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|  | **Telecommunication DevelopmentAdvisory Group (TDAG)****32nd Meeting, Geneva, Switzerland, 12-16 May 2025** | A close up of a sign  Description automatically generated |
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|  | **Document** **TDAG-25/****26-E** |
|  | **1 April 2025 2025** |
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| Director, Telecommunication Development Bureau |
| Outcomes of WTSA-24: Updates relevant to the work of ITU-D |
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| **Summary:**WTSA 2024 took place in New Delhi, India from 15 to 24 October 2024. The conference was preceded by the Global Standards Symposium, that took place on 14 October 2024.This document summarizes the key outcomes of these meetings while highlighting decisions that are relevant to the work of the Development Sector.**Action required:**TDAG is invited to note this document and provide guidance as deemed appropriate.**References:*** WTSA-24 website: <https://www.itu.int/wtsa/2024/>
* Draft proceedings: [WTSA-24 Draft Proceedings](https://www.itu.int/pub/T-REG-WTSADRAFT-2024)
* WTSA-24 brochure: [https://www.itu.int/en/ITU-T/wtsa24/Documents/WTSA-](https://www.itu.int/en/ITU-T/wtsa24/Documents/WTSA-24_GSS-24_Brochure.pdf%22%20/t%20%22_blank)[24\_GSS-24\_Brochure.pdf](https://www.itu.int/en/ITU-T/wtsa24/Documents/WTSA-24_GSS-24_Brochure.pdf)
* WTSA-24 related events: <https://www.itu.int/wtsa/2024/related-events/>
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# Background

WTSA 2024 took place in New Delhi, India from 15 to 24 October 2024. Some 3700 delegates from 164 countries attended the conference, with the highest number of member states represented and37 ministers. WTSA 2024 also counted the highest level of female participation outside Geneva (27%).

Mr. Ritu Ranjan Mittar from India served as Chair. The opening ceremony was attended by His Excellency, Prime Minister of India, Shri Narendra Modi.

More than 20 parallel events took place during the WTSA 2024 (more information is available at <https://www.itu.int/wtsa/2024/related-events/>)

The conference was preceded by the Global Standards Symposium, that took place on 14 October 2024.

# Key Highlights

*ITU-T Study Groups*

* ITU-T SG9 (Broadband cable and TV) and SG16 (Multimedia and related digital technologies) were consolidated into a new study group SG21 (Technologies for multimedia, content delivery and cable television).
* The other ten study groups were maintained.
* Updated mandates (Resolution 2) and new Questions of the ten ITU-T study groups were approved. Resolution 2 is available in the draft proceedings (<https://www.itu.int/pub/T-REG-WTSADRAFT-2024>), and the text of Questions is being made available on the various updated study group pages (<https://www.itu.int/en/ITU-T/studygroups/2025-2028>).

*Appointment of chairs and vice-chairs for ten ITU-T study groups, TSAG and SCV*

* The list of appointed chairs and vice-chairs is available in Part 4 of the draft proceedings (<https://www.itu.int/pub/T-REG-WTSADRAFT-2024>).

*Approval of new and revised WTSA Resolutions and ITU-T Recommendations*

* Eight new Resolutions (Resolutions 101 to 108)
* 44 revised Resolutions (Resolutions 2, 7, 11, 18, 20, 22, 29, 32, 34, 40, 43, 44, 48, 50, 52, 54, 55, 58, 60, 61, 64, 65, 67, 68, 70, 72, 73, 74, 76, 77, 78, 79, 84, 88, 89, 91, 92, 93, 94, 96, 97, 98, 99, 100)
* One suppressed Resolution (Resolution 80)
* One revised ITU-T Recommendation (A.25)
* New and revised WTSA Resolutions and ITU-T Recommendations are available in Parts 1 and 2 of the draft proceedings (<https://www.itu.int/pub/T-REG-WTSADRAFT-2024>).

*New WTSA Resolutions*

* Resolution 101 (ex COM4/AI) (New Delhi, 2024): Standardization activities of the ITU Telecommunication Standardization Sector on artificial intelligence technologies in support of telecommunications/information and communication technologies
* Resolution 102 (ex COM4/CLI-CL) (New Delhi, 2024): Provision of handset-derived caller location information for emergency communications
* Resolution 103 (ex COM4/DPI) (New Delhi, 2024): Enhancing standardization activities on digital public infrastructure
* Resolution 104 (ex COM4/VC) (New Delhi, 2024): Promoting and strengthening standardization activities for vehicular communications
* Resolution 105 (ex COM4/MV) (New Delhi, 2024): Promoting and strengthening metaverse standardization
* Resolution 106 (ex COM4/SDT) (New Delhi, 2024): Enhancing standardization activities on sustainable digital transformation
* Resolution 107 (ex COM3/NG) (New Delhi, 2024): Enhancing the engagement of next-generation experts in the standardization activities of the ITU Telecommunication Standardization Sector
* Resolution 108 (ex COM3/SP) (New Delhi, 2024): Strategic planning in ITU Telecommunication Standardization Sector

# Relevance to the ITU-D work

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

Table 2 provides an overview of the WTSA Resolutions relevant to the work of ITU-D with the related instructs to the Director of the ITU Telecommunication Development Bureau.

**Table 1 – WTSA Resolutions with an impact on the work of ITU-D**

| Status | Number | Title |
| --- | --- | --- |
| Rev | 2 | Scope and mandate of the ITU Telecommunication Standardization Sector study groups |
| Rev | 18 | Strengthening coordination and cooperation among the three ITU Sectors on matters of mutual interest |
| Rev | 22 | Authorization for Telecommunication Standardization Advisory Group to act between world telecommunication standardization assemblies |
| Rev | 29 | Alternative calling procedures on international telecommunication networks |
| Rev | 32 | Strengthening electronic working methods for the work of the ITU Telecommunication Standardization Sector |
| Rev | 43 | Regional preparations for world telecommunication standardization assemblies |
| Rev | 44 | Bridging the standardization gap between developing and developed countries |
| Rev | 48 | Internationalized (multilingual) domain names |
| Rev | 50 | Cybersecurity |
| Rev | 52 | Countering and combating spam |
| Rev | 54 | Regional groups of study groups of the ITU Telecommunication Standardization Sector |
| Rev | 58 | Encouraging the creation and enhancement of national computer incident response teams, particularly for developing countries |
| Rev | 64 | Promoting, facilitating and accelerating the transition to and deployment of Internet Protocol version 6 |
| NOC | 69 | Non-discriminatory access and use of Internet resources and telecommunications/ICTs |
| Rev | 72 | Measurement and assessment concerns related to human exposure to electromagnetic fields |
| Rev | 73 | Information and communication technologies, environment, climate change and circular economy |
| Rev | 74 | Enhancing participation of Sector Members1 from developing countries in the work of the ITU Telecommunication Standardization Sector |
| Rev | 76 | Conformance and interoperability testing, assistance to developing countries, and a possible future ITU Mark programme |
| Rev | 78 | Information and communication technology applications and standards for improved access to e-health services |
| Rev | 79 | Role of telecommunications/information and communication technologies in handling and controlling e-waste from telecommunication and information technology equipment and methods of treating it |
| NOC | 83 | Evaluation of the implementation of WTSA Resolutions |
| Rev | 84 | Studies concerning the protection of users of telecommunication/ICT services |
| NOC | 86 | Facilitating the implementation of the Smart Africa Manifesto |
| NOC | 88 | International mobile roaming (IMR) |
| Rev | 89 | Promoting the use of information and communication technologies to bridge the financial inclusion gap |
| Rev | 92 | Enhancing the standardization activities in the ITU Telecommunication Standardization Sector related to non-radio aspects of international mobile telecommunications |
| NOC | 95 | ITU Telecommunication Standardization Sector initiatives to raise awareness on best practices and policies related to service quality |
| Rev | 96 | ITU Telecommunication Standardization Sector studies for combating counterfeit and tampered telecommunication/information and communication technology devices |
| Rev | 97 | Combating mobile telecommunication device theft |
| Rev | 98 | Enhancing standardization of Internet of Things, digital twins and smart sustainable cities and communities for global development |
| Rev | 100 | A common emergency number for Africa |
| New | 101 | Standardization activities of the ITU Telecommunication Standardization Sector on artificial intelligence technologies in support of telecommunications/information and communication technologies |
| New | 103 | Enhancing standardization activities on digital public infrastructure |
| New | 104 | Promoting and strengthening standardization activities for vehicular communications |
| New | 107 | Enhancing the engagement of next-generation experts in the standardization activities of the ITU Telecommunication Standardization Sector |

**Annex**

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

| Number / Resolution | Relevant text |
| --- | --- |
| RESOLUTION 2Scope and mandate of the ITU Telecommunication Standardization Sector study groups | **resolves**3 that the ITU-T study groups should consider the outputs and materials of the other two Sectors and the ITU Council relevant to a study group's terms of reference;5 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; |
| RESOLUTION 18Strengthening coordination and cooperation among the three ITU Sectors on matters of mutual interest | **resolves**1 that the Radiocommunication Advisory Group (RAG), the Telecommunication Standardization Advisory Group (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, as provided for by Resolution 191 (Rev. Bucharest, 2022);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 study groups and/or the Directors of the Bureaux;4 to cooperate with the Director of the Telecommunication Development Bureau (BDT) in enhancing the ability of the ITU regional and area offices to provide support for study group activities, as well as the necessary expertise, in order to strengthen cooperation and coordination with the relevant regional organizations and to facilitate the participation of all Member States and Sector Members in the activities of ITU-T;5 that the Director of the Telecommunication Standardization Bureau (TSB) shall cooperate with the Directors of the other two Bureaux on activities relating to the development and updating of handbooks and reports with the view to avoiding duplication of efforts, and on the implementation of outcomes of ITU-T activities,**invites**1 TSAG, RAG and TDAG to continue to assist ISCG in the identification of subjects of mutual interest to the three Sectors and mechanisms to enhance their cooperation and collaboration;2 the Directors of the Radiocommunication Bureau, TSB and BDT 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, |
| RESOLUTION 22Authorization for Telecommunication Standardization Advisory Group to act between world telecommunication standardization assemblies | **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:*l) cooperate and coordinate with ITU-R and ITU-D, considering Resolution 18 (Rev. [Geneva, 2022]) of this assembly;* |
| RESOLUTION 29Alternative calling procedures on international telecommunication networks | **instructs**the Director of the Telecommunication Standardization Bureauto 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 32Strengthening electronic working methods for the work of the ITU Telecommunication Standardization Sector | **resolves**1 that the principal EWM objectives of ITU-T are:* that TSB, in close collaboration with the ITU Telecommunication Development Bureau (BDT), should provide facilities and capabilities for EWM at ITU-T meetings, workshops and training courses, particularly to assist developing countries that have bandwidth limitations and other constraints, including remote participation and electronic access, such as via secured and available open-source-based platforms;
* that TSB, in close collaboration with BDT, should provide facilities and capabilities for EWM at ITU-T meetings, workshops and training courses, and encourage participation of developing countries, by waiving, within the credits that the Council is empowered to authorize, any expenses for those participants, other than the local call or Internet connectivity charges;

**instructs**1 the Director of TSB to:* coordinate with the Directors of the other two Bureaux to explore how EWM tools can promote cooperation and collaboration among ITU-R, ITU-T and ITU-D in order to avoid duplicating activities, and ensure that work is undertaken efficiently and effectively;
 |
| RESOLUTION 43Regional preparations for world telecommunication standardization assemblies | **invites the Secretary-General, in cooperation with the Directors of the Bureaux of the three Sectors**1 to consult with Member States and regional and subregional telecommunication organizations on the means by which assistance can be provided in support of their preparations for future WTSAs, including support for the organization of a "Bridging the Standardization Gap Forum" per region to address major issues of the next WTSA of interest to developing countries1;2 on the basis of such consultations, to assist Member States and regional and subregional telecommunication organizations in such areas as:i) the organization of informal regional and interregional preparatory meetings, and formal regional preparatory meetings if a region so requests;ii) the identification of major issues to be resolved by the next WTSA;iii) the development of coordination methods;iv) the organization of information sessions on expected work for WTSA;3 to submit, no later than the session of the ITU Council following WTSA, a report on feedback from Member States concerning WTSA regional preparatory meetings, their results and the application of this resolution, |
| RESOLUTION 44Bridging the standardization gap between developing 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; **resolves further**that ITU regional offices1be 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-chairs 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 resources1 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**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 Bureau1to 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 activities5 to consider, whenever possible, holding meetings of ITU-T study groups in developing countries,**instructs** the Director of the Telecommunication Standardization Bureau, in collaboration with the Director of the Telecommunication Development Bureau to promote awareness and assist in the implementation of ITU-T standards in developing countries, considering countries’ specific needs, in collaboration with the regional telecommunication organizations and ITU regional offices, as appropriate, |
| RESOLUTION 48Internationalized (multilingual) domain names | **instructs** the Director of the Telecommunication Standardization Bureau3 to support ITU-D in engaging stakeholders, raising awareness and incentivizing progress within the ITU-D membership, including Member States and Sector Members, in order to support and promote multilingualism on the Internet;**invites** the Director of the Telecommunication Development Bureauto continue to cooperate with the Director of the Telecommunication Standardization Bureau on these issues in the spirit of "One ITU", |
| RESOLUTION 50Cybersecurity | **resolves**6 that ITU‑T should coordinate and collaborate with ITU‑D in this regard, both within the context of ITU‑D Study Question 3/2 (Securing information and communication networks: Best practices for developing a culture of cybersecurity) and within the context of the capacity-building work of the Telecommunication Development Bureau (BDT);**instructs Study Group 17 of the ITU Telecommunication Standardization Sector**2 to support the Director of TSB in maintaining the ICT Security Standards Roadmap, which should include work items to progress standardization work related to cybersecurity, and its aspects of data and PII protection, and the security compendium, which should include the list of ITU‑T Recommendations and terms and definitions, and share this with relevant groups of the ITU Radiocommunication Sector and ITU‑D as the mission of the ITU‑T lead study group for security;**instructs**the Director of the Telecommunication Standardization Bureau1 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 Director of BDT in overseeing the development of ITU-T Recommendations and potentially other tools that the Member States, in particular developing countries, can use to anticipate rapid responses in the event of major incidents, and in helping these bodies to propose action plans using a suitable framework, as appropriate and upon request, to increase their protection, taking into account mechanisms and partnerships; 9 to disseminate information to all stakeholders and increase stakeholders’ understanding of cybersecurity through the organization of training programmes, forums, workshops, seminars, etc., as appropriate, on ITU-T Recommendations and implementation guidelines 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;11 to consider, whenever possible, to raise awareness by holding workshops concurrently with the meetings of the respective regional groups of ITU-T study groups, or events in coordination and collaboration with the Director of BDT and ITU regional offices alongside these meetings, where appropriate, |
| RESOLUTION 52Countering and combating spam | **resolves**resolves to instruct Study Group 17 of the ITU Telecommunication Standardization Sector4 to collaborate with ITU-D and with the relevant organizations, including other relevant standards organizations and development partners, in order to continue developing, as a matter of urgency, technical Recommendations with a view to awareness raising, sharing best practices, policy dialogue and providing technical training through workshops, in partnership with beneficiary Member States and other stakeholders, such as network operators, Internet service providers and online service providers, the Internet technical community, business associations and civil society; 6 to support ITU-D Study Group 2 on countering and combating spam in its work providing technical training sessions and workshop activities in different regions related to spam policy, regulatory and economic issues and their impact for the benefit of regulators and telecommunication operators; |
| RESOLUTION 54Regional groups of study groups of the ITU Telecommunication Standardization Sector | **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 available1 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 versa;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 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 regional groups in order to promote the necessary synergies among the three Sectors and thereby improve the effectiveness and efficiency of the ITU-T study groups |
| RESOLUTION 58Encouraging the creation and enhancement of national computer incident response teams, particularly for developing countries | **instructs** Study Group 17 of the ITU Telecommunication Standardization Sector3 to collaborate with ITU-D in its work on the creation and enhancement of national CIRTs, as appropriate;5 to support the Director of the Telecommunication Standardization Bureau (TSB) in initiatives that assist in bridging the standardization gap between developing and developed countries for national CIRTs, which should include studies on CIRT frameworks, and share results with relevant groups of ITU-D as the mission of the lead group for security,**instructs**the Director of the Telecommunication Standardization Bureau, in collaboration with the Director of the Telecommunication Development Bureau1 to identify where national CIRTs are needed, particularly in developing countries, and encourage their establishment;2 to collaborate with international experts and bodies to help countries establish and enhance national CIRTs, through improving and accelerating the development of ITU-T Recommendations, supplements and technical reports in this domain;3 to support the promotion of national, regional and international best practices for establishing CIRTs by providing Recommendations, supplements and technical reports;4 to raise awareness of ITU-T Study Group 17’s outputs such as Recommendations, supplements and technical reports for the establishment and enhancement of CIRTs, including the related operating framework;5 to provide support, as appropriate, within existing budgetary resources;6 to facilitate collaboration between national CIRTs, such as capacity building and exchange of information, within an appropriate framework;7 to take necessary action to progress implementation of this resolution, |
| RESOLUTION 64Promoting, facilitating and accelerating the transition to and deployment of Internet Protocol version 6 | **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. Kigali 2022);2 to maintain, update, and enhance the website which provides information about global activities related to IPv6, including hyperlinks to monitoring and tracking initiatives, in order to facilitate awareness-raising and highlight the importance of IPv6 deployment for the entire ITU membership and interested entities, as well as information related to training events being undertaken by ITU and relevant organizations (e.g. regional Internet registries (RIRs), network operator groups and the Internet Society (ISOC));3 to promote awareness of the importance of IPv6 deployment, facilitate human capacity building through joint training activities, involving appropriate experts from the relevant entities, provide information, including roadmaps and guidelines, and technical assistance 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 promote the best practices of government programmes, including procurement, in order to facilitate the transition to and deployment of IPv6;5 to promote discussions between ITU Member States, Sector Members and relevant regional and international organizations on the transition to and deployment of IPv6;6 to support BDT in relevant IPv6 training for engineers, network operators, content providers and service 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 69Non-discriminatory access and use of Internet resources and telecommunications/ICTs | **invites**Directors of the Telecommunication Standardization Bureau, Radiocommunication Bureau and Telecommunication Development Bureauto contribute on the progress on resolution, |
| RESOLUTION 70Telecommunication/information and communication technology accessibility for persons with disabilities and persons with specific needs | **invites**the Director of the Telecommunication Standardization Bureau1 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 Members5 to participate actively in accessibility-related studies in ITU-R, ITU-T and ITU-D, and to promote the effective representation of 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 72Measurement and assessment concerns related to human exposure to electromagnetic fields | **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 ITU-T 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;viii) 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, within the available financial resources1 to support the development of reports identifying the needs of developing countries on the issue of assessing human exposure to EMF, and to 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, as well as information intended for the general public;3 to hold workshops in developing countries with presentations and training on the use of equipment employed in assessing human exposure to RF energy, including SAR;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 and standardization activities 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, using, among other things, the modalities set out in Resolutions 44 (Rev. New Delhi, 2024) and 76 (Rev. New Delhi, 2024) of this assembly and Resolution 177 (Rev. Bucharest, 2022) of the Plenipotentiary Conference, in the context of the development of regional test centres;6 to invite ITU-T Study Group 5 to coordinate and cooperate with various international organizations such as WHO, ICNIRP, IEC, ISO, 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 73Information and communication technologies, environment, climate change and circular economy | **instructs**all ITU-T study groups6 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 Bureaux1 to report on progress on the application of this resolution annually to the Council and to the next world telecommunication standardization assembly;2 to keep up to date the calendar of events relevant to ICTs, environment, climate change and circular economy, based on proposals by the Telecommunication Standardization Advisory Group 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, environment, climate change and circular economy, taking into consideration relevant studies, in particular the ongoing work of ITU-T Study Group 5, including issues related to, inter alia, circular economy, sustainable eco-design of equipment and ICT solutions, 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, biodiversity protection, in cooperation with other expert bodies in these domains, and how the ICT sector contributes to annual reductions in GHG emissions, and submit the reports as soon as possible to ITU-T Study Group 5 for its consideration;5 to organize forums, workshops and seminars for developing countries in order to raise awareness and identify their particular needs and challenges in regard to environmental, climate-change and circular-economy issues;7 to report on progress of the Joint Task Force of ITU, the World Meteorological Organization (WMO) and the United Nations Educational, Scientific and Cultural Organization Intergovernmental Oceanographic Commission (IOC-UNESCO) 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 Environment and Sustainable Digital Transformation and its use as an electronic forum for the exchange and dissemination of ideas, experience and best practices on ICTs, environment, climate change and circular economy;9 to assist countries that are vulnerable to climate-change impact, with specific emphasis on developing countries:i) that are susceptible to wildfires, drought, floods, and other disasters exacerbated by climate change;ii) whose economies rely on agricultural investments;iii) with weak capacity or lack of meteorological-support infrastructure and technical systems for the mitigation of climate-change effects, |
| RESOLUTION 74Enhancing participation of Sector Members from developing countries in the work of the ITU Telecommunication Standardization Sector | **instructs** the Director of the Telecommunication Standardization Bureau, in close collaboration with the Director of the Telecommunication Development Bureau within available resources,1 to organize workshops, preferably back-to-back with meetings of regional groups of ITU-T study groups or other ITU regional events, and develop programmes on awareness campaigns on the benefits for operators, service providers, industries and other Sector Members from developing countries to participate in ITU-T activities aimed at in particular:i) enhancing the relevance of ITU-T and the importance of their participation in standardization activities;ii) identifying their standardization priorities, needs and concerns with respect to, in particular, telecommunication/ICT trends;2 to develop relevant metrics to measure the participation of Sector Members from developing countries in ITU-T activities, |
| RESOLUTION 76Conformance and interoperability testing, assistance to developing countries, and a possible future ITU Mark programme | **invites** Member States and Sector Members of the ITU Telecommunication Development Sector1 to evaluate and assess the risks and various costs resulting from the lack of C&I tests, particularly in developing countries, and share necessary information and recommendations to avoid losses, based on best practices;2 to collaborate at regional level (especially developing countries) on the establishment of C&I test facilities through having different testing facilities located in different countries and making use of mutual recognition agreements and arrangements;3 to develop technical skills and institutional capacity for C&I testing;4 to strengthen initiatives for technical training and institutional capacity building in developing countries by supporting testing centres and conducting hands-on training and workshops on C&I testing,**instructs** the Director of the Telecommunication Standardization Bureau1 in collaboration with the Director of the Telecommunication Development Bureau (BDT), to continue consultations in all regions, taking into consideration the needs of each region, on implementation of the action plan endorsed by the ITU Council;2 to support the Director of BDT in human capacity building and assistance in order to establish testing facilities in developing countries;3 to implement the action plan agreed by the Council at its 2012 session and revised at its 2014 session, in cooperation with the Director of BDT;5 in collaboration with the Director of the BDT, and in consultation with each region, to continue implementing the ITU C&I programme, including the testing laboratory database and informative pilot conformity product database, identifying product conformance and origin;**invites** the Director of the Telecommunication Standardization Bureau in collaboration with the Director of the Telecommunication Development Bureauto collaborate with Member States and Sector Members in order to assist in the development and deployment of virtual laboratories to carry out remote testing in developing countries, |
| RESOLUTION 78Information and communication technology applications and standards for improved access to e-health services | **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 Bureau1 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, WIPO, 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 countries and gauge the needs of the developing countries, which are the countries with the greatest need for e-health applications;5 to encourage the standardization work based on the deliverables of FG-AI4H.**instructs** the Director of the Telecommunication Standardization Bureau to collaboratively work with the Director of the Telecommunication Development Bureauto support awareness-raising campaigns, developed by the Telecommunication Development Bureau upon request, that sensitize populations to the use of e-health applications such as telemedicine in developing countries, within available resources, |
| RESOLUTION 79Role of telecommunications/information and communication technologies in handling and controlling e-waste from telecommunication and information technology equipment and methods of treating it | **resolves to instruct** the Director of the Telecommunication Standardization Bureau, in collaboration with the Director of the Telecommunication Development Bureau1 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, in particular in developing countries;2 to assist developing countries to undertake proper assessment of the magnitude/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 developing countries and facilitate their work in the implementation of circular-economy principles;7 to continue promoting e-waste data collection and global databases on e-waste, in collaboration with relevant stakeholders, in order to support effective formulation of regional and national policies and strategies, |
| RESOLUTION 83Evaluation 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 84Studies concerning the protection of users of telecommunication / information and communication technology 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 on issues associated with protection of telecommunication/ICT service users/consumers, as appropriate; **instructs**the Director of the Telecommunication Standardization Bureau, in collaboration with the Director of the Telecommunication Development Bureau1 to make efforts to implement Resolution 196 (Rev. Bucharest, 2022);2 to encourage active participation of developing countries in the relevant ITU-T study groups and strengthen relations with other standards-development organizations involved in resolving issues associated with 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 86Facilitating the implementation of the Smart Africa Manifesto | **instructs**the Director of the Telecommunication Standardization Bureau, in collaboration with the Director of the Telecommunication Development Bureau1 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 88International mobile roaming (IMR) | **instructs**the Director of the Telecommunication Standardization Bureau1 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 89Promoting 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 Bureaux1 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 92Enhancing the standardization activities in the ITU Telecommunication Standardization Sector related to non-radio aspects of international mobile telecommunications | **instructs**instructs Study Group 13 of the ITU Telecommunication Standardization Sector1 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, and share this with relevant groups of ITU-R and ITU-D and external organizations, such as through coordination work ensured by JCA-IMT2020;**instructs**the Director of the Telecommunication Standardization Bureau1 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 Bureaux1 to investigate new ways to improve the efficiency of ITU work on IMT, and to examine the possibility of establishing an observatory for IMT systems, including appropriate guidelines if needed, taking into account budgetary considerations;2 to promote studies on standardization activities related to regulatory and economic questions relevant to accommodating non-radio aspects of IMT use cases, and to encouraging and supporting market growth, innovation, collaboration and telecommunication/ICT infrastructure investment;3 to develop guidance on the economic drivers and sustainability for non-radio aspects of IMT system deployment, |
| RESOLUTION 95ITU Telecommunication Standardization Sector initiatives to raise awareness on best practices and policies related to service quality | **instructs**the Director of the Telecommunication Standardization Bureau, in close collaboration with the Director of the Telecommunication Development Bureau1 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 96ITU Telecommunication Standardization Sector studies for combating counterfeit and tampered telecommunication/information and communication technology devices | **instructs**the Director of the Telecommunication Standardization Bureau, in close collaboration with the Director of the Telecommunication Development Bureau1 to organize workshops and events across the 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 based on different technological solutions;3 to work in close collaboration with relevant stakeholders, such as WTO, WIPO, WHO and WCO, on activities relating to combating counterfeit and tampered telecommunication/ICT devices, including restricting 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 ITU-T Study Group 11 and focus 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 the use of conformity assessment systems;6 to promote and share information on best practices and emerging trends developed by industry and governments in combating counterfeit and tampered telecommunication/ICT devices,**instructs**the Director of TSB in close collaboration with the BDT and BR Directors1 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 97Combating mobile telecommunication device theft | **instructs**the Director of the Telecommunication Standardization Bureau in collaboration with the Directors of the Radiocommunication Bureau and Telecommunication Development Bureau1 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 standards-development organizations (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 identifiers of mobile devices reported stolen or lost, and to prevent lost or stolen mobile devices from accessing mobile networks;3 to consult with the Sector's relevant study groups, manufacturers of mobile devices, manufacturers of telecommunication network components, operators, telecommunication SDOs 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;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 98Enhancing standardization of Internet of Things, digital twins and smart sustainable cities and communities for global development | **instructs**the Director of the Telecommunication Standardization Bureau, in collaboration with the Directors of the Telecommunication Development Bureau and the Radiocommunication Bureau1 to prepare reports considering, in particular, the needs of developing countries[[1]](#footnote-2) 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 in order to discuss the various aspects related to the development of the IoT, digital twins ecosystem and solutions for SSC&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, digital twins, and SSC&C;5 to organize forums, seminars, training programmes and workshops including DTD webinars, and to support Member States, in particular developing countries;6 to report to the next world telecommunication standardization assembly on progress made in the organization of forums, seminars, training programmes 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, digital twins, and SSC&C, |
| RESOLUTION 100A common emergency number for Africa | **resolves**to instruct the Director of Telecommunication Standardization Bureau in cooperation with the Director of the Telecommunications Development Bureau1 to continue to provide technical assistance to Member States in Africa, within available resources and existing budgetary limits, 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, |
| RESOLUTION 101Standardization activities of the ITU Telecommunication Standardization Sector on artificial intelligence technologies in support of telecommunications/information and communication technologies | **instructs** the Director of the Telecommunication Standardization Bureau, in collaboration with the Secretary-General and theDirectors of the Telecommunication Development and Radiocommunication Bureaux1 to support the work of the AI for Good platform in identifying practical applications of AI in order to advance progress on the SDGs and scale those solutions for global impact;2 to identify opportunities, as appropriate, for cooperation in international standardization efforts and for collaboration with relevant stakeholders on AI in relation to telecommunications/ICTs;3 to provide technical guidance, in particular to developing countries, on implementing international standards on AI in telecommunications/ICTs, |
| RESOLUTION 103Enhancing standardization activities on digital public infrastructure | **instructs** the Director of the Telecommunication Standardization Bureau, in collaboration with the Secretary-General and the Director of the Telecommunication Development Bureauto collaborate with other relevant United Nations agencies and other international and regional multistakeholder and intergovernmental organizations that are assisting countries in implementing digital public infrastructure, and with countries that have lessons learned to share in this regard,**instructs** the Director of the Telecommunication Standardization Bureau, in collaboration with the Director of the Telecommunication Development Bureau1 to collaborate with other relevant SDOs, academia and organizations with responsibility for standards development, implementation and capacity building in the telecommunication/ICT aspects of digital public infrastructure, in order to support the membership in developing and deploying digital public infrastructure initiatives, taking into consideration the particular needs of developing countries;2 to organize workshops for the ITU membership in collaboration with other relevant SDOs, academia and institutions with primary responsibility for digital public infrastructure implementation, in order to raise awareness and identify opportunities and challenges in the telecommunication/ICT standardization aspects of digital public infrastructure, in particular for developing countries, |
| RESOLUTION 104Promoting and strengthening standardization activities for vehicular communications | **instructs** the Director of the Telecommunication Standardization Bureau in cooperation with the Director of the Telecommunication Development Bureau1 to support Member States in implementing applications and deployments of vehicular communications, such as V2X, and ITS, including vehicular communications to support automated driving;2 to support Member States, especially developing countries1, in organizing forums, seminars, and workshops on vehicular communications, such as V2X, and ITS, including vehicular communications to support automated driving, in order to promote innovation, development, and growth of technology and solutions, provided the availability of suitable programmes and budget;3 to assist developing countries in implementing vehicular communications, such as V2X, and ITS, including vehicular communications to support automated driving, through ITU-T Recommendations, technical reports and guidelines, in relation to their telecommunication and ICT aspects, |
| RESOLUTION 107 Enhancing the engagement of next-generation experts in the standardization activities of the ITU Telecommunication Standardization Sector | **instructs** the Director of the Telecommunication Standardization Bureau, in collaboration with the Director of the Telecommunication Development Bureau1 to reuse BSG content in close collaboration with the ITU Academy and other capacity-building initiatives of the Telecommunication Development Bureau to attract the next generation of experts across developed and developing countries;2 to request voluntary contributions from the membership to develop enhanced training materials on telecommunication/ICT standardization for the next generation of experts, and to promote and disseminate these deliverables;3 to evaluate opportunities, such as awards, for recognizing the next generation of experts, and thereby help to advance the standardization work of ITU-T;4 to report to the Telecommunication Standardization Advisory Group annually on the implementation of this resolution, |

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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)