

# Implementation of ITU Conformance and Interoperability programme

Pillars 1&2

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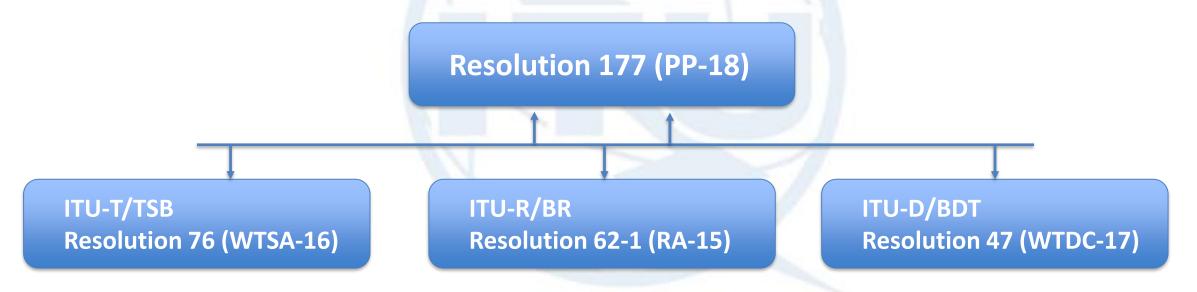
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#### **GENERAL OVERVIEW**



- ITU implements conformity and interoperability (C&I) programme since 2008, when the first version of Resolution 76 was adopted by WTSA-08 (Johannesburg).
- Currently, ITU C&I Programme is implemented by all three sectors, according to the following ITU Resolutions





## **ITU C&I Programme**





#### **PILLAR 1. CONFORMITY ASSESSMENT**



#### **PILLAR 2. INTEROPERABILITY EVENTS**



PILLAR 3. CAPACITY BUILDING



PILLAR 4. ASSISTANCE TO DEVELOPING COUNTRIES



## ITU Product Conformity Database (PCDB)

http://www.itu.int/go/tcdb



The PCDB can be populated by **testing laboratories**, **conformity assessment bodies (CABs)**, **vendors** and others, **including nonmembers of ITU**, provided that the product is either:

- <u>tested</u> by a testing laboratory which has an accreditation with ISO/IEC 17025 and at least one ITU-T Recommendation; or,
- <u>certified</u> to be in conformance with at least one ITU-T Recommendation by a CAB with ISO/IEC 17065 accreditation

Product Conformity Databa	se		
DU ARE HERE HOME > ITU-T > ITU CONFORMITY AND INTEROPERABILITY > PRODUCT CONFORMITY DATABASE SHARE () () (in (			
ISCLAIMER: This database is not certified to be either accurate or comple erified the veracity or accuracy of such information, nor the relevance of the E-Health Devices Mobile Phones Ethernet Services IPTV	e products to ITU Recommendations	_	secretariat. The ITU secretariat has not
Product	Company	Model Number	Conformity to ITU-T Recommendation
HealthUp HIS	Openit, Inc.	OI-PROD-HU-HIS	
nHealthcare - Smart Healthcare	NTELS Co., LTD	NSH-16	
NoninConnect - Connected Fingertip	Nonin	3230, 3240, and 3245	
Accu-Chek Instant (BTLE & USB) and Instant S meter (USB)	Roche	958	
Wireless Blood Clucose Meter	Ascensia Diabetes Care	Contour Next ONE and Contour Plus ONE	
Windriver Intel Manager (Bluetooth HDP)	Wind River	BT App	
Austonio Application for Android	Intel	Asus Memo Pad 8	ITU-T H.810 (2013-12)
Digital Thermometer	A & D Medical	UT-201BLE	ITU-T H.810 (2013-12)
Digital Blood Pressure Monitor	A & D Medical	UA-651BLE as Type A	ITU-T H.810 (2013-12)
Energy Smart Blood pressure monitor	IDT	BPU321 (as Type A)	ITU-T H.810 (2013-12)
Accu-Chek Active GB	Roche	GB revision 2	ITU-T H.810 (2013-12)

At this early stage of the database's implementation, the entry of products is possible through two other channels:

- if these products were tested in an <a href="ITU test event">ITU test event</a>
- as part of an ITU conformity testing <u>pilot project</u>



#### **BASIS OF ITU C&I PROGRAMME**



- The ITU Product Conformity Database (around 500 entries),
   19 December 2014, <a href="www.itu.int/go/tcdb">www.itu.int/go/tcdb</a>
- List of mobile phones which meet the requirements of P.1100/P.1110
- Pilot projects of conformity assessment against ITU-T Recs http://itu.int/go/pilot-projects
- Living list of ITU-T Recommendations on key technologies suitable for C&I testing http://itu.int/go/key-technologies
- Reference table of ITU-T Recs and corresponding test specification under C&I testing <a href="http://itu.int/go/reference-table">http://itu.int/go/reference-table</a>



#### Rev. Resolution 177 (PP-18, DUBAI)

"Conformance and interoperability"

#### **Noting**

••

- d) that ITU-T has launched an informative and voluntary Product Conformity Database and is progressively populating it with details of ICT equipment having undergone testing for conformity to ITU-T Recommendations
- g) that CASC in collaboration with other certification bodies (e.g., International Electrotechnical Commission IEC) are working on the establishment of joint certification scheme for assessing ICT equipment for conformity with ITU-T Recommendations

#### **Recognizing further**

• • •

h) that CASC has been set up for the purpose of developing a procedure for the recognition of ITU experts and elaborating detailed procedures for the implementation of a test laboratory recognition procedure in ITU-T

#### invites the Council

• •

to support the implementation of the testing laboratories recognition procedure of the ITU and make the list of recognized testing laboratories accessible for ITU members

#### Rev. Resolution 76 (WTSA-16)

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



#### instructs the Director of the Telecommunication Standardization Bureau

• •

- 3 considering resolves 7, to accelerate the implementation of Pillar 1, so as to ensure gradual and smooth accomplishment of the other three pillars and the possible implementation of the ITU Mark
- 4 in cooperation with the Director of BDT, to implement an ITU C&I programme for possible introduction of a database identifying products' conformance and origin
- 6 to facilitate the development and implementation of an ITU-T C&I test laboratory recognition procedure



#### **Rev. Resolution 76 (WTSA-16)**

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

#### instructs the Study Groups

• • •

to identify existing ITU-T Recommendations that would be candidates for C&I testing

• • •

to submit to CASC a list of ITU T Recommendations which could be candidates for the **joint IEC/ITU certification scheme**, taking into account market needs

#### instructs the ITU-T Conformity Assessment Steering Committee

• • •

to study and define a procedure to recognize testing laboratories that are competent to test according to ITU-T Recommendations, in collaboration with existing certification schemes such as that of IEC

## OPTIONS TO IMPLEMENT THE ITU-T TL'S RECOGNITION PROCEDURE



- to join the existing conformity assessment programs, by providing ITU-T's technical experts to perform relevant TL's assessment against ITU-T Recommendations
- based on gained experience, ITU may, in future, consider the possibility of establishing an ITU-T TL self-recognition procedure, providing the assessment of ITU-T technical experts and assessment of the TL





## **ITU-T Conformity Assessment Steering Committee**

Set up: April 2015 by ITU-T SG11

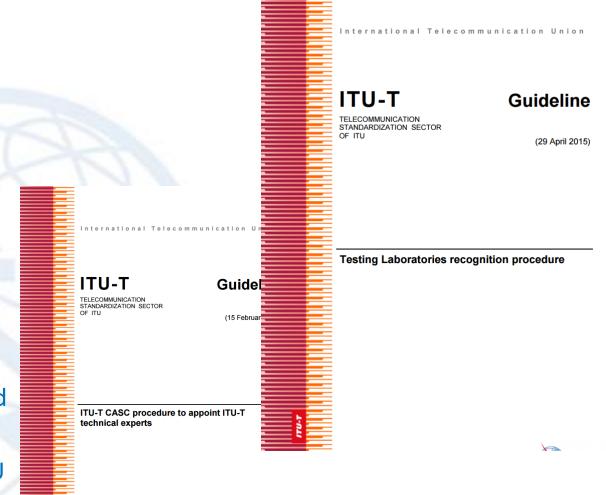
Main goal is to elaborate Testing Laboratories recognition procedure

Web page



#### **ITU-T CASC ACHIEVEMENTS**

- Agreed Guidelines:
  - Guideline on "Testing Laboratories recognition procedure" (2015)
  - Guideline on "ITU-T CASC procedure to appoint ITU-T technical experts" (2017, rev. Oct. 2019)
- Ongoing activities:
  - Created a list of ITU-T Recommendations for future joint certification ITU/IEC scheme
  - ITU-T CASC collaborates with existing Conformity
     Assessment Systems and Schemes such as IEC and ILAC
  - IEC CMC created a special task force IECEE TF "ITU Requirements" which developed standalone service to recognize TL for ITU-T Recommendations
  - Guideline on collaboration between ITU and IECEE for TL recognition





### **IEC Task Force "ITU Requirements"**

**Successor: IECEE CMC WG33** 

#### **Recognition of Testing Laboratories**

- IECEE Task Force (IECEE and ITU-T CASC experts)
  finalized OD "ICT Laboratory Recognition Service on
  ITU-T Recommendations" (to be put in place after
  approval at the IECEE level)
- ITU-T CASC appointed 11 ITU-T technical experts who have competence on particular ITU-T Recommendations (e.g. EMC, API, NM, lightening/overvoltage, visual surveillance, etc.)

  Note: the ITU-T technical experts might be involved to the IECEE assessment team to assess TLs
- ITU-T CASC is developing the third Guideline "ITU-T CASC collaboration procedure with IECEE for TL recognition service on ITU-T Recommendations"





#### **IECEE PUBLICATION**

IEC System of Conformity Assessment Schemes for Electrotechnical Equipment and Components (IECEE System)

ICT Laboratory Recognition Service on ITU-T Recommendations

#### CONTENTS

CONTENTS

FO	REWOR	D	
1	Scope.		
	1.1	Normative references	
	1.2	Definitions	
2	Rules		
	2.1	Certificate of Acceptance	6
	2.2	Publication	6
	2.3	Assessment requirements	6
	2.4	Joint ITU-IECEE Working Group	6
3	IECEE	ITU Laboratory Recognition Service	
	3.1	Participation	6
4	Peer As	ssessment Programme Process	
	4.1	Application	6
	4.2	Review of the application files	
	4.3	Appointment of the assessment team	
	4.4	Peer Assessment Assignment	7
	4.5	Reviewing of the assessment reports	
	4.6	Recommendation to the ITU for recognition	
5	Technic	cal assessors	7
	5.1	IECEE Training Courses for technical assessor (request input by before Geneva meeting	7
	5.2	Registration of Technical Assessors	8
6	Initial a	ssessment of RLIR	8
7	Review	er's task and terms of reference	9
8	Fees		10
9		nes and applicable penalties	
3	Doddiii	ice and applicable politices	



## ICT technologies proposed for certification



- "safe listening" in close collaboration with WHO (draft ITU-T H.870/HSTP.CONF-H870)
- "video surveillance" (ITU-T H.626-series) potential approach for self-testing
- "Accessibility features in IPTV systems" / "Audio-based network navigation systems" ITU-T H.702/HSTP.CONF-H702; ITU-T F.921/FSTP.CONF-F921
- Electromagnetic compatibility requirements and test methods for radio telecommunication terminal equipment (ITU-T K.116)
- Speech communication requirements for emergency calls originating from vehicles (ITU-T P.1140)
- Narrow-band and wideband hands-free communication in motor vehicles (ITU-P.1100/P.1110)

## **ITU-T CASC and IECEE collaboration**



- Recognition of Testing Laboratories which perform testing against ITU-T Recommendations
  - (any laboratories, including non-ITU members may apply for such recognition)

    Note: application should be submitted to IECEE once the special dedicated IECEE service will be put in place (this service will be available once it is approved at the IEC Certification Management Committee)
- Joint ITU/IECEE certification scheme on particular ITU-T Recommendations

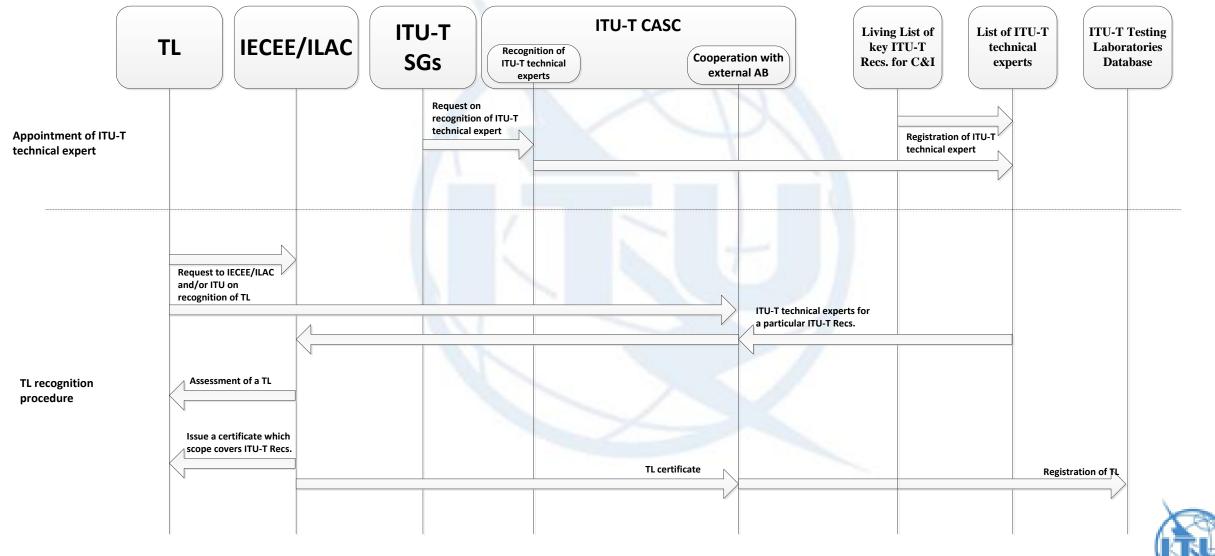
  Note: all ITU-T SGs were requested to provide their proposal regarding potential ITU-T

  Recommendations, which may become subject for a future ITU/IEC joint certification
  scheme, taking into consideration market needs



## **Testing Laboratories recognition procedure**





### **Criteria for ITU-T Technical experts**



- Expert from ITU members
- Good technical knowledge and experience on particular ITU-T Recommendation(s) to perform respective conformity assessment.
- Should be familiar with the Rules of the IEC and ILAC. An experience in ISO/IEC 17025 will be added advantage
- To pass relevant "assessor training" which will be related to the assessment against ITU-T Recommendation, requested by IEC/ILAC
- Knowledge and experience on the development of relevant ITU-T Recommendation(s)
  and corresponding test suites; experience in testing and measuring of the relevant ITUT Recommendation(s); competence to review Test Report(s)
- Do not have conflict interest with assessed TL
- Completed relevant training programmes to be determined by the ITU-T CASC (optional);



## **Duties of ITU-T technical experts**



- In agreement with ITU-T CASC, ITU-T technical experts shall provide technical assistance in the scope of the particular ITU-T Recommendation(s) for which they have been positively assessed, to the TL assessment team of bodies, such as IECEE and ILAC
- ITU-T technical expert shall follow rules and procedures of bodies, such as IECEE and ILAC, for the assessment of testing laboratories.
- For being involved to the IECEE and ILAC TL assessment teams, the ITU-T technical expert may be requested by IECEE and ILAC to pass relevant "assessor training" which will be related to the assessment against ITU-T Recommendations.

## **Application and Submission**



## Complete Application form (Annex 1)

Submit to CASC with supporting documents

- A. Personal Details
- B. Education
- C. Professional experience
- D. Experience of standardization of ICT in SDO
- E. Testing experience of ICT products against ITU-T Recommendations
- F. Professional training
- G. Requested competence on ITU-T Recommendations
- H. Experience in ISO/IEC 17025 (optional)
- I. Guarantor

#### Annex 1

#### Application form to request ITU-T CASC to be appointed as an ITU-T technical expert

This annex provides an application form, which should be used by the ITU-T CASC for verifying the competence of an Applicant to be appointed as an ITU-T technical expert in the scope of given ITU-T Recommendation(s).

#### This Application Form should be returned to:

Secretariat Conformity Assessment Steering Committee (ITU-T CASC)

E-mail: tsbcasc@itu.int

#### A. PERSONAL DETAILS

Title (Mr, Ms, Dr, etc.)			
First name			
Last name			
Company			
Post address			
Country			
Representative of ITU member	ITU member	ITU-T SGs	Years
Phone			
Fax (supplementary)			
E-mail			

#### B. EDUCATION

l	Dates	Qualifications
ĺ		
Ī		

#### C. PROFESSIONAL EXPERIENCE

Date from	Date to	Employer	Duties

ITU-T SGs are invited to encourage many competent experts as possible to apply for ITU-T Technical experts on relevant ITU-T Recommendations within the scope of their respective SG.



## Key advantages of joint IECEE/ITU TL recognition procedure



### **Key advantages:**

- As two truly international organisations covering a large scope of products and services, ITU and IECEE support laboratories to have a harmonized process, which includes the scope of testing of both organisations. Such a harmonized process would allow laboratories to receive recognition from both organisations based on a single assessment per location
- For large testing organizations as well as small test laboratories, this support is an economical and optimized access to a larger testing portfolio based on their expertise and competence







The established joint IECEE/ITU certification scheme will provide Vendors a possibility to enter new markets. It means to easily sale their products out in different countries/regions using Mutual Recognition Agreement.

Tested and certified at one place – accepted everywhere



### **PILLAR 2: ITU INTEROP EVENTS**



#### **CONDUCTED EVENTS**

 Fourth ITU test event on compatibility of mobile phones and vehicle's hands-free terminals\*

(Busan, Korea, 25-28 September 2017, during ITU Telecom World)

- <u>ITU test event on IPTV</u> (Geneva, 17 January 2017)
- Third ITU test event on compatibility of mobile phones and vehicle's hands-free terminals\*

(Bangkok, Thailand, 15-16 November 2016, during ITU Telecom World)

• <u>IPTV test event</u> (Geneva, 14 September 2016)

\* 10 March 2017, ITU-T conducted a <u>Roundtable</u> between phone and car industries to discuss to discuss possible approaches to address found issues at the relevant test events



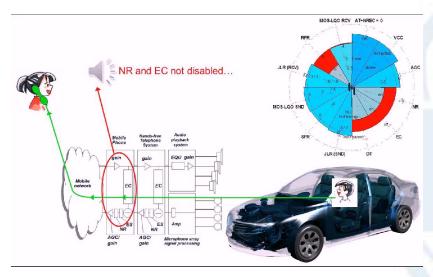


## COMPATIBILITY OF MOBILE PHONES AND VEHICLE HANDS-FREE TERMINALS



#### **BACKGROUND**

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



#### **LIST OF ITU TEST EVENTS**

May 2014; May 2016; November 2016

Roundtable (10 March 2017); September 2017

#### **GENERAL STATISTIC**

- 58 mobile phones (state-of-art devices)
- 89 tests (55 Narrowband and 34 Wideband)
- 30 % mobile phones comply with the requirements ITU-T P.1100&P.1110 (1st event)
- 22% mobile phones comply with the requirements ITU-T P.1100&P.1110 (2<sup>nd</sup> event)



Video 1, <u>YouTube</u> (2016) Video 2, <u>YouTube</u> (2017)

**LIST OF BEST PERFORMERS** 







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