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| African Telecommunication Union Administrations | | | |
| PROPOSED MODIFICATIONS TO RESOLUTION 76 | | | |
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| **Abstract:** | ATU proposes to modify WTSA Resolution 76 to reflect the current status of Conformance Assessment Steering Committee (CASC) and to update the document to reflect current trends. The general text has some updates and some additional text is proposed relating to security. | |
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Introduction

On specifics of security, the proposal has sections to encourage security, cybersecurity and protection of personal identifiable information (PII) in the area of conformance and interoperability. Noting that cybersecurity is a growing area in the use of ICTs and especially devices and systems, as well as the inclusion of security within many areas of work, such as in Quality of Service, this recommendation aims to highlight and encourage support for work to develop capacity of people, processes, recommendations and technologies related to testing systems in relation to cybersecurity.

Due to the lack of focus on cybersecurity, most of the conformance and interoperability work and databases do not include references and efforts on work for cybersecurity. At the ITU-T SG17 Regional Group meeting for Africa, some participants asked on how best to use the various recommendations in a cybersecurity testing and assurance concept.

Proposal

ATU proposes that Resolution 76 should highlight the current status of CASC as well as the future technologies after IMT-2020.

Additionally, this recommendation encourages contributions to testing, conformance and interoperability in the area of cybersecurity with outcomes including references to organizations, laboratories, recommendations, and tested systems or components. It also aims to encourage an area of work in the structured test of systems, devices, protocols and processes using recommendations of ITU-T SG 17 others.

MOD ATU/35A19/1

RESOLUTION 76 (Rev. New Delhi, 2024)

Studies related to conformance and interoperability testing, assistance to developing countries[[1]](#footnote-1)1, and a possible future ITU Mark programme

(Johannesburg, 2008; Dubai, 2012; Hammamet, 2016; Geneva, 2022; New Delhi, 2024)

The World Telecommunication Standardization Assembly (New Delhi, 2024),

recalling

*a)* that Resolution 123 (Rev. Bucharest 2022) of the Plenipotentiary Conference instructs the Secretary-General and the Directors of the three Bureaux to work closely with each other in order to step up actions intended to reduce the standardization gap between developing and developed countries;

*b)* that Resolution 200 (Rev. Bucharest 2022) of the Plenipotentiary Conference resolves to reaffirm a shared global vision for the development of the telecommunication/information and communication technology (ICT) sector, including broadband, for sustainable development under the Connect 2030 Agenda, envisaging "an information society, empowered by the interconnected world, where telecommunications/ICTs enable and accelerate social, economic and environmentally sustainable growth and development for everyone";

*c)* that Article 17 of the ITU Constitution, while providing that the functions of the ITU Telecommunication Standardization Sector (ITU‑T) shall fulfil the purposes of the Union relating to telecommunication standardization, stipulates that ITU-T perform such functions "bearing in mind the particular concerns of the developing countries";

*d)* the efforts and outputs of the ITU‑T Conformity Assessment Steering Committee (CASC) under the leadership of ITU‑T Study Group 11;

*e)* Resolution 177 (Rev. Bucharest 2022) of the Plenipotentiary Conference, on conformance and interoperability (C&I);

*f)* Resolution 130 (Rev. Bucharest 2022) of the Plenipotentiary Conference, on Strengthening the role of ITU in building confidence and security in the use of ICT;

*g)* Resolution 47 (Rev. Kigali, 2022) of the World Telecommunication Development Conference on enhancement of knowledge and effective application of ITU Recommendations in developing countries, including conformance and interoperability testing of systems manufactured on the basis of ITU Recommendations;

*h)* Resolution ITU-R 62-3 of the Radio Assembly (Dubai, 2023) on studies related to testing for conformance with ITU-R Recommendations and interoperability of radiocommunication equipment and systems,

recognizing

*a)* that interoperability of international telecommunication networks was the main reason for creating the International Telegraph Union in 1865, and that this remains one of the main goals in the ITU strategic plan;

*b)* that emerging technologies such as Internet of Things (IoT), International Mobile Telecommunications-2020 (IMT-2020) and beyond have increasing requirements for C&I testing;

*c)* that conformity assessment is the accepted way of demonstrating that a product adheres to an international standard, and conformity assessment continues to be important in the context of World Trade Organization members' international standardization commitments under the Agreement on Technical Barriers to Trade;

*d)* that conformance testing does not guarantee interoperability but could increase the chance of interoperability of equipment conforming to ITU‑T Recommendations, particularly during the development phase;

*e)* that technical training and institutional capacity development for testing and certification are essential issues for countries to improve their conformity assessment processes, to promote the deployment of advanced telecommunication networks and to increase global connectivity;

*f)* 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;

*g)* that CASC has in accordance with its mandate developed a procedure for the appointment of ITU experts and has developed detailed procedures for the recognition of testing laboratories that have competence for testing against/compliance with ITU-T Recommendations, in collaboration with existing conformity assessment schemes;

*h)* that ITU‑T has a Product Conformity Database and is progressively populating it with details of ICT equipment having undergone testing for conformity with ITU‑T Recommendations;

*i)* that the ITU C&I programme contains four pillars namely: 1) conformity assessment, 2) interoperability events, 3) human resource capacity building, and 4) assistance in the establishment of test centres and C&I programmes in developing countries;

*j)* that providing for interoperability should be an important consideration when developing future ITU‑T Recommendations;

*k)* that testing for conformity with ITU‑T Recommendations should help in efforts to address combating counterfeit ICT products;

*l)* that enhancing Member States' capabilities for conformance assessment and testing and the availability of national and regional conformance assessment testing facilities may help combat counterfeit telecommunication/ICT devices and equipment;

*m)* that C&I testing can facilitate the interoperability of certain emerging technologies such as IoT and IMT-2020 and beyond;

*n)* that the WSIS Plan of Action states in § 12 that "Confidence and security are among the main pillars of the information society", and calls for "appropriate action on spam at national and international levels";

*o)* that conformity and interoperability testing with ITU‑T Recommendations help to secure, build confidence and trust in ICT products and services,

considering

*a)* that Resolution 177 (Rev. Bucharest 2022) recognized further that a decision concerning the implementation of the ITU Mark would be postponed until Pillar 1 (conformity assessment) has reached a more mature stage of development;

*b)* that there are concerns that equipment is often not fully interoperable with other equipment;

*c)* that interoperability testing could increase the chances of end-to-end interoperability of equipment from different manufacturers, and would assist developing countries in the choice of solutions;

*d)* the importance, especially to developing countries, of ITU assuming a leading role in the implementation of the ITU C&I programme, with ITU‑T taking lead responsibility for Pillars 1 and 2, and the ITU Telecommunication Development Sector (ITU‑D) for Pillars 3 and 4;

*e)* that the remote testing of equipment and services using virtual laboratories may enable countries, especially those with economies in transition and developing countries, to conduct C&I testing, while at the same time facilitating the exchange of experience among technical experts taking into account the positive results achieved in implementing the ITU pilot project for the creation of such laboratories;

*f)* priorities of members, especially developing countries, to combat and deter counterfeit devices;

*g)* that the normal operations, functions, and interactions of devices, products, services and systems are dependent on security, particularly cybersecurity,

noting

*a)* that C&I requirements to support testing are essential components for developing interoperable equipment that is based on ITU‑T Recommendations;

*b)* that considerable practical experience exists within the ITU‑T membership regarding the production of relevant testing requirements and the testing procedures on which the actions proposed in this resolution are based;

*c)* the need to assist developing countries in facilitating conformity and interoperability, which can help in reducing the cost of systems and equipment procurement by operators, particularly in the developing countries, in order to enhance product quality and safety;

*d)* that when interoperability experiments or testing are not performed, users may suffer from the lack of interconnection performance between equipment from different manufacturers;

*e)* that availability of equipment tested as per ITU‑T Recommendations for C&I may provide the basis for achieving a greater choice of solutions, greater competitiveness and more economies of scale,

taking into account

*a)* that some ITU‑T members carry out testing activities, including ITU‑T study group pilot projects, to assess C&I;

*b)* that ITU standardization resources are limited, and C&I testing requires specific technical infrastructure;

*c)* that a diverse set of expertise is required for developing C&I test suites, C&I testing standardization, product development and product testing;

*d)* that it is of advantage if regional and national accreditation and certification bodies conduct the C&I testing;

*e)* that collaboration with a range of external conformity assessment bodies (including accreditation and certification) is necessary;

*f)* that some forums, consortia and other organizations have already established certification programmes;

*g)* that developing countries have made strides in cybersecurity and expressed the need for security and assessments for ICT Products in conformance and interoperability,

resolves

1 to continue working on the pilot projects that encourage conformity with ITU‑T Recommendations, in order to gain experience and identify requirements and methodologies in the development of test suites;

2 that Study Group 11 continue to coordinate the Sector's activities related to the ITU C&I programme across all study groups;

3 that Study Group 11 continue to undertake activities within the C&I programme, including pilot projects on conformance/interoperability testing;

4 to continue working with accreditation bodies to recognize testing laboratories with competence to test in accordance with ITU-T Recommendations;

5 to encourage collaboration between ITU-T and ITU-D on the four pillars of the ITU C&I programme, each according to its responsibilities;

6 to encourage and contribute to work in security and cybersecurity relating to testing and assessments for conformance and interoperability;

7 that Study Group17 undertake activities within C&I programming, supporting testing and assessments relating to security;

8 that conformance testing requirements shall provide for verification of the parameters defined in the current and future ITU‑T Recommendations as determined by the study groups developing the Recommendations, and for interoperability testing to take into account user needs and consider market demand, as appropriate;

9 to continue to develop a set of methodologies and procedures for remote testing using virtual laboratories;

10 that ITU-T could hold interoperability testing events as needed to promote the interoperability of equipment conforming to ITU‑T Recommendations;

11 that ITU, being a world standardization body, can address the impediments to harmonization and growth of worldwide telecommunications and 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, and taking into consideration *recognizing f)*;

12 that ITU-T work with stakeholders on security testing to ensure conformance with ITU‑T Recommendations,

invites Member States and Sector Members of the ITU Telecommunication Development Sector

1 to evaluate and assess the risks and various costs resulting from the lack of C&I tests, particularly in developing countries, and share necessary information and recommendations to avoid losses, based on best practices;

2 to collaborate at regional level (especially developing countries) on the establishment of C&I test facilities through having different testing facilities located in different countries and making use of mutual recognition agreements and arrangements;

3 to collaborate at all levels to share knowledge on the establishment of security related testing in facilities located in developing countries;

4 to strengthen initiatives for technical training and institutional capacity building in developing countries by focusing efforts on establishing test centres and conducting hands-on training and workshops on C&I testing;

5 to collaborate at regional level (especially developing countries) in capacity building and conformance and interoperability testing,

instructs the Director of the Telecommunication Standardization Bureau

1 to continue consultations and assessment studies in all regions, taking into consideration the needs of each region, on implementation of the action plan endorsed by the ITU Council;

2 in collaboration with the Director of the Telecommunication Development Bureau (BDT) to continue consultations with all regions, taking into consideration the need of each region, including security on implementation of the action plan endorsed by the ITU Council;

3 to collaborate with the Director of the Telecommunication Development Bureau (BDT), in the development of Recommendations on human capacity building and assistance in the establishment of test facilities in developing countries;

4 to implement the action plan agreed by the Council at its 2012 session and revised at its 2014 session, in cooperation with the Director of BDT;

5 considering *resolves*9, 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;

6 in collaboration with the Director of the BDT, and in consultation with each region to continue implementing the ITU C&I programme;

7 to continue maintaining the testing laboratory database and informative pilot conformity product database identifying product and ICT services compliant with ITU-T Recommendations;

8 to publish an annual plan of C&I activities which could attract more members' participation;

9 to continue the implementation of the ITUT C&I test laboratory recognition procedure;

10 to involve experts and external entities as appropriate;

11 to provide progress reports on the activities carried out under the action plan to the Council for its consideration and required actions;

12 to facilitate the interoperability testing events in order to achieve the interoperability of equipment conforming to ITUT Recommendations;

13 to encourage work on security in conformance and interoperability testing of devices, protocols, components, products and services etc;

14 to establish a structured C&I testing feedback mechanism to continually assess the effectiveness of initiatives developed by ITU and contribute towards its improvement,

instructs the study groups

1 to accelerate accomplishing the pilot projects started by ITU‑T study groups and continue to identify existing ITU‑T Recommendations that are candidates for C&I testing, taking into account the needs of the membership, and that are capable of providing end-to-end interoperable services on a global scale, adding to their content, if necessary, specific requirements within their scope;

2 to prepare the ITUT Recommendations identified in *instructs the study groups* 1 above, with a view to conducting C&I tests as appropriate for different technologies/products/services (e.g. security, signalling, end-devices, ICT services, etc.);

3 to continue and enhance cooperation, as appropriate, with interested stakeholders, including other standards-development organizations, forums and consortia, in order to optimize studies to prepare test specifications, taking into account user needs and in consideration of the market demand for a conformity assessment programme;

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 ITU Telecommunication Standardization Sector Conformity Assessment Steering Committee

to administer the ITU procedure to recognize testing laboratories that are competent to test according to ITUT Recommendations, in collaboration with existing accreditation bodies,

invites the Director of the Telecommunication Standardization Bureau

to collaborate with Member States and other Sector Members to assist in the development and deployment of virtual laboratories to carry out remote testing in developing countries,

invites the ITU Council

to consider the Director's report referred to in *instructs the Director of the Telecommunication Standardization Bureau* 8 above,

invites Member States and Sector Members

1 to contribute to the implementation of this resolution by, including, but not limited to:

i) actively providing requirements for testing activities on C&I through contributions to related study groups;

ii) considering potential collaboration on future C&I activities;

iii) contributing to the Product Conformity Database;

2 to encourage national and regional testing entities to assist ITU‑T in implementing this resolution;

3 to actively provide input to the C&I testing feedback mechanism.

1. 1 These include the least developed countries, small island developing states, landlocked developing countries and countries with economies in transition. [↑](#footnote-ref-1)