



**APT/ITU Conformance and
Interoperability Event 2015**
7 – 8 September 2015, Bangkok, Thailand




Document C&I-3/INP-15
07 September 2015

International Telecommunication Union

ITU C&I PROGRAMME PILLARS 1 AND 2 OF C& I PROGRAMME

Contact: SAMEER SHARMA
ITU Regional Office for AP

Email:






Key activities and major ITU-T outcomes on C&I Pillar 1 and 2 of ITU C&I Programme

*8 September 2015
Bangkok, Thailand,*

*Sameer Sharma
Senior Advisor, ITU Regional Office, Bangkok*

3rd joint APT/ITU C&I event, 8 September 2015

ITU-T C&I Portal

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

YOU ARE HERE: HOME > ITU-T > ITU CONFORMITY AND INTEROPERABILITY
SHARE

Overview

Conformity with international standards such as ITU Recommendations is one of the core principles underlying the global interoperability of ICT networks, devices and services.

The ITU Conformity and Interoperability (C&I) programme was initiated at the request of ITU's membership to enhance the conformity and interoperability of ICT products implementing ITU Recommendations or part thereof, solicit feedback to improve the quality of ITU Recommendations, and reduce the digital divide and the Standardization Gap by assisting developing countries with human resource and infrastructure capacity building.

The ITU C&I Programme is organized in accordance with the ITU Plenipotentiary Conference Resolution 177 (Guadalajara, 2010) in four pillars:

PILLAR 1. CONFORMITY ASSESSMENT

Conformity assessment is the process used to demonstrate that a product, service or system conform to specified requirements and commonly used by many standard development organizations (SDOs). By promoting conformity assessment relevant to ITU-T Recommendations and showcasing product conform to ITU-T Recommendations, Pillar 1 of the ITU C&I Programme aims to ensure the strategic goal of the ITU Telecommunication Standardization Sector (ITU-T) to develop interoperable, non-discriminatory and demand-driven international standards for international telecommunication.

More >

PILLAR 2. INTEROPERABILITY EVENTS

Although conformity assessment increases the probability of interoperability, interoperability can only be guaranteed through practical tests of interconnected equipment and services from different vendors. Self-funding "interoperability events" are run by many SDOs to verify their standards and facilitate their members' to deliver "standardized" product timely to market. Under Pillar 2, ITU-TSB organizes interoperability testing and showcasing events upon request of ITU-T membership as an integral step of standard-making process.

More >

News

Press release: ICT products conforming to ITU standards listed in public database
Published Fri, 19 Dec 2014

ITU-T webpage launched with focus on measurements of internet speed
Published Tue, 28 Oct 2014

Press Release: Test event finds mobile phones have poor hands-free performance
Published Fri, 13 Jun 2014

12-16 May: Leading car makers to test hands-free systems to ITU standards
Published Wed, 16 Apr 2014

More >

Archives >

QUICK LINKS



General information

- [ITU C&I related Resolutions](#)
- [ITU C&I Action plan](#)
- [List of activities on the implementation of the ITU C&I Action plan \(agreed by Council - 7\)](#)
- [ITU Council C&I related documents](#)
- [Presentations and promotional materials](#)

ITU C&I Databases

- [Product Conformity Database new](#)
- [Classification Report](#)



3rd joint APT/ITU C&I event, 8 September 2015 2



Pillar 1

Conformity Assessment


3rd joint APT/ITU C&I event, 8 September 2015 3




Pillar 1 as defined in Resolution 177 (ITU PP-14)

- “Instructs the Director of the TSB:
 - to continue to carry out pilot projects for conformity to ITU-T Recommendations to increase the probability of interoperability
 - to enhance and improve standards-setting processes in order to improve interoperability through conformity”
- “Invited the Membership to populate the pilot conformity database with details of products tested to applicable ITU T recommendations”


3rd joint APT/ITU C&I event, 8 September 2015 4


150 1865 2015 

Pillar 1 Key outcomes (1/2) 

- **First entries in the Product Conformity Database**, (19 December 2014, <http://itu.int/net/itu-t/cdb/ConformityDB.aspx>)
- **Whitelist of mobile phones** which meet the requirements of P.1100/P.1110
- **Pilot projects** (<http://itu.int/go/pilot-projects>) of conformity assessment against ITU-T Recs
 - M.3170-series (SG2)
 - Mobile Number Portability (SG11)
- Approved a Guideline "**Testing laboratories recognition procedure**"
- Established the **Conformity Assessment Steering Committee (ITU-T CASC)** to elaborate detailed procedures for the implementation of a test laboratory recognition procedure in ITU-T ([web page](#))
First meeting is scheduled on *3 December 2015 (Geneva)*

3rd joint APT/ITU C&I event, 8 September 2015 5

150 1865 2015 

Pillar 1 Key outcomes (2/2) 


- A **living list of ITU-T Recommendations** on key technologies suitable for C&I testing (<http://itu.int/go/key-technologies>)
- A **reference table of ITU-T Recs and corresponding test specification** under C&I testing (<http://itu.int/go/reference-table>)
- **New work items**
 - **SIP-IMS conformity assessment** ([web page](#))
 - "Unified methodology of **Internet speed quality measurement** usable by end-users on the fixed and mobile networks" ([web page](#))
 - "Conformance **test plan for Number Portability** requirements defined by ITU-T Q.Suppl.4" ([C-240](#), SG11)
 - **Benchmarking of IMS platform**. Work plan ([C-220](#), SG11)

3rd joint APT/ITU C&I event, 8 September 2015 6

150 1865 2015

Measurements of Internet speed

(under ITU-T SG11 Q15/11 "Testing as a service TAAS")



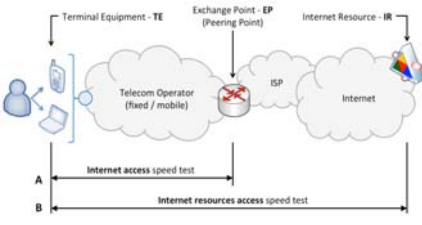
Two types of measurements:

- Internet access speed
- Internet resources access speed

[Web page](#)

In progress:

Draft Recommendation ITU-T [Q.Int_speed_test](#)
 "Unified methodology of Internet speed quality measurement usable by end-users on the fixed and mobile networks"



3rd joint APT/ITU C&I event, 8 September 2015

7



150 1865 2015

ITU-T SGs activities on C&I

- ITU-T SG12 assumes that ITU-T P.381 "Technical requirements and test methods for the universal wired headset or headphone interface of digital mobile terminals" may become a candidate for a pilot project (*iLS to SG11 [TD641](#)*)
- ITU-T SG2 continue developing conformance testing specifications for network management interface (ITU-T M.3170) (*oLS from SG2*)
- ITU-T SG12 revised ITU-T [P.1100/P.1110](#)
- ITU-T SG15 developed Implementers' Guide for Recommendation ITU-T G.9801 (Conformance and interoperability tests for OMCI-EPON) (*iLS to SG11 [TD634](#)*)

3rd joint APT/ITU C&I event, 8 September 2015



8



Pillar 2

Interoperability Events

3rd joint APT/ITU C&I event, 8 September 2015 9/26



Objectives of ITU Interop events

- ◆ cross-connect various manufacturers
- ◆ evaluate of interoperability of all participants on a peer basis
- ◆ check end-to-end performance at common “interfaces”
- ◆ to validate different implementations of standard, and feedback to standard-making

3rd joint APT/ITU C&I event, 8 September 2015 10

150 1865 2015

ITU Interop events



- ◆ [HATS Interoperability event on NGN supported by ITU and APT](#)
(Tokyo, Japan, 14-16 July 2015)
- ◆ [E-health testing and showcasing event](#)
(Geneva, ITU Headquarters, 10-12 February 2015)
- ◆ [2nd joint APT/ITU Conformance and Interoperability event](#)
(Bangkok, Thailand, 25-26 August 2014)
- ◆ [ITU test event](#) on Performance assessment of vehicle-mounted mobile phones in conjunction with Hands-free Terminals according to Recommendations ITU-T P.1100 and ITU-T P.1110
(Geneva, ITU Headquarters, 12-16 May 2014)

□ **Future events planned:**

- ◆ [3rd APT/ITU Conformance and Interoperability event](#)
(Bangkok, Thailand, 7-8 Sep 2015)
- ◆ 2nd ITU-T testing event on performance assessment of vehicle-mounted mobile phones in conjunction with hands-free terminals according to Recommendations ITU-T P.1100 and ITU-T P.1110
(Geneva, ITU Headquarters, the date is TBD)

3rd joint APT/ITU C&I event, 8 September 2015 11

150 1865 2015

ITU Test Event

Performance assessment of mobile phones in conjunction with vehicle's HFT in accordance with Recs. ITU-T P.1100/P.1110

www.itu.int/go/test-event



Background

Many mobile phones do not work properly with HFT's system and thereby significantly degrading the speech quality of the complete system

Findings

- ✓ an incorrect behavior of the mobile phone in the wireless connection to a vehicle's HFT
- ✓ an unacceptable quality of a voice-call inside the car and outside the car for the conversational partner

Only 30 % of phones passed the tests!

Key outcomes

- ✓ ["whitelist"](#) of mobile phones which meet the requirements is made publically available
- ✓ Updated Recs. ITU-T P.1100/P.1110 with the new values of performance have been approved
(January 15)



Venue: ITU Headquarters
TL: HEAD Acoustics
Date: 12-16 May 2014
Participants: Mercedes-Benz, Volvo, Bosch, Toyota, Renault
Number of tests: 40 (30 phones)

[ITU press-release](#)
[Test report](#)

3rd joint APT/ITU C&I event, 8 September 2015 12



Conclusions



- The living list of ITU-T Recommendations which are suitable for C&I testing can be used by TLs for performing tests at the national/regional level
- All interested parties are invited to participate in ITU-T SGs on developing ITU-T Recommendations for which the market requires C&I testing
- Interoperability testing events become very popular and can help operators to fix the compatibility issues at the early stage (interoperability plays a significant role for user's connection and interconnection among telecom operators)
- Pilot project is one of the tools to verify technologies before implementing in the ICT market
- Conformity assessment can play a role in the fight against counterfeit telecommunication/ICT devices





TSB contacts

Conformance: conformity@itu.int
Interoperability: interop@itu.int



JCA-CIT tsbjcacit@itu.int





ADDITIONAL SLIDES

3rd joint APT/ITU C&I event, 8 September 2015 15



ITU web sources related to C&I Programme

ITU C&I resources

C&I Portal - <http://www.itu.int/en/ITU-T/C-I/Pages/default.aspx>
JCA-CIT - <http://www.itu.int/en/ITU-T/jca/cit/Pages/default.aspx>
SG11 (lead group on testing) - <http://www.itu.int/en/ITU-T/studygroups/2013-2016/11/Pages/default.aspx>

3rd joint APT/ITU C&I event, 8 September 2015 16