International Telecommunication Union

ITU-T

TELECOMMUNICATION
STANDARDIZATION SECTOR
OF ITU

WORLD TELECOMMUNICATION STANDARDIZATION
ASSEMBLY
Hammamet, 25 October – 3 November 2016

Resolution 44 – Bridging the standardization gap between developing and developed countries

FOREWORD

The International Telecommunication Union (ITU) is the United Nations specialized agency in the field of telecommunications, information and communication technologies (ICTs). The ITU Telecommunication Standardization Sector (ITU-T) is a permanent organ of ITU. ITU-T is responsible for studying technical, operating and tariff questions and issuing Recommendations on them with a view to standardizing telecommunications on a worldwide basis.

The World Telecommunication Standardization Assembly (WTSA), which meets every four years, establishes the topics for study by the ITU-T study groups which, in turn, produce Recommendations on these topics.

The approval of ITU-T Recommendations is covered by the procedure laid down in WTSA Resolution 1.

In some areas of information technology which fall within ITU-T's purview, the necessary standards are prepared on a collaborative basis with ISO and IEC.

RESOLUTION 44 (Rev. Hammamet, 2016)

Bridging the standardization gap between developing[1] and developed countries

(Florianópolis, 2004; Johannesburg, 2008; Dubai, 2012; Hammamet 2016)

The World Telecommunication Standardization Assembly (Hammamet, 2016),

considering

a)   that Resolution 123 (Rev. Busan, 2014) of the Plenipotentiary Conference, on bridging the standardization gap between developing and developed countries, instructs the Secretary-General and the Directors of the three Bureaux to work closely with each other on the follow-up and implementation of this resolution and related resolutions, and in pursuing initiatives intended to enhance efforts to bridge the standardization gap between developing and developed countries as well as on follow-up and implementation of the operative paragraphs of Resolution 123 (Rev. Busan, 2014), supporting coordination in this respect at the regional level through regional offices and organizations;

b)   that Resolution 139 (Rev. Busan, 2014) of the Plenipotentiary Conference resolves that implementation of Resolution 37 (Rev. Dubai, 2014) of the World Telecommunication Development Conference (WTDC), on the use of telecommunications/information and communication technologies (ICT) to bridge the digital divide and build an inclusive information society, should continue;

c)   that Resolution 154 (Rev. Busan, 2014) of the Plenipotentiary Conference resolves to continue to take all necessary measures to ensure use of the six official languages of the Union on an equal footing;

d)   that Resolution 166 (Rev. Busan, 2014) of the Plenipotentiary Conference, on the number of vice-chairmen of Sector advisory groups, study groups and other groups, specifies that equitable geographical distribution among ITU regions and the need to promote effective participation of developing countries should be taken into account so as to ensure that every region be represented;

e)   that Resolution 169 (Rev. Busan, 2014) of the Plenipotentiary Conference resolves to continue to admit academia from developing countries to participate in the work of the three Sectors of the Union for 1/32 of the value of the Sector Member contributory unit;

f)   that Resolution 191 (Busan, 2014) of the Plenipotentiary Conference instructs the Directors of the three Bureaux to ensure coordination among the Sectors;

g)   that Resolution 195 (Busan, 2014) of the Plenipotentiary Conference resolves to instruct the Director of the Telecommunication Development Bureau (BDT), in coordination with the Directors of the other Bureaux, to provide technical expertise to carry out feasibility studies, project management and support for the implementation of the Smart Africa Manifesto;

h)   that Resolution 197 (Busan, 2014) of the Plenipotentiary Conference instructs the Secretary-General, in consultation and collaboration with the Directors of the three Bureaux, to facilitate the exchange of experiences and information with all relevant organizations and entities involved in the Internet of things (IoT) and IoT services, with the aim of creating opportunities for cooperative efforts to support the deployment of IoT,

---

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

recognizing

a)   that the tasks undertaken in the ITU Telecommunication Standardization Sector (ITU-T) cover Recommendations, conformity assessment and matters having policy or regulatory implications;

b)   that the harmonious and balanced development of the worldwide telecommunication facilities and services is of mutual advantage to the developing as well as the developed countries;

c)   that there is a need to reduce the cost of equipment and of rolling out networks and facilities taking into account the needs and requirements of developing countries;

d)   that the disparity between developing and developed countries in standardization has five components: disparity of voluntary standardization, disparity of mandatory technical regulations, disparity of conformity assessment, disparity in human resources skilled in standardization and disparity in effective participation in ITU-T activities;

e)   that it is of high importance for developing countries to increase their participation in the establishment and widespread use of telecommunication standards, and to enhance their contribution in ITU-T study groups;

f)   that coordination at national level in many developing countries needs to be developed to handle ICT standardization activities in order to contribute to work in ITU-T;

g)   that the development of guidelines and the establishment of national standardization secretariats could enhance standardization activities at national level and the participation and contribution of developing countries in ITU-T study groups;

h)   that Resolution 71 (Rev. Busan, 2014) of the Plenipotentiary Conference, on the strategic plan for the Union for 2016-2019, lists enablers of the strategic goals and objectives of the Union, one of these enablers being to ensure efficient and accessible conferences, meetings, documentation, publications and information infrastructures, and one of the support processes to that enabler being the organization of conferences, assemblies, seminars and workshops (including translation and interpretation),

recognizing also

a)   that Decision 12 (Rev. Busan, 2014) of the Plenipotentiary Conference confirmed free-of-charge online access for the general public to ITU-T Recommendations, Recommendations of the ITU Radiocommunication Sector (ITU-R), ITU-R reports, the basic texts of the Union (Constitution, Convention and General Rules of conferences, assemblies and meetings of the Union), and the final acts of plenipotentiary conferences;

b)   that annual reports presented at the ITU Council regarding policies of free on-line access to ITU publications indicate that said policies have been able to raise the level of awareness regarding standardization activities carried out at ITU and to promote greater participation of developing countries in these activities;

c)   that, under the strategic plan for the Union for 2016-2019, one of the objectives of ITU-T is to work to "promote the active participation of the membership, in particular developing countries, in the definition and adoption of international non-discriminatory/ICT standards (ITU-T Recommendations) with a view to bridging the standardization gap";

d)   that interpretation service needs to be provided in some ITU-T meetings so as to contribute to bridging the standardization gap and ensure maximum involvement of all delegates, in particular those from developing countries;

e)   that interpretation is essential to help all delegates, especially those from developing countries, to be fully aware of and engaged in standardization decisions that are taken in ITU-T meetings;

f) that the Telecommunication Standardization Advisory Group (TSAG) plays a vital role and takes decisions that have an impact on the work of all study groups,

taking into account

a) that while ITU has made significant progress in defining and bridging the standardization gap, developing countries are still encountering multifarious difficulties in ensuring their efficient participation in the work of ITU-T, in particular engaging in and following up the work of the ITU-T study groups, especially given budgetary limitations;

b) that the actual participation by developing countries, where it exists, is usually limited to the final approval and implementation stages, rather than in the preparation of proposals elaborated in the various working groups;

c) that coordination at national level in many developing countries needs to be improved to handle ICT standardization activities in order to contribute to work in ITU-T;

d) that the biennial budget structure now includes a separate expenditure line item for bridging the standardization gap activities, while at the same time voluntary contributions are being encouraged, and a management mechanism for this line item has been implemented by the Telecommunication Standardization Bureau (TSB) in close coordination with BDT;

e) that ITU's programmes for fostering partnerships, under the patronage of ITU-T, continue to strengthen and expand the assistance ITU provides to its members, particularly developing countries;

f) the importance of having appropriate consultative frameworks for developing countries for the formulation and study of Questions, the preparation of contributions and capacity building;

g) that the structure and working methods of ITU-T study groups could serve to improve the level of developing-country participation in standardization activities;

h) that joint meetings of regional groups of different ITU-T study groups, in particular if concatenated with a regional workshop and/or a meeting of a regional standardization body, will encourage the participation of developing countries in these meetings and increase the effectiveness of such meetings;

i) that ITU can further improve the active participation of developing countries in the standardization work of ITU-T in terms of both quality and quantity, through the role of TSAG and ITU-T study group vice-chairmen and chairmen who are appointed on the basis of regional representation and can be charged with specific responsibilities;

j) that TSAG agreed to create a mentor role in ITU-T study groups for coordination with representatives from developed and developing countries with the objective of sharing information and best practices with regard to the application of ITU-T Recommendations in order to enhance standardization activities in developing countries and in the regional groups,

recalling

a) that Resolution 1353 of the Council recognizes that telecommunications and ICT are essential components for developed and developing countries for achieving sustainable development, and instructs the Secretary-General, in collaboration with the Directors of the Bureaux, to identify new activities to be undertaken by ITU to support the developing countries to achieve sustainable development through telecommunications and ICT;

b) the relevant conclusions of the Global Standards Symposium,

resolves

1   that the action plan annexed to this resolution, having the objective of bridging the standardization gap between developed and developing countries, should be continued and be reviewed on an annual basis to take into account the requirements of developing countries;

2   that ITU-T, in collaboration with the other Sectors, especially the ITU Telecommunication Development Sector (ITU-D), as appropriate, shall develop a programme to:

i)   assist developing countries in developing strategies and methods that facilitate the process of linking innovations to the standardization process;

ii)   assist developing countries in developing means to align their national industrial and innovation strategies towards the goal of achieving highest impact on their socio-economic ecosystems;

iii)   assist developing countries on developing strategies in establishing national/international test laboratories for emerging technologies;

3   that, subject to Council approval, there should be free online access to the manuals, handbooks, directives and other ITU material related to understanding and implementation of ITU-T Recommendations, particularly in the area of developing planning, operation and maintenance of telecommunication equipment and networks;

4   to support, within available or otherwise contributed resources, and on a case-by-case basis, the coordinated creation of regional groups of ITU-T study groups, and encourage cooperation and collaboration of these groups with other regional standardization entities;

5   to maintain in the annual budget of the Union a separate expenditure line item for bridging the standardization gap activities, while at the same time voluntary contributions should be further encouraged;

6   that interpretation shall be provided, based on the requests of participants, at all study group and working party plenary meetings and the entire meeting of TSAG,

resolves further that ITU regional offices

1   be engaged in the activities of TSB in order to promote and coordinate standardization activities in their regions so as to support the implementation of the relevant parts of this resolution and carry out the objectives of the action plan, launch campaigns to attract new Sector Members, Associates and academia from developing countries to join ITU-T, and provide the necessary assistance to the regional groups of ITU-T study groups;

2   assist, within the offices' budgets, the vice-chairmen appointed with specific responsibilities, including, among others, the following:

i)   closely work with ITU members in the region in order to mobilize them to participate in ITU standardization activities to assist in bridging the standardization gap;

ii)   make mobilization and participation reports to the ITU body concerning the region;

iii)   prepare and submit a mobilization programme for the regions that they represent at the first meeting of TSAG or a study group and send a report to TSAG;

iv)   inform ITU members of programmes and initiatives within ITU-D that could assist in bridging the standardization gap;

3   organize and coordinate the activities of the regional groups of ITU-T study groups,

invites the Council

in view of the above *resolves*, in particular *resolves* 6, to increase the ITU-T budgetary provisions for fellowships, interpretation and translation of documents for meetings of TSAG, ITU-T study groups and regional groups of ITU-T study groups,

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

within available resources,

1   to continue implementing the objectives of the action plan annexed to this resolution;

2   to encourage the formation of partnerships under the patronage of ITU-T as one of the means for financing and implementing the objectives of the action plan annexed to this resolution;

3   to consider, whenever possible, holding workshops concurrently with meetings of the ITU-T regional groups, in coordination and collaboration with the Director of BDT;

4   to assist developing countries with their studies, particularly in respect of their priority questions and towards developing and implementing ITU-T Recommendations;

5   to continue the activities of the implementation group established within TSB to organize, mobilize resources, coordinate efforts and monitor work related to this resolution and the associated action plan;

6   to carry out the necessary studies on the role of innovation management and innovation stimulation programmes on bridging the standardization gap between the developed and developing countries;

7   to include in the TSB budget proposal to the Council funds identified for the implementation of this resolution, taking into account financial constraints and existing and planned BDT activities;

8   to report on the implementation of this plan to future world telecommunication standardization assemblies and plenipotentiary conferences, with a view to reviewing this resolution and introducing the appropriate amendments in the light of implementation outcomes, as well as the budgetary adjustments needed;

9   to provide support and assistance to developing countries, if requested, in drafting/developing a set of guidelines on the application of ITU-T Recommendations at the national level in order to enhance their participation in ITU-T study groups, with the assistance of the ITU regional offices, for bridging the standardization gap;

10   to enhance the use of electronic channels such as webinars or e-learning for education and training on the implementation of ITU-T Recommendations;

11   to provide all necessary support and take all necessary measures for creating and ensuring the smooth functioning of the regional groups, and to facilitate the organization of regional group meetings and workshops for disseminating information and increasing understanding of new Recommendations, in particular for developing countries;

12   to report on the effectiveness of the regional groups to the Council;

13   to conduct workshops and seminars, as appropriate, for disseminating information and increasing understanding of new Recommendations and implementation guidelines for Recommendations, in particular for developing countries;

14   to provide remote participation, where possible, for more ITU-T workshops, seminars and forums, encouraging greater participation by developing countries;

15   to leverage existing ITU-D platforms, such as the Global Innovation Platform, in order for developing countries to have greater involvement in ITU-T's standardization work;

16   to study the possibility of generating additional revenue for ITU-T activities on bridging the standardization gap, through identifying new financial resources not related to the voluntary contributions mentioned above,

instructs study groups of the ITU Telecommunication Standardization Sector and the Telecommunication Standardization Advisory Group

1   to be actively involved in the implementation of the programmes set forth in the action plan annexed to this resolution;

2   to consider including implementation guidelines for ITU-T Recommendations where these could provide advice to assist developing countries in adopting them, with emphasis on Recommendations having regulatory and policy implications;

3   to coordinate joint meetings of regional groups of ITU-T study groups,

further instructs the study groups

1   to take account of the specific characteristics of the telecommunication environment of the developing countries in the process of establishing standards in the fields of planning, services, systems, operation, tariffs and maintenance, and to provide solutions/options relevant to developing countries wherever possible;

2   to take appropriate steps to have studies carried out on questions connected with standardization which are identified by WTDCs;

3   to continue liaising with ITU-D study groups, where appropriate, when developing new or revised ITU-T Recommendations, on the specific needs and requirements of developing countries, in order to broaden the appeal and applicability of the Recommendations in those countries;

4   to identify the challenges that developing countries are facing with a view to bridging the standardization gap among Member States,

invites the Director of the Telecommunication Standardization Bureau

1   to work closely with the Directors of BDT and the Radiocommunication Bureau (BR) in order to encourage the formation of partnerships under the patronage of ITU-T as one of the means for financing the action plan;

2   to consider, whenever possible, holding workshops concurrently with meetings of the ITU-T regional groups, in coordination and collaboration with the Director of BDT,

invites regions and their Member States

1   to pursue the creation of regional groups of parent ITU-T study groups in their respective regions in accordance with *resolves* 4 of this resolution and Resolution 54 (Rev. Hammamet, 2016) of this assembly, and to support their meetings and activities, as appropriate, in coordination with TSB;

2   to take an active part in the activities of the ITU-T regional groups and support regional organizations in setting up regional frameworks for the development of standardization activities;

3   to create regional standardization bodies, as appropriate, and encourage joint and coordinated meetings of such bodies with the regional groups of the ITU-T study groups in the respective regions, so that these standardization bodies act as an umbrella for such regional group meetings;

4   to develop draft terms of reference and working methods for regional groups, for approval by the parent study group;

5   to share information on utilizing ITU-T Recommendations,

encourages Member States and Sector Members

to take the objectives set out in the action plan in the annex to this resolution into account in their participation in ITU-T.

ANNEX
(to Resolution 44 (Rev. Hammamet, 2016))

Action plan for the implementation of Resolution 123 (Rev. Busan, 2014) of the Plenipotentiary Conference

I   Programme 1: Strengthening standards-making capabilities

1)   Objective

•   To improve the standards-making capabilities of developing countries.

2)   Activities

•   Developing guidelines to assist developing countries in their involvement in ITU-T activities, covering, but not limited to, ITU-T working methods, formulating draft Questions and making proposals.

•   Creating methods to increase the access of developing countries to essential technical information in order to enhance their knowledge and capacity (i) to implement global standards, (ii) to effectively contribute to the work of ITU-T, (iii) to include their own specificities and necessities in the global standards-making process, and (iv) to influence global standards-making discussions by having active roles in ITU-T study groups.

- Improving procedures and tools for remote participation via electronic means so as to enable experts in developing countries to participate actively in ITU-T meetings (including TSAG, study groups, joint coordination activities, global standardization initiatives, among others), workshops and training, from their own countries.

- Conducting consultancy projects designed to support developing countries in the development of standardization plans, strategies, policies, etc. The outputs should be further transformed into best practices.

- Developing methods, tools and indicators for accurate measurement of the results and the level of effectiveness of the efforts and activities applied in bridging the standardization gap.

- Working with Sector Members, and in particular manufacturers, academia and research and development organizations, on exchanging information on new technologies and requirements of developing countries, and on providing technical assistance to encourage the establishment of standardization programmes in academia and research and development organizations in the field of ICT.

II Programme 2: Assisting developing countries with respect to the application of standards

1) Objective
- To assist developing countries in:
  - Having a clear understanding of ITU-T Recommendations;
  - Enhancing the application of ITU-T Recommendations in developing countries.

2) Activities
- Assisting developing countries in:
  - Establishing a standardization secretariat to coordinate standardization activities and participation in ITU-T study groups;
  - Determining whether their existing national standards are consistent and in accordance with the current ITU-T Recommendations.

- Actions to be performed by TSB with BDT cooperation:
  - Developing guidelines on the application of ITU-T Recommendations, in particular on manufactured products and interconnection, with emphasis on Recommendations having regulatory and policy implications.

  - Providing advice and assistance for better utilization and adoption of ITU-T Recommendations in national standards.

  - Compiling and maintaining an up-to-date database with information on new standardized technologies, as well as products that are compliant with ITU-T Recommendations.

  - Organizing capacity-building events that enable better application of specific Recommendations and on methods of examining compliance of manufactured products with these Recommendations.

  - Promoting the use of a standardization forum for "questions and answers on standards" where developing countries can raise questions concerning the understanding and application of Recommendations and seek advice from study group experts.

  - Providing assistance to developing countries on developing strategies in establishing national/international test laboratories for emerging technologies.

III   Programme 3: Human resources capacity building

1)   Objective

•   To increase the human resources capacity of developing countries in ITU-T and national standardization activities.

2)   Activities

•   Promoting the organization of events, seminars, workshops and study group meetings at the regional and global levels in order to promote standardization capacity building and the development of telecommunications/ICT in developing countries.

•   In close collaboration with BDT and BR, providing training courses on standardization to developing countries.

•   Providing more internship, secondment and short-term employment, etc., opportunities for developing countries at ITU.

•   Encouraging the election of more candidates from developing countries to ITU-T study group chairmanship and vice-chairmanship positions.

•   Encouraging secondment and short-term employment opportunities for experts from developing countries in test laboratories of international standards development organizations (SDOs) and manufacturers, in particular in the area of conformance and interoperability testing.

•   Organizing in-depth tutorials on understanding and implementation of ITU-T Recommendations.

•   Providing guidance and support material to developing countries to assist them in developing and providing undergraduate and postgraduate courses on standardization in their universities.

•   Offering, to the extent possible, through TSB, a greater number of fellowships to eligible developing countries to attend relevant ITU-T meetings.

IV   Programme 4: Fundraising for bridging the standardization gap

a)   Contributions to the action plan through the following forms of partnerships and other means:

        •   Partnership contributions

        •   Additional budget allocated by ITU

        •   Voluntary contributions by developed countries

        •   Voluntary contributions by the private sector

        •   Voluntary contributions by others.

b)   Management of funds by TSB:

        •   The Director of TSB, in close coordination with the Director of BDT, shall be responsible for the management of funds raised as above, which shall be used principally for achieving the objectives of these programmes.

c)   Principles for the use of funds:

        •   Funds are to be used for ITU-related activities including, but not limited to, assistance and consultation, training of representatives of developing countries in ITU-T activities, as well as studying compliance examination, interconnection and interoperability programmes for developing countries.