ITU C&I Programme Pillar 1 - ITU-T Conformity Assessment Programme

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Agenda

- Why an ITU-T Conformity Assessment(CA) Programme is necessary
- Investigation of current CA practice
- WTSA-12 Resolution 76
- Latest ITU-T activities

ITU-T's Mission

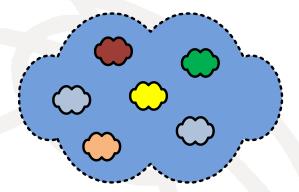
- ITU Plenipotentiary Resolution 71 (Guadalajara, 2010):
 - "Develop interoperable, nondiscriminatory and demand-driven international standards for International telecommunication"
- ITU-T's objective is to ensure that instances of non-interoperability are not caused by poor or insufficient standardization

Pillar 1 Objectives

Pillar 1 objectives should be clarified before details of the database

- Ensure ITU-T's strategic objective to produce interoperable ITU-T Recommendations
- Promote conformity assessment by ITU-T recognized competent testing labs on products/services against ITU-T Recommendation(s)
- Grow a community of telecom/ICT standardization and conformity assessment
- Facilitate mutual recognition of conformance testing results in this community

Complex Standards and Interoperability

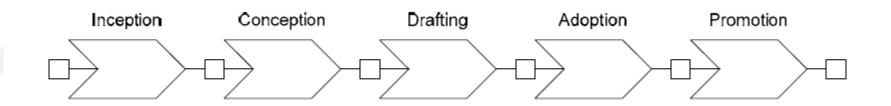


- Complex ICT standards are increasingly specified by 'islands of standards'
 - From different standardisation bodies
 - Or developed for a different (original) use
 - Complete system not specified in detail
- Results in potentially non-interoperable standards and/or products

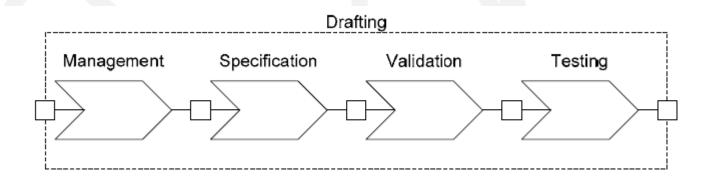
Typical causes of non-interoperable Standards

- Requirements not well identified or missing
- Ambiguous requirements
- Varying technical quality and use of language
- Inadequate handling of options
- Lack of clear system overview
- Loose definition of interfaces (reference points)
- Poor maintenance
- Using standards beyond their original purposes
- **.** ...

Producing interoperable standards (1)



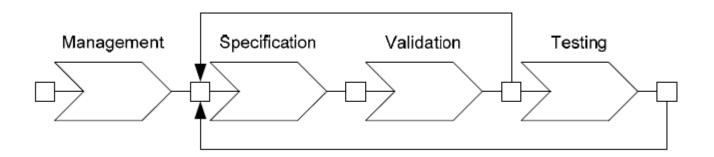
A Typical Standards Making Process



The drafting phase of a SMP

Producing interoperable standards (2)

Feedback from validation and testing to base standards



*Credit of charts in this and previous slide goes to ETSI expert Martin Brand

Why an ITU-T Conformity Assessment Programme

- An ITU-T conformity assessment programme is necessary to ensure that ITU-T Recommendations are:
 - designed from the begining with interoperability in mind
 - focusing on parameters that may impact interoperability of equipments, systems and processes
 - With necessary testing specifications

CA Practice of Industry Forums

Voluntary conformance assessment are common in telecom/ICT industry

- Industry forums designated/qualified/certified testing lab(s) issue product certification against specific standard(s) (esp. CPEs), e.g.:
 - → Bluetooth
 - → Wi-Fi Alliance
 - WiMAX Forum
 - Global Certification Forum (GCF) certification of GSM and UMTS handsets
 - Home Grid Forum (HGF)

CA of Other International SDOs

- IECEE-CB scheme:
 - → IEC conformity testing and certification of electrotechnical equipment and components
 - ▶ IECEE-CB Scheme: ISO System 1: The CB Scheme is a mutual recognition of test results by its members
- IEEE ICAP
 - Also in initiative stage
 - Projects ISO/IEEE 1588 Project
- ETSI
 - Funded Special Task Force (STF)

WTSA-12 Resolution 76

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

Res. 76 main "Resolves"

- ITU-T Study Group 11: coordination role on ITU-T C&I
- ITU-T Study Groups: to develop conformance testing Recommendations and testing requirements for ITU-T Recs.
- Cooperation with ITU sectors
- Cooperation with external entities:
 Governmental, non-governmental,
 accreditation and certification bodies

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

Res. 76: Instructs Study Groups

- Identify and prepare existing and future ITU-T Recommendations candidates for conformance and interoperability testing
- Cooperate with interested stakeholders to a conformity assessment programme for key technologies

SG11 C&I Action Plan

- approved Feb 2013
 - Maintain a living list of key technologies under study in ITU-T suitable for C&I testing, with reference of testing specification
 - Encourage pilot projects for conformity assessment against ITU-T Recs
 - → ITU C&I databases: Certification and Conformity Assessment bodies
 - → Further study Route 4 Self Declaration of Conformity for the ITU conformity database

SG11 is inviting all ITU-T SGs

- identify candidate ITU-T Recommendations for the living list
- develop testing requirements for identified candidate ITU-T Rec
- Provide references on available testing specification for identified ITU Recs if any
- develop test suites when needed, in cooperation with SDOs if appropriate
- initiate pilot project

Working Party 4/11 Meeting Outcome (1) (14-20 November 2013)

- Established a correspondence group to work on a new work item on ITU-T recognition procedure for testing lab with competence to test and/or certify against ITU-T Recommendations
- Launched a pilot project on conformance testing against ITU-T M.3170-series Recommendations
 - collaboration of SG11 with other ITU-T SGs associate Rapporteur of Question 11/11
 - SG2 to develop conformance testing specification
 - Trail management of testing labs and testing results
 - Report as input to the work item on testing lab recognition procedure

Working Party 4/11 Meeting Outcome (2) (14-20 November 2013)

- Encourage ITU-T SG15 possible pilot conformance testing project on Synchronized Ethernet and G.hn
- updated living list of candidate ITU-T Recs.

ITU Conformity Database

- Voluntary and informative only
- to showcase product(/system/service) implementing and conformant to ITU-T Recommendations
- A tool to demonstrate Pillar 1 achievement, but it is not the objective itself
- Pilot project will generate entries for this database

Conclusions

- ITU-T is investigating different conformity assessment approaches by pilot projects
- We are inviting competent testing labs, certification bodies to become our partners in this effort
- We are looking forward to proposals/contributions from all stakeholders in the telecom/ICT

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Thank You!