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| C:\Users\ponder\AppData\Local\Microsoft\Windows\Temporary Internet Files\Content.Word\BDT-25th_anniversary_2017-Logo_411959-3_transparent.png | **World Telecommunication Development Conference 2017 (WTDC-17)**  **Buenos Aires, Argentina, 9-20 October 2017** | C:\Users\ponder\AppData\Local\Microsoft\Windows\Temporary Internet Files\Content.Word\BDT-25th_anniversary_2017-Logo_411959-1_transparent.png |
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| PLENARY MEETING | | **Addendum 20 to Document WTDC-17/23-E** |
|  | | **4 September 2017** |
|  | | **Original: Russian** |
| ITU Member States, members of the Regional Commonwealth  in the field of Communications (RCC) | | |
| DRAFT Revision to WTDC Resolution 47 - 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 | | |
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| **Priority area:**  Resolutions and Recommendations  **Summary:**  Taking into account the importance of implementing ITU's C&I programme for conformance and interoperability testing with a view to resolving problems of bridging the digital divide and the standardization gap, as well as building capacity in the area of introducing modern technologies, telecommunication/ICT services and related applications in developing countries, these proposals are intended to define more clearly relevant areas of study for ITU-D.  **Expected results:**  WTDC-17 is invited to consider and approve changes to Resolution 47 (Rev. Dubai, 2014) in the form set out in the annex hereto.  **References:**  Resolution 47 (Rev. Dubai, 2014) | | |

**MOD** RCC/23A20/1

RESOLUTION 47 (Rev. BUENOS AIRES, 2017)

Enhancement of knowledge and effective application of   
ITU Recommendations in developing countries[[1]](#footnote-1)1, concerning   
conformance and interoperability testing of systems   
manufactured on the basis of ITU Recommendations, and a possible future ITU Mark programme

The World Telecommunication Development Conference (Buenos Aires, 2017),

considering

*a)* that Resolution 123 (Rev. Busan, 2014) of the Plenipotentiary Conference (PP) on bridging the standardization gap between developing and developed countries, instructed the Secretary-General and the Directors of the three Bureaux to work closely with each other to bridge the standardization gap between developing and developed countries;

*b)* that Resolution 200 (Busan, 2014) of the Plenipotentiary Conference, "Connect 2020 Agenda for global telecommunication/information and communication technology development", endorses a shared global vision for the development of the telecommunication/information and communication technology (ICT) sector, under the agenda "Connect 2020", 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 the progress towards achievement of the objectives and outcomes of the work of each Sector is reported, as elaborated within the strategic plan for the Union for 2016-2019 in Annex 2 to Resolution 71 (Rev. Busan, 2014) of the Plenipotentiary Conference, contributing to the implementation of the 2030 Agenda for Sustainable Development;

*d)* 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 such functions are to be performed "bearing in mind the particular concerns of the developing countries";

*e)* the results achieved by ITU in implementing the Global Mobile Personal Communications by Satellite (GMPCS) Mark;

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

*g)* that, at its 2013 session, the ITU Council updated the Action Plan for the Conformance and Interoperability (C&I) Programme initially established in 2012, the pillars of which are: 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;

*h)* Resolution 177 (Rev. Busan, 2014) of the Plenipotentiary Conference, on conformance and interoperability (C&I);

*i)* Resolution 197 (Busan, 2014) of the Plenipotentiary Conference, on facilitating the Internet of things (IoT) to prepare for a globally connected world;

*j)* Resolution 76 (Rev. Hammamet, 2016) of the World Telecommunication Standardization Assembly (WTSA), on studies related to conformance and interoperability testing, assistance to developing countries, and a possible future ITU Mark programme;

*k)* Resolution 98 (Hammamet, 2016) of WTSA, on enhancing the standardization of Internet of things and smart cities and communities for global development;

*l)* Resolution ITU-R 62 (Rev. Geneva, 2015) of the Radiocommunication Assembly, on studies related to testing for conformance with Recommendations of the ITU Radiocommunication Sector (ITU-R) and interoperability of radiocommunication equipment and systems,

recognizing

*a)* ;

*b)* that Resolution 44 (Rev. Hammamet, 2016) of WTSA adopted the Action Plan aimed at bridging the standardization gap between developing and developed countries;

*c)* that Resolution 76 (Rev. Hammamet, 2016) of WTSA instructed the Director of the Telecommunication Standardization Bureau, in cooperation with the Radiocommunication Bureau and the Telecommunication Development Bureau (BDT), to continue to conduct as necessary exploratory activities in each region in order to identify and prioritize the problems faced by developing countries related to achieving interoperability of telecommunication/ICT equipment and services; and 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;

*d)* that the C&I programme Action Plan was approved by Council (Documents C12/48, C13/24, C14/24, C15/24 and C16/24) ;

*e)* that having infrastructure applications in developing countries which are compatible with the Recommendations and standards of ITU‑T and/or other international and internationally recognized organizations is desirable, as against those based on proprietary technologies and equipment, so as to maintain a competitive environment, reduce costs, increase the chances of interoperability and ensure satisfactory quality of service and quality of experience;

*f)* 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;

*g)* that emerging technologies have increasing requirements for C&I testing;

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

*i)* that Recommendations ITU-T X.290 to ITU-T X.296 specify a general methodology for conformance testing of equipment to ITU-T Recommendations;

*j)* that conformance testing does not guarantee interoperability but would increase the chance of interoperability of equipment conforming to ITU-T Recommendations;

*k)* that very few of the current ITU-T Recommendations identify interoperability or conformance testing requirements, including both test procedures and performance criteria;

*l)* that assessment of conformity with certain ITU-T Recommendations may imply defining key performance indicators as part of testing specifications;

*m)* that interoperability testing of ICT equipment is an important type of testing from the consumer's perspective;

*n)* 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;

*o)* 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;

*p)* 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;

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

*r)* that an ITU C&I Portal website has been established, which is being continuously updated;

*s)* that testing for conformity with ITU-T Recommendations should help in efforts to combat counterfeit ICT products,

noting

*a)* 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;

*b)* that C&I testing can facilitate the interoperability of certain emerging technologies such as IoT, IMT-2020, etc.;

*c)* that understanding ITU Recommendations and related international standards in order to apply new technology to the network appropriately and effectively is essential for the implementation of Resolution 76 (Rev. Hammamet, 2016), on studies related to C&I testing, assistance to developing countries, and a possible future ITU Mark programme;

*d)* the increasing availability of implementation guidelines on the application of ITU Recommendations and on how to conduct and appropriately utilize C&I testing, and the lack of guidelines on applying these technical documents;

*e)* that some countries, especially the developing countries, have not yet acquired the capacity to test equipment and provide assurance to consumers in their countries;

*f) t*hat increased confidence in the conformance of ICT equipment with ITU-T Recommendations would increase the chances of end-to-end interoperability of equipment from different manufacturers, and would assist developing countries in the choice of solutions;

*g)* the importance, especially to developing countries, that ITU takes up a leading role in 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;

*h)* that the remote testing of equipment and services using virtual laboratories will enable all 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;

*i)* that, along with ITU-T Recommendations, there are a number of specifications for C&I testing developed by other standards development organizations (SDOs), forums and consortia;

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

*k)* the need to assist developing countries in facilitating interoperable solutions which can help in reducing the cost of systems and equipment procurement by operators, particularly in the developing countries, whilst improving product quality and safety;

*l)* that when interoperability experiments or testing have not been performed, users may have suffered from the lack of interconnection performance between equipment from different manufacturers;

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

*n)* that ITU-T regularly carries out testing activities, including ITU-T study group pilot projects, to assess C&I;

*o)* that a decision concerning the implementation of an ITU Mark would be postponed until pillar 1 (conformity assessment) of the Action Plan has reached a more mature stage of development (Council-12),

resolves to invite Member States and Sector Members

1 to continue to engage in activities to enhance knowledge and effective application of ITU‑R and ITU‑T Recommendations in developing countries;

2 to enhance efforts to introduce best-practice application of ITU‑R and ITU‑T Recommendations, in, for example, but not limited to, fibre‑optic transmission technology, broadband network technology, IMT and next-generation networks and building confidence and security in the use of ICTs, by organizing training courses and workshops especially for developing countries, involving academia in the process;

3 to evaluate the benefits of using equipment tested in accordance with ITU-T and ITU-R Recommendations, particularly in developing countries, and share necessary information and recommendations to avoid losses, based on best practices,

instructs the Director of the Telecommunication Development Bureau, in close collaboration with the Directors of the Telecommunication Standardization Bureau and the Radiocommunication Bureau

1 to continue to encourage the participation of developing countries in training courses and workshops organized by the ITU Telecommunication Development Sector (ITU‑D), so as to introduce best practices in the application of ITU‑R and ITU‑T Recommendations, for example by providing fellowships;

2 in cooperation with the Radiocommunication Bureau and the Telecommunication Development Bureau (BDT), to continue to conduct as necessary exploratory activities in each region in order to identify and prioritize the problems faced by developing countries related to achieving interoperability of telecommunication/ICT equipment and services;

3 at the request of the Director of TSB, in collaboration, where necessary, with the Director of BR, to assist with the development of the programme in order to:

i) assist developing countries in capacity building on C&I (Pillar 3) and establishing test centres in developing countries, aimed at promoting regional integration and common C&I programmes (Pillar 4);

ii) assist developing countries in establishing regional or subregional C&I centres and encourage cooperation with governmental and non-governmental, national and regional organizations and international accreditation and certification bodies, to prevent any overlaps caused by or imposed on ICT equipment;

iii) develop and improve the mutual recognition of C&I testing results, mechanisms and data analysis techniques between different regional testing centres;

4 to assist developing countries, in collaboration with the Director of TSB, under WTSA Resolution 44 (Rev. Hammamet, 2016), to take advantage of the guidelines established and developed by ITU‑T on how to apply ITU‑T Recommendations, in particular on manufactured products and interconnection, with emphasis on Recommendations having regulatory and policy implications;

5 to provide assistance in developing methodological guidance (manuals) on implementing ITU Recommendations;

6 to assist developing countries in building their capacity, in collaboration with the other Bureaux, so as to be able to perform conformance testing and interoperability testing of equipment and systems, relevant to their needs, in accordance with the relevant Recommendations, including the development or recognition of, as appropriate, conformity assessment bodies;

7 to assist the Director of TSB, in collaboration with the Director of the Radiocommunication Bureau (BR) and, as appropriate, with equipment and systems manufacturers and internationally and regionally recognized standards-development organizations, in conducting conformance assessment and interoperability testing events, preferably in the developing countries, to encourage developing countries to attend these events, to collaborate with the Director of TSB to build the capacity of the developing countries to effectively participate and be involved in these events, and to provide the views of developing countries on this issue following a questionnaire addressed by the relevant BDT programme to the ITU members;

8 to coordinate and facilitate participation from developing countries in the work of international or regional test laboratories of organizations or entities specialized in conformance testing and interoperability testing, in order for them to gain on-the‑job experience;

9 to collaborate with the Director of TSB in order to implement the recommended actions on Resolution 76 (Rev. Hammamet, 2016) from the C&I programme Action Plan as endorsed by the ITU Council at its 2013 session (Documents C12/48, C13/24, C14/24, C15/24 and C16/24);

10 to assign to the BDT programme concerned the responsibility for following up implementation of this resolution;

11 to submit a periodic report to the Telecommunication Development Advisory Group on the implementation of this resolution as well as a report to the next WTDC in 2018 on implementation of this resolution, which shall also contain lessons learned with a view to updating the resolution for the phase after 2018;

12 to facilitate, through the ITU regional offices, meetings of experts at the regional and subregional levels, in order to promote awareness in developing countries on the question of the establishment of an appropriate C&I programme in such countries,

invites eligible organizations under Recommendation ITU‑T A.5

in collaboration with the Director of BDT and the Director of TSB, in accordance with Resolution 177 (Rev. Busan, 2014), to work on building the capacity of developing countries in C&I testing, including training.

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