# Overview of ITU Testing Laboratories Recognition procedure



October 2023

# **GENERAL OVERVIEW**

The ITU 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
- improve the quality of ITU Recommendations
- reduce the digital divide and the Standardization Gap by assisting developing countries with human resource and infrastructure capacity building

ITU-T C&I Portal – <u>https://itu.int/go/citest</u>

# ITU Conformance and Interoperability programme (C&I), <a href="http://itu.int/go/citest">http://itu.int/go/citest</a>

# Key pillars:

Pillar 1: Conformity assessmentPillar 2: Interoperability eventsPillar 3: Capacity buildingPillar 4: Establishment of test centres and a C&I programmein developing countries

## **Core ITU Resolutions:**

- <u>Resolution 177 (PP-22)</u>
- <u>Resolution 76 (WTSA-20)</u>
- <u>Resolution 47 (WTDC-22)</u>
- Resolution 62-2 (RA-19)

# Implementation of C&I programme:

- ITU-T SG11: lead group on testing (<u>http://itu.int/go/tsg11</u>)
- All other ITU-T SGs are developing test specifications in areas of their responsibilities
- <u>ITU-D SG2 (Q4/2)</u>: assistance to developing countries on implementing C&I programme
- <u>Conformity Assessment Steering Committee (CASC)</u>: Testing Laboratories Recognition procedure
- ITU test events
- ITU training events on C&I

### Contact: conformity@itu.int

### 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.



# **Outcomes:**

- **Product Conformity Database** (launched in 2014) *Note: around 500 entries*
- **Testing Laboratories database** (launched in 2022) *Note: 11 TLs are registered*
- List of ITU-T Technical experts (10 experts) Note: they might be involved in the TL assessment
- Testing specifications for different ICT technologies
- Number of test events (23 events)
- Number of training events and Workshops

WORLD TELECOMMUNICATION STANDARDIZATION ASSEMBLY Geneva, 1-9 March 2022

International Telecommunication Union

ITU-T

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#### Resolution 76 – Studies related to conformance and interoperability testing, assistance to developing countries and a possible future ITU Mark programme

# Rev. Resolution 76 (WTSA-20)

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

### resolves

4 to continue working with accreditation bodies to recognize testing laboratories with competence to test in accordance with ITU-T Recommendations;

### instructs the study groups

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

### Instructs the TSB Director

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4 to continue implementing the ITU C&I programme, including the **testing laboratory database** and **informative pilot conformity product database**, identifying product conformance and origin, in cooperation with the Director of BDT, and in consultation with each region;

6 to **facilitate the development** and implementation of an ITU-T C&I **test laboratory recognition procedure**;

### instructs the ITU-T CASC

•••

to study and define an ITU procedure to recognize testing laboratories that are competent to test according to ITU-T Recommendations, in collaboration with existing accreditation bodies,

# Rev. Resolution 177 (PP-22)

# "Conformance and interoperability"

# resolves

•••

2 that this programme of work continue to be implemented, **including the informative pilot conformity database and its development into a fully functioning database** ...

# invites the membership

1 to **populate the pilot conformity database** with details of products tested to applicable **W**. ITU-T recommendations in accredited test laboratories (first, second or third party), or by accredited certification bodies, or according to procedures adopted by an SDO or forum qualified in accordance with Recommendation ITU-T A.5;

# instructs the Director of the Telecommunication Standardization Bureau

7 **to develop the criteria for assessing the maturity of Pillar 1** of the Action Plan for the C&I Programme mentioned in recognizing further j) above and report to the Council;

8 to define the ITU Mark concept and its implications for ITU and its membership,



• • •

# 2015

# SG11 established ITU-T Conformity Assessment Steering

**Committee ITU-T CASC**, <u>http://itu.int/go/casc</u> Main objective is elaborate the TL recognition procedure in close collaboration with existing accreditation entities (e.g., IEC, ILAC, IAF, etc.).



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### Conformity Assessment Steering Committee

YOU ARE HERE ITU > HOME > ITU-T > STUDY GROUPS > STUDY GROUP 11 > CASC

The Conformity Assessment Steering Committee (ITU-T CASC) was established in April 2015 by ITU-T SG11 to elaborate detailed procedures for the implementation of a test laboratory recognition procedure in ITU-T.

The ITU-T CASC works in accordance with the ITU-T SG11 Guideline "Testing laboratories recognition procedure" which describes the procedure for recognition of Testing Laboratories that have competence for testing against ITU-T Recommendations.

For more background information see here.

#### TERMS OF REFERENCE

#### Scope

The ITU-T CASC (Conformity Assessment Steering Committee) is working under the auspices of ITU-T SG11 with the participation of ITU-T experts from all ITU-T SGs.

### MEETINGS

#### Next ITU-T CASC meeting Geneva, 8 July 2022

- Announcement
- Draft Time Plan
- Cs | TDs

#### CASC Sharepoint Note: for interim CASC meetings and appointment teams only

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#### CASC meetings (2015-2021)

**ô** A TIES account is required to access the documents



SG11 agreed a <u>Guideline on "Testing Laboratories</u> <u>recognition procedure"</u>.

It describes the process on how ITU may recognize Testing Laboratories which competence covers ITU-T standards.



# 2017-2019

# SG11 agreed a <u>Guideline "ITU-T CASC procedure to appoint</u> <u>ITU-T technical experts"</u>.

Those experts could be included in the assessment team of IEC or ILAC in order to evaluate TL which have competence on particular ITU-T Recommendations.

International Te	lecommunication Union	
ITU-T TELECOMMUNICATION STANDARDIZATION SECTOR OF ITU	Guideline (25 October 2019)	
ITU-T CASC proced technical experts	ure to appoint ITU-T	

List technical experts appointed by ITU-T CASC (Geneva, 12 May 2023)

No.	Name	ITU-T Recommendation	Country	Company	Email
1.	Feng Qi	ITU-T M.3101 (07/1995); ITU-T M.3170.4 (04/2015); ITU-T X.781 (08/2001); ITU-T X.783 (07/2014); ITU-T X.784 (03/2016)	China	BUPT, China	gifeng@bupt.edu.cn
2.	Awad Mulah	ITU-T K.48 (09/2006); ITU-T K.116 (11/2015)	Sudan	Telecommuni cation and Post Regulatory Authority (TPRA), Khartoum- Sudan	<u>awadmulah@tpra.go</u> <u>v.sd</u>
3.	Yuan Zhang	ITU-T H.626 (Rev.), ITU-T H.626.4, ITU-T H.626.5, ITU-T H.627, ITU-T H.627.1	China	China Telecom	zhangyuan1.sh@chi natelecom.cn
4.	Haitao Zhang	ITU-T H.626 (Rev.), ITU-T H.626.2, ITU-T H.626.3, ITU-T H.627	China	Beijing University of Posts and Telecomm	<u>zht@bupt.edu.cn</u>
5.	Yalan Zhang	ITU-T H.626 (Rev.), ITU-T H.626.2, ITU-T H.626.3, ITU-T H.627	China	Huawei Technologies Co., Ltd	<u>zhangyalan@huawei</u> .com
6.	Kai Liao	ITU-T H.626 (Rev.), ITU-T H.626.2, ITU-T H.626.3, ITU-T H.627	China	ZTE Corporation	liao.kai@zte.com.cn
7.	Shuo Deng	ITU-T H.626 (Rev.), ITU-T H.626.2, ITU-T H.626.3, ITU-T H.627	China	ZTE Corporation	deng.shuo@zte.com. <u>cn</u>
8.	Weihua Li	ITU-T H.626 (Rev.), ITU-T H.626.2, ITU-T H.626.3, ITU-T H.627	China	ZTE Corporation	liweihua@zte.com.cn
9.	Hongsheng Wang	ITU-T H.626 (Rev.), ITU-T H.626.2, ITU-T H.626.3, ITU-T H.627	China	Academy of Broadcasting Science, NRTA	wanghongsheng@abs. ac.cn
10.	Doudou Hu	ITU-T H.626 (Rev.), ITU-T H.626.5, ITU-T H.627, ITU- T H.627.1	China	China Telecom	hudoudou.sh@chinate lecom.cn

SG11 appointed several <u>ITU technical experts</u> on different ITU-T Recommendations.





# 2020

# **Collaboration with ILAC**

69 of the 102 ILAC MRA Signatories responded to the ILAC Survey on accreditation of testing laboratories to perform testing in accordance with ITU-T Recommendations.



Number of 'Yes' and 'No' responses to the survey question: Does your AB accredit testing laboratories to perform testing in accordance with ITU-T Recommendations?



ILAC presented outcomes of ILAC survey to identify Testing Laboratories accredited to perform testing in accordance with ITU-T Recommendations (see <u>SG11-TD1370/GEN</u>).

The results indicated that:

- 12 Accreditation Bodies (ABs) out of the 57 who replied to the survey, are accrediting laboratories for ITU Recommendations.
- Out of the 12 ABs 10 had fewer than 5 accredited labs while 2 members indicated they have accredited 23 and 37 laboratories respectively for ITU-T Recommendations.



SG11 decided that ITU recognizes the Testing Laboratories (TLs) which are accredited by an AB that is a signatory to the ILAC MRA for testing, which scope of accreditation contains ITU-T Recommendation(s).

There are no financial implications for ITU for implementing such procedures. Financial implications for TLs are to be covered by the cost structures of the ABs.



*Ref.: SG11 Report, March 2021, <u>SG11-R42</u>* 

- Aligned its ToR with Resolutions of WTSA-20
- Established collaboration with International Laboratory Accreditation Cooperation (ILAC) on Testing Laboratory recognition procedure
- Approved the ITU Guidelines on TL recognition procedure and appointment of ITU technical experts
- Appointed 10 ITU-T Technical experts on ITU-T Recommendations H., K., M. and X.series.
- Recognized 11 TLs which are accredited by an Accreditation Body (AB) that is a signatory to the <u>ILAC</u> <u>Mutual Recognition Arrangement (MRA)</u> for testing, which scope of accreditation contains ITU-T Recommendation(s).
  - <u>ITU Operational Bulletins</u>
     (OB.1253, OB.1256, OB.1263, OB.1266)
  - Newslog

TSB Circular 368

2022

### Testing Laboratories Database

YOU ARE HERE: HOME > ITU-T > ITU CONFORMITY AND INTEROPERABILITY > TESTING LABORATORIES D/

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DISCLAIMER: The database lists Testing Laboratories (TLs) recognized by ITU which compliant with criteria defined in ITU-T Guideline "Testing Laboratories recognition procedure

The recognition of a TL by ITU does not imply or otherwise suggest approval of a product or that the recognized TL acts as an agent or representative of the ITU. The ITU does not accept any responsibility for the effects or consequences of services provided by the recognized TL on users of such services.

The status as recognized TL for ITU-T Recommendations is valid within the terms of TL accreditation. Once validity is expired, it will be reflected in ITU database for particular TL entry. The recognized TL needs to inform ITU (conformity@itu.int) on any changes in their scope of accreditation and their validity accordingly. In the event of misalignment, it may result in full delisting of TL from ITU Database.

TL Name	Country	Scope of Accreditation (ITU-T Recommendations)	Accreditation body name (AB of ILAC MRA)	Laboratory ID	Validity of accreditation
Hermon Laboratories Ltd	Israel	K.20; K.21; K.41; K.44; K.45; G.703; G.823; G.991.2; G.992.1; G.992.3 Cor. 3; G.992.5 Cor. 1; G.993.1; G.993.2; P.313; P.340; P.370; P.862; P.862.1; P.863; T.30; T.38; Q.552	American Association for Laboratory Accreditation (A2LA)	0839.01	31 May 2023
Bharat Test House Pvt. Ltd.	India	G.664; G.691; G.693; G.694,1; G.695; G.698.3; G.703; G.709; G.783; G.823; G.824; G.825; G.957; G.959.1; G.984,1; G.984.2; G.984.3; G.987.1; G.987.2; G.989.2; G.991.2; G.992.3; G.992.5;	National Accreditation Board for Testing and Calibration Laboratories (NABL)	TC-6451	25 December 2023

# MoU between ITU-T, International Accreditation Forum (IAF) and International Laboratory Accreditation Cooperation (ILAC)

**<u>24 August 2022</u>**: The MoU between ITU-T, IAF and ILAC provides critical support to ITU's Conformance and Interoperability (C&I) programme. Conformance with international standards is one of the core principles underlying the global interoperability of ICT networks and devices.

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.

The purpose of this MoU is to establish effective collaborative linkages between the ITU-T, IAF and ILAC in the area of conformity and interoperability of ICT products, to facilitate achieving the desired level of connectivity and 'usability' of services to the end-users.



MEMORANDUM OF UNDERSTANDING (MoU) BETWEEN THE INTERNATIONAL TELECOMMUNICATION UNION AND THE INTERNATIONAL ACCREDITATION FORUM AND THE INTERNATIONAL LABORATORY ACCREDITATION COOPERATION

### 1. Parties and Purpose

- The Parties
- 1.1 The International Telecommunication Union (hereafter ITU) is the United Nations specialized agency for information and communication technologies (ICTs). It allocates global radio-frequency spectrum and satellite orbits, develops technical standards that ensure networks and technologies seamlessly interconnect, and strives to improve access to ICTs to underserved communities worldwide.
- 1.2 The International Accreditation Forum (hereafter IAF) is the specialised body administering a global multilateral mutual recognition arrangement among accreditation bodies responsible for accrediting conformity assessment bodies including management system certification bodies, product certification bodies, personnel certification bodies and verification and validation bodies, having as their objective the formal recognition of competent conformity assessment bodies, for specified scopes.
- 1.3 The International Laboratory Accreditation Cooperation (hereafter ILAC) is the specialised body administering a global multilateral mutual recognition arrangement (MRA) among accreditation bodies responsible for accreditation of conformity assessment bodies including calibration laboratories, testing laboratories, medical laboratories, inspection bodies, proficiency testing providers, reference material producers and biobanks, having as their objective the formal recognition of competent conformity assessment bodies, for specified scopes.

#### The Purpose

1.4 The purpose of this MoU is to establish effective collaborative linkages between the Parties in the area of conformity and interoperability of ICT products, to facilitate achieving the desired level of connectivity and 'usability' of services to the end-users.



# **ITU Testing Laboratories Database (TLDB)**

# http://itu.int/go/tldb

In order to be recognized by the ITU, Testing Laboratories (TL) shall be:

- accredited by an Accreditation Body that is a signatory to the ILAC MRA for Testing (using ISO/IEC 17025) Note: the list of ABs is available at: <u>https://ilac.org/signatory-search/</u>.
- have ITU-T Recommendations in the TL's scope of accreditation

# Ref: revised ITU-T Guideline, July 2022

<u>According to ITU Guideline</u>: "Based on received applications, if they are in line with the criteria defined in cl.9, TSB Director is asked to register the Testing Laboratory in the ITU Testing Laboratory Database accordingly."

Any TL including non-ITU members are encouraged to apply

# TSB Circular 368

ITU Testing Laboratories Database -Application form

> ITU-T > ITU CONFORMITY AND INTEROPERABILITY > ITU TESTING LABORATORIES DATABASI

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1. APPLICANT *	
Testing Laboratory Name *:	
Laboratory ID:	Note: please provide the name as identified by the Accreditation Body of ILAC MRA signatory in the scope of accreditation
Accreditation validity *:	Note: please indicate the registration number provided by the Accreditation Body of the ILAC MRA signatory to the testing laboratory, if applicable (yyyy-MM-dd) Note: please indicate the date when the given accreditation is expired
Street/P.O. Box *:	
Town/City *:	
Country *:	<b>v</b>
Website *:	
Contact Person *:	
Job title *:	
Phone *: Email *:	
2. ACCREDITATION INFORM	
Accreditation body name *:	
Email of Accreditation Body *: Website *:	Note: please provide the name of the Accreditation Body that need to be an ILAC MRA signatory in testing

The request needs to be sent via <u>online form</u>. It is available on ITU C&I Portal: <u>http://itu.int/go/citest</u>

# **ITU Product Conformity Database (PCDB)**

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

The PCDB can be populated by **testing laboratories**, <u>Online application form</u> **conformity assessment bodies (CABs), vendors** and others, **including non-members of ITU**, provided that the product is either (see <u>here</u>):

- **tested** 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
- tested by testing laboratory recognized by ITU (accredited by ILAC MRA signatories AB which have ITU Recommendations in its scope of accreditation), see ITU-T Guideline.

rudj	Applicant	Applicant			
		Company Name *			
plication form	(The relevant required if th	confirmation from a vendor is e applicant is not the vendor)	Certification Body Customer		
plication form			Vendor Standardization Development Organization Other (please specify below)		
		Street/PO Box *			
		Town/City *			
		Country *		~	
		E-mail *			
DU ARE HERE HOME > ITU-T > ITU CONFORMITY AND INTER	OPERABILITY > PRODUCT CON	IFORMITY DATABASE	SHARE 👔 오 向 (		
SCLAMER: This database is not certified to be either accurate or comple- rified the veracity or accuracy of such information, nor the relevance of the	te, but only reflects the information t e products to ITU Recommendations	hat has been communicated to	the IIU secretariat. The IIU secretariat has not		
-Health Devices Mobile Phones Ethernet Services IPTV N 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)	atory	
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)		

Product is to be tested to applicable ITU-T Recommendations using ITU-T test specifications or procedures adopted by an SDO or forum qualified in accordance with Recommendation ITU-T A.5.

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 <u>ITU test event</u>
- as part of an ITU conformity testing <u>pilot project</u>

# Contacts

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