

QUESTION 4/2

Assistance to developing countries for implementing conformance and interoperability programmes

1 Statement of the situation or problem

Inclusion of an ITU-D study group Question on this matter provides an effective way to further the aims of Resolution 47 (Rev. Dubai, 2014) of the World telecommunication Development Conference (WTDC), Resolution 76 (Rev. Dubai, 2012) of the World telecommunication Standardization Assembly (WTSA) and Resolution 177 (Guadalajara, 2010) of the Plenipotentiary Conference.

Member States and ITU-D Sector Members can assist and guide each other by conducting studies, building tools to bridge the standardization gap, and navigating issues related to matters raised in the above-mentioned resolutions. ITU-D can harness the energy of its membership to examine these important issues.

In a global economy characterized by rapid technological change, a variety of ICT solutions and the convergence of telecommunication networks and services, ICT users – public entities, businesses and consumers – understandably have certain expectations regarding interoperability, quality and also environmental sustainability of products and services.

In this regard, to facilitate safe usage of products and services anywhere in the world, regardless of who is the manufacturer or service provider, it is crucial that products and services be developed in accordance with relevant international standards, regulations and other specifications, and that their compliance be tested.

The Question will ultimately contribute to international community's effort in adopting eco-friendly set of harmonized standards, since the countries can, through conformance and interoperability (C&I) regime instruments, better control and authenticate products.

Conformity assessment increases the probability of interoperability, i.e. equipment built by different manufacturers being capable of communicating successfully. In addition, it helps to ensure that products and services are delivered according to expectations. Conformity assessment builds consumer trust and confidence in tested products and consequently strengthens the business environment and, thanks to interoperability, the economy benefits from business stability, scalability and cost reduction of systems, equipment and tariffs.

While economically C&I increases market opportunities, encourages trade and technology transfer and contributes to the removal of technical barriers, socially it helps to extend ICT service availability and affordability to all people at a good level of quality.

To increase the benefits of C&I, many countries have adopted harmonized C&I regimes at both national and bi-/multilateral level. However, some developing countries have not yet done so because of a number of major challenges, such as the lack of appropriate/adequate infrastructure and technology development to be in a position to test or to recognize tested ICT equipment (e.g. accredited laboratories).

Availability of high-quality, high-performing products will accelerate widespread deployment of the infrastructure, technologies and associated services, allowing people to access the information society regardless of their location or chosen device, and contributing to implementing the outcomes of the World Summit on the Information Society (WSIS).

In this respect, other outcomes of the Plenipotentiary Conference, ITU-D, ITU-T and ITU-R resolutions and Recommendations, and in particular Resolution 177 (Guadalajara, 2010), Resolution 47 (Rev. Dubai, 2014), Resolution 76 (Rev. Dubai, 2012), and Resolution ITU-R 62 (Geneva, 2012) of the

Radiocommunication Assembly, should serve as a basis for the study of this Question, and as the framework for ITU's business plan developed upon request of ITU's Member States, which establishes the following four pillars:

- Pillar 1: Conformance assessment
- Pillar 2: Interoperability
- Pillar 3: Capacity building
- Pillar 4: Establishment of C&I regimes, including building laboratories.

The report presented by the Secretary-General to the 2013 session of the ITU Council ("Conformance and Interoperability Programme Status Report and Action Plan" – Document C13/24(Rev.1)) was positively commented on by the councillors, who unanimously referred to the importance of activities relating to conformance and interoperability, supported the work accomplished by ITU in that area, and urged the Union to continue that work.

2 Question or issue for study

The Question is established in ITU-D Study Group 2, to examine these issues and undertake the following, taking into account the economic impact of previously mentioned programmes, including on Member States and Sector Members:

2.1 In close collaboration with the relevant BDT programme(s), identify and assess what the challenges, priorities and problems are for countries, subregions or regions with respect to the application of ITU-T Recommendations, approaches to meeting the confidence needs associated with equipment conformance to ITU-T Recommendations and other related issues, identifying critical issues/priority issues in countries, subregions or regions, and identifying related best practices.

2.2 Examine how information transfer, know-how, training and institutional and human capacity development can strengthen the ability of developing countries to reduce risks associated with low-quality equipment, and equipment interoperability issues. Examine effective information-sharing systems and best practices to assist in this work.

2.3 Examine global trends related to these matters.

2.4 Elaborate a methodology for the implementation of this Question, in particular gathering evidence and information regarding current best practices being adopted to create C&I programmes, taking into consideration progress achieved by the all ITU Sectors in this regard.

2.5 Techniques designed to promote harmonization of C&I regimes, to improve regional integration and to contribute to bridging the standardization gap, consequently reducing the digital divide.

2.6 Information regarding the establishment of mutual recognition agreements (MRA) between countries. Guidance on concepts and procedures to establish and manage MRAs.

2.7 Techniques on market surveillance and maintenance of C&I regimes in order to guarantee the credibility and sustainability of the conformance assessment scheme put in place.

3 Expected output

In the next ITU-D study period 2014-2018, studies of various issues related to conformance and interoperability are to be reported, including a description of the technical, legislative and regulatory framework that would be needed to implement appropriate C&I programmes by developing countries.

Specifically, the following outputs are envisaged:

- a) Harmonized guidelines on technical, legal and regulatory aspects of a C&I regime

- b) Feasibility studies regarding the establishment of laboratories in different C&I domains
- c) Guidance on the framework and procedures to establish MRAs
- d) Case studies on C&I regimes established at national, regional or global levels
- e) Development of a methodology for assessing the status of C&I regimes in place in the regions (or subregions)
- f) Experience-sharing and case study reports on C&I implementation of programmes.

4 Timing

- 4.1 Annual progress reports will be submitted to ITU-D Study Group 2.
- 4.2 A final report will be submitted to ITU-D Study Group 2.

5 Proposers/sponsors

United States; Algérie Télécom; Arab States.

6 Sources of input

- 1) Member States, Sector Members and relevant experts.
- 2) Examination of regulations, policies and practices in countries that have created systems to manage these matters.
- 3) Other relevant international organizations.
- 4) Interviews, existing reports and surveys should also be used to gather data and information for the finalization of a comprehensive set of best-practice guidelines for administering C&I information. Material from regional telecommunication organizations, telecommunication research centres, manufacturers and working groups should also be utilized in order to avoid duplication of work. Close cooperation with ITU-T study groups, in particular Study Group 11 and the Joint Coordination Activity on C&I testing (JCA-CIT), and with other organizations (e.g. ILAC, IAF, ISO, IEC) involved in conformance and interoperability activities and other actions within ITU-D is required and extremely important.

7 Target audience

Target audience	Developed countries	Developing countries ¹
Telecom policy-makers	Yes	Yes
Telecom regulators	Yes	Yes
Service providers/operators	Yes	Yes
Manufacturers	Yes	Yes
Consumers/end-users	Yes	Yes
Standards-development organizations, including consortia	Yes	Yes
Testing laboratories	Yes	Yes
Certification bodies	Yes	Yes

a) Target audience

Depending on the nature of the output, policy- and decision-makers, middle- to upper-level managers in operators, laboratories, SDOs, certification bodies, market-research agencies, regulators and ministries in developed, developing and least developed countries will be the predominant users of the output. Compliance managers at equipment manufacturers and system integrators could also use the output for information.

b) Proposed methods for implementation of the results

The results of the Question are to be distributed through ITU-D interim and final reports. This will provide a means for the audience to have periodic updates of the work carried out and a means for the audience to provide input and/or seek clarification/more information from ITU-D Study Group 2 should they need it.

8 Proposed methods of handling the Question or issue

The Question will be addressed within a study group over a four-year study period (with submission of interim results), and will be managed by a rapporteur and vice-rapporteurs. This will enable Member States and Sector Members to contribute their experiences and lessons learned with respect to conformity assessment, type-approval and interoperability.

9 Coordination

9.1 The ITU-D study group dealing with this Question will need to coordinate with:

- Relevant ITU-T study groups, particularly Study Group 11
- Relevant focal points in BDT and ITU regional offices
- Coordinators of relevant project activities in BDT
- Standards-development organizations (SDOs)
- Conformity-assessment bodies (including testing organizations and laboratories, accreditation organizations, etc.) and industry consortia

¹ These include the least developed countries, small island developing states, landlocked developing countries and countries with economies in transition.

- Consumers/end users
- Experts in this field.

10 BDT programme link

- a) WTDC Resolution 47 (Rev. Dubai, 2014)
- b) WTSA Resolution 76 (Rev. Dubai, 2012)
- c) WTSA Resolution 44 (Rev. Dubai, 2012)
- d) C&I Action Plan Pillars 3 and 4 (Council Document C13/24(Rev.1))

Links to BDT programmes aimed at human-capacity development and assistance to operators in developing and least developed countries, programmes that deal with technical assistance and programmes concerning conformance and interoperability.

11 Other relevant information

As may become apparent within the life of this Question.