

Overview of ITU-T Conformity Assessment Steering Committee (CASC)

Isaac BOATENG

Chairman of ITU-T CASC

Deputy Director, NCA, Ghana

Email: isaac.boateng@nca.org.gh

[ITU-T CASC web page](#)

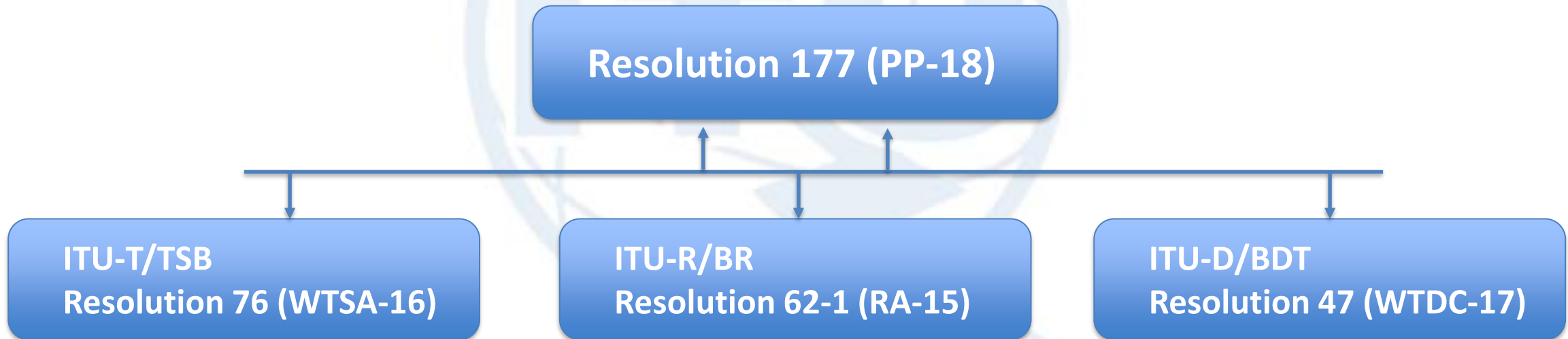


BACKGROUND



GENERAL OVERVIEW

- ITU begins to implement 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



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

...

4 **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) (1/3)

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

Recognizing

...

- j) that **it is not appropriate for ITU itself to enter into certification and testing of equipment and services** that many regional and national standards bodies also provide for conformance testing;
- k) 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;
- l) that **CASC**, in collaboration with the **International Electrotechnical Commission (IEC)**, is working on the establishment of a **joint IEC/ITU certification scheme** for assessing ICT equipment for conformity with ITU-T Recommendations;

resolves

...

- 7 that ITU, being a world standardization body, can address the impediments to harmonization and growth of worldwide telecommunications, promote the visibility of ITU standards (ensure interoperability): **by means of having an ITU testing mark regime**, taking into account the technical and legal implications, if any, and/or any revenue-generating possibilities, taking into consideration recognizing j),



Rev. Resolution 76 (WTSA-16) (2/3)

“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) (3/3)

“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



A large, light blue watermark of the ITU logo is centered on the page. It features a globe with a satellite dish and the letters 'ITU' in a bold, sans-serif font.

CASC Overview



TIMELINE (2013 – 2016)

- 2013: a correspondence group was created ([C97](#)) in ITU-T SG11; concluded in July 2014; and the work transferred to Q11/11 ([TD475](#))
- April 2015: ITU-T SG11 approved a **Guideline** on Testing Laboratories recognition procedure ([link](#))
- April 2015: **ITU-T SG11 established ITU-T CASC**, which adopts working methods of a Working Party. **Mr. Isaac Boateng** (SG11 vice-chairman, Ghana) has been appointed as chairman, [Web page](#)
- All ITU-T SGs are invited to appoint a representative to the ITU-T CASC [see [TD 245 \(TSAG\)](#)]
- 2016: IECEE Task Force “ITU Requirements” was setup, composed of IECEE experts, CASC member and ITU Secretariat with objective is to develop a **proposal** for IEC CAB, based on the CB Scheme, regarding potential acceptance of inclusion of ITU Recommendations under the IECEE scope.



TIMELINE (2017 – 2019)

- February 2017: SG11 approved a **Guideline** on ITU-T CASC procedure to appoint ITU-T technical expert ([link](#))
- November 2017: CASC **ToR** has been updated
- July 2018: The IECEE TF ITU submitted a draft **Operational Document** contains the requirements and processes of the ICT Laboratory Recognitions Service on ITU–T Recommendations based on IECEE peer assessment processes.
- CASC is developing new Guideline which defines mechanism for **collaboration between ITU-T CASC and IECEE** for implementation a framework on the TL recognition services on ITU-T Recommendations
- To process submitted candidate application for appointment as **ITU-T Technical experts**



ITU-T CASC ACHIEVEMENT

- Two guidelines agreed by ITU-T SG11, as follows:
 - **High level TL recognition procedure (2015)**
 - **Procedure to appoint ITU-T technical experts (2017)**
- Prepared first draft list of ITU-T Recommendations for future joint certification scheme (at the request of ITU-T SGs)
- ITU-T CASC continues to collaborate with existing Conformity Assessment Systems and Schemes such as IEC and ILAC.
- IEC CMC created a special task force IECEE TF “ITU Requirements” and **developed standalone service to recognize TL for ITU-T Recs.**
- Developing **guidelines on collaboration between ITU and IECEE** on TL recognition



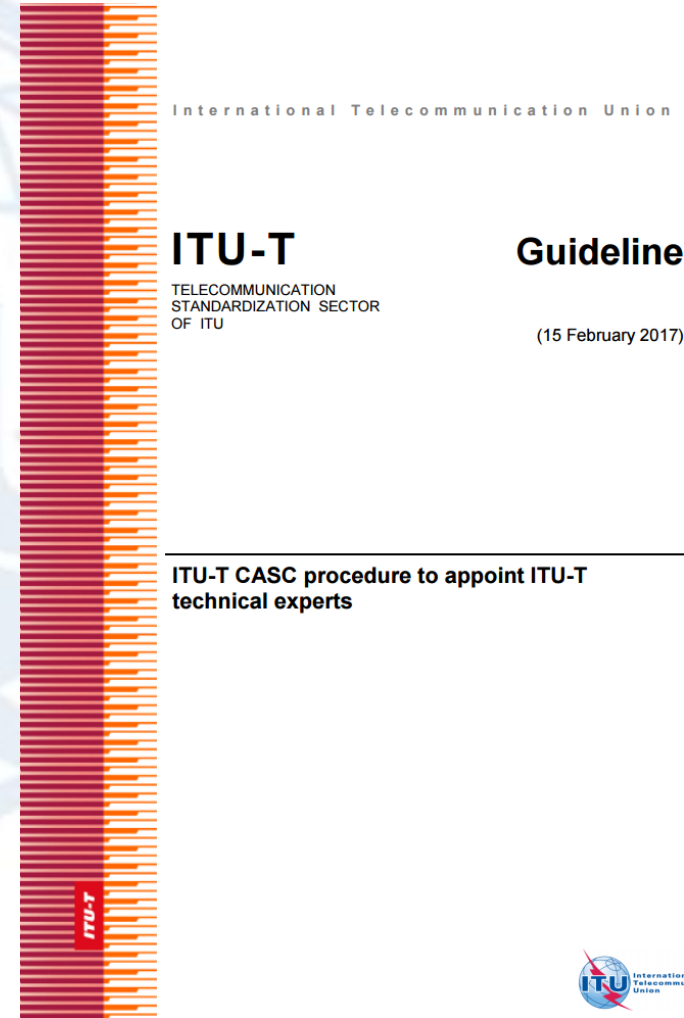
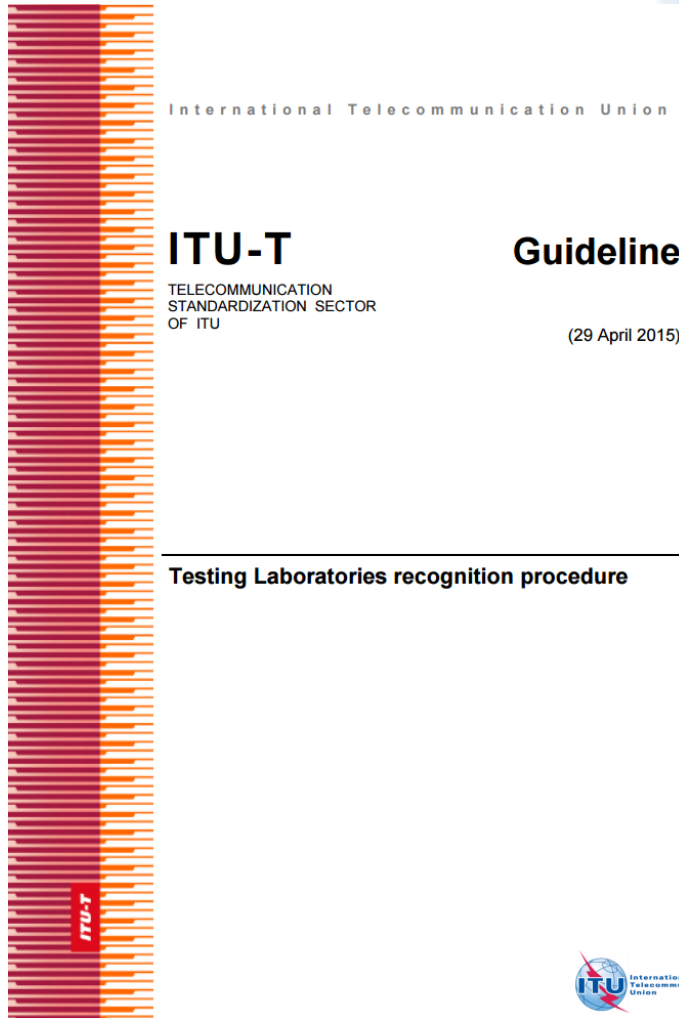


Guidelines



CASC Guidelines

<https://www.itu.int/en/ITU-T/studygroups/2017-2020/11/Pages/CASC.aspx>



Guideline "Testing Laboratories recognition procedure"

- **General Framework** for the recognition of Testing Laboratories which have competence in testing against ITU-T Recommendations
- Describes the ITU-T Conformity Assessment Steering Committee (CASC) **ToR**
- Describes the general criteria for **ITU-T technical experts**



ITU-T CASC ToR

- to provide the ITU-T view and position to the management organs of the established Conformity Assessment Systems and Schemes of the IEC and ILAC
- to set up criteria, rules and procedures for the appointment of ITU-T technical experts by working with established Conformity Assessment Systems and Schemes of IEC, in collaboration with ILAC aiming for a common testing and conformity assessment
- to process applications from candidate experts
- to appoint the ITU-T technical expert(s)
- to recognize TL with a scope of ITU-T Recommendation(s) which is assessed by IEC or by ILAC accreditation bodies and register it in the ITU recognized TL list



CRITERIA FOR ITU-T TECHNICAL EXPERTS

- Knowledge and experience of ITU-T Recommendations and relevant test suites
- Complete relevant training (if needed)
- Familiar with assessment rule of accreditation bodies. An experience in ISO/IEC 17025 standard is advance
- Shall not have conflict interest with assessed Testing Laboratories

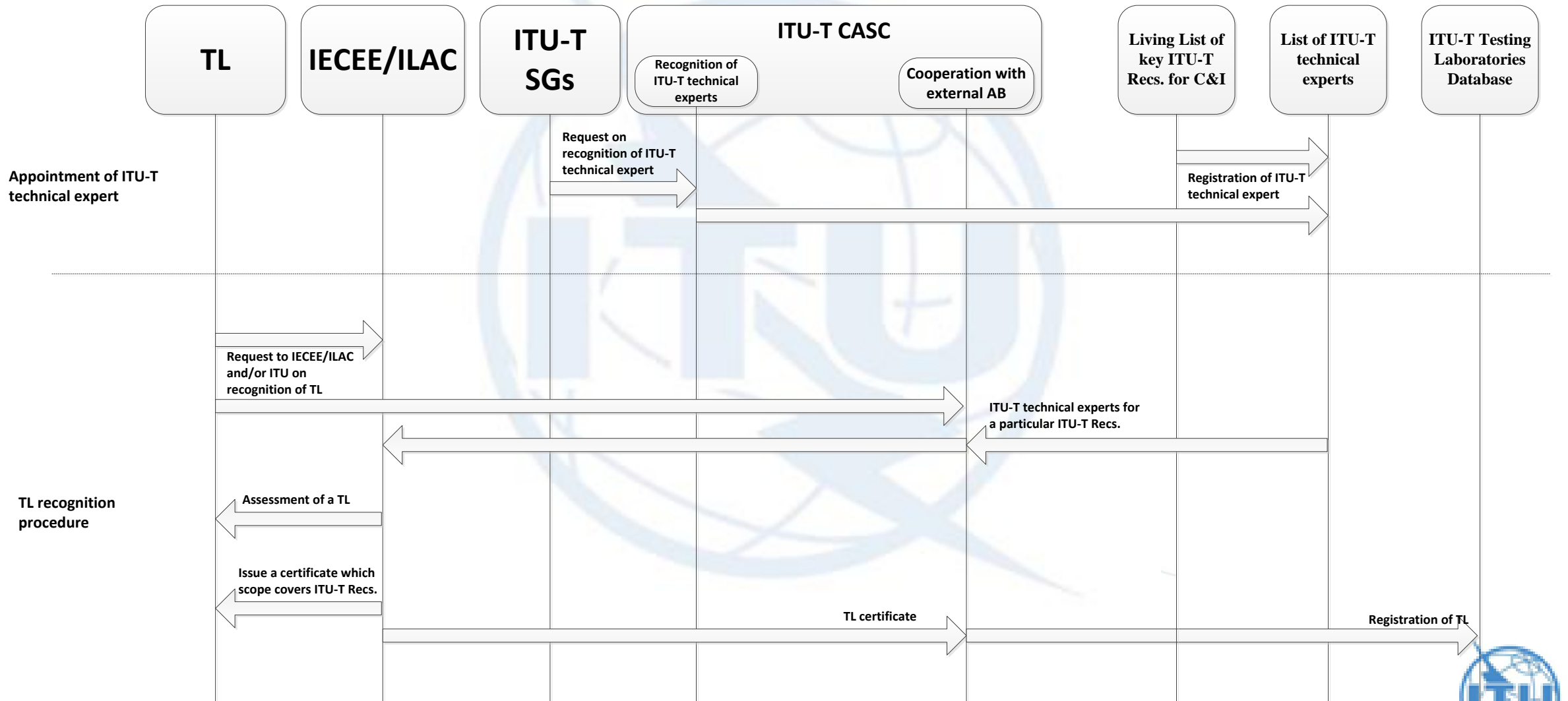


OPTIONS TO IMPLEMENT THE ITU-T TL'S RECOGNITION PROCEDURE

- 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



Testing Laboratories recognition procedure



Guideline "ITU-T CASC procedure to appoint ITU-T Technical experts"

- ITU will collaborate with existing conformity assessment program to assess competence of TL to test against ITU-T Recommendations
- Describes the procedure of appointing an ITU-T technical expert; their criteria and duties
- ITU-T CASC shall provide technical expert for making relevant TL's assessment against ITU-T Recommendations

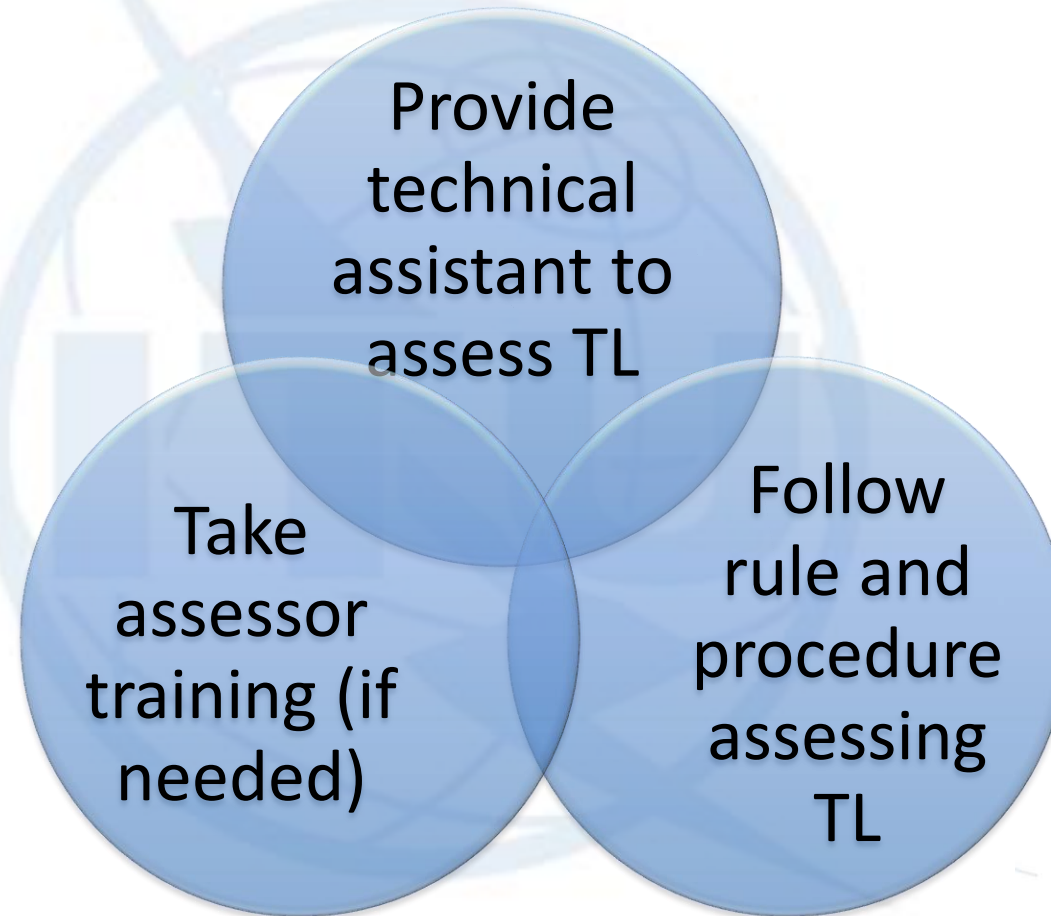


Criteria for ITU-T Technical experts

- 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 ITU-T 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



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

Dates	Qualifications

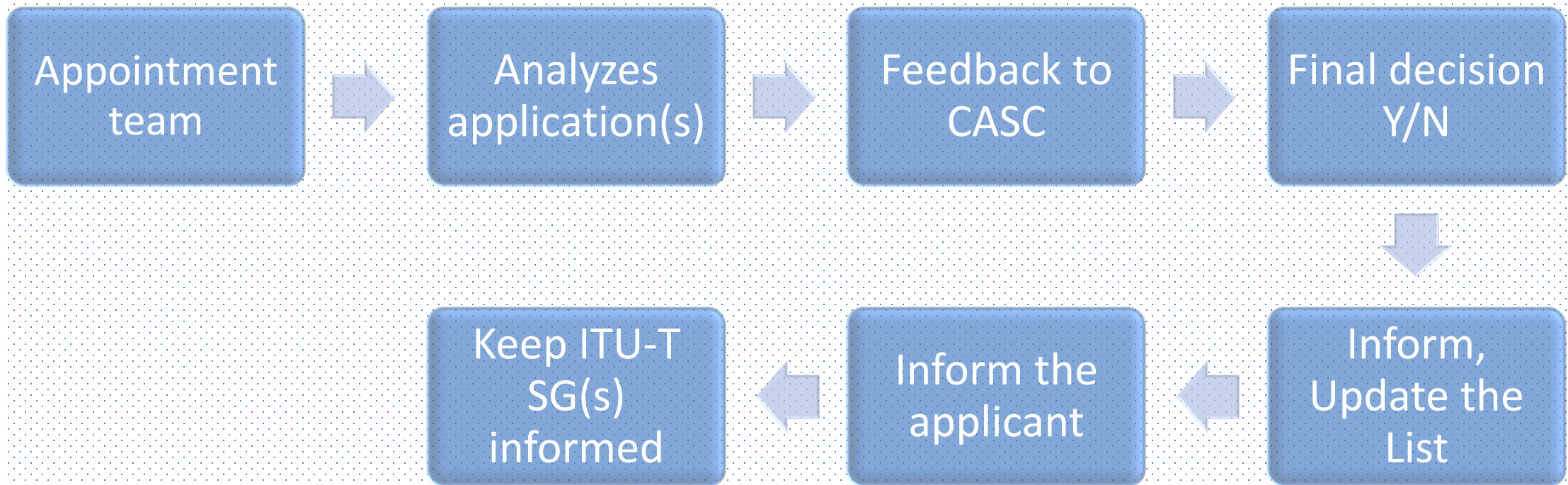
C. PROFESSIONAL EXPERIENCE

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.



Evaluation



A large, light blue watermark of the ITU logo is centered on the page. It features a globe with a satellite dish and the letters 'ITU' overlaid.

Ongoing Guidelines



Rev. Resolution 76 (WTSA-16)

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

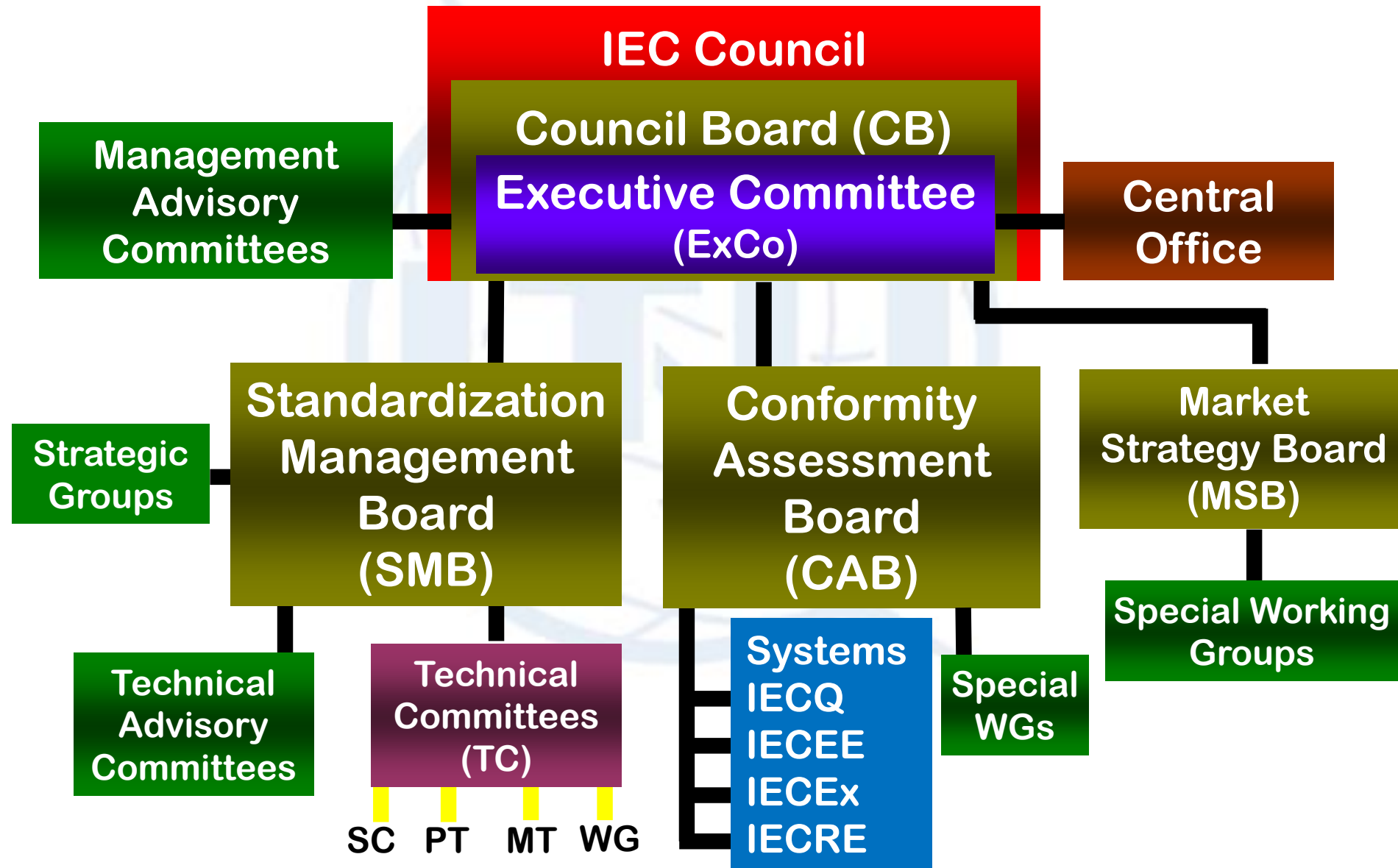
instructs the ITU-T Conformity Assessment Steering Committee

...

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**



Structure of the IEC



IEC Task Force “ITU Requirements”

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 will appoint ITU-T technical experts who have competence in particular ITU-T Recommendations (received 2 applications from candidates on ITU-T SG2 and ITU-T SG5 Recommendations)
Note: the ITU-T technical experts might be included in 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” (to be agreed in October 2019)

CONTENTS

CONTENTS	
FOREWORD	
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	6
3.1 Participation	6
4 Peer Assessment Programme Process	6
4.1 Application	6
4.2 Review of the application files	6
4.3 Appointment of the assessment team	6
4.4 Peer Assessment Assignment	7
4.5 Reviewing of the assessment reports	7
4.6 Recommendation to the ITU for recognition	7
5 Technical assessors	7
5.1 IECEE Training Courses for technical assessor (request input by ITU) – before Geneva meeting	7
5.2 Registration of Technical Assessors	8
6 Initial assessment of RLIR	8
7 Reviewer’s task and terms of reference	9
8 Fees	10
RLIR	10
9 Deadlines and applicable penalties	10



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

(currently, there are 4 proposed ITU-T Recs – K.116, P.1100, P.1110, P.1140)



Potential technologies for TL recognition

Existing standards

1. **EMC (SG5)**
Recs: K.21/K.44, K.116, K.series
2. **Hands-free connectivity (SG12)**
Recs: P.1100/P.1110
3. **4G Interconnection (VoLTE) (SG11)**
Recs: Q.3640/Q.3953, new recs on distributed ENUM
4. **Mobile universal charger solution (SG5)**
Recs: L.1000/L.1005
5. **Video coding (SG16)**
Recs: H.264/H.264.1, H.265/H.265.1
6. **IPTV (SG16)**
Recs: H.701/HSTP.CONF-H701, H.702/HSTP.CONF-H702
7. **IoT (SG20)**
Recs: Y.4500.1-32/Q.3954/Q.3955

Ongoing study

1. **IoT identification (SG20, SG11)**
WIs: Y.IoT-IoD-PT (SG20)/Q.39_FW_Test_ID_IoT (SG11)
2. **LTE, 3G/2G user Equipment/mobile stations (UE/MS) for over-the-air performance testing**
Guideline Test_UE/MS
3. **Cable television services (SG9)**
R-REC0J.5DOCSIS

The [reference table](#) of ITU-T Recommendations to be used for conformity/interoperability assessment ([SG11-TD632/GEN](#), Geneva, July 2018)



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



Next meetings of ITU-T SG11

Next ITU-T SG11 meeting (Geneva, 16-25 October 2019)

Next CASC meeting (18 October 2019)

Note: deadline for contributions – 3 October 2019

www.itu.int/go/tsg11

The current work programme of SG11 is available [here](#)

