STUDY GROUP 2

QUESTION 4/2

Assistance to developing countries¹ for implementing conformance and interoperability programmes and combating counterfeit information and communication technology equipment and theft of mobile devices

1 Statement of the situation or problem

Question 4/2 will examine the following three items:

i) Conformance and interoperability (C&I)

Inclusion of an ITU Telecommunication Development Sector (ITU-D) study group Question on this matter provides an effective way to further the aims of Resolutions 177 (Rev. Busan, 2014) and 188 (Busan, 2014) of the Plenipotentiary Conference, Resolution 47 (Rev. Buenos Aires, 2017) of the World Telecommunication Development Conference (WTDC), and Resolutions 76 (Rev. Hammamet, 2016) and 96 and 97 (Hammamet, 2016) of the World Telecommunication Standardization Assembly (WTSA).

According to the Buenos Aires Declaration, widespread C&I of telecommunication/ICT equipment and systems allow increased market opportunities as well as the reliability and integration of world trade, which can be achieved through programmes, policies and decisions.

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 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 to achieve the Sustainable Development Goals (SDGs), especially the targets on infrastructure² (namely 9.1, 9.a, 9.b, and 9.c), by adopting an eco-friendly set of harmonized standards, since C&I regime instruments enable countries to better control and authenticate products.

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

² SDG 9: https://sustainabledevelopment.un.org/sdg9

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.

To increase the benefits of C&I, many countries have adopted harmonized C&I regimes at both national and bilateral/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).

The availability of high-quality, high-performing products will accelerate widespread deployment of infrastructure, technologies and associated services, allowing people to access the information society regardless of their location or chosen device, and contributing to implementing the SDGs.

Also, simplifying the conformity assessment process will facilitate the homologation of products destined for telecommunications, will give legal certainty to users on compliance in the products they acquire, and will promote adoption of the best technological standards and measures to protect intellectual property.

In addition, this will contribute to raising the quality standards of services, making them more efficient, for the benefit of the population.

ii) Counterfeit telecommunication/ICT equipment

Counterfeit telecommunication/ICT equipment is a growing issue and socio-economic problem. It causes significant negative impact on innovation, levels of foreign direct investment, growth in the economy and levels of employment, and may also redirect resources into organized criminal networks.

iii) Mobile device theft

Preventing and combating the use of stolen mobile devices is another issue. The theft of user-owned mobile devices may lead to the criminal use of telecommunication/ICT services and applications, resulting in economic losses for the lawful owner and user.

Implementing measures to combat counterfeit telecommunication/ICT devices and mobile device theft is a matter of urgency and high interest for developing countries.

2 Question or issue for study

The Question is established in ITU-D Study Group 2, to examine issues related to ICT equipment and systems, a key component for spreading ICT networks, access, services and applications. The work of the Question takes into account the following items:

2.1 In close collaboration with the relevant Telecommunication Development Bureau (BDT) programme(s), identifying and assessing the challenges, priorities and problems for countries, subregions or regions with respect to the application of ITU Telecommunication

Standardization Sector (ITU-T) Recommendations and approaches to meeting the need for confidence in the conformity of equipment with ITU-T Recommendations.

- 2.2 Identifying critical/priority issues in countries, subregions or regions, and related best practices.
- 2.3 Examining 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. Examining effective information-sharing systems and best practices to assist in this work.
- 2.4 Elaborating 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 all the 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, thereby reducing the digital divide.
- 2.6 Information regarding the establishment of mutual recognition agreements (MRAs) 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.
- 2.8 Assessing the impact of the increase of ICTs, including the Internet of Things (IoT), and providing guidelines to the ITU-D membership for ICT-readiness.
- 2.9 Techniques and national experiences on combating counterfeit, sub-standard, and tampered devices:
- prepare and document examples of best practices on limiting counterfeit and tampered devices, for distribution;
- prepare guidelines, methodologies and publications to assist Member States in identifying counterfeit and tampered devices and methods of increasing public awareness and restricting trade in these devices, as well as the best ways of limiting them;
- study the impact of counterfeit and tampered telecommunication/ICT devices being transported to developing countries.

3 Expected outputs

In the ITU-D study period 2018-2021, studies of various issues related to C&I, combating counterfeit ICT equipment and theft of mobile devices are to be reported. Outputs are to be prepared in three separate components.

Specifically, the following outputs are envisaged:

C&I programmes

- a) Review of guidelines and best practices 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 for establishing technical collaboration on C&I and sharing of resources
- d) Questionnaire to collect and update the database of current status of 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 implementation of C&I programmes focusing on efficient and affordable methods to improve the level of conformity.

Combating counterfeit ICT equipment

g) Best practices and guidelines, including methodologies to combat counterfeit ICT equipment.

Mobile device theft

h) Experience-sharing and case-study reports on combating mobile device theft.

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

6 Sources of input

- 1) Member States, Sector Members and relevant experts.
- 2) A questionnaire covering relevant C&I matters.
- 3) Examination of regulations, policies and practices in countries that have created systems to manage these matters.
- 4) Other relevant international organizations.
- 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.
- 6) Material from regional telecommunication organizations, telecommunication research centres, manufacturers and working groups should also be utilized in order to avoid duplication of work.

7) Close cooperation with ITU-T study groups, in particular Study Group 11 and the Joint Coordination Activity on C&I testing, and with other organizations (e.g. ILAC, IAF, ISO, IEC) involved in C&I activities and other actions within ITU-D is required and extremely important.

7 Target audience

Target audience	Developed countries	Developing countries
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, standards-development organizations (SDOs), certification bodies, market-research agencies, regulators and ministries in developed, developing and least developed countries (LDCs) 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 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, testing laboratories, recognition of testing reports, as well as combating counterfeit devices.

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
- SDOs
- Conformity-assessment bodies (including testing organizations and laboratories, accreditation organizations, etc.) and industry consortia
- Consumers/end users
- Experts in this field.

10 BDT programme link

- a) WTDC Resolution 47 (Rev. Buenos Aires, 2017)
- b) WTSA Resolution 76 (Rev. Hammamet, 2016)
- c) Resolution 123 (Rev. Busan, 2014) of the Plenipotentiary Conference
- d) ITU C&I Programme

Links to BDT programmes aimed at human capacity development and assistance to operators in developing countries and LDCs, programmes that deal with technical assistance and programmes concerning C&I.

11 Other relevant information

As may become apparent within the life of the Question.
