ITU-T Conformity and Interoperability Portal Overview

July 13,2012
Hajime KOTO, NEC

ITU Resolutions on C&I

- *Endorsement* **Resolution 76, Resolution 47** and decisions of **Council-09**

  - *Conformity &Interoperability (C&I) programme* **to be implemented in parallel and without any delay**

  - *Parallel* development of a *long-term business plan* in consultation with each region

  - *Assist developing countries* in establishing regional or subregional conformity and interoperability centres

  - Studies in view to introducing the use of *ITU Mark* for a possible future ITU Mark programme

[adapted from "ITU Information Session on Conformity and Interoperability"(Jan. 12, 2012 , Geneve)]

The ITU C&I Programm

TSB lead:

1. Conformity database
(ITU-T Conformity and Interoperability Portal)
2. Interoperability events

BDT lead:

1. Capacity building
2. Establishment of test centres in developing countries.

ITU-T C&I Portal

- *Informative and voluntary database* open both to *members and non-members* **for conforming products**

- **Adoption of international** *ISO/IEC standards* **and guidelines or self-assessment approach**

- *On-line inputs* **directly made by Companies**

- *ITU Liability*: **ITU is not participating in any testing/certification activities**

- **Products conforming to standards** *increase* **the** *probability of interoperability*

[adapted from "ITU Information Session on Conformity and Interoperability"(Jan. 12, 2012 , Geneve)]

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ITU-T C&I Portal Overview(1)
<http://www.itu.int/net/ITU-T/cdb/Default.aspx>

ITU Conformity and Interoperability Portal

Enabling the interoperability of ICT products is one of standardization's core principles. Products developed in accordance with ITU standards should provide the interoperability needed for users of these products to make use of them anywhere in the world, regardless of who has manufactured them and who is offering the service.

The ITU Conformity and Interoperability (C&I) Portal is intended to cover a wide range of issues including the ITU C&I Programme, concepts, information on entities, laboratories, certification and accreditation bodies, SDOs, training opportunities, assistance for regional centres and links to other databases in the C&I field
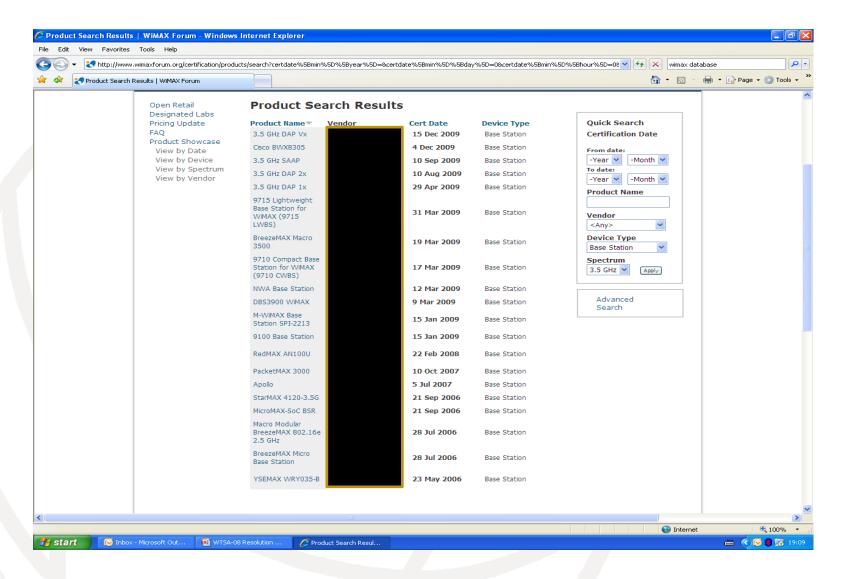
- **The ITU Conformity and Interoperability (C&I) Programme Concepts and Guidance**

- **ITU Conformity Database**

- **Interoperability and "ITU Interop Events"**

- **Capacity Building & Guidelines for establishing test centres**

- **Vendors, Industry, Testing**

- **Laboratories**

- **Standards Developing Organizations and International Organizations**

Contact on conformity: conformity@itu.int
Contact on interoperability: interop@itu.int

ITU-T C&I Portal Overview(2)

- **The ITU Conformity and Interoperability (C&I) Programme Concepts and Guidance**
  - Conformity Assessment
    - Mandatory Conformity Assessment Schemes
    - Certification schemes established by various organizations
      - **Global Certification Forum**
      - **CTIA – The Wireless Association**
      - **WiFi Alliance**
      - **WiMAX Forum**
      - **Metro Ethernet Forum (MEF)**
      - **Broadband Forum (BBF)**
      - **HomeGrid Forum**
      - **IEEE Conformity Assessment Programme (ICAP)**
      - **CableLabs**
      - **SIP Forum**
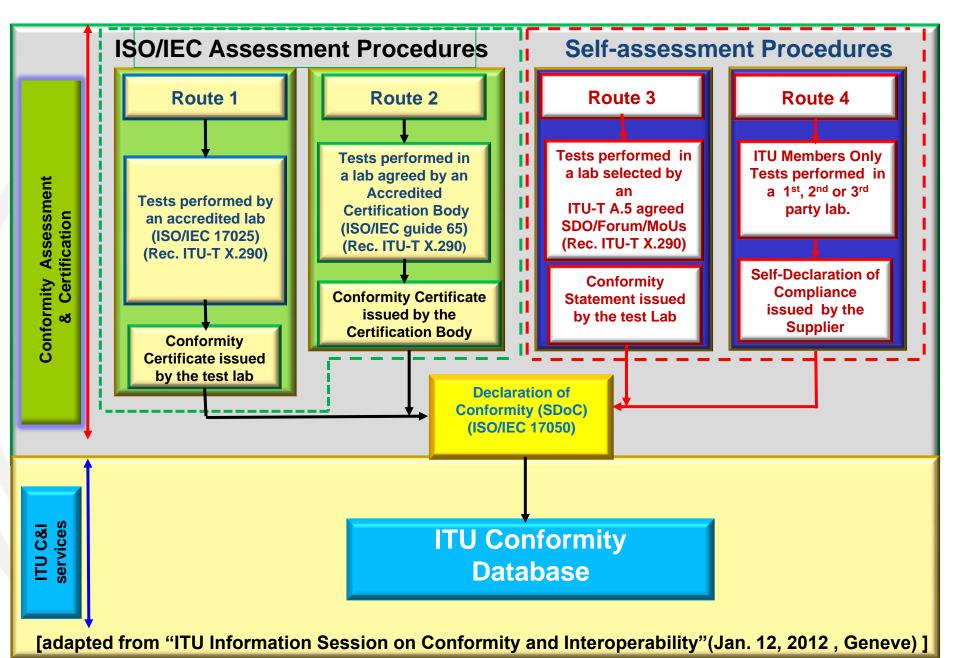   - **IPv6**

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......from WiMax Forum...

[adapted from "ITU Information Session on Conformity and Interoperability"(Jan. 12, 2012 , Geneve)]

ITU-T C&I Portal Overview(3)

- **ITU Conformity Database**

  - The ITU-T Conformity Database
    - ITU-T Recommendations with Test Specifications
      - Optical fibre cables:
      - Characteristics of optical components and subsystems:
      - Optical fibre submarine cable systems:
      - Coding of voice and audio signals:
      - Coding of moving video:
      - Protection against interference – resistibility:
      - Voice terminal characteristics:
      - Integrated Services Digital Network (ISDN):
    - Supplier's Declaration of Conformity (SDoC)
      - Company information
      - Product information
      - ITU-T Recommendations implemented in the product
      - SDOs (Accepted under A.5) whose standards are implemented in the product
      - Declaration of conformity
        Route 1 ,2, 3 and 4

Populating the ITU-T conformity DB

ISO/IEC Assessment Procedures

Conformity Assessment & Certification

Route 1

Tests performed by an accredited lab (ISO/IEC 17025) (Rec. ITU-T X.290)

Conformity Certificate issued by the test lab

Route 2

Tests performed in a lab agreed by an Accredited Certification Body (ISO/IEC guide 65) (Rec. ITU-T X.290)

Conformity Certificate issued by the Certification Body

Self-assessment Procedures

Route 3

Tests performed in a lab selected by an ITU-T A.5 agreed SDO/Forum/MoUs (Rec. ITU-T X.290)

Conformity Statement issued by the test Lab

Route 4

ITU Members Only Tests performed in a 1st, 2nd or 3rd party lab.

Self-Declaration of Compliance issued by the Supplier

Declaration of Conformity (SDoC) (ISO/IEC 17050)

ITU C&I services

ITU Conformity Database

[adapted from "ITU Information Session on Conformity and Interoperability"(Jan. 12, 2012 , Geneve)]

Conformity Assessment Testing Routes

ISO/IEC assessment and self assessment procedures.

- **Route 1**: *Accredited Testing Laboratories*

- **Route 2**: *Accredited Certification Bodies*

- **Route 3:** Laboratories recognized by ITU A.5 qualified *SDO or Forum* or *Consortium* and other *Organization* signatory of an MoU with the ITU.

- **Route 4:** *for ITU members only.* Any 1st, 2nd or 3rd party lab

ITU-T C&I Portal Overview(4)

- **Interoperability and "ITU Interop Events"**
  - NGN
    - Interop Event organized by HATS (Japan), supported by ITU, Tokyo, Japan, 11-13 July, 2012
  - Home Network
    - 1st G.hn Interop Testing, Geneva, Switzerland, 23-27 May 2011
  - IPTV
    - IPTV Showcasing, Telecom World-2011, Geneva, Switzerland, 24-27 October 2011
    - IPTV Showcasing, Dubai, UAE, 20-22 September 2011
    - 4th ITU IPTV Interop Event, Rio de Janeiro, Brazil, 18-22 July 2011
    - 3rd ITU IPTV Interop Event, Pune, India, 14-17 December 2010
    - 2nd ITU IPTV Interop Event, Singapore, 23-24 and 27 September 2010
    - 1st ITU IPTV Interop Event, Geneva, Switzerland, 20-23 July 2010

ITU Interop Events on IPTV

❖ **1st Event: Geneva, ITU headquarters, 20-23 July 2010**

❖ **2nd Event: Singapore, 23-24 and 27 September 2010**

❖ **3rd Event: Pune, India, 14-17 December 2010**

❖ **4th Event: Rio de Janeiro, Brazil, 18-22 July 2011**

[adapted from "ITU Information Session on Conformity and Interoperability"(Jan. 12, 2012 , Geneve)]

ITU-T C&I Portal Overview(5)

- **Capacity Building & Guidelines for establishing test centres**

- **Vendors, Industry, Testing**

- **Laboratories**
  - USA NIST
  - AUSTRALIA
  - European
  - TUNISIA
  - FCC Q&A SITE
  - MIDDLE EAST
  - RUSSIAN FEDERATION
  - SLOVENIA
  - CANADA
  - AFRICA, CHINA, ASEAN, CIS, LATIN AMERICA TEST LABS

- **Standards Developing Organizations and International Organizations**

KPMG's recommendation
[Council 2012 (Geneva, 4-13 July 2012)]

- In order to facilitate the process of populating the CDB, ……
  - ITU should also consider limiting the number of options for entering data into the CDB to the first three Routes.
  - Implementation of these recommendations will support testing in laboratories which ensure high quality tests (laboratories which are ISO-accredited or endorsed by other SDOs, Forums, etc).

References

WTSA-08 Res. 76

- Res. 76: addresses the **needs of Developing Countries** for conformance and interoperability.

- **Conformity is a first step to increase the probability of interoperability**

- **Identification of Labs** able to carry out tests according to the ITU-T Recommendations requirements, and training programs

- **Voluntary-based ITU program** promoting compliance to ITU-T Recommendations and **possible creation of an ITU-Mark**

[adapted from "ITU Information Session on Conformity and Interoperability"(Jan. 12, 2012 , Geneve)]

WTDC Resolution 47   Hyderabad, India, 2010

- **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

- Essentially supporting and endorsing WTSA 2008 Resolution 76

[adapted from "ITU Information Session on Conformity and Interoperability"(Jan. 12, 2012 , Geneve)]

ITU Plenipotentiary Resolution 177
(Guadalajara Oct 2010)

Conformance and interoperability

- Reiterated essence of WTSA 2008 Res 76

- Added: *invites Sector Members* to:

  a. **populate the pilot conformity database** according to procedures and criteria adopted by ITU-T

  b. participate in ITU-facilitated interoperability events;

- Added : *further invites Member States*

  to **contribute to the next radiocommunication assembly in 2012** in order for it to consider and take appropriate actions as deemed necessary

[adapted from "ITU Information Session on Conformity and Interoperability"(Jan. 12, 2012 , Geneve)]