEC/CASCO toolbox, guides and standards such as ISO/IEC 17011 and 17025) internationally used to issue conformity testing certifications as necessary,***

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Content of the Guidelines (Cont'd)

- ***Advising on technical and economical steps to be followed to build Testing Labs according to the identified criteria and characteristics outlined in ISO/IEC 17025***
- ***Considering the involvement of other international funding and training organization where applicable***
- ***Proposing MRAs reference documents for mutual recognition of conformity assessment of telecommunication equipment and systems in consultation with recognized agencies/associations/bodies that could advise and coordinate MRAs at Regional level also contributing to populate the ITU database of conforming and/or interoperable products***
- ***Acquiring elements from International experience of testing center creation from other organizations for an optimal strategy of standardization and testing organization procedure***

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Content of the Guidelines (Cont'd)

- ***Cooperating with ITU-T in the search of available test suites from any SDO and sending inputs to the Study Groups to consider the development of new test suite***
- ***Exploring the possible role of International telecommunication testing centers (ITTC) Unified and test network solutions for Region (equipment requirements, special requirements to services and QoS); ITTC's operational procedure The typical work plan for build ITTC; Structure of ITTC includes testing lab facilities, technologies and equipment to be tested, personal to be trained***
- ***Estimating the Impact and cost penalty due to lack of unified work program for Region (regional specific requirements, methodology of testing)***
- ***With the assistance from the Related Organization (e.g. African Telecommunication Union for AFR Region), identifying and proposing the possible location of the Test Centre(s)***

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Content of the Guidelines (Cont'd)

- **Identifying the roadmap and guidelines in accordance with the environment for NGN test centre project document and the roll out plan.**
- **Evaluation of economical impact on:**
 - **creation of test centers according to established criteria (geographical distribution, existing labs and technologies to be tested,**
 - **creation of capacity building opportunities**
 - **costs of human, material and instrumental resources**
 - **costs of maintenance and periodical activities (e.g. calibration)**
 - **others**