

I n t e r n a t i o n a l T e l e c o m m u n i c a t i o n U n i o n

ITU-T

TELECOMMUNICATION
STANDARDIZATION SECTOR
OF ITU

WORLD TELECOMMUNICATION STANDARDIZATION
ASSEMBLY
Geneva, 1-9 March 2022

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

ITU-T



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.

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RESOLUTION 44 (Rev. Geneva, 2022)

Bridging the standardization gap between developing¹ and developed countries

(Florianópolis, 2004; Johannesburg, 2008; Dubai, 2012; Hammamet 2016; Geneva, 2022)

The World Telecommunication Standardization Assembly (Geneva, 2022),

considering

- a) that Resolution 71 (Rev. Dubai, 2018) of the Plenipotentiary Conference includes under the objectives of the ITU Telecommunication Standardization Sector (ITU-T) the promotion of active participation of the membership, in particular developing countries, in the definition and adoption of non-discriminatory international standards (ITU-T Recommendations) with a view to bridging the standardization gap;
- b) Resolution 123 (Rev. Dubai, 2018) of the Plenipotentiary Conference, on bridging the standardization gap between developing and developed countries;
- c) Resolution 139 (Rev. Dubai, 2018) of the Plenipotentiary Conference, on the use of telecommunications/information and communication technologies (ICTs) to bridge the digital divide and build an inclusive information society;
- d) Resolution 154 (Rev. Dubai, 2018) of the Plenipotentiary Conference, on the use of the six official languages of the Union on an equal footing;
- e) Resolution 169 (Rev. Dubai, 2018) of the Plenipotentiary Conference, on the admission of academia to participate in the work of the Union;
- f) Resolution 191 (Rev. Dubai, 2018) of the Plenipotentiary Conference, on the strategy for the coordination of efforts among the three Sectors of the Union;
- g) Resolution 195 (Busan, 2014) of the Plenipotentiary Conference, on the implementation of the Smart Africa Manifesto;
- h) Resolution 197 (Rev. Dubai, 2018) of the Plenipotentiary Conference, on facilitating the Internet of Things and smart sustainable cities and communities;
- i) Resolution 34 (Rev. Geneva, 2022) of this assembly, on voluntary contributions;
- j) Resolution 67 (Rev. Geneva, 2022) of this assembly, on use in ITU-T of the languages of the Union on an equal footing,

recognizing

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

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

- c) 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;
- d) 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;
- e) that developing countries would benefit from effective participation by their operators in ITU-T activities and that this participation by operators would contribute to enhancing capacity building in the developing countries, increase their competitiveness and support innovation in the markets of developing countries;
- f) that coordination at national level in many developing countries needs to be more developed to handle ICT standardization activities in order to contribute to work in ITU-T and the regional groups of ITU-T study groups;
- 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 developing countries would benefit from new services and applications enabled by the digital transformation provided by the emergence of key technologies, and from the building of the information society and progress towards sustainable development;
- i) 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, and help them to be fully aware of and engaged in standardization decisions that are taken in ITU-T meetings,

recognizing further

- a) that the achievements of ITU-T in the standardization of transformative digital technologies will contribute towards achievement of the 2030 Agenda for Sustainable Development;
- b) 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;
- c) that actual participation by developing countries in ITU-T study group activities has been progressively increased, but it is often limited to the final approval and implementation stages, rather than the preparation of proposals elaborated in the various working groups;
- d) 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;
- e) that the biennial budget structure 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 Telecommunication Development Bureau (BDT);

- f) 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;
- g) the importance of having appropriate consultative frameworks for developing countries for the formulation and study of Questions, the preparation of contributions and capacity building;
- h) that the structure and working methods of ITU-T study groups could serve to improve the level of developing-country participation in standardization activities;
- i) 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 and also meetings of the ITU regional counterparts, such as the Inter-American Telecommunication Commission (CITEL), the Regional Commonwealth in the field of Communications (RCC), the African Telecommunications Union (ATU), the Council of Arab Ministers of Telecommunication and Information represented by the Secretariat-General of the League of Arab States (LAS), the Asia-Pacific Telecommunity (APT) and the European Conference of Postal and Telecommunications Administrations (CEPT), will encourage the participation of developing countries in these meetings and increase the effectiveness of such meetings;
- j) that holding ITU-T study group meetings in developing countries has shown potential to increase the participation of ITU-T members from the region in these meetings;
- k) 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 the Telecommunication Standardization Advisory Group (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;
- l) that a mentor role in ITU-T study groups was created by TSAG 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 ITU Council, recognizing that telecommunications/ICTs are essential components for developed and developing countries for achieving sustainable development, 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 ICTs;
- b) the relevant conclusions of the Global Standards Symposium;
- c) that in certain regions there are regional institutions or organizations that undertake standardization work;
- d) that some developing countries are unable to participate in the work of regional standardization organizations,

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 their challenges and innovations to the standardization process in support of the digital transformation of society;
- 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 in developing strategies for establishing test laboratories which are nationally, regionally and internationally recognized 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, in accordance with the approval or procedures set forth in Resolution 54 (Rev. Geneva, 2022) of this assembly, 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;

7 to encourage the participation of members, particularly Academia, from developing countries in ITU-T standardization activities,

resolves further that ITU regional offices

1 be engaged in the activities assigned by TSAG in order to further enhance the implementation of the action plan annexed to this resolution, promoting and coordinating standardization activities in their regions, including raising awareness among prospective Sector Members, Associates and Academia from developing countries, and providing the necessary assistance to the regional groups of ITU-T study groups;

2 assist, within the offices' budgets, the vice-chairmen of TSAG and ITU-T study groups 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 ITU Council

1 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;

2 to consider exemption from payment of the membership fees for a limited time of up to one full study period for new Academia members from developing countries in order to encourage them to get involved in ITU-T activities and the standardization process,

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 the meetings of their respective regional groups of ITU-T study groups, or organizing other workshops or events in coordination and collaboration with the Director of BDT and ITU regional offices alongside these meetings;

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 work, mobilize resources, coordinate efforts and monitor work related to this resolution and the associated action plan;

6 to continue 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, in close collaboration with the ITU Academy and other capacity-building initiatives of BDT;

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 to the Council on the effectiveness of the regional groups of ITU-T study groups;
- 13 to conduct workshops and seminars, as appropriate, for disseminating information and increasing understanding of new ITU-T Recommendations and implementation guidelines for Recommendations, in particular for developing countries;
- 14 to ensure equal access to the ITU electronic meetings to the maximum extent possible and 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 tools 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/ICT environment of the developing countries in establishing standards in the fields of planning, services, systems, operation, tariffs and maintenance, and to provide solutions 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 world telecommunication development conferences or which are identified via specific studies or surveys targeting developing countries carried out by other ITU-T study groups;
- 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 encourage Sector Members from the developed countries to promote the participation in ITU-T activities of their subsidiaries based in developing countries;

3 to develop mechanisms to support the effective participation by members, including telecommunication operators, from developing countries in standardization activities;

4 to consider, whenever possible, holding meetings of ITU-T study groups in developing countries,

invites regions and their Member States

1 to pursue, if necessary, the creation of regional groups of ITU-T study groups in accordance with Resolution 54 (Rev. Geneva, 2022);

2 to take an active part in the activities of the regional groups of ITU-T study groups and support regional telecommunication 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;

6 to encourage the participation of their Sector Members and Associates, especially industry from developing countries, in ITU-T activities;

7 to host regional group and study group meetings and other ITU-T events in particular in developing countries,

encourages Member States and Sector Members

1 to communicate their standardization priorities via contributions and responses to ITU-T surveys;

2 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. Geneva, 2022))

Action plan for the implementation of Resolution 123 (Rev. Dubai, 2018) 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, in close collaboration with other BDT capacity-building initiatives.
- 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, focus 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 and providing statistics on the involvement of developing countries in the work and meetings of TSAG, ITU-T focus groups, ITU-T study groups and regional groups in addition to other ITU-T events.
- 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, in close collaboration with other BDT capacity-building initiatives.
- 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 in developing strategies for establishing test laboratories which are nationally, regionally and internationally recognized for emerging technologies, in coordination with other related actions in other ITU Sectors, especially ITU-D.
- Continuing launching ITU-T initiatives and programmes that focus on the implementation of existing ITU-T Recommendations while exploring new topics of study, and encouraging the participation of developing countries in these initiatives and programmes.

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 other BDT capacity-building initiatives.
- 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 TSAG and 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 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.
- The Bridging the Standardization Gap (BSG) programme should take actions to ensure more participation of women and girls, and vulnerable groups, in standards-development in order to capture their requirements in standardization activities, especially in respect of emerging technologies, taking into account geographical and regional balance.

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.