``JOINT ATU-ITU SEMINAR: WTSA-12 & WCIT-12 REGIONAL DEBRIEFING"

(Durban, South Africa, 10-11 July 2013)

Key Issues on Conformance & Interoperability (C&I)

ISAAC BOATENG Manager NCA & Vice Chair ITU_T SG11 isaac.boateng@nca.org.gh



Key Issues on Conformance & Interoperability (C&I)

- Overview of C&I presented to WTSA-12
- WTSA-12 outcome on C&I Res 76
- What does it mean to Africa Group
- Scope of Work on C&I @ TSB & BDT
- Proposed Action Plan for implementing C&I





Overview of C&I presented to WTSA-12

- Unresolved issues since WTSA-08
 - Influx of sub-standard and counterfeit equipment
 - Raised issues of reliability and safety with users
 - we cannot confirm whether or not these systems and terminals conform to required standards
 - Lack of testing to ascertain equipment that have met the required standards
 - Network providers and equipment dealers bring any equipment of choice.



Overview of C&I presented to WTSA-12

- Unresolved issues since WTSA-08
 - Many African countries have no established laws to guide importation of ICT apparatus.

No MRAs

- We mostly rely on ITU, FCC and IEC to verify equipment conformity
- Lack of expertise/capacity building problems
- Poor market surveillance capabilities
 - Regulatory vacuum



Overview of C&I presented to WTSA-12 - A Gap Analysis

Less consumer confidence in Government & Regulatory bodies

Increase in digital divide
> widen the standardisation gap
> counter productive to ITU-T Res 44



Authority for Action; ITU's highest decision making bodies

ITU Resolutions on C&I

- Resolution 76: ITU World Telecommunication Standardization Assembly (WTSA-12)
- Resolution 47: ITU World Telecommunication Development Conference (WTDC-10)
- Resolution 177: ITU Plenipotentiary Conference (PP-10)
- Resolution 62: Radiocommunication Assembly 2012
- ITU Council Decisions: (2009, 2010, 2011, 2012)



Highlight of key discussions on C&I @WTSA-12

Res 76 signifies:

Studies related to conformance and interoperability testing, assistance to developing countries and a possible future ITU mark programme

Africa Group proposed amendments

Main Resolves

SG11 to coordinate and lead study on C&I



Highlight of key discussions

#Instruct Director TSB

expand to cover counterfeit equipment find measures to face out the problem of counterfeiting

strengthen to identify locations for the establishment of testing centres within the next study period

Continue to find measures to build the necessary human-resource capacities



WTSA-12 outcomes on Res. 76

"Resolves"

■ITU-T SG11: to lead & coordination role on C&I

Other SGs: to develop conformance testing specifications for ITU-T Recs.

Cooperation with external entities: Governmental, non-governmental, accreditation and certification bodies



WTSA-12 outcomes on Res. 76

"Instructs TSB Director"

In cooperation with other ITU sectors:

Continue C&I Forums in the regions

Implement the action plan and an ITU C&I Programme for a possible introduction of an ITU Mark

Involve experts and external entities as appropriate



WTSA-12 outcomes on Res. 76

"Instructs Study Groups"

Identify and prepare existing and future ITU-T Recommendations with market and user demand for conformance and interoperability testing

Cooperate with interested stakeholders to a conformity assessment programme for key technologies



WTSA-12 Res76; What does it mean to ITU Africa Member States?

- Deepen our support for ITU C&I programme
- Standardisation Sector (Pillars 1&2)
 - Conformity assessment database to address
 - Issues of safety & ensure consumers confidence
 - Develop testing requirement to check counterfeiting
 - Interoperability Testing
 - systems correctly implement the technical specifications to ensure successful integration communication protocols.
 - Common "interfaces" to ensure end to end QoS delivery
 - Competition & Technology neutrality
 - Capex & Opex cost reduction



WTSA-12 Res76; What does it mean to ITU Africa Member States?

Africa can propose for the establishment of regional group of SG11

Africa shall be visible (contributions) in SG11 activities

Influence SG11 recommendations



WTDC-10 RES47; What does it mean to ITU Africa Member States?

Development sector (Pillars 3&4)

Capacity building exercise

- to disseminate awareness about conformity and interoperability
- to reduce the digital divide and standardization gap
- clarify fundamental issues of accreditation, certification & MRAs

Establishment of testing centres DC

- to facilitate the establishment of regional or sub regional C&I test centres
- To encourage MRAs.
- BDT could provide strategy to establish test centres, including technical,

Experience sharing

Collaborate among Regional and Sub-Regional Organizations for a common C&I Regime including MRAs

ITU_T SG11 @Glance

ITU-T SG11 has been designated:

- Lead study group on signalling and protocols
- Lead study group on machine-to-machine (M2M) signalling
- Lead study group on IoT testing
- Lead study group on test specifications, conformance and interoperability testing

SG 11 chairs and vice-chairs

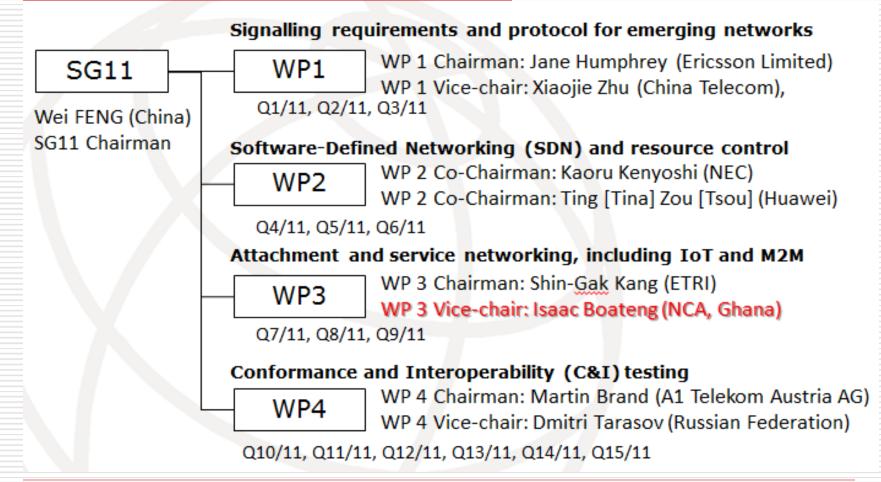
WTSA-12 re-elected Mr Wei FENG (Huawei Tech, China) as chairman of SG11 and appointed the following six vice-chairmen:

Mr Isaac BOATENG (Ghana)	isaac.boateng@nca.org.gh
Mr Martin BRAND (Austria)	martin.brand@a1telekom.at
 Mr Shin-Gak KANG (Rep. of Korea)	sgkang@etri.re.kr
Mr Kaoru KENYOSHI (Japan)	kaoru.kenyoshi@emea.nec.com
Mr Dmitri TARASOV (Russian Federation)	dmitry.tarasov@ties.itu.int
Mr Horacio VILLALOBOS TLATEMPA (Mexico)	horaciov@cft.gob.mx

International

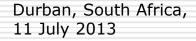
Telecommunication

Structure of SG11



Lists of Questions under SG11

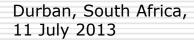
QUESTIONS	TITLE
Q1/11	Signalling and protocol architectures in emerging telecommunication environments
Q2/11	Signalling requirements and protocols for service and application in emerging telecommunication environments
Q3/11	Signalling Requirements and Protocol for Emergency Telecommunications
Q4/11	Signalling requirements and protocols for Bearer and Resource control in emerging telecommunication environments
Q5/11	Protocol procedures relating to services provided by Broadband Network Gateways
Q6/11	Protocol procedures relating to specific services over IPv6
Q7/11	Signalling and control requirements and protocols for network attachment supporting multi-screen service, future networks, and M2M
Q8/11	Guidelines for implementations of signalling requirements and protocols
Q9/11	Protocols supporting distributed, smart service networking and end-to-end multicast
Q10/11	Service and networks benchmarking measurements
Q11/11	Protocols and Networks Test Specifications
Q12/11	Internet of things test specifications
Q13/11	Monitoring parameters for protocols and emerging networks
Q14/11	Cloud interoperability testing
Q15/11	Testing as a service (TAAS)





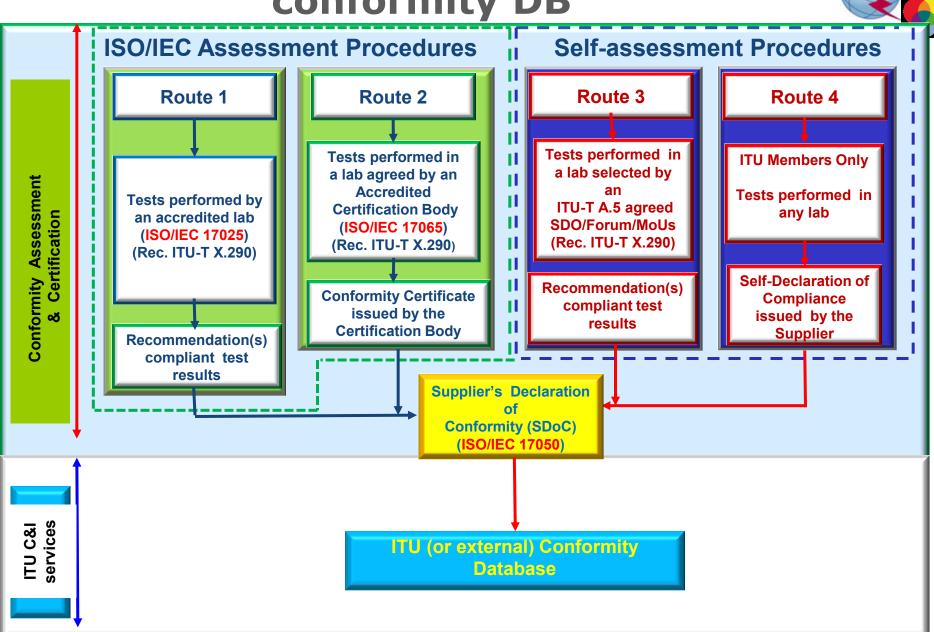
Work on C&I @ SG11

- SG11 C&I Action Plan approved (refer to TD 070 (GEN/11)
 - living list of technologies under study in ITU-T for C&I testing
 - list of pilot projects for conformity assessment against ITU-T Recs
 - reference table of testing requirement specification for C&I assessment of ITU-T Recs
 - ITU C&I databases: Certification and Conformity Assessment bodies
 - SG 11 to decide whether or not to drop Route 4 of the ITU conformity database





Four routes to populate conformity DB



Work on C&I @ TSB-SG11

SG11 invite all ITU-T SGs to:

identify candidate technologies and candidate pilot project

- references on available test suites of ITU Recs if any
- > prepare testing requirements under guideline developed by SG13

develop test suites when needed, in cooperation with SDOs if appropriate

JCA-CIT ToR revised



Work on C&I @ BDT

- Capacity Buildnig, Training & Test centres:
- BDT collaborates with regions & organise
 - Conformity, interoperability & Testing opportunities
 - to clarify fundamental issues of accreditation, certification, MRAs and Testing.
- Guidelines for DC on establishing conformity assessment test labs in regions
- Guidelines for the development, implementation and management of MRAs



Proposed Action Plan for Implementing C&I - Res 76

ATU/ITU organised C&I workshops as part of capacity building and awareness

A study & what action is required on;

- regulatory/ legal framework,
- institutions dealing with conformance assessment
- accreditation bodies, laboratories, MRAs, certification and marking

Discuss C&I issues at ministerial level so African Governments can commit to its implementation



Proposed Action Plan for implementing Res 76

- Explore the possibility of PPP/BoT for establishing a testing lab; agreement could include training
 - Populate SG11 in the region; establish regional group of SG11
 - contribute to C&I programme
 - encourage operators to participate in regional activities
- National, Regional or Sub-regional C&I Assessment Body
 - To identify our needs and possible solutions.
 - To establish a Common C&I Regime and MRAs coordination



Concluding Remarks

- C&I has matured; ITU, IEEC, other SDOs, Asia, Arab States are walking the talking; What about Africa?
- Conformance and interoperability within the framework of standardization;
 Makes a significant contribution to national development goals
 Bridges the digital divide
- Collaborations among Regional Organizations should be encouraged.



References

ITU C&I resources

C&I Portal - <u>http://www.itu.int/en/ITU-T/C-</u> <u>I/Pages/default.aspx</u>

JCA-CIT - <u>http://www.itu.int/en/ITU-</u> <u>T/jca/cit/Pages/default.aspx</u>

SG11 (lead group on testing) -<u>http://www.itu.int/en/ITU-T/studygroups/2013-</u> 2016/11/Dagas/dafault.aspy

2016/11/Pages/default.aspx





