Mauritania (Islamic Republic of)

PROPOSAL FOR CONTINUING WITH THE ITU-D SG 2 QUESTION 4/2 ON CONFORMITY AND INTEROPERABILITY

Priority area:

Other proposals

Summary:

This contribution proposes continue with the studies carried out by the ITU-D SG 2 Question 4/2 on Conformity and Interoperability.

Some inclusions in the scope and work methodology are proposed. This contribution is based on the current work of the Question and on the discussions on its future.

This will certainly contribute to achieving the Sustainable Development Goals (SDGs), mainly those targets focusing on infrastructure.

Expected results:

Conformity and Interoperability

References:

WTDC Resolution 47 (Rev. Dubai, 2014)

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Proposal for continuing with the ITU-D Study Group 2 Question on Conformity and Interoperability

Introduction

This contribution proposes continue with the studies carried out by the ITU-D SG 2 Question 4/2 on Conformity and Interoperability.

Some inclusions in the scope and work methodology are proposed. This contribution is based on the current work of the Question and on the discussions on its future.

This will certainly contribute to achieving the Sustainable Development Goals (SDGs), mainly those targets focusing on infrastructure.

Proposal

The continuity of an ITU-D SG2 Question on Conformity and Interoperability remains an important and even increasing issue for developing countries.

Also, the results of the discussions on the future of the question that took place during the January 2017 RG meeting pointed out for the continuation of the Question on C&I. It should focus on issues related to ICT equipment and system taking into consideration a holistic view, this would include:

- Technical requirements and standards
- Conformity assessment
- Control of equipment; post-market surveillance
- Promotion of Mutual Recognition agreements
- Internet of Thing scenario, implicating in billions of connections (people and devices), mostly through the usage of wireless communication systems

Needs for improving Conformity and Interoperability in developing countries are still around:

- Quality
- Safety
- Interoperability
- Spectrum environment free of interference
- National Rules
- Sustainability
- Reliability
- Resilient
- Affordability (through the economy of scales promoted by C&I)

Innovative ways must continue to be pursued, this should include:

- Establishment or sharing of Laboratory testing
- Virtual Laboratory services
- Mutual Recognition Agreements reflecting local and regional demands and limitations

- Post-Market Surveillance
- Smart testing solutions
- Standard Harmonization

Tasks
- Raise Awareness
- Networking platform on C&I for ITU-D Members
- Promote collaboration, research and share of experience on the several matters embraced by the question
- ITU-D members representation in other Forums dealing with C&I (e.g. ISO/CASCO STAR group meetings)
- Questionnaire to collect country reports and to track the progress achieved in terms of C&I
- Guidelines
- Recommendations

This proposed targets to achieve the **Sustainable Development Goal**, having in focus the SDG 9 - Build resilient infrastructure, promote inclusive and sustainable industrialization and foster innovation. Specifically the following SDG Targets are priorities for this question:

9.1 - Develop quality, reliable, sustainable and resilient infrastructure, including regional and transborder infrastructure, to support economic development and human well-being, with a focus on affordable and equitable access for all;

9.a - Facilitate sustainable and resilient infrastructure development in developing countries through enhanced financial, technological and technical support to African countries, least developed countries, landlocked developing countries and small island developing States;

9. b - Support domestic technology development, research and innovation in developing countries, including by ensuring a conducive policy environment for, inter alia, industrial diversification and value addition to commodities;

9.c - Significantly increase access to information and communications technology and strive to provide universal and affordable access to the Internet in least developed countries by 2020.
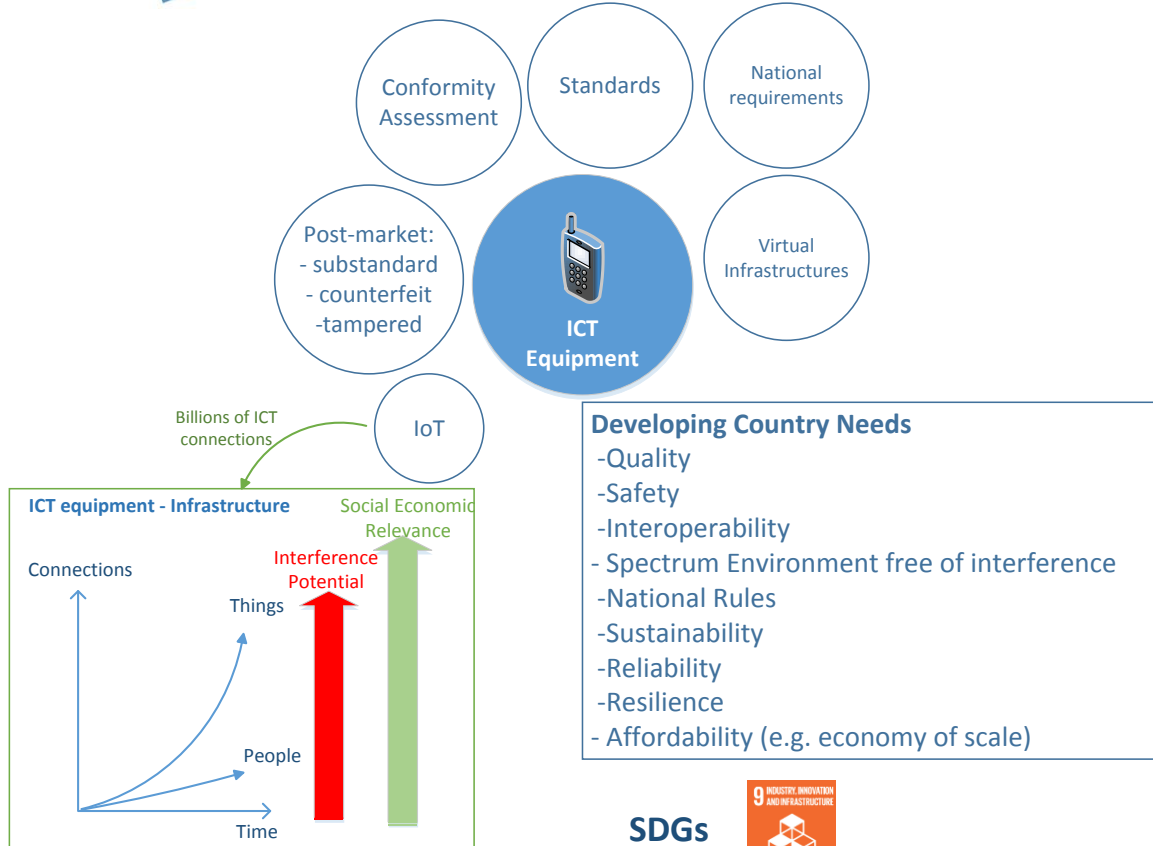
The following chart shared during the January 2017 Q4/2 meeting reflects the considerations above mentioned:

ICT Equipment Infrastructure

Q4/2

Revised C&I Question 4/2 having an Holistic approach of the several issues on infrastructure related to ICT equipment and systems in developing countries

- Conformity Assessment
- Standards
- National requirements
- Post-market:
  - substandard
  - counterfeit
  - tampered
- Virtual Infrastructures

ICT Equipment

- IoT

Billions of ICT connections

ICT equipment - Infrastructure

Connections

Interference Potential

Things

People

Time

Social Economic Relevance

Developing Country Needs
- Quality
- Safety
- Interoperability
- Spectrum Environment free of interference
- National Rules
- Sustainability
- Reliability
- Resilience
- Affordability (e.g. economy of scale)

SDGs

9 INDUSTRY, INNOVATION AND INFRASTRUCTURE

Tasks for the Question
- Raise Awareness
- Questionnaire (2x): at the begning and at the middle of the Study Period for follow-up
- Networking
- Collaboration, Research and share of experience
- Allowing Membership to participate in other forums (e.g. ISO/CASCO STAR group meetings)

9.1
Develop quality, reliable, sustainable and resilient infrastructure, including regional and transborder infrastructure, to support economic development and human well-being, with a focus on affordable and equitable access for all

9.a
Facilitate sustainable and resilient infrastructure development in developing countries through enhanced financial, technological and technical support to African countries, least developed countries, landlocked developing countries and small island developing States

9.b
Support domestic technology development, research and innovation in developing countries, including by ensuring a conducive policy environment for, inter alia, industrial diversification and value addition to commodities

9.c
Significantly increase access to information and communications technology and strive to provide universal and affordable access to the Internet in least developed countries by 2020

The Annex to this contribution presents the **new Draft Terms of Reference** for the Question 4/2 on Conformity and Interoperability.

Annex:

REV. QUESTION 4/2

Assistance to developing countries for implementing conformity 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. Buenos Aires, 2017) of the World telecommunication Development Conference (WTDC), Resolution 76 (Rev. Hammamet, 2016) of the World telecommunication Standardization Assembly (WTSA) and Resolution 177 (Busan, 2014) 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. A scenario where the successful adoption of Internet of Things (IoT) is true, billions of ICT devices an system play a vital role in society demanding increasing efforts for an organized ICT market that must take into consideration: Safety, Quality, Spectrum environment free of harmful interference, limits to the NRI emission of devices, interoperability, Sustainability, Reliability , Resilience, and Affordability.

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 achieving the Sustainable Development Goals (SDG), especially those targets on Infrastructure[1] (namely 9.1, 9.a, 9.b, and 9.c) 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

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[1] SDG 9: https://sustainabledevelopment.un.org/sdg9

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 SDGs.

2   Question or issue for study

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

2.1   In close collaboration with the relevant BDT programme(s), identify and assess what the challenges, priorities and problems are for countries, sub regions or regions with respect to the application of international ICT Standard and Technical Requirements, including ITU-T and ITU-r Recommendations

2.2   Identify critical issues/priority issues in countries, sub regions 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   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.

2.4   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.

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

2.6   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.

2.7   Techniques and best practices on combating counterfeit, sub-standard, and tampered devices.

2.8   Access the impact of the exponential increase of ICT equipment (IoT) and provide recommendation to ITU-D Member for readiness.

3   Expected output

In the next ITU-D study period 2018-2022, studies of various issues related to conformity 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 sub regions);

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

Autorité de Régulation (Mauritania), Arab states.

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 organization;

5)   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.

6) Materials 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 with other organizations (e.g. ILAC, IAF, ISO, IEC) involved in conformity and interoperability.

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, interoperability, testing laboratories, recognition of testing reports, participation in Mutual Recognition Agreements, as well as combating counterfeit devices.

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[1]   These include the least developed countries, Small Island developing states, landlocked developing countries and countries with economies in transition.

9   Coordination

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

–   Relevant ITU-T study groups, particularly Study Group 11 and its regional groups;

–   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;

–   Consumers/end users;

–   Experts in this field.

10   BDT programme link

b)   WTDC Resolution 47 (Rev. Buenos Aires, 2017)

b)   WTSA Resolution 76 (Rev. Hammamet, 2016)

c)   PP Resolution 123 (Rev. Dubai, 2014)

d)   ITU C&I Programme

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.