

ITU Training on Conformance and Interoperability 
 for the Arab region
 Tunis, Tunisia, 2-6 April 2013

**ITU Conformity and Interoperability
 Programme**

Pillar 3 and 4

<http://www.itu.int/en/ITU-T/Technology/Pages/ConformanceandInteroperability.aspx>

Riccardo Passerini
 Telecommunication
 Development Bureau, ITU

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**The Telecommunication
 Development Bureau Side** 

- ❖ Capacity building
- ❖ Establishment of test centres and appropriate C&I Regimes including MRAs in developing countries.


Meeting with in-deep consideration for test centres and Capacity Building in the Regions

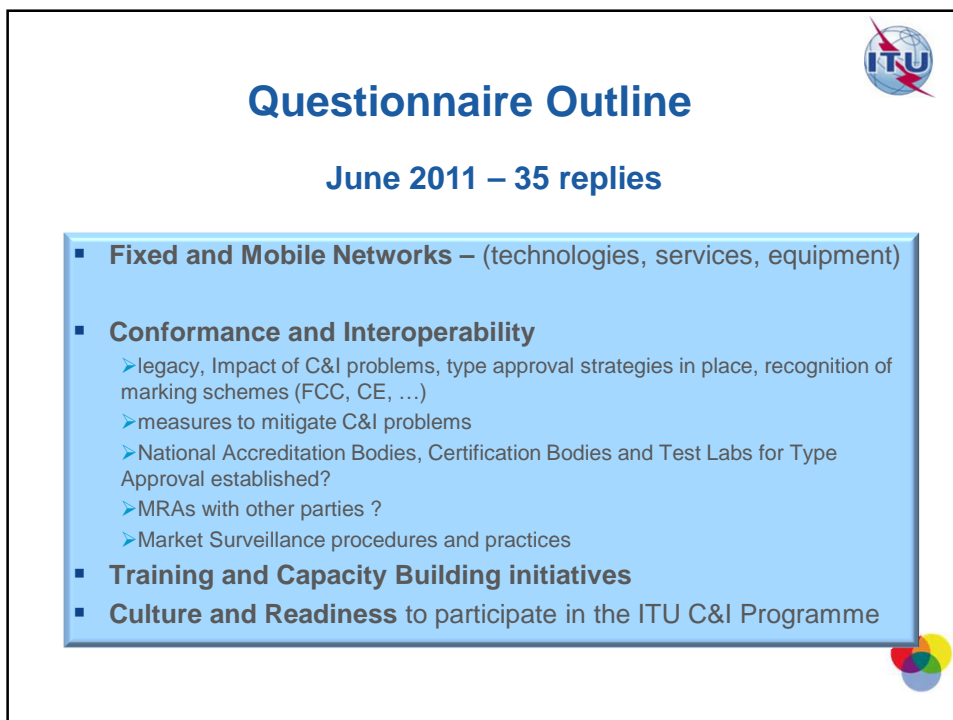
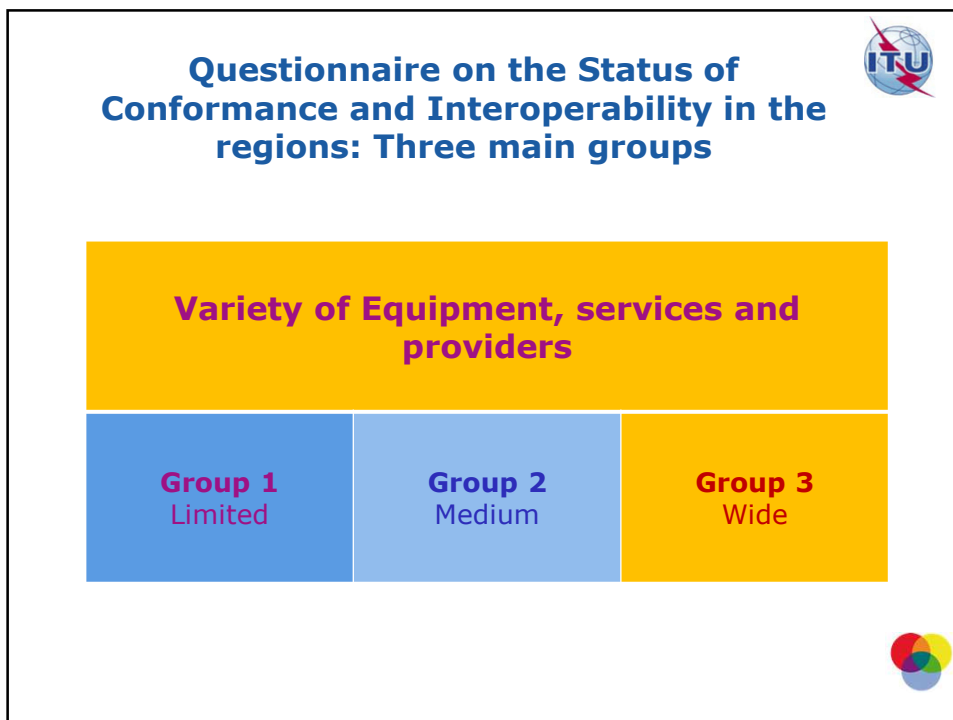
Held:



- ❖ Africa (Ghana)
- ❖ CIS (Moscow)
- ❖ Americas
- ❖ Arab States (Tunis) Forum and Training 5-10 Nov. 2012



Next:

- ❖ Asia Pacific (2013)





Fixed & Mobile networks 		
Group 1 Limited variety of equipment, services and providers	Internet/IP Gateway services 2G and 3G GSM network services	No equipment listed in response, referred/deferred to service provider for detailed information
Group 2 Medium variety of equipment, services and a few providers	TDM voice, fax, international voice, data Internet/IP ADSL, Cybercafe, VoIP NGN Softswitch voice, data 2G voice, local and international SMS, prepaid 3G international and local SMS, data and Internet	Tendence to have a dominant equipment supplier
Group 3 Wide variety of equipment, services and providers	TDM voice, data, ISDN Internet/IP VoIP, data, email, wimax, metro ethernet NGN Softswitch voice, fax, ISDN NGN IMS VoIP, digital fax 2G GPRS/EDGE, circuit switched data, voice, SMS 3G HSPA + mobile broadband, voice, AMR-WB voice, CS video call, SMS, R99 PS data	Tendence to have a wide mix of suppliers 

Conformance and Interoperability 	
Group 1 Limited variety of equipment, services and providers	Reported no problems – likely single operator Type Approval regime reported in place No Type Approval responsible body Marking – recognized either a body recommended by service provider or well known Mark such as EC, FCC No national accreditation, certification bodies or test labs, No MRAs, No market surveillance, No ICT labs
Group 2 Medium variety of equipment, services and a few providers	New equipment and legacy – Interoperability: signalling in core networks, equipment malfunctions, implementation of new features on all platforms – Affecting QoS, customer satisfaction and loss of business - Pre installation activities carried out to mitigate interoperability problems - Half of this Group have Type Approval regimes - Half have Type Approval bodies - No national accreditation and certification bodies, No MRAs -No market surveillance
Group 3 Wide variety of equipment, services and providers	Longer lists of interoperability problems such as: MSAN-Softswitch conformity, ISDN support, IMS core, software Economic impacts: additional costs, company image, QoS, project delay, upgrade costs, extra testing costs Pre installation work always done to mitigate interoperability problems - Type Approval regimes in place - Type Approval Bodies in place - Recognize EU, or FCC, or IC or all three Accreditation and certification bodies in place as well as test labs. MRAs active - Market surveillance in place 

Training and Capacity Building

Group 1

Limited variety of equipment, services and providers

Interested in follow-up training/capacity building related to WTDC 2010 Res 47, WTSA 2008 Res 76, PP-10 Res177

Group 2

Medium variety of equipment, services and a few providers

Would **participate** in development of regional program in **capacity building**

Interested in opportunities to **establish** national, sub-regional and regional **test centres**

Group 3

Wide variety of equipment, services and providers

No ICT Labs capable of hosting test events or ITU activities



Training and Capacity Building

Group 1

Limited variety of equipment, services and providers

Interested in **follow-up** training/capacity building related to WTDC 2010 Res 47, WTSA 2008 Res 76, PP-10 Res177

Group 2

Medium variety of equipment, services and a few providers

Would **participate** in development of regional program in **capacity building** and **expert tutorials**

Interested in opportunities to **establish** national, sub-regional and regional **test centres**

Group 3

Wide variety of equipment, services and providers

Availability of ICT Labs to **host test events** or ITU activities



Questionnaire: Overall results



- Highlighted ***lack of interoperability***
- ITU to ***provide assistance and relief***
- ***capacity building*** and access to expertise is an essential ingredient
- initiatives to promote the use of **global testable standards**
- ***test events for*** compliance and interoperability ***welcome***



Guidelines for Developing Countries for Establishing Test Labs in Different Regions



<http://www.itu.int/ITU-D/tech/ConformanceInteroperability/ConformanceInterop/indexGuidelines.html>

- ***Status*** in the regions and needs
- ***Funding and Training Sources***
- ***Criteria*** to establish Accreditation and Conformity Assessment Bodies - ***International Telecommunications Testing Centres (ITTCs)***
- Economics and ***Cost Implications*** for ITTCs
- ***Roadmap*** for ITTC rollout



Needs in Developing Countries for Test Labs

- Conformity Assessment Bodies to contribute to create an orderly telecom apparatus market place
- Once standards and test suites are in place, test labs can check equipment for compliance
- Sharing test labs resources amongst countries and regions may lowering overall costs while continuing addressing regional priorities
- A robust framework (following international procedures – ISO/CASCO) needed for trust and confidence in test results and among test labs



Conclusions from Guidelines

- Members to:
 - advise the ITU of **interoperability problems**
 - Regulators to establish market access requirements
 - assess **legislation and regulations**
 - **prioritize areas of concern** for products and systems
- Establishment of Accreditation Bodies and approach to **MRAs and MLAs**
- Establishment of **Test Centres** on a regional basis, wide areas and possibly common infrastructures



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Steps to Establish an ISO 17025 Compliant Test Lab



- Management requirements and systems
- Lab requirements, test methods and procedures, audits, equipment handling, technical competence
- Document control, calibration records and staff records
- Handling of test reports and calibration certificates
- Service to customers and handling of complaints



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Funding and Training Sources



- UNIDO, major Banks in each region, specialized funding agencies for telecoms projects and others
- Requirements to access funds vary from low interest loans, to grants, seed funding and cost underwriting
- Repository of international telecom training organizations
- Costs of training may vary from just travel to and from location, to government and supplier subsidized training, to private for-profit fully costed training.



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ITU Training activities on C&I



Dedicated exclusively to C&I (<http://www.itu.int/ITU-D/tech/events/index.html>)

- Workshop on NGN Conformity and Interoperability Testing Centre(s), Nairobi (Kenya), 2-4 August 2010
- ITU Regional Seminar for the Africa Region on Conformance and Interoperability Testing Center(s), Accra (Ghana), 4-6 July 2011
- ITU Regional Seminar for the CIS Countries on Conformance and Interoperability Testing Center(s), Moscow (Russian Federation), 9-11 November 2011
- **Africa and Arab Regions, Tunis 5-7 Nov 2012**
- **ARB Region 2-6 April 2013 (EMC Compatibility)**
- **Next: Africa Region, 14-18 October 2013 (EMC Compatibility)**

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Capacity building and test centres



- ❖ ITU is implementing proposals on human **capacity building**
- ❖ ITU will assist developing countries in the establishment of test facilities and in cooperation with **international institutions**:
 - UNIDO
 - International Laboratory Accreditation Cooperation (ILAC)
 - International Accreditation Forum (IAF),...
 - Labs and R&D institutions



What's next in 2013



Pillar 3

- Forum and Training on Conformance and Interoperability for ASP CIS Region
- Training on Conformance and Interoperability for Arab and Africa Regions
- Training on Conformance and Interoperability for AMS Region

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What's next in 2013



Pillar 4

- Conformity and Interoperability Assessment on Regional Basis: Collaboration with Regional and Subregional Organizations for establishing a common C&I Regime and Mutual Recognition Arrangements
- Guidelines on establishing Conformity Assessment Test Labs and Regimes in different Regions
- Guidelines for the development, implementation and management of Mutual Recognition Agreements (MRAs)
- Initiate a pilot project for the development of a regional test facility in Asia Pacific
- Sub-Regional Workshop for SADC Countries to promote the development and implementation of Mutual Recognitions Agreements

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ARB, AFR and ITU Cooperation

- ❖ **Analysing the status of resources in the regions**
- ❖ **Finding regional agreements about possible locations for resources/ and testing capabilities**
- ❖ **Participation in Capacity Building activities, accreditation and certification**
- ❖ **Participation in the creation of regional test laboratories**



Thank You !

