Overview of ITU C&I Programme including ITU Testing Laboratories and Product Conformity Databases

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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 – https://itu.int/go/citest

ITU Conformance and Interoperability programme (C&I), https://itu.int/go/citest

Key pillars:

Pillar 1: Conformity assessment
Pillar 2: Interoperability events
Pillar 3: Capacity building
Pillar 4: Establishment of test centres and a C&I programme in developing countries

Core ITU Resolutions:

- Resolution 177 (PP-22)
- Resolution 76 (WTSA-24)
- Resolution 47 (WTDC-22)
- Resolution 62-3 (RA-23)

Implementation of C&I programme:

- ITU-T SG11: lead group on testing (https://itu.int/go/tsg11)
- All other ITU-T SGs are developing test specifications in areas of their responsibilities
- Conformity Assessment Steering Committee (CASC): Testing Laboratories Recognition procedure
- ITU test events

- ITU-D SG2 (Q4/2): assistance to developing countries on implementing C&I programme
- ITU training events on C&I

Contact: conformity@itu.int

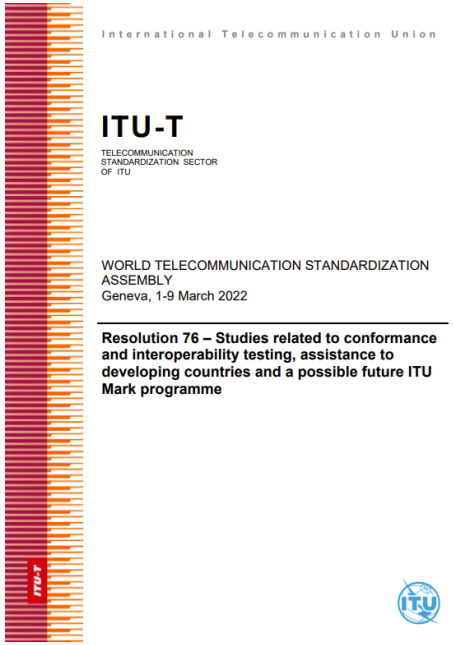
Overview

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.

Key outcomes:

- **Product Conformity Database** (launched in 2014)
  Note: around 500 entries
- **Testing Laboratories database** (launched in 2022)
  Note: 14 TLs as of July 2025
- **List of ITU-T Technical experts** (12 experts, CASC)
  Note: They may be involved in the TL assessment
- **Testing specifications for different ICT technologies**
- **Number of test events** (23 events)
- **Number of training events and workshops**



Rev. Resolution 76 (WTSA-24)

"Conformance and interoperability testing, assistance to developing countries, and a possible future ITU Mark programme"

resolves

…

3 to **continue working with accreditation bodies to recognize testing laboratories** with competence in conformance testing 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

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

…

7 to facilitate **implementation of the ITU-T C&I testing laboratory recognition procedure**;

…

instructs the ITU-T CASC

…

1 to maintain the **procedure to appoint ITU-T technical experts** for involvement in the testing laboratories' assessment teams of existing conformity assessment programmes, for the assessing/checking of the competence of testing laboratories;

2 to maintain a **procedure for recognizing testing laboratories** competent to test conformance according to ITU-T Recommendations, in collaboration with existing accreditation bodies

ITU Conformity Assessment Steering Committee (CASC)

https://itu.int/go/casc

It 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

CASC outcomes:

- **Established collaboration with International Laboratory Accreditation Cooperation (ILAC)** on Testing Laboratory recognition procedure
- Considered the **survey prepared by ILAC** to identify Testing Laboratories accredited to perform testing in accordance with ITU-T Recommendations
- **Approved** the ITU Guidelines:
  - **Testing Laboratories recognition procedure** [2022]
  - **ITU-T CASC procedure to appoint ITU-T technical experts** [2019]
- **Appointed 12 ITU-T Technical experts** on ITU-T Recommendations H., K., M. and X.series [10-2023]

ITU started recognition of the Testing Laboratories (TLs) which are accredited by an Accreditation Body that is a signatory to the ILAC MRA for testing, which scope of accreditation contains ITU-T Recommendation(s)

The UN agency for digital technologies

Events Publications Membership News

Labs gain official recognition for testing conformance with ITU standards

Labs gain official recognition for testing conformance with ITU standards

News · 3 Oct 2022

By ITU News

Testing labs can now obtain official recognition from the International Telecommunication Union (ITU) for their competence to test the conformance of products with ITU technical standards.

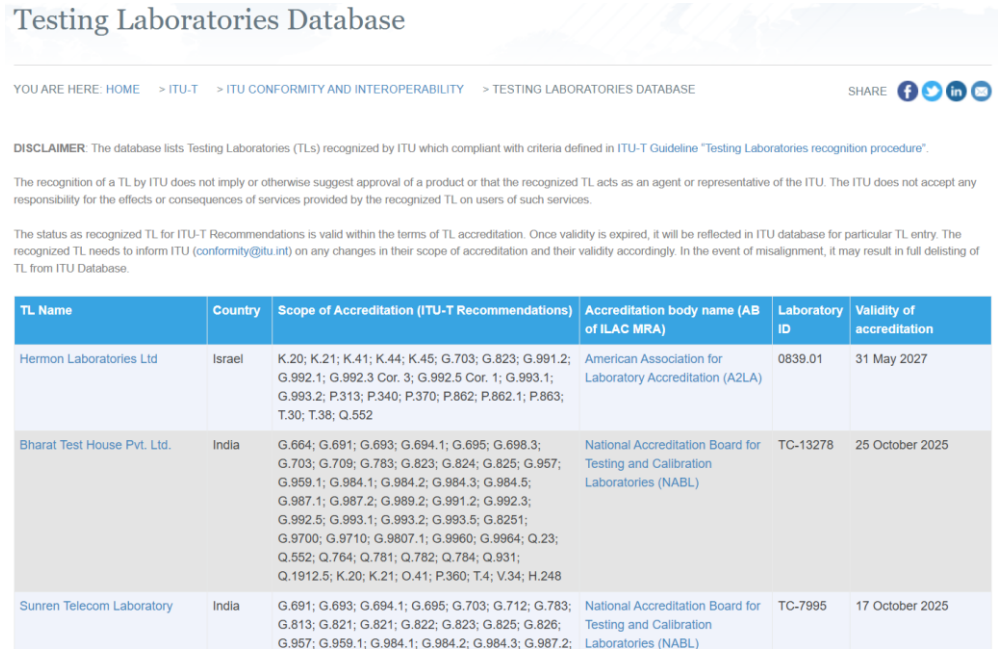
The first eight testing labs have recently been listed in the new directory for ITU-recognized facilities. For buyers seeking standards-based solutions, another complementary ITU database lists compliant products – those meeting the standards developed by the ITU Telecommunication Standardization Sector (ITU-T).

ITU Testing Laboratories Database (TLDB)

http://itu.int/go/tldb

Key recognition criteria:

- accredited by an **Accreditation Body** that is a **signatory to the ILAC MRA** for Testing (using ISO/IEC 17025)
- have **ITU-T Recommendations in the TL's scope of accreditation**



Testing Laboratories Database

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

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 2027
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.984.5; G.987.1; G.987.2; G.989.2; G.991.2; G.992.3; G.992.5; G.993.1; G.993.2; G.993.5; G.8251; G.9700; G.9710; G.9807.1; G.9960; G.9964; Q.23; Q.552; Q.764; Q.781; Q.782; Q.784; Q.931; Q.1912.5; K.20; K.21; O.41; P.360; T.4; V.34; H.248	National Accreditation Board for Testing and Calibration Laboratories (NABL)	TC-13278	25 October 2025
Sunren Telecom Laboratory	India	G.691; G.693; G.694.1; G.695; G.703; G.712; G.783; G.813; G.821; G.821; G.822; G.823; G.825; G.826; G.957; G.959.1; G.984.1; G.984.2; G.984.3; G.987.2;	National Accreditation Board for Testing and Calibration Laboratories (NABL)	TC-7995	17 October 2025

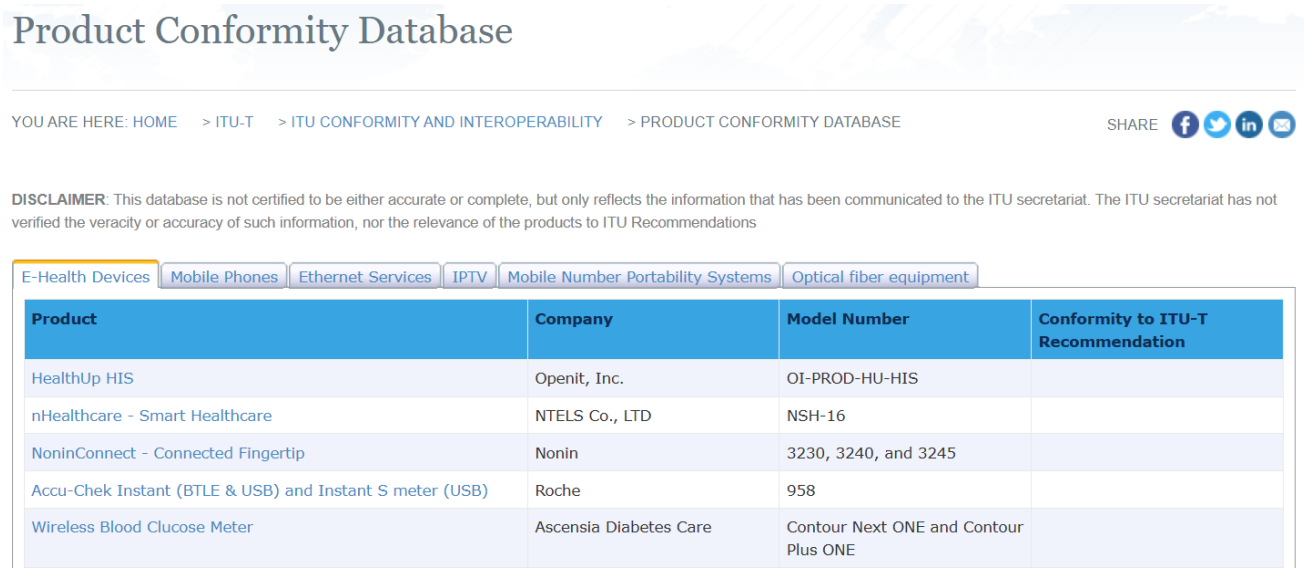
- **14 Testing Laboratories (TL)** listed in the ITU Database (as of September 2025)
- The recognized **TLs provides updates** on the scope of their accreditation and its validity on a regular basis

ITU-T Guideline – Testing Laboratories recognition procedure (2022)

ITU Product Conformity Database (PCDB)

The database was launched in 2014, and it lists ICT products compliant with ITU-T Recommendations

Among the criteria for populating the database is that the **ICT product is tested by a testing laboratory recognized by the ITU**



Product Conformity Database

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

SHARE

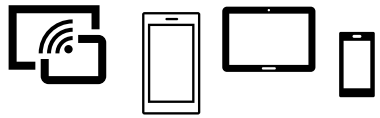
DISCLAIMER: This database is not certified to be either accurate or complete, but only reflects the information that has been communicated to the ITU secretariat. The ITU secretariat has not verified the veracity or accuracy of such information, nor the relevance of the products to ITU Recommendations

E-Health Devices | Mobile Phones | Ethernet Services | IPTV | Mobile Number Portability Systems | Optical fiber equipment

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	

Overview of ITU C&I Databases

ICT equipment compliant with ITU-T Recommendations*



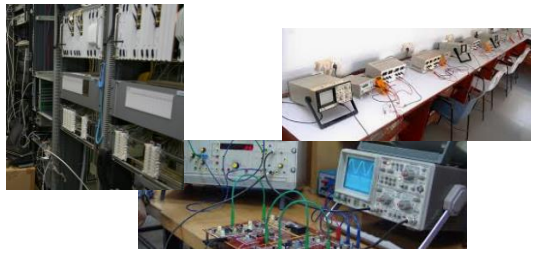
Applicant: Any stakeholder, including non-ITU member (e.g. vendor, operator, customer, TL, certification body, etc.) which fulfil the **criteria**

Reference table of ITU-T Recommendations for C&I

In operation since 2019
12 experts

ITU-T Technical experts

Testing Laboratories which have competence on ITU-T Recommendations



Applicant: Any Testing Laboratory, including non-ITU member which fulfil the **criteria**

ILAC MRA

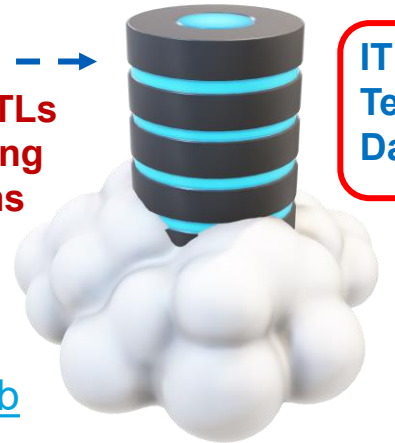
Raise customer's awareness on ITU-T Recommendations implemented in ICT equipment

ITU Product Conformity Database

https://itu.int/go/tcdb

In operation since 2014
500+ entries

Raise customer's awareness on TLs which have competence on testing against ITU-T Recommendations



https://itu.int/go/tldb

ITU Testing Laboratories Database

In operation since 2022
14 entries

* Lingo: **Recommendations** = ITU technical standards

SG11 C&I Action plan

The aim of the SG11 C&I Action Plan (rev. 2023) is to maintain:

- **Reference Table of standards which are used for C&I assessment**
- **Pilot Projects for conformity assessment against ITU-T Recommendations**

C&I Pilot projects

Reference table of ITU-T Recommendations for C&I

The **Reference Table** lists ITU-T Recommendations to be used for conformity/interoperability testing including references to the applicable test suites (ITU and/or other A.5 qualified SDOs).

https://itu.int/go/reference-table

ITU-T Rec.	Suitability for testing		Parameters to be tested	Tests suites available in ITU-T Recs [Y/N]	Tests suites available from SDOs / Forums / Labs [Y/N]	Reference to the applicable Test Suite (existing ITU-T Recs and/or other SDOs / Forums)	Who studies additional / new test suites ITU/ Others
	Conformity	Interoperability					
Q.703	Y	Y	MTP Level 2 (SS7)	Y	N	Q.781	N
Q.704	Y	Y	MTP Level 3 (SS7)	Y	N	Q.782	N
Q.706	Y	Y	The Level 3 performance aspects (SS7)	Y	N	Q.782	N
Q.707	Y	Y	MTP Level 3 (SS7)	Y	N	Q.782	N
Q.721-Q.724	Y	Y	Telephony User Part (TUP) (SS7)	Y	N	Q.783	N
Q.761-Q.764	Y	Y	Telephony User Part (TUP) (SS7)	Y	N	Q.784; Q.784.1; Q.784.2; Q.784.3	N
Q.767	Y	Y	Application of ISUP (SS7)	Y	N	Q.784; Q.784.1; Q.784.2; Q.784.3	N
Q.730	Y	Y	ISUP for supplementary services (SS7)	Y	N	Q.785; Q.785.2	N

Mantained by TSB

The **Reference Table provides guidance when populating the ITU Conformity Product Database** especially for ICT products tested against ITU-T Recommendations using test specifications developed by external SDOs.

List of Pilot projects for conformity assessment against ITU-T Recs

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

#	Title	ITU-T Recs.	Focal Point	Interested Companies	Motivations	Short-term strategy	References
1	**Conformance testing pilot project on Recommendations ITU-T H.626V2 and ITU-T H.627V2**	ITU-T H.626V2 ITU-T H.627V2	Haitao Zhang Beijing Univ. of Posts and Telecom (China), Email: zht[at]bupt.edu.cn; Yalan Zhang (Huawei Technologies Co., Ltd (China), Email: zhangyalan[at]huawei.com	**Network Operators:** • China Telecom Co., Ltd. **Vendors:** • Huawei Technologies Co., Ltd (China) • VisionVera, ZTE. **Testing Labs:** • National	Taking into account of the wide adoption and influence in industrial of this series of Recommendations (H.626V2 and H.627V2), this Conformance testing project will promote products which are compliant to this series of Recommendations, help operators, vendors, and integrators to implement this series of ITU-T Recommendations and	**First** — gather interested vendors, operators, integrators and others who implement Recs. ITU-T H.626V2 and ITU-T H.627V2 to identify and harmonize their testing requirements and collaborate to proceed and release the test specification F.TSVSN.	SG11-TD76/WP3 (July 21)

The **Pilot Project** aims are (normally organized by ITU-T SGs):

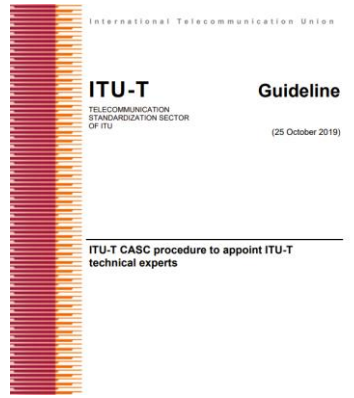
- to develop the required test specification as ITU-T Recommendation/Supplement/Technical Paper
- conduct testing of particular ICT devices
- populate product conformity database with products which successfully passed the testing

https://itu.int/go/pilot-projects

ITU-T technical experts

Ref: ITU-T Guideline – "ITU-T CASC procedure to appoint ITU-T technical experts" (2019)

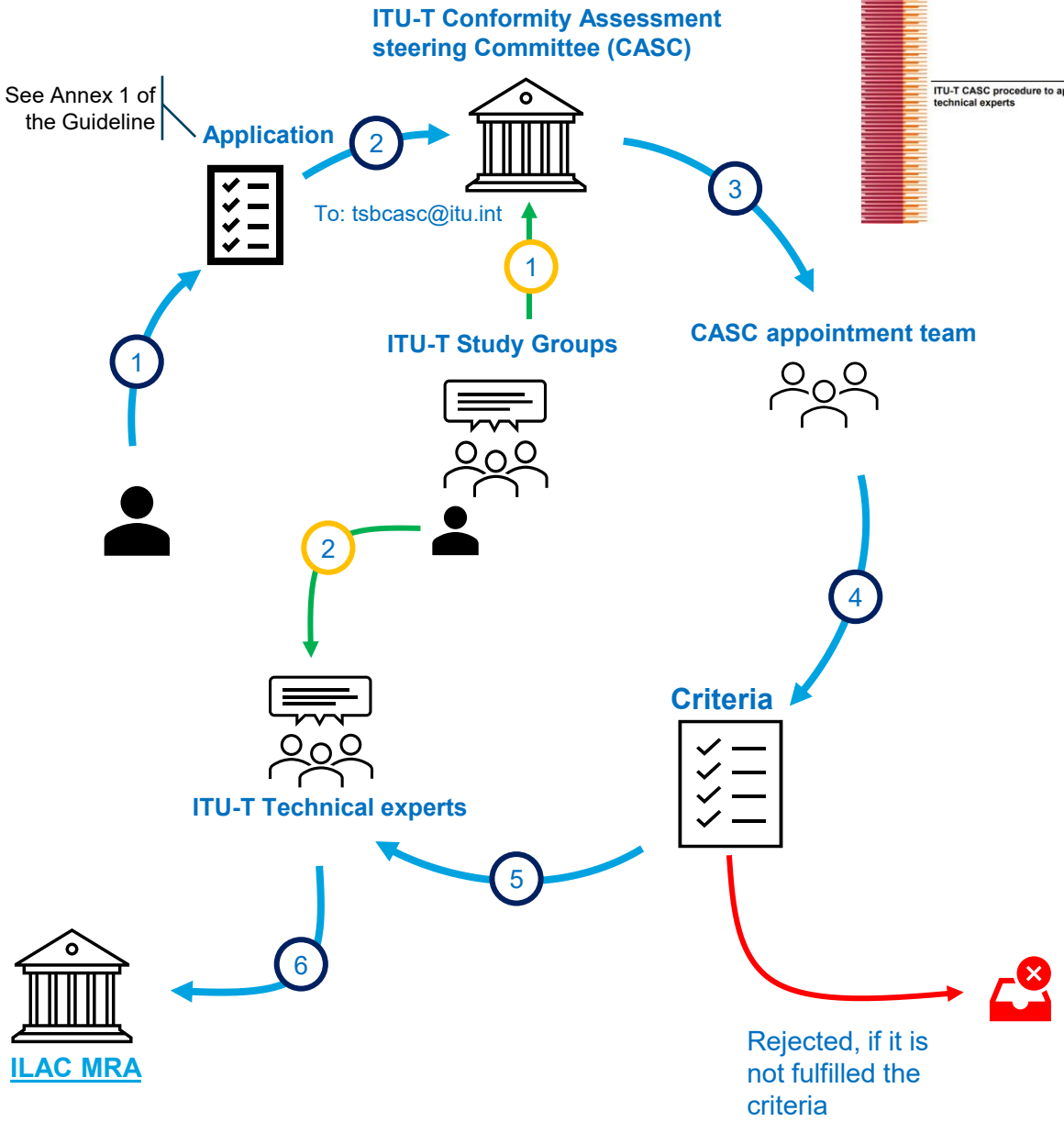
ITU-T technical expert	a candidate ITU-T technical expert who has been assessed by the ITU-T CASC appointment team and as result appointed by the ITU-T CASC as an ITU-T Technical expert
TL assessment team	a group of experts appointed by ILAC or IECEE, to perform the assessment of a Testing Laboratory. A number of ITU-T technical experts will join the TL assessment team, as decided by the ITU-T CASC.



Criteria

The prospective ITU-T technical expert should (see cl.9 of the ITU-T Guideline):

- be an expert from **ITU members**
- have a **good technical knowledge and experience** on particular ITU-T Recommendation(s) to perform respective conformity assessment
- 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 (e.g. ILAC)
- **follow rules and procedures of ILAC**
- comply with the following requirements:
  - **knowledge and experience** on the development of relevant **ITU-T Recommendation(s)** and corresponding **test suites**; experience in testing and measuring of the relevant ITU-T Recommendation(s) ; competence to **review Test Report(s)**;
  - completed relevant training programmes to be determined by the ITU-T CASC (optional);
  - **shall not have a conflict of interest with the TL being assessed**.



Testing Laboratories recognition procedure

Ref. ITU-T Guideline – "Testing Laboratories recognition procedure" (2022)

ITU-T Conformity Assessment steering Committee (CASC)

1

ITU-T Technical experts

2

3

ILAC MRA

List of Accreditation Bodies
https://ilac.org/signatory-search/

ILAC-ITU-IAF MoU

TL assessment team

4

ILAC Assessment Procedure in the field of Telecommunications

Testing Laboratory

Any TL, including non-ITU member

1

Online application form

Application

2

Criteria

3

TSB

Rejected, if the criteria are not fulfilled

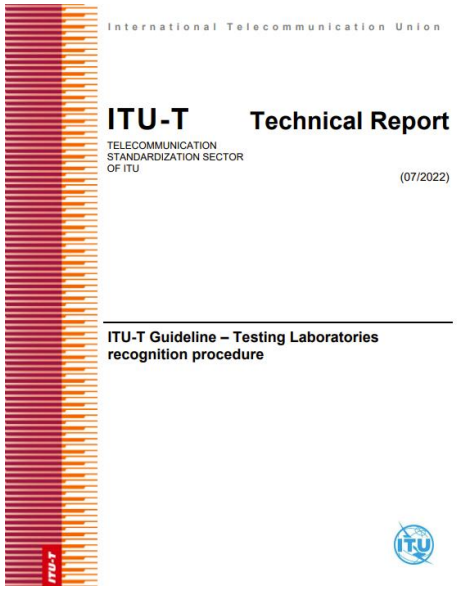
4

Registered in TL Database, if it meets the criteria

ITU Testing Laboratories Database

In order to be recognized by the ITU, testing laboratories shall:

- **have ITU-T Recommendations in the TL's scope of accreditation.**
- **be accredited by Accreditation Body (AB) that is a signatory to the ILAC MRA for testing (using ISO/IEC 17025).**



Product Conformity Database

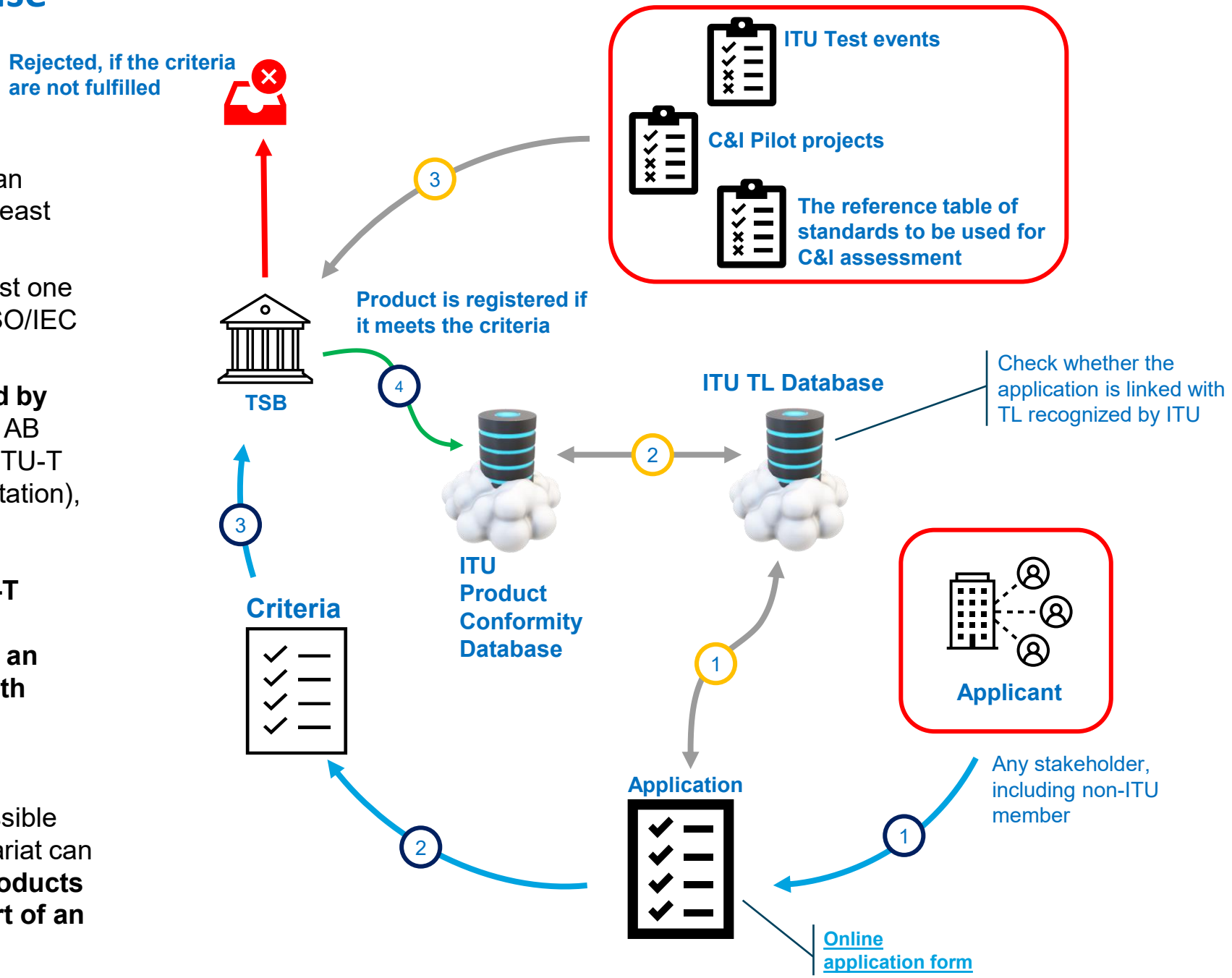
Criteria

The product is either:

- **tested** by a testing laboratory which has an accreditation with ISO/IEC 17025 and at least one ITU-T Recommendation;
- **certified** 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 (Accreditation Body); test laboratory has ITU-T Recommendations in its scope of accreditation), see ITU-T Guideline.

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: the ITU secretariat can enter products into the database if these **products were tested in an ITU test event or as part of an ITU conformity testing pilot project.**



Formalization of collaboration

ITU, ILAC and IAF have maintained a structured partnership under a **Memorandum of Understanding (MoU)**, originally signed in 2012 and revised in August 2022.

Among key revisions were support and promotion of the **ITU recognition of testing laboratories that are accredited by ILAC MRA signatories** to perform testing in accordance with ITU Recommendations as detailed in the ITU Testing Laboratory recognition procedure.

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.

ILAC-ITU Partnership

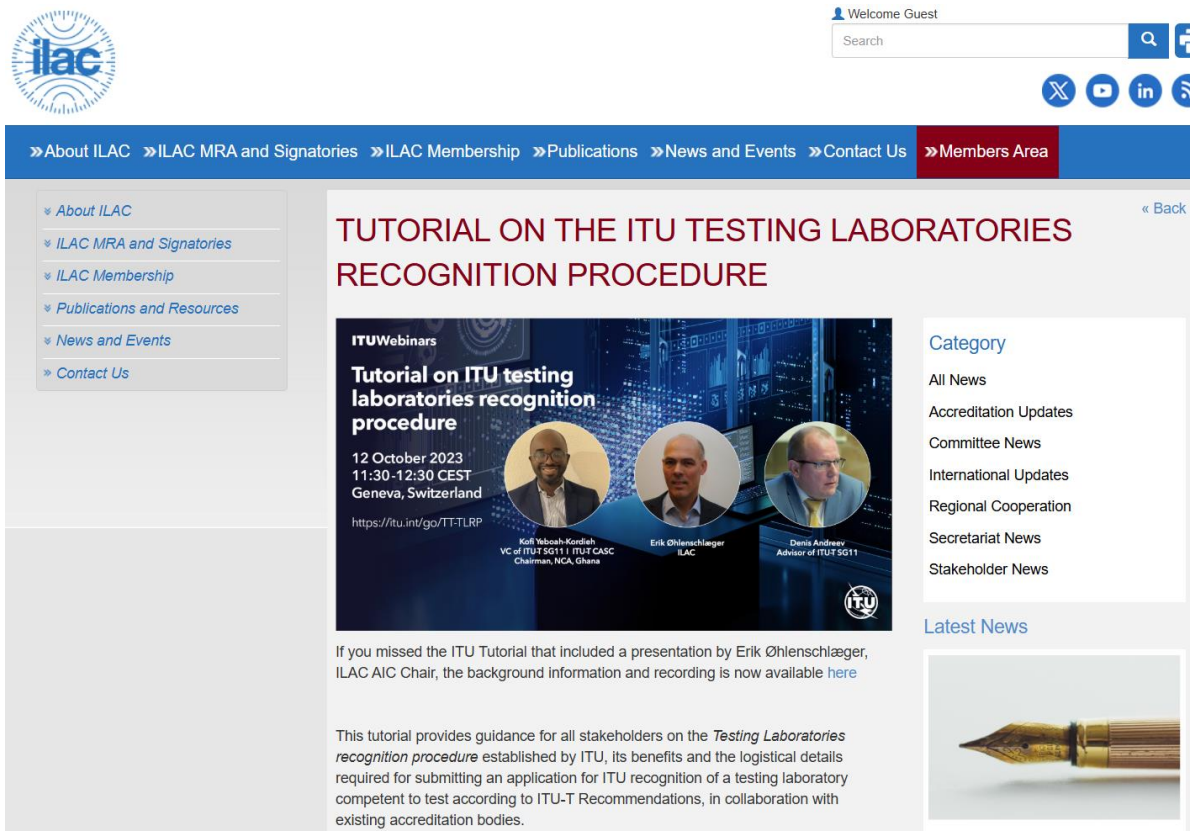
The **ILAC Assessment Procedure in the field of Telecommunications** has been produced to inform ILAC MRA signatory accreditation bodies about the requirements that must be met by testing laboratories seeking to be registered on the ITU list of recognized test laboratories.

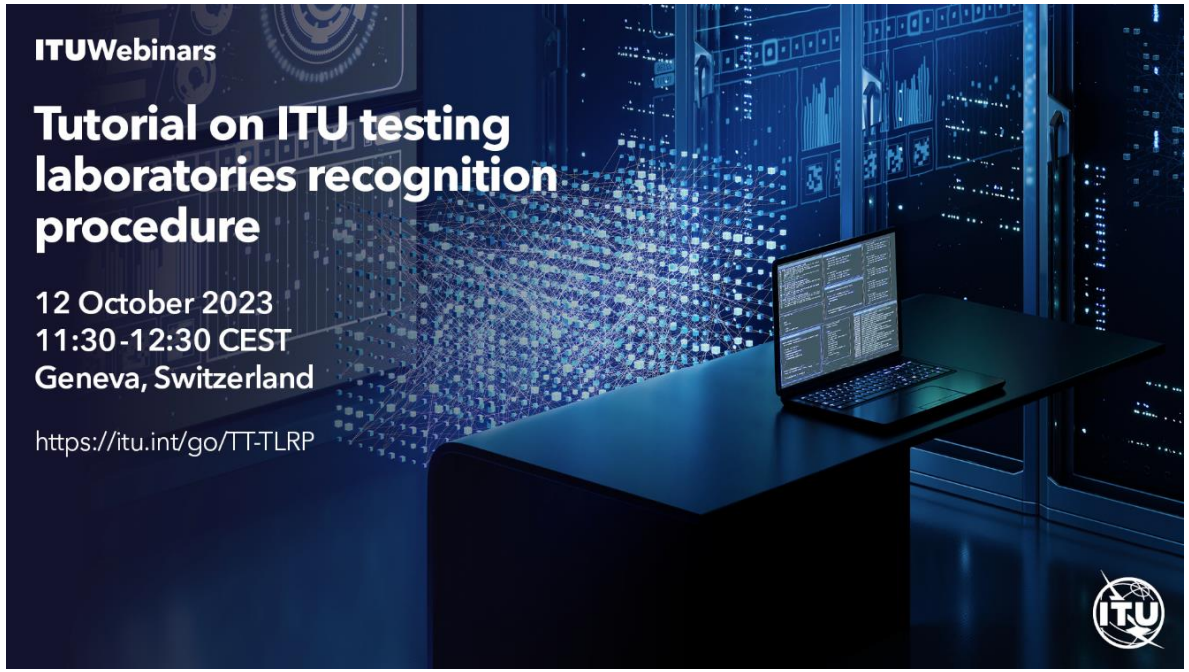
It is aligned with **ITU Testing Laboratory recognition procedure (2022)**

https://ilac.org/about-ilac/partnerships/international-partners/itu/

Promotion

ITU in collaboration with ILAC organized a tutorial aimed at guiding all stakeholders on Testing Laboratories recognition procedure established by ITU, its benefits and all logistical details needed for submitting applications





ILAC

ITU

Future plans

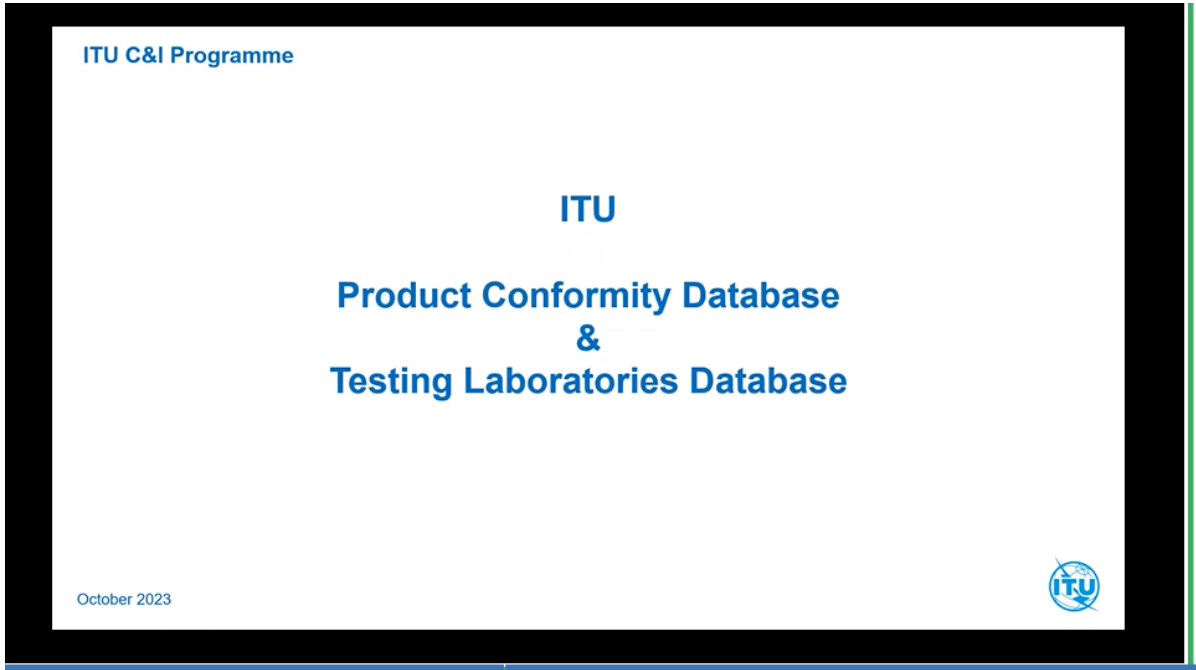
Continue maintaining ITU Testing Laboratories database in close collaboration with ILAC

Encourage vendors and recognized Testing Laboratories to populate ITU Product Conformity Database with ICT products tested by recognized Testing Laboratories

Collaborate with IAF on the possibility of launching certification schemes for specific ITU standards taking into consideration market needs

RESOURCES

Video Guideline on ITU Testing Laboratories and Product Conformity Databases



Start date	Title (Room)
12/10/2023 - 09:00 (UTC +1)	**Video Guideline on ITU Testing Laboratories Database and ITU Product Conformity Database** (Room vts) [English]

RESOURCES

ITU C&I Portal: https://itu.int/go/citest

ITU TL Database: https://itu.int/go/tldb

ITU Product Conformity Database: https://itu.int/go/tcdb

ITU Tutorial on TL recognition procedure: https://itu.int/go/TT-TLRP

Contacts

conformity@itu.int