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| **Logo, company name  Description automatically generated** | A close up of a sign  Description automatically generated**World Telecommunication Development Conference (WTDC-21)**  **Kigali, Rwanda, 6-16 June 2022** | |
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| PLENARY MEETING | | **Document** **WTDC-21/18-E** |
|  | | **9 May 2022** |
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| Director, Telecommunication Development Bureau | | |
| REPORT ON THE RESULTS OF GSS-20 and WTSA-20  THAT RELATE TO THE WORK OF ITU-D | | |
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| **Priority area:** - Resolutions and Recommendations  **Summary:**  This document provides a summary of GSS-20 and WTSA-20.  **Expected results:**  WTDC-21 is invited to take note of this report.  **References:**  [GSS-20 outcome](https://www.itu.int/md/T17-WTSA.20-C-0043), [The draft proceedings of WTSA-20](https://www.itu.int/en/ITU-T/wtsa20/Documents/2000V2E5.pdf) | | |

**Introduction**

The World Telecommunication Standardization Assembly (WTSA-20) was held from 1 to 9 March 2022 in Geneva, Switzerland. WTSA-20 was held as a physical event with interactive remote participation. Decision making was done by delegates who were physically present in Geneva.

**GSS-20**

WTSA-20 was preceded by the [fourth Global Standards Symposium (GSS-20)](https://gss.itu.int/wp-content/uploads/2022/02/2022-02-28-GSS-20-Conclusions-E.pdf) held on 28 February 2022, in Geneva (Switzerland). GSS-20 brought together thought-leaders in the standardization sphere to deliberate on international standards to enable digital transformation and achieve the Sustainable Development Goals (SDGs). GSS-20 recognizing the crucial role played by standards in enhancing digital transformation and achieving the SDGs, invited ITU to:

* continue to support the activities of the United for Smart Sustainable Cities (U4SSC) to accelerate the digital transformation of cities;
* promote the activities AI for Road Safety initiative, to support in particular developing countries to fully benefit from available technologies aimed at improving road safety, including support of data collection;
* support the outcomes of the Financial Inclusion Global Initiative (FIGI) and the development of technical standards that aim to lower the cost of ICTs, enhance the resiliency of digital infrastructure, and support high levels of security for financial transactions;
* foster collaboration among standards bodies to address the disparity between developing and developed countries in their ability to access and implement standards, and
* frameworks to accelerate digital transformation, and participate in standard development on an equal footing through instruments such as the ITU Bridging the Standardization Gap (BSG) Programme.

GSS-20 concluded with an [outcome document](https://www.itu.int/md/T17-WTSA.20-C-0043/en), which was adopted by WTSA-20, and which has shown how standards can change the world by harnessing emerging technologies, innovation and artificial intelligence to support industries like healthcare, financial services, road safety, and agriculture.

**Key summary of WTSA-20**

WTSA-20 approved the mandates and Questions of the eleven ITU-T study groups and appointed the Chairmen and Vice-Chairmen of TSAG, the ITU-T study groups, and the Standardization Committee for Vocabulary. [Eight new study group Chairmen and more than 120 Vice-Chair](http://wtsa12.wordpress.com/2012/11/29/study-group-leadership-appointed/)men were appointed, coming from 37 countries including 27 developing countries.

WTSA-20 revised 36 Resolutions, adopted two new Resolutions, suppressed four Resolutions, and decided to keep 10 Resolutions unchanged (in total, 20 Resolutions remain the unchanged since Hammamet 2016). WTSA-20 also revised three ITU-T A-Series Recommendations that guide ITU-T’s work; three other ITU-T A-Series Recommendations were left unchanged.

The WTSA-20 agreed to include the text of the draft new Resolution on *The role of telecommunication/information and communication technologies in mitigating global pandemics* into the final WTSA report, and instructed the TSB Director to inform the Directors of the other two Bureaux on the above request to the Plenipotentiary Conference for necessary coordination.

Contributions made to the WTSA can be broadly classified in three main categories: proposals related to the work of the ITU-T study groups, proposals related to the ITU-T Recommendations and proposals related to WTSA Resolutions.

A significant number of WTSA-20 Resolutions address the needs of developing countries in terms of telecommunication/ICT for development and are therefore related to the work of ITU-D. Most of them include in their operative part, the collaboration and cooperation with ITU-D, its related study groups and the BDT Director. In some Resolutions, there is a clear mention to support existing efforts undertaken by ITU-D.

Table 1 presents an overview of the WTSA Resolutions with an impact on the work of ITU-D.

Table 2 provides detailed text of the WTSA Resolutions relevant to the work of ITU-D.

**Conclusion**

WTSA-20 approved one new resolution as well as a significant number of revised resolutions that engage ITU-D in undertaking collaborative work on their implementation.

The main topics of several resolutions touch upon key areas of the work of ITU-D, as they require the provision of assistance to Member States, with a focus on developing countries mostly in the form of raising awareness, organizing workshops and seminars including human and institutional capacity building as well as establishing platforms for dialogue.

Taking into consideration that most of the WTSA-16 resolutions related to the work of the ITU-D led to the consideration and approval of corresponding resolutions at WTDC-17, this document provides background information on the resolutions approved at WTSA-20 for the consideration of the membership in the framework of the preparation of WTDC-21, to guide the work of ITU-D in relation to the topics concerned.

**Table 1 – Overview of the WTSA Resolutions relevant to the work of ITU-D**

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| RESOLUTION 2 [Rev] on ITU Telecommunication Standardization Sector study group responsibility and mandates:  Provide the mandates and lead roles and points of guidance for the ITU-T study groups. It encourages ITU-T study groups to conduct work on how to ensure wider implementation of ITU-T Recommendations at the national level in collaboration with the ITU Telecommunication Development Sector (ITU-D) study groups. |
| RESOLUTION 18 [Rev] on Principles and procedures for the allocation of work to, and strengthening coordination and cooperation among, the ITU-R, ITU-T and ITU-D:  Invites RAG, TSAG and TDAG to continue to assist the Intersector Coordination Group on Matters of Mutual Interest in the identification of subjects common to the three Sectors and mechanisms to enhance cooperation and collaboration in all Sectors on matters of mutual interest and the Directors BR, TSB, BDT and ISC-TF to report to the Intersector Coordination Group on Matters of Mutual Interest. |
| Resolution 22 [Rev] on Authorization for the Telecommunication Standardization Advisory Group to act between world telecommunication standardization assemblies:  Assigns TSAG the following specific matters within its competence between this assembly and the next assembly to act in the following areas in consultation with the Director of TSB, as appropriate, to cooperate and coordinate with ITU-R and ITU-D and with other, external, standardization bodies. |
| RESOLUTION 29 [Rev] on alternative calling procedures on international telecommunication networks:  Instructs the TSB Director to continue to cooperate with the BDT Director in order to facilitate the participation of developing countries in these studies and to make use of the results of the studies, and in the implementation of the resolution. |
| RESOLUTION 44 [Rev] on bridging the standardization gap between developing and developed countries:  Resolves that the action plan annexed to the resolution, should be continued and be reviewed on an annual basis to take into account the requirements of developing countries; it also resolves that ITU-T, in collaboration with the other Sectors, especially the ITU-D as appropriate, shall develop a programme to 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, 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, assist developing countries to develop strategies for establishing test laboratories which are nationally, regionally and internationally recognized for emerging technologies; and encourages the participation of members, particularly Academia, from developing countries in ITU-T standardization activities.  It resolves further that ITU regional offices be engaged in the activities of TSB in order to promote and coordinate standardization activities. It furthermore instructs TSB Director, in collaboration with the BDT and BR Director, to continue implementing the objectives of the action plan as well as other activities related to partnerships and collaboration. It further instructs the study groups to continue liaising with ITU-D study groups, where appropriate, when developing new or revised ITU-T Recommendations, and finally invites the TSB Director to work closely with the Directors of BDT the BR and the ITU Regional Offices in order to encourage the formation of partnerships and to consider holding workshops concurrently with meetings of the ITU-T regional groups, in close collaboration with the ITU Academy and other capacity-building initiatives of BDT and in coordination and collaboration with the BDT Director.  The TSB Director is invited to encourage Sector Members from the developed countries to promote the participation in ITU-T activities of their subsidiaries based in developing countries, and to develop mechanisms to support the effective participation by members, including telecommunication operators, from developing countries in standardization activities. The TSB Director is also invited to consider, whenever possible, holding meetings of the ITU-T study groups in developing countries. The Resolution 123 Action Plan emphasizes in close collaboration with other BDT capacity-building initiatives, and to provide 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; and to 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.  Overall, the 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. |
| RESOLUTION 50 [Rev] on cybersecurity:  Notes that ITU-T should work closely with ITU-D, particularly in the context of Question3/2, instructs TSB Director to continue to maintain, in building upon the information base associated with the "ICT Security Standards Roadmap" and the ITU-D efforts on cybersecurity an inventory of national, regional and international initiatives and to share the roadmap with relevant groups of ITU-R and ITU-D; and to support the BDT Director on assisting Member States in the establishment of an appropriate framework between developing countries. The TSB Director is instructed to disseminate information to all stakeholders related to cybersecurity through the organization of training programmes, forums, workshops, seminars, etc., for policy makers, regulators, operators and other stakeholders, especially from developing countries to raise awareness and identify needs in collaboration with the Director of BDT. |
| RESOLUTION 52 [NOC] on countering and combating spam:  Instructs the relevant study groups to continue collaboration with ITU-D in order to continue developing, as a matter of urgency, technical Recommendations with a view to exchanging best practices and disseminating information through joint workshops, training sessions. It further instructs ITU-T Study Group 17 to support ITU-D Study Group 2 on countering and combating spam in its work providing technical training sessions, workshops activities in different regions related to spam policy, regulatory and economic issues and their impact. |
| RESOLUTION 54 [Rev] on Regional groups of study groups of the ITU Telecommunication Standardization Sector:  Instructs study groups and the Telecommunication Standardization Advisory Group to consider and identify questions of greatest interest to Member States and Sector Members from developing countries with a view to keeping them updated on the development of international standards in the context of the regional groups of ITU-T study groups.  It instructs the TSB Director, in collaboration with the BDT Director and the ITU Regional Offices to provide all necessary support for creating and ensuring the smooth functioning of the regional groups of the ITU-T study groups; to consider holding events (workshops, forums, seminars, training, etc.) concurrently with meetings of the ITU-T regional groups, in the relevant regions, and vice versa and to take all necessary measures to facilitate the organization of meetings and workshops of the regional groups. It also calls upon the TSB Director to cooperate with the BDT Director and with the BR Director, as appropriate, in order to continue to provide specific assistance to regional groups of ITU-T study groups, to encourage the use of electronic working methods, and take appropriate steps to facilitate meetings of the current and future regional groups in order to promote the necessary synergies among the three Sectors and thereby improve the effectiveness and efficiency of the study groups. |
| RESOLUTION 58 [NOC] on encouraging the creation of national Computer Incident Response Teams (CIRTs) particularly developing countries:  Instructs the TSB Director to work in collaboration with the BDT Director to identify best practices to establish CIRTs in line with the ITU toolkit; to identify where national CIRTs are needed, particularly in developing countries, and encourage their establishment, to collaborate with international experts and bodies to establish national CIRTs, to provide support, as appropriate and to facilitate collaboration between national CIRTs, and to take necessary action to progress implementation of this resolution. |
| RESOLUTION 64 [Rev] on IP address allocation and facilitating the transition to and deployment of IPv6:  Recognizes that future work on IPv6 human capacity building is to be continued and led by the Telecommunication Development Bureau (BDT), in collaboration with other relevant organizations, if required. It also instructs the Director of the Telecommunication Standardization Bureau, in close collaboration with the Director of the Telecommunication Development Bureau to continue the ongoing activities between the Telecommunication Standardization Bureau (TSB) and BDT, to update and maintain the website which provides information about global activities related to IPv6, to promote awareness of the importance of IPv6 deployment, to facilitate joint training activities, to support BDT in relevant IPv6 training for engineers, network operators and content providers, mainly in developing countries. |
| RESOLUTION 69 [Rev] on non-discriminatory access and use of Internet resources and telecommunications/ICTs:  Invites the Directors of TSB, BR, BDT to contribute on the progress of the resolution. |
| RESOLUTION 70 [Rev] on Telecommunication/information and communication technology accessibility for persons with disabilities and persons with specific needs:  Invites the TSB Director to work collaboratively on accessibility-related activities with the BR and BDT Directors, taking into account JCA-AHF, on awareness and mainstreaming of telecommunication/ICT accessibility as well as to work collaboratively on accessibility-related activities with ITU-D, and to consider the possibility of organizing, jointly with ITU-D and with the involvement of other standardization organizations and entities, coaching and training for developing countries on working with disability organizations. |
| RESOLUTION 72 [Rev] on measurement and assessment concerns related to human exposure to electromagnetic fields:  Resolves to invite ITU-T, to expand and continue its work including cooperating with ITU-R and ITU-D study groups to be developing new and/or updating existing reports and Recommendations, taking into account the advancements in wireless technologies, advances in measurement/assessment methodologies and best practices, in close coordination with other ITU Sectors and relevant specialized organizations in this field.  It instructs TSB Director in close collaboration with the Directors of the other two Bureaux to support the development of reports identifying the needs of developing countries, to hold workshops in developing countries, to appoint experts in the field of assessment and measurement of exposure to EMF to assist developing countries in the formulation of their strategies in this area and to extend its support for developing countries while they establish their regional centres equipped with test benches for continuous monitoring of EMF levels. |
| RESOLUTION 73 [Rev] on Information and communication technologies, environment, climate change and circular economy:  Instructs the TSB Director, in collaboration with the Directors of the other Bureaux, to report on progress on the application of this resolution annually to the Council and to the next world telecommunication standardization assembly; to keep up to date the calendar of events relevant to ICTs, the environment, climate change and circular economy, based on proposals by the Telecommunication Standardization Advisory Group and in close collaboration with the other two Sectors; to launch pilot projects, aimed at bridging the standardization gap, on environmental sustainability issues, in particular in developing countries; to support the development of reports on ICTs, the environment, climate change and circular economy, taking into consideration relevant studies, in particular the ongoing work of Study Group 5, including issues related to, inter alia, circular economy, green data centres, smart buildings, green ICT procurement, cloud computing, energy efficiency, smart transportation, smart logistics, smart grids, water management, adaptation to climate change and disaster preparedness, and how the ICT sector contributes to annual reductions in GHG emissions, and submit the reports as soon as possible to Study Group 5 for its consideration; to organize forums, workshops and seminars for developing countries in order to raise awareness and identify their particular needs and challenges in regard to environment, climate-change and circular economy issues; to develop, promote and disseminate information and training programmes on ICTs, climate change, environment and circular economy; to report on progress of the ITU/WMO/UNESCO IOC Joint Task Force to investigate the potential of using submarine telecommunication cables for ocean and climate monitoring and disaster warning; to promote the ITU-T Global Portal on ICTs, environment, climate change and circular economy and its use as an electronic forum for the exchange and dissemination of ideas, experience and best practices on ICTs, the environment, climate change and circular economy; to assist countries that are vulnerable to climate-change impact, with specific emphasis on developing countries. |
| RESOLUTION 76 [Rev] on studies related to conformance and interoperability testing, assistance to developing countries, and a possible future ITU Mark programme:  Instructs the TSB Director 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, including, in collaboration with the Director of the Telecommunication Development Bureau (BDT), and assistance in the establishment of test facilities in developing countries; and to continue implementing the ITU C&I programme including the testing laboratory database and informative pilot conformity product database, identifying product conformance and origin, in cooperation with the Director of BDT, and in consultation with each region. |
| Resolution 78 [Rev] on information and communication technologies and standards for improved access to e-health services:  Notes the ongoing work and studies in ITU-D Study Group 2 under Question 14-3/2, and instructs the TSB Director in collaboration with the BDT and BR Director to consider with priority the enhancement of telecommunication/ICT initiatives in e health and to coordinate their related standardization activities, to continue and further develop ITU activities on telecommunication/ICT applications for e-health, to work collaboratively with WHO, academia and other relevant organizations on activities related to e-health in general and to this resolution in particular and to organize seminars and workshops on e-health. |
| RESOLUTION 79 [Rev] on the role of telecommunications/information and communication technologies in handling and controlling e-waste from telecommunication and information:  Instructs the TSB Director, in collaboration with the BDT Director to pursue and strengthen the development of ITU activities in regard to handling and controlling e-waste from telecommunication and information technology equipment and methods of treating it; to assist developing countries to undertake proper assessment of the size/quantity of e-waste generated in a harmonized manner; to address the handling and controlling of e waste and to contribute to global efforts designed to deal with the increasing hazards which arise therefrom; to work in collaboration with the relevant stakeholders, including academia and relevant organizations, and to coordinate activities relating to e-waste among the ITU study groups, focus groups and other relevant groups; to organize seminars and workshops to enhance awareness of the hazards and sustainable management of e-waste, particularly in developing countries, and gauge the needs of the developing countries, which are the countries that suffer most from the hazards of e-waste, and to assist and facilitate developing countries in the implementation of circular economy principles. |
| Resolution 83 [NOC] on evaluation of the implementation of WTSA Resolutions:  Instructs the TSB Director in collaboration with Directors of the other Bureaux to take the necessary actions to assess the implementation of the WTSA Resolutions by all parties concerned. |
| Resolution 84 [Rev] on studies concerning the protection of users of telecommunication/information and communication technology services:  Resolves that ITU-T study groups continue close collaboration with the ITU Telecommunication Development Sector (ITU-D) and its study groups; and invites the TSB Director, in collaboration with the BDT Director to make efforts to implement Resolution 196 (Rev. Dubai, 2018) to encourage active participation of developing countries in the relevant ITU-T study groups and to strengthen relations with other standards development organizations involved in resolving issues of protection of telecommunication/ICT service users/consumers; and to contribute to the relevant initiatives on the protection of users/consumers, provided that this does not overlap with or duplicate activities of the other Sectors. |
| Resolution 86 [NOC] on facilitating the implementation of the Smart Africa Manifesto:  Instructs the TSB Director, in collaboration with the BDT Director to establish mechanisms for collaboration and cooperation between ITU-T study groups and the Smart Africa office in the development of standards, to continue supporting the Smart Africa Manifesto, to provide assistance to Smart Africa and Africa regional groups and to strengthen training and guide Smart Africa member states. |
| Resolution 88 [NOC] on International mobile roaming (IMR):  Instructs the TSB Director to organize initiatives, in collaboration with the BDT Director, to raise awareness on the consumer’s benefits of lowering international mobile roaming rates. |
| Resolution 89 [Rev] on Promoting the use of information and communication technologies to bridge the financial inclusion gap:  Instructs the TSB Director in collaboration with the Directors of the other Bureaux to report the progress on the resolution to Council and WTSA, to support the development of reports and best practises on digital financial and to organize workshops and seminars for the ITU membership; and relevant ITU-T study groups to develop technical standards and guidelines that will help developing countries take advantage of emerging technologies related to digital financial services; and to develop technical standards and guidance for developing countries to assess the security of their digital financial service infrastructure related to telecommunications. |
| Resolution 92 [Rev] on enhancing the non-radio aspects related standardization activities in ITU-T on international mobile telecommunications:  Instructs ITU-T Study Group 13, to maintain the roadmap of, and continue promoting, IMT standardization activities in ITU-T, which should include work items to progress standardization work related to the non-radio aspects of IMT systems (including IMT-2020 and beyond), and share this with relevant groups of ITU-R and ITU-D and external organizations, such as through coordination work ensured by JCA-IMT-2020; and encourages the Directors of the three Bureaux to investigate new ways to improve the efficiency of ITU work on IMT, and to examine the possibility to establish an observatory for IMT-2020 and beyond, including appropriate guidelines if needed, taking into account budgetary considerations; to promote the studies on standardization activities related to regulatory and economic questions relevant to accommodating non-radio aspects of IMT-2020 systems and beyond use cases, and to encouraging and supporting market growth, innovation, collaboration and ICT infrastructure investment; and to develop guidance on the economic drivers for IMT-2020 deployment. |
| Resolution 95 [Rev] on ITU Telecommunication Standardization Sector initiatives to raise awareness on best practices and policies related to service quality:  Instructs the TSB Director, in close collaboration with the BDT Director to assist developing and least developed countries in identifying human and institutional capacity-building opportunities for establishing national quality measurement frameworks, to conduct activities in each region in order to identify and prioritize the problems and to assist developing and least developed countries in elaborating and implementing actions to improve service quality and keep users informed. |
| Resolution 96 [NOC] on ITU-T studies for combating counterfeit telecommunication/Information Communication Technologies devices:  Instructs the TSB Director in close collaboration with the BDT Director to organize workshops and events across ITU regions, to assist developing countries in preparing human resources to combat the spread of counterfeit and tampered telecommunication/ICT devices, to work in close collaboration with relevant stakeholders and to assist Member States in taking the necessary actions to apply relevant ITU-T Recommendations. It further instructs the TSB Director in close collaboration with the BDT and BR Directors to assist Member States in addressing their concerns with respect to counterfeit and tampered telecommunication/ICT devices. |
| Resolution 97 [Rev] on combating mobile telecommunication device theft resolves:  Instructs the TSB Director in collaboration with the BDT and BR Directors to compile and share information on best practices developed by industry or governments and promising trends in combating mobile device theft especially from regions where the rate of mobile phone theft has fallen, including statistics on their effectiveness, to facilitate the standardization and dissemination of recommendations, technical reports and guideline, to consult with the Sector’s relevant study groups, manufacturers of mobile devices, manufacturers of telecommunication network components, operators, telecommunication standards-development organizations as well as developers of promising technologies related to these matters and to provide assistance to Member States, if so requested, and to share information and experiences on how to control tampering (unauthorized changing) of unique mobile telecommunication/ICT device identifiers and prevent tampered devices from accessing mobile networks. |
| Resolution 98 [Rev] on enhancing the standardization of Internet of things and Smart Cities and Communities for global development:  Instructs the TSB Director, in collaboration with the BDT and BR Directors, prepare reports considering, in particular, the needs of developing countries in terms of the study of IoT and its applications, sensor networks, services and infrastructure, taking into account the results of work being done in ITU-R and ITU-D to ensure coordination of efforts; to provide support to Member States to implement U4SSC KPIs for smart sustainable cities; to foster joint work among ITU Sectors to discuss the various aspects related to the development of the IoT ecosystem and solutions for SC&C, in the context of the achievement of the SDGs and within the framework of the World Summit on the Information Society; to continue disseminating ITU publications on IoT and SC&C, as well as organizing forums, seminars and workshops on the subject, taking into account the needs of developing countries, in particular; to support Member States, especially developing countries, in the organization of forums, seminars and workshops on IoT and SC&C to promote innovation, development and growth in IoT technologies and solutions; to report to the next world telecommunication standardization assembly on progress made in the organization of forums, seminars and workshops dedicated to developing the capacity of developing countries; and to assist developing countries in the implementation of recommendations, technical reports and guidelines related to IoT and SC&C. |
| RESOLUTION 100 [New] on a common emergency number for Africa:  Instructs the TSB Director, in cooperation with the BDT Director, to provide technical assistance to Member States in Africa in the implementation of a common emergency number in line with Recommendation ITU-T E.161.1. |

**Table 2 - Detailed text of WTSA Resolutions relevant to the work of ITU-D**

| Number / Resolution | Relevant text |
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| RESOLUTION 2  ITU Telecommunication Standardization Sector study group responsibility and mandates | **resolves**  to encourage ITU-T study groups to conduct work on how to ensure wider implementation of ITU-T Recommendations at the national level in collaboration with the ITU Telecommunication Development Sector (ITU-D) Study Groups;  **Mandates of ITU-T study groups**  **Annexes A, B & C**  ITU-T Study Group 2: Operational aspects of service provision and telecommunication management  ITU-T Study Group 3: Tariff and accounting principles and international telecommunication/ICT economic and policy issues  ITU-T Study Group 5: Electromagnetic fields (EMF), environment, climate action, sustainable digitalization and circular economy  ITU-T Study Group 9: Audiovisual content transmission and integrated broadband cable networks  ITU-T Study Group 11: Signalling requirements, protocols, test specifications and combating counterfeit telecommunication/information and communication technology (ICT) devices  ITU-T Study Group 12: Performance, quality of service and quality of experience  ITU-T Study Group 13: Future networks and emerging network technologies  ITU-T Study Group 15: Networks, technologies and infrastructures for transport, access and home  ITU-T Study Group 16: Multimedia and related digital technologies  ITU-T Study Group 17: Security  ITU-T Study Group 20: Internet of Things (IoT) and smart cities and communities |
| RESOLUTION 18  Principles and procedures for the allocation of work to, and strengthening coordination and cooperation among, the ITU Radiocommunication, ITU Telecommunication Standardization and ITU Telecommunication Development Sector | **recalling**  Resolution 59 (Rev. Buenos Aires, 2017) of the World Telecommunication Development Conference (WTDC), on strengthening coordination and cooperation among the three ITU Sectors on matters of mutual interest;  **resolves**  1 that the Radiocommunication Advisory Group (RAG), TSAG and the Telecommunication Development Advisory Group (TDAG), meeting jointly as necessary, shall continue the review of new and existing work and its distribution among ITU-R, ITU-T and ITU-D, for approval by  Member States in accordance with the procedures laid down for the approval of new and/or revised Questions;  2 that, if considerable responsibilities in any two or all Sectors in a particular subject are identified:  i) the procedure given in Annex A to this resolution should be applied; or  ii) the matter should be studied by relevant study groups of the Sectors involved, with appropriate coordination and matching of relevant Question topics of interest to the study groups in ITU-T, ITU-D and ITU-R (see Annexes B and C to this resolution); or  iii) a joint meeting may be arranged by the Directors of the Bureaux involved,  **invites**  1RAG, TSAG and TDAG to continue to assist the ISCG in the identification of mutual interest to the three Sectors and mechanisms to enhance their cooperation and collaboration in all Sectors;  2 the Directors of the Radiocommunication (BR), Telecommunication Standardization (TSB) and Telecommunication Development (BDT) Bureaux and ISC TF to report to ISCG and the respective Sector advisory groups on options for improving cooperation at the secretariat level to ensure that close coordination is maximized,  **instructs**  1 the ITU-T study groups to continue cooperation with the study groups of the other two Sectors so as to avoid duplication of effort and proactively make use of the results of work done by the study groups of those two Sectors;  **ANNEX A:** Procedural method of cooperation  **ANNEX B**: Coordination of radiocommunication, standardization and development activities through intersector coordination groups  **ANNEX C**: Coordination of radiocommunication, telecommunication standardization and development activities through intersector rapporteur groups |
| RESOLUTION 22  Authorization for Telecommunication Standardization Advisory Group to act between world telecommunication standardization assemblies | **recalling**  b) Resolution 22 (Rev. Buenos Aires, 2017) of the World Telecommunication Development Conference, on alternative calling procedures on international telecommunication networks, identification of origin and apportionment of revenues in providing international telecommunication services;  **resolves**  1 to assign to TSAG the following specific matters within its competence between this assembly and the next assembly to act in the following areas in consultation with the Director of TSB, as appropriate:  *m)* cooperate and coordinate with ITU-R and ITU-D and with other, external, standardization bodies; |
| RESOLUTION 29  Alternative calling procedures on international telecommunication networks | **instructs**  the Director of the Telecommunication Standardization Bureau  to continue to cooperate with the Director of the Telecommunication Development Bureau in order to facilitate the participation of developing countries in these studies and to make use of the results of the studies, and in the implementation of this resolution |
| RESOLUTION 44  Bridging the standardization gap between developing[[1]](#footnote-2) and developed countries | **resolves**  1that 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 to develop 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, according to 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, and 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  1be 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,  **instructs**  the Director of the Telecommunication Standardization Bureau, in collaboration with the Directors of Telecommunication Development Bureau and the Radiocommunication 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, 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 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 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 use of electronic channels such as webinars or e-learning for education and training on implementation of ITU-T Recommendations, in close collaboration with the ITU Academy and other capacity-building initiatives of BDT;  11to provide all necessary support and measures for creating and ensuring the smooth functioning of the regional groups, and to facilitate the organization of their meetings and workshops for disseminating information and increasing understanding of new ITU-T Recommendations, in particular for developing countries;  12 to report on the effectiveness of the regional groups of ITU-T study groups to 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 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,  **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 WTDCs 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;  **invites**  the Director of the Telecommunication Standardization Bureau  1to 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,  **ANNEX**  II. Programme 2: Assisting developing countries with respect to the application of standards  III. Programme 3: Human resources capacity building |
| RESOLUTION 50  Cybersecurity | **recalling**  j) Resolution 45 (Rev. Dubai, 2014) of the World Telecommunication Development Conference (WTDC), on mechanisms for enhancing cooperation on cybersecurity, including countering and combating spam;  **resolves**  5 that ITU-T should work with ITU-D, particularly in the context of ITU-D Question 3/2 (Securing information and communication networks: Best practices for developing a culture of cybersecurity)  **instructs Study Group 17**  2 to support the Director of the Telecommunication Standardization Bureau to maintain the "ICT Security Standards Roadmap", which should include work items to progress standardization work related to security, and share this with relevant groups of ITU-R and ITU-D as the mission of the lead group for security;  **instructs**  the Director of the Telecommunication Standardization Bureau  1 to continue to maintain, in building upon the information base associated with the "ICT Security Standards Roadmap" and the ITU-D efforts on cybersecurity, and with the assistance of other relevant organizations, an inventory of national, regional and international initiatives and activities to promote, to the maximum extent possible, the worldwide harmonization of strategies and approaches in this critically important area including the development of common approaches in the field of cybersecurity;  7 to support the BDT Director on assisting Member States in the establishment of an appropriate framework between developing countries allowing rapid response to major incidents, and to propose an action plan to increase their protection, taking into account mechanisms and partnerships, as appropriate;  10 to disseminate information to all stakeholders related to cybersecurity through the organization of training programmes, forums, workshops, seminars, etc., for policy makers, regulators, operators and other stakeholders, especially from developing countries to raise awareness and identify needs in collaboration with the Director of BDT, |
| RESOLUTION 52  Countering and combating spam | **resolves**  to instruct the relevant study groups  2 to continue collaboration with ITU-D and with the relevant organizations, including other relevant standards organizations (e.g. the Internet Engineering Task Force (IETF), in order to continue developing, as a matter of urgency, technical Recommendations with a view to exchanging best practices and disseminating information through joint workshops, training sessions, etc.,  **further instructs**  2 ITU-T Study Group 17 to support ITU-D Study Group 2 on countering and combating spam in its work providing technical training sessions, workshops activities in different regions related to spam policy, regulatory and economic issues and their impact; |
| RESOLUTION 54  Regional groups of study groups of the ITU Telecommunication Standardization Sector | **instructs**  study groups and the Telecommunication Standardization Advisory Group  2 to consider and identify questions of greatest interest to Member States and Sector Members from developing countries with a view to keeping them updated on the development of international standards in the context of the regional groups of ITU-T study groups  **instructs**  the Director of the Telecommunication Standardization Bureau, in collaboration with the Director of the Telecommunication Development Bureau, within the allocated or contributed resources that are available  1 to provide all necessary support for creating and ensuring the smooth functioning of the regional groups of the ITU-T study groups;  2 to consider, whenever possible, holding events (workshops, forums, seminars, training, etc.) concurrently with meetings of the ITU-T regional groups, in the relevant regions, and vice;  3 to take all necessary measures to facilitate the organization of meetings of the regional groups of ITU-T study groups and workshops in the relevant regions,  **calls upon**  the Director of the Telecommunication Standardization Bureau  1 to cooperate with the Director of the Telecommunication Development Bureau and with the Director of the Radiocommunication Bureau, as appropriate, in order to:  i) continue to provide specific assistance to regional groups of ITU-T study groups;  ii) encourage the use of electronic working methods to assist the members of the regional groups;  iii) take appropriate steps to facilitate meetings of the current and future regional groups in order to promote the necessary synergies among the three Sectors and thereby improve the effectiveness and efficiency of the study groups, |
| RESOLUTION 58  Encouraging the creation of national computer incident response teams, particularly for developing countries | **resolves**  to support the creation of national CIRTs in Member States where CIRTs are needed and are currently absent,  **instructs**  the Director of the Telecommunication Standardization Bureau, in collaboration with the Director of the Telecommunication Development Bureau  1 to identify best practices to establish CIRTs in line with the ITU toolkit;  2 to identify where national CIRTs are needed, particularly in developing countries, and encourage their establishment;  3 to collaborate with international experts and bodies to establish national CIRTs;  4 to provide support, as appropriate, within existing budgetary resources;  5 to facilitate collaboration between national CIRTs, such as capacity building and exchange of information, within an appropriate framework;  6 to take necessary action to progress implementation of this resolution.  **invites**  Member States and Sector Members to cooperate closely with ITU-T and ITU-D in this regard. |
| RESOLUTION 64  IP address allocation and facilitating the transition to and deployment of IPv6 | **recognizing**  d) that future work on IPv6 human capacity building is to be continued and led by the Telecommunication Development Bureau (BDT), in collaboration with other relevant organizations, if required,  **instructs**  the Director of the Telecommunication Standardization Bureau, in close collaboration with the Director of the Telecommunication Development Bureau:  1 to continue the ongoing activities between the Telecommunication Standardization Bureau (TSB) and BDT, taking into consideration the involvement of those partners willing to participate and bring their expertise to assist developing countries with IPv6 migration and deployment, and respond to their regional needs as identified by BDT, taking into account WTDC Resolution 63 (Rev. Buenos Aires, 2017);  2 to update and maintain the website which provides information about global activities related to IPv6, in order to facilitate awareness-raising and highlight the importance of IPv6 deployment for all ITU members and interested entities, as well as information related to training events being undertaken by ITU and relevant organizations (e.g. regional Internet registries (RIR), network operator groups and the Internet Society (ISOC));  3 to promote awareness of the importance of IPv6 deployment, facilitate joint training activities, involving appropriate experts from the relevant entities, provide information, including roadmaps and guidelines, and to assist in the continued establishment of IPv6 test-bed laboratories in developing countries in collaboration with appropriate relevant organizations, and to promote awareness of the need for IPv6 deployment with regard to IoT given the substantial demand for IP addresses for IoT devices;  4 to support BDT in relevant IPv6 training for engineers, network operators and content providers, mainly in developing countries, that can enhance their skills and which they can further apply to planning, deployment, and operation at their respective organizations, |
| RESOLUTION 69  Non‑discriminatory access and use of Internet resources and telecommunications/ICTs | **invites**  Directors of the Telecommunication Standardization Bureau, Radiocommunication Bureau and Telecommunication Development Bureau  to contribute on the progress on resolution, |
| RESOLUTION 70  Telecommunication/information and communication technology accessibility for persons with disabilities and persons with specific needs | **recognizing**  *b)* Resolution 58 (Rev. Buenos Aires, 2017) of the World Telecommunication Development Conference (WTDC), on telecommunication/ICT accessibility for persons with disabilities and persons with specific needs, and WTDC Resolution 17 (Rev. Buenos Aires, 2017), on implementation of regionally approved initiatives at the national, regional, interregional and global levels;  **invites**  the Director of the Telecommunication Standardization Bureau  1 to work collaboratively on accessibility-related activities with the Directors of the Radiocommunication Bureau (BR) and the Telecommunication Development Bureau (BDT), taking into account JCA-AHF, in particular concerning awareness and mainstreaming of telecommunication/ICT accessibility standards, reporting findings to the Council as appropriate;  2 to work collaboratively on accessibility-related activities with ITU-D, in particular developing programmes that enable developing countries to introduce services that allow persons with disabilities to utilize telecommunication services effectively;  7 to consider the possibility of organizing, jointly with ITU-D and with the involvement of other standardization organizations and entities, coaching and training for developing countries on working with disability organizations;  **invites**  *Member States and Sector Members*  3 to participate actively in accessibility-related studies in ITU-R, ITU-T and ITU-D, and to encourage and promote self-representation by persons with disabilities in the standardization process so as to ensure their experiences, views and opinions are taken into account in all the work of study groups; |
| RESOLUTION 72  Measurement and assessment concerns related to human exposure to electromagnetic fields | **recalling**  *b)* Resolution 62 (Rev. Buenos Aires, 2017) of the World Telecommunication Development Conference, on measurement concerns related to assessment and measurement of human exposure to EMF,  **considering**  l) that most developing countries do not have the necessary tools to measure and assess the impact of radio waves on the human body;  *m)* relevant resolutions, recommendations and reports of the ITU Telecommunication Standardization Sector (ITU-T), the ITU Radiocommunication Sector (ITU-R) and the ITU  Telecommunication Development Sector (ITU-D) related to human exposure to EMF;  *n)* that there is continuous advancement in wireless communication technologies and ongoing work in the ITU Sectors related to such advancements and also the concomitant EMF exposure aspect, and that active coordination and collaboration between the Sectors and other specialized and expert organizations in this field are important to avoid duplication of efforts,  **resolves**  to invite ITU-T, in particular Study Group 5, to expand and continue its work and support in this domain, including but not limited to:  i) developing new and/or updating existing reports and Recommendations, taking into account the advancements in wireless technologies, advances in measurement/assessment methodologies and best practices, in close coordination with other ITU Sectors and relevant specialized organizations in this field;  vii) cooperating on these issues with ITU-R Study Groups, and with ITU-D Study Group 2 in the framework of EMF measurements to assess human exposure and other relevant issues;  **instructs**  the Director of the Telecommunication Standardization Bureau, in close collaboration with the Directors of the other two Bureaux, and within the available financial resources  1 to support the development of reports identifying the needs of developing countries on the issue of assessing human exposure to EMF, and submit the reports as soon as possible to ITU-T Study Group 5 for its consideration and action in accordance with its mandate;  2 to regularly update the ITU-T portal on EMF activities including, but not limited to, the ITU EMF Guide, its mobile application, links to websites, the global portal on ICTs and the environment and flyers;  3 to hold workshops in developing countries with presentations and training on the use of equipment employed in assessing human exposure to RF energy;  4 to appoint experts in the field of assessment and measurement of exposure to EMF to assist developing countries in the formulation of their strategies in this area;  5 to extend support for developing countries while they establish their national and/or regional centres equipped with test benches for continuous monitoring of EMF levels, especially in selected areas where the public has concerns, and transparently provide the data to the general public by using, among other things, the modalities listed in Resolutions 44 (Rev. Geneva, 2022) and 76 (Rev. Geneva, 2022) of this assembly, and of Resolution 177 (Rev. Dubai, 2018) of the Plenipotentiary Conference in the context of the development of regional test centres;  6 to invite Study Group 5 to coordinate and cooperate with various international organizations such as WHO, ICNIRP, IEC, IEEE and other relevant international and regional organizations in the harmonization of exposure thresholds globally and to generate consistent measurement protocols;  7 to report to the next world telecommunication standardization assembly on measures taken to implement this resolution, |
| RESOLUTION 73  Information and communication technologies, environment, climate change and circular economy | **instructs**  all ITU-T study groups  6 to liaise with the relevant ITU-R and ITU-D study groups and promote liaison with other standards development organizations and forums in order to avoid duplication of work, optimize the use of resources and accelerate the availability of global standards,  **instructs**  the Director of the Telecommunication Standardization Bureau, in collaboration with the Directors of the other Bureaux  1 to report on progress on the application of this resolution annually to the ITU Council and to the next world telecommunication standardization assembly;  2 to keep up to date the calendar of events relevant to ICTs, the environment, climate change and circular economy based on proposals by TSAG and in close collaboration with the other two Sectors;  3 to launch pilot projects, aimed at bridging the standardization gap, on environmental sustainability issues, in particular in developing countries;  4 to support the development of reports on ICTs, the environment, climate change and circular economy, taking into consideration relevant studies, in particular the ongoing work of Study Group 5, including issues related to, inter alia, circular economy, green data centres, smart buildings, green ICT procurement, cloud computing, energy efficiency, smart transportation, smart logistics, smart grids, water management, adaptation to climate change and disaster preparedness, and how the ICT sector contributes to annual reductions in GHG emissions, and submit the reports as soon as possible to Study Group 5 for its consideration;  5 to organize forums, workshops and seminars for developing countries, to raise awareness and identify their particular needs and challenges on environment, climate-change issues and circular economy;  6 to develop, promote and disseminate information and training programmes on ICTs, environment and circular economy;  7 to report on progress of the ITU/WMO/UNESCO IOC Joint Task Force to investigate the potential of using submarine telecommunication cables for ocean and climate monitoring and disaster warning;  8 to promote the ITU-T Global Portal on ICTs, environment and climate change and its use as an electronic forum for exchange and dissemination of ideas, experience and best practices on ICTs, the environment, climate change and circular economy;  9 to assist countries that are vulnerable to climate-change impact, with specific emphasis on developing countries:  i) located along coastal areas and those surrounded by oceans and seas, as well as inland areas that are susceptible to wildfire and drought;  ii) whose economies rely on agricultural investments;  iii) with weak capacity or lack of infrastructure and technical systems of meteorological support for the mitigation of climate-change effects |
| RESOLUTION 76  Studies related to conformance and interoperability testing, assistance to developing countries and a possible future ITU Mark programme | **considering**  *d)* the importance, especially to developing countries, that ITU takes up 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,  **resolves**  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;  **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, including, in collaboration with the Director of the Telecommunication Development Bureau (BDT), and assistance in the establishment of test facilities in developing countries;  4 to continue implementing the ITU C&I programme including the testing laboratory database and informative pilot conformity product database, identifying product conformance and origin, in cooperation with the Director of BDT, and in consultation with each region; |
| RESOLUTION 78  Information and communication technologies and standards for improved access to e-health services | **recalling**  *b)* Resolution 65 (Rev. Dubai, 2014) of the World Telecommunication Development Conference, on improving access to healthcare services by using ICTs;  **noting**  *a)* ongoing work and studies in Study Group 2 of the ITU Telecommunication Development Sector (ITU-D) under Question 2/2, on information and telecommunications/ICT for e-health;  *e)* ongoing work in ITU-D to reduce the digital divide in the area of e-health;  **resolves**  to instruct the Director of the Telecommunication Standardization Bureau, in collaboration with the Director of the Telecommunication Development Bureau and the Director of the Radiocommunication Bureau  1 to consider with priority the enhancement of telecommunication/ICT initiatives in e health and to coordinate their related standardization activities;  2 to continue and further develop ITU activities on telecommunication/ICT applications for e-health in order to contribute to the wider global efforts concerning e-health;  3 to work collaboratively with WHO, academia and other relevant organizations on activities related to e-health in general and to this resolution in particular;  4 to organize seminars and workshops on e-health for developing countries1 and gauge the needs of the developing countries, which are the countries with the greatest need for e-health applications, |
| RESOLUTION 79  The role of telecommunications/information and communication technologies in handling and controlling e-waste from telecommunication and information | **recalling**  *b)* Resolution 66 (Buenos Aires, 2017) of the World Telecommunication Development Conference, on information and communication technology and climate change;  *c)* § 19 of the Hyderabad Declaration (2010), stating that the formulation and implementation of policies for proper disposal of e-waste are of great importance;  **recognizing**  *l)* ongoing work of Study Group 2 of the Telecommunication Development Sector (ITU-D) under Question 6/2 on information and communication technologies and the environment which study the strategies to develop a responsible approach to, and comprehensive treatment of, telecommunication/ICT waste,  **resolves**  to instruct the Director of the Telecommunication Standardization Bureau, in collaboration with the Director of the Telecommunication Development Bureau  1 to pursue and strengthen the development of ITU activities in regard to handling and controlling e-waste from telecommunication and information technology equipment and methods of treating it;  2 to assist developing countries to undertake proper assessment of the size/quantity of e-waste generated in a harmonized manner;  3 to address the handling and controlling of e‑waste and to contribute to global efforts designed to deal with the increasing hazards which arise therefrom;  4 to work in collaboration with the relevant stakeholders, including academia and relevant organizations, and to coordinate activities relating to e-waste among the ITU study groups, focus groups and other relevant groups;  5 to organize seminars and workshops to enhance awareness of the hazards and sustainable management of e-waste, particularly in developing countries, and gauge the needs of the developing countries, which are the countries that suffer most from the hazards of e-waste  6 to assist and facilitate developing countries in the implementation of circular economy principles, |
| RESOLUTION 83  Evaluation of the implementation of WTSA Resolutions | **instructs**  the Director of TSB in collaboration with Directors of the other Bureaux to take the necessary actions to assess the implementation of the WTSA Resolutions by all parties concerned |
| RESOLUTION 84  Studies concerning the protection of users of telecommunication / information and communication technology services | **recalling**  *d)* Resolution 64 (Rev. Buenos Aires, 2017) of the World Telecommunication Development Conference, on protecting and supporting users/consumers of telecommunication/ICT services  **resolves**  2 that ITU-T, through its study groups, continue close collaboration with the ITU Telecommunication Development Sector (ITU-D) and its study groups  5 that Study Group 3 should liaise with ITU-D Study Group 1 on the issues of best practices in the field of protection of users/consumers of telecommunication/ICT services,  **invites**  the Director of the Telecommunication Standardization Bureau, in collaboration with the Director of the Telecommunication Development Bureau  1 to make efforts to implement Resolution 196 (Rev. Dubai, 2018)  2 to encourage active participation of developing countries in the relevant ITU-T study groups and to strengthen relations with other standards development organizations involved in resolving issues of protection of telecommunication/ICT service users/consumers;  3 to contribute to the relevant initiatives on the protection of users/consumers, provided that this does not overlap with or duplicate activities of the other Sectors, |
| RESOLUTION 86  Facilitating the implementation of the Smart Africa Manifesto | **instructs**  the Director of the Telecommunication Standardization Bureau, in collaboration with the Director of the Telecommunication Development Bureau  1 to establish mechanisms for collaboration and cooperation between ITU-T study groups and the Smart Africa office in the development of standards;  2 to continue supporting the Smart Africa Manifesto in accordance with Resolution 195 (Busan, 2014);  3 to provide assistance to Smart Africa and Africa regional groups from within the assigned budget in order to support pilot projects aimed at speeding up the implementation of ITU standards and Recommendations;  4 to strengthen training and guide Smart Africa member states, partner organizations and industries in their adoption of ITU-T standards |
| RESOLUTION 88  International mobile roaming (IMR) | **instructs**  the Director of the Telecommunication Standardization Bureau  1 to organize initiatives, in collaboration with the Director of the Telecommunication Development Bureau (BDT), to raise awareness on the consumer’s benefits of lowering international mobile roaming rates; |
| RESOLUTION 89  Promoting the use of information and communication technologies to bridge the financial inclusion gap | **instructs**  the Director of the Telecommunication Standardization Bureau, in collaboration with the Directors of the other Bureaux  1 to report on progress on the implementation of this resolution annually to the Council and to the world telecommunication standardization assembly;  2 to support the development of reports and best practices on digital financial inclusion, taking into consideration relevant studies, where clearly within the mandate of the Union and not duplicative of work other SDOs and institutions are responsible;  3 to establish a platform or, where possible, connect to those already existing, for peer learning, dialogue and experience-sharing in digital financial services among countries and regions, regulators from telecommunication and financial services sectors, industry experts and international and regional organizations;  4 to organize workshops and seminars for the ITU membership in collaboration with other relevant SDOs, academia and institutions with primary responsibility for financial services standards development, implementation and capacity building, in order to raise awareness and identify regulators’ particular needs and challenges in enhancing financial inclusion and in respect of applications of emerging technologies in digital finance, and to share lessons learned from different regions, |
| RESOLUTION 92  Enhancing the non-radio aspects related standardization activities in ITU-T on international mobile telecommunications | **instructs**  Study Group 3  to consider the ITU-T studies related to, *inter alia*, regulatory and economic questions relevant to IMT systems including IMT-2020 and beyond within their mandate,  Study Group 5  to pursue promoting the studies on standardization activities related to IMT environmental requirements, including energy efficiency,  Study Group 12  to continue promoting the studies on standardization activities of service, QoS and quality of experience (QoE) related to the non-radio aspects of IMT systems (including IMT-2020 and beyond),  Study Group 13  to maintain the roadmap of, and continue promoting, IMT standardization activities in ITU-T, which should include work items to progress standardization work related to the non-radio aspects of IMT systems (including IMT-2020 and beyond), and share this with relevant groups of ITU-R and ITU-D and external organizations, such as through coordination work ensured by JCA-IMT-2020;  **instructs**  the Director of the Telecommunication Standardization Bureau  1 to bring this resolution to the attention of the Directors of the Radiocommunication Bureau and the Telecommunication Development Bureau;  **encourages**  the Directors of the three Bureaux  1 to investigate new ways to improve the efficiency of ITU work on IMT and to examine the possibility to establish an observatory for IMT-2020 and beyond, including appropriate guidelines if needed, taking into account budgetary considerations;  2 to promote the studies on standardization activities related to regulatory and economic questions relevant to accommodating non-radio aspects of IMT-2020 systems and beyond use cases, and to encouraging and supporting market growth, innovation, collaboration and ICT infrastructure investment;  3 to develop guidance on the economic drivers for IMT-2020 deployment, |
| RESOLUTION 95  ITU Telecommunication Standardization Sector initiatives to raise awareness on best practices and policies related to service quality | **resolves**  *that the ITU Telecommunication Standardization Sector*  1 continue to develop the necessary Recommendations on performance, QoS and QoE, in particular for broadband networks and services;  2 in close collaboration with the ITU Telecommunication Development Sector (ITU-D), develop initiatives to raise awareness of the importance of keeping users informed about the quality of the services offered by operators;  3 in close collaboration with ITU-D and the ITU regional offices, provide references that assist developing1 and least developed countries in establishing a national quality measurement framework suitable to perform QoS and QoE measurement;  **instructs**  the Director of the Telecommunication Standardization Bureau, in close collaboration with the Director of the Telecommunication Development Bureau  1 to assist developing and least developed countries in identifying human and institutional capacity-building opportunities for establishing national quality measurement frameworks;  2 to conduct activities in each region in order to identify and prioritize the problems faced by developing and least developed countries related to the provision of acceptable service quality to users;  3 based on results of instructs 2 above, to assist developing and least developed countries in elaborating and implementing actions to improve service quality and keep users informed, |
| RESOLUTION 96  ITU-T studies for combating counterfeit telecommunication / Information Communication Technologies devices | **recalling**  *c)* Resolution 79 (Rev. Buenos Aires, 2017) of the World Telecommunication Development Conference (WTDC), on the role of telecommunications/ICT in combating and dealing with counterfeit telecommunication/lCT devices;  **recognizing**  h) the ongoing work of ITU Telecommunication Standardization Sector (ITU-T) Study Group 11 as the leading expert in the study of combating counterfeit and tampered telecommunication/ICT devices at ITU, and also the related work and studies, in particular at ITU-T Study Groups 5, 17 and 20 and ITU-D Study Group 2;  **instructs**  the Director of the Telecommunication Standardization Bureau, in close collaboration with the Director of the Telecommunication Development Bureau  1 to organize workshops and events across ITU regions to promote the work in this field, involving all stakeholders and raising awareness of the impact of counterfeit and tampered telecommunication/ICT devices;  2 to assist developing countries in preparing human resources to combat the spread of counterfeit and tampered telecommunication/ICT devices, by providing capacity-building and training opportunities;  3 to work in close collaboration with relevant stakeholders, such as the World Trade Organization (WTO), the World Intellectual Property Organization, (WIPO), the World Health Organization (WHO) and the World Custom Organization (WCO) relating to combating counterfeit and tampered telecommunication/ICT devices, including to restrict the trading, export and circulation of these telecommunication/ICT devices internationally;  4 to coordinate activities relating to combating counterfeit and tampered telecommunication/ICT devices through study groups, focus groups and other related groups;  5 to assist Member States in taking the necessary actions to apply relevant ITU-T Recommendations for combating counterfeit and tampered telecommunication/ICT devices, including use of conformity assessment systems  **instructs**  the Director of TSB in close collaboration with the BDT and BR Directors  1 to assist Member States in addressing their concerns with respect to counterfeit and tampered telecommunication/ICT devices, through information sharing at regional or global level, including conformity assessment systems;  2 to assist all the membership, considering relevant ITU-T recommendations, in taking the necessary actions to prevent or detect the tampering with and/or duplication of unique telecommunication/ICT device identifiers, interacting with other telecommunication standards-development organizations related to these matters |
| RESOLUTION 97  Combating mobile telecommunication device theft | **recalling**  *e)* Resolution 79 (Rev. Buenos Aires, 2017) of the World Telecommunication Development Conference (WTDC), on the role of telecommunications/ICTs in combating and dealing with counterfeit telecommunication/ICT devices;  *f)* Resolution 64 (Rev. Buenos Aires, 2017) of WTDC, on protecting and supporting users/consumers of telecommunication/ICT services,  **instructs**  the Director of the Telecommunication Standardization Bureau in collaboration with the Directors of the Radiocommunication Bureau and Telecommunication Development Bureau  1 to compile and share information on best practices developed by industry or governments and promising trends in combating mobile device theft especially from regions where the rate of mobile phone theft has fallen, including statistics on their effectiveness;  2 to facilitate , in collaboration with industry organizations and SDOs, the standardization and dissemination of recommendations, technical reports and guidelines to combat mobile device theft and its negative effects, specifically regarding the exchange of mobile device identifiers reported stolen/lost , and to prevent lost/stolen mobile devices from accessing the mobile networks.  3 to consult with the Sector’s relevant study groups, manufacturers of mobile devices, manufacturers of telecommunication network components, operators, telecommunication standards-development organizations as well as developers of promising technologies related to these matters, in order to identify existing and future technological measures, both software and hardware, to mitigate the consequences of the use of stolen mobile devices;4 to provide assistance, within ITU-T's expertise and within available resources, as appropriate, in cooperation with relevant organizations, to Member States, if so requested, in order to reduce mobile device theft and the use of stolen mobile devices in their countries;  4 to provide assistance, within ITU-T's expertise and within available resources, as appropriate, in cooperation with relevant organizations, to Member States, if so requested, in order to reduce mobile device theft and the use of stolen mobile devices in their countries;  5 to share information and experiences on how to control tampering (unauthorized changing) of unique mobile telecommunication/ICT device identifiers and prevent tampered devices from accessing mobile networks, |
| RESOLUTION 98  Enhancing the standardization of Internet of things and Smart Cities and Communities for global development | **recalling**  *c)* Resolution 85 (Rev. Buenos Aires, 2017) of the World Telecommunication Development Conference, on facilitating IoT and SC&C for global development;  **instructs**  the Director of the Telecommunication Standardization Bureau, in collaboration with the Directors of the Telecommunication Development Bureau and the Radiocommunication Bureau  1 to prepare reports considering, in particular, the needs of developing countries[[2]](#footnote-3) in terms of the study of IoT and its applications, sensor networks, services and infrastructure, taking into account the results of work being done in ITU-R and ITU-D to ensure coordination of efforts;  2 to provide support to Member States to implement U4SSC KPIs for smart sustainable cities;  3 to foster joint work among ITU Sectors to discuss the various aspects related to the development of the IoT ecosystem and solutions for SC&C, in the context of the achievement of the SDGs and within the framework of the World Summit on the Information Society;  4 to continue disseminating ITU publications on IoT and SC&C, as well as organizing forums, seminars and workshops on the subject, taking into account the needs of developing countries, in particular;  5 to support Member States, especially developing countries, in the organization of forums, seminars and workshops on IoT and SC&C to promote innovation, development and growth in IoT technologies and solutions;  6 to report to the next world telecommunication standardization assembly on progress made in the organization of forums, seminars and workshops dedicated to developing the capacity of developing countries;  7 to assist developing countries in the implementation of recommendations, technical reports and guidelines related to IoT and SC&C, |
| RESOLUTION 100  A common emergency number for Africa | **recalling**  *c)* Resolution 34 (Rev. Buenos Aires, 2017) of the World Telecommunication Development Conference states, under *invites 10*, Member States to consider introducing, in addition to their existing emergency numbers, a harmonized national/regional number for access to emergency services taking into account the relevant ITU-T Recommendations,  **resolves**  to instruct the Director of Telecommunication Standardization Bureau in cooperation with the Director of the Telecommunications Development Bureau  1 to provide technical assistance to Member States in Africa in the implementation of a common emergency number in line with Recommendation ITU-T E.161.1;  2 to report to the World Telecommunication Standardization Assembly on the progress achieved in implementing this resolution, which is intended to improve access to emergency services, |

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1. These include the least developed countries, small island developing states, landlocked developing countries and countries with economies in transition. [↑](#footnote-ref-2)
2. These include the least developed countries, small island developing states, landlocked developing countries and countries with economies in transition. [↑](#footnote-ref-3)