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| **Agenda item: PL 2** | **Document C25/33-E** |
| **17 April 2025** |
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| Report by the Secretary-General | |
| ITU INTERNET ACTIVITIES: RESOLUTIONS 101, 102, 133, 180 AND 206 | |
| **Purpose**  This report summarizes ITU’s activities related to Plenipotentiary Conference (PP) Resolution 101 (Rev. Bucharest, 2022), “Internet Protocol-based networks”; Resolution 102 (Rev. Bucharest, 2022), “ITU’s role with regard to international public policy issues pertaining to the Internet and the management of Internet resources, including domain names and addresses”; Resolution 133 (Rev. Bucharest, 2022), “Roles of administrations of Member States in the management of Internationalized (multilingual) domain names”; Resolution 180 (Rev. Bucharest, 2022), “Promoting deployment of Internet Protocol version 6” and Resolution 206 (Dubai, 2018), “OTTs”.  **Action required by the Council**  The Council is invited to **note** the report. The Council is also invited to **endorse** the transmission of the report, along with the compilation of views of Council Member States and the related summary records with a cover note, to the United Nations Secretary-General.  **Relevant link(s) with the Strategic Plan**  Development of international standards; convening platform; capacity development; provision of technical assistance.  **Financial implications**  Within the allocated budget 2024-2025.  \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_  **References**  *Plenipotentiary Resolutions* [*101*](https://www.itu.int/en/council/Documents/basic-texts-2023/RES-101-E.pdf)*,* [*102*](https://www.itu.int/en/council/Documents/basic-texts-2023/RES-102-E.pdf)*,* [*133*](https://www.itu.int/en/council/Documents/basic-texts-2023/RES-133-E.pdf)*,* [*180*](https://www.itu.int/en/council/Documents/basic-texts-2023/RES-180-E.pdf) *(Rev. Bucharest, 2022), Resolution* [*206*](https://www.itu.int/en/council/Documents/basic-texts-2023/RES-206-E.pdf) *(Dubai, 2018); Council Resolutions* [*1305*](http://www.itu.int/md/S09-CL-C-0105) *(2009),* [*1336*](http://www.itu.int/md/S15-CL-C-0113/en) *(Mod. 2015),* [*1344*](http://www.itu.int/md/S15-CL-C-0112/en) *(Mod. 2015); WTSA Resolutions* [*47*](https://www.itu.int/pub/publications.aspx?lang=en&parent=T-RES-T.47-2022) *(Rev. Dubai, 2012),* [*48*](https://www.itu.int/pub/publications.aspx?lang=en&parent=T-RES-T.48-2022) *(Rev. Geneva, 2022),* [*49*](https://www.itu.int/pub/publications.aspx?lang=en&parent=T-RES-T.49-2016) *(Rev. Hammamet, 2016),* [*50*](https://www.itu.int/pub/publications.aspx?lang=en&parent=T-RES-T.50-2022) *(Rev. Geneva, 2022),* [*52*](https://www.itu.int/pub/publications.aspx?lang=en&parent=T-RES-T.52-2022)*(Rev. Hammamet, 2016),* [*58*](https://www.itu.int/pub/publications.aspx?lang=en&parent=T-RES-T.58-2022)*,* [*60*](https://www.itu.int/pub/publications.aspx?lang=en&parent=T-RES-T.60-2022)*,* [*64*](https://www.itu.int/pub/publications.aspx?lang=en&parent=T-RES-T.64-2022) *(Rev. Geneva, 2022),* [*69*](https://www.itu.int/pub/publications.aspx?lang=en&parent=T-RES-T.69-2022)*,* [*75*](https://www.itu.int/pub/publications.aspx?lang=en&parent=T-RES-T.75-2022) *(Rev. Geneva, 2022),* [*98*](https://www.itu.int/pub/publications.aspx?lang=en&parent=T-RES-T.98-2022) *(Rev. Geneva, 2022);* [*WTDC-17/Buenos Aires Action Plan Objective 3/Output 3.3*](https://www.itu.int/en/ITU-D/Conferences/WTDC/WTDC17/Documents/WTDC17_FinalReport_en.pdf)*, WTDC Resolutions* [*20, 30, 63*](https://www.itu.int/en/ITU-D/Conferences/WTDC/WTDC17/Documents/WTDC17_FinalReport_en.pdf) *(Rev. Buenos Aires, 2017) and* [*45*](http://www.itu.int/en/action/internet/Documents/Resolution_45_wtdc14.pdf) *(Rev. Dubai, 2014); Council Documents* [*C16/33*](http://www.itu.int/md/S16-CL-C-0033/en)*,* [*C17/33*](https://www.itu.int/md/S17-CL-C-0033/en)*,* [*C18/33*](https://www.itu.int/md/S18-CL-C-0033/en)*,* [*C19/33*](https://www.itu.int/md/S19-CL-C-0033/en)*,* [*C20/33*](https://www.itu.int/md/S20-CL-C-0033/en)*,* [*C21/33*](https://www.itu.int/md/S21-CL-C-0033/en)*,* [*C22/33*](https://www.itu.int/md/S22-CL-C-0033/en)*,* [*C23/33*](https://www.itu.int/md/S23-CL-C-0033/en)*, and* [*C24/33*](https://www.itu.int/md/S24-CL-C-0033/en)*.* | |

# 1 Introduction

This report describes ITU’s activities related to the 2022 Plenipotentiary Conference Resolutions 101, 102, 133, 180 and 206 for the reporting period from April 2024 to March 2025.

# 2 Activities related to Internet Protocol (IP) networks, the development of next-generation networks (NGN) and future Internet, including policy and regulatory challenges

ITU-T approved 75 new/revised ITU-T Recommendations and other texts from 1 April 2024 to 31 March 2025, including those relevant to this Report. [Relevant Recommendations](https://www.itu.int/itu-t/workprog/wp_search.aspx?isn_sp=9677&isn_status=-1,8,1,3,7,2&adf=2024-03-31&adt=2025-03-31&details=0&view=tab&field=acdefghijo) can be found under the different ITU-T Study Groups (SGs).

**2.1 IMT-2020 and beyond:** 35 new Recommendations were approved by ITU-T SGs 3, 5, 11, 13 and 17. One revised Supplement was agreed by SG13, and eight draft Recommendations are under approval in SGs 13 and 17.

**2.2 Internet-of-things (IoT) and Smart Cities:** 38 Recommendations were approved by SGs 5, 11, 16, 17 and 20, Five Supplements and three Technical Reports were agreed by SG 20. Nine draft Recommendations are under approval in SGs 17, 20 and 21. ITU-T SG20 continued coordination in its ITU-T [JCA-IoT, DT and SSC&C](https://www.itu.int/en/ITU-T/jca/iot/Pages/default.aspx) and is also in close collaboration with IETF, oneM2M, W3C, LoRa Alliance and TMForum.

**2.3 IP Cable:** ITU-T SG9 approved eight Recommendations and one revised Supplement on IP cable. NOTE – WTSA-24 consolidated ITU-T SG9 and SG16 into new ITU-T SG21 for the study period 2025-2028.

**2.4 IPTV, Content Delivery Networks (CDN) and Digital Signage:** ITU-T SGs 9 and 16 approved four Recommendations.

**2.5 IP performance:** ITU-T SG12 approved three Recommendations.

**2.6 IP-based Cloud computing and Big Data:** 30 Recommendations were approved by SGs 9, 11, 13, 16, 17, 20 and 21. One Supplement was developed by SG20.

**2.7 Security:** ITU-T SGs 5, 13, 15, 17 and 20 approved 30 new/revised Recommendations and three new supplements on security of telecom/IMT systems, IoT, digital twin and smart cities, smart applications, Cloud/edge/big data, personal identifiable information protection, authentication, and quantum-based security technologies. Five draft Recommendations are under approval in SGs 17 and 20. A separate report on ITU’s activities related to building confidence and security in the use of ICTs, including SG17’s work, is presented as Document [C25/18](https://www.itu.int/md/S25-CL-C-0018/en).

**2.8 ITU-T Focus Groups:** [ITU-T Focus Group on Artificial Intelligence (AI) and Internet of Things (IoT) for Digital Agriculture (FG-AI4A)](https://www.itu.int/en/ITU-T/focusgroups/ai4a/Pages/default.aspx) and [ITU-T Focus Group on metaverse (FG-MV)](https://www.itu.int/en/ITU-T/focusgroups/mv/Pages/default.aspx)completed their work in June 2024.As of March 2025, two ITU-T Focus Groups are in operation: [Focus Group on costing models for affordable data services (FG-CD)](https://www.itu.int/en/ITU-T/focusgroups/cd/Pages/default.aspx) and [Focus Group on Artificial Intelligence Native for Telecommunication Networks (FG AINN)](https://www.itu.int/en/ITU-T/focusgroups/ainn/Pages/default.aspx).

**2.9** In the reporting period, TSB has not received reports or information on concerning any incidents covered by [WTSA Resolution 69](https://www.itu.int/net/ITU-T/res69/Default.aspx) on “Non-discriminatory access and use of Internet resources” (so far, there have been [37 incidents since 2009](https://www.itu.int/net/ITU-T/res69/secured/notifications.aspx)).

**2.10** ITU-D SG1 and SG2 continue their work on IP-related issues and continue to organize sessions on IP broadband satellite connectivity, digital broadcasting, including hybrid technical solutions. Details can be found at: [ITU Development Study Groups](https://www.itu.int/itu-d/sites/studygroups/).

**2.11** Projects have been implemented successfully by BDT on Internet broadband wireless connectivity to provide free or low-cost digital access for schools and hospitals, and for underserved populations in rural and remote areas in selected countries. The impact for the countries where projects have been implemented includes but is not limited to:

– Burundi: 10 cities connected in 2.5 GHz frequency band, 15 engineers trained for operations and maintenance, and 437 schools, hospitals and Government agencies connected.

– Djibouti: 20 cities connected in 2.5 GHz frequency band, and 48 schools, 43 hospitals/clinics and 23 Ministries connected.

– Eswatini: 4G LTE Broadband Wireless Network installed in 10 sites and 15 technical training sessions completed for local experts on the RF Monitoring and Planning and Operation and Maintenance of the deployed 4G LTE Broadband Wireless Network.

Other initiatives related to this subject are also ongoing, such as GIGA and Partner2Connect. More information is available in Document [C25/35](https://www.itu.int/md/S25-CL-C-0035/en).

**2.12** ITU-R approved Recommendation ITU-R M.2083-0 “IMT Vision – Framework and overall objectives of the future development of IMT for 2020 and beyond”, Resolutions ITU-R 65 “Principles for the process of future development of IMT for 2020 and beyond” and ITU-R 66 “Studies related to wireless systems and applications for the development of the Internet of Things”, and Report ITU-R M.2440-0 “The use of the terrestrial component of International Mobile Telecommunications for narrowband and broadband machine-type communications”.

**2.13** Several training courses were provided through the [ITU Academy](https://academy.itu.int/) and the [ITU Academy Training Centers](https://academy.itu.int/itu-d/projects-activities/centres-excellence/coe-overview), covering topics such as “Future fixed and mobile broadband internet”, “cloud computing and IoT/AI”, “Key aspects and governance of Internet of things, big data and artificial intelligence”, and “The Last Mile Internet Connectivity”. A total of 457 participants took those courses, of which 154 received a certificate.

# 3 IPv6

**3.1** The [ITU-T IPv6 webpage](https://www.itu.int/en/ITU-T/ipv6/Pages/default.aspx) highlights the IPv6 activities within ITU-T. Trainings/courses are being organized on all forms of IoT connectivity, including information security and privacy.

**3.2** BDT and Telecommunications and Post Regulatory Authority of Sudan established a regional “ITU IPv6 and IoT Expertise Center for Arab Region” hosted by TPRA-Sudan. Several trainings were provided (including training of trainers) for member states such as Iraq and Palestine.

**3.3** BDT provided technical assistance on IPv6 to Montenegro. The IPv6 Laboratory is now operational at the University of Montenegro.

**3.4** BDT is providing assistance on IPv6 test bed implementation in Cameroon and in the Republic of Congo. Technical assistance is being provided to Iraq, State of Palestine, Somalia, and Sudan for developing their national IPv6 transition strategies and the creation of national IPv6 task forces.

**3.5** BDT is also focusing on a special program to train the trainers on “IPv6 Over 5G Networks”. 31 participants completed the training and 20 have been certified.

**3.6** The [final report](https://www.itu.int/pub/D-STG-SG01.01.1-2017) in response to ITU-D SG 1 [Question 1/1](https://www.itu.int/net4/ITU-D/CDS/sg/rgqlist.asp?lg=1&sp=2014&rgq=D14-SG01-RGQ01.1&stg=1) is available and explores through case studies the experiences of countries in transitioning from IPv4 to IPv6. An [essential Guide](https://www.itu.int/en/ITU-D/Study-Groups/2018-2021/Pages/Publications.aspx) is available in order to assist developing countries to implement IPv6 over 5G Networks.

# 4 Internet-related public policy issues including the management of domain names and addresses

**4.1** The [Council Working Group on international Internet-related public policy issues (CWG-Internet)](https://www.itu.int/en/council/cwg-internet/Pages/default.aspx) held its twentieth and twenty-first meeting of CWG-Internet on 4 October 2024 and 19-20 February 2025, respectively, at the ITU Headquarters in Geneva, Switzerland. At the twentieth meeting, the Group launched an open consultation on [*The role of public policy in promoting multilingualization of the Internet*](https://www.itu.int/en/council/cwg-internet/Pages/consultation-oct2024.aspx). At the twenty-first meeting, the Group launched an open consultation on [*Ensuring meaningful connectivity to the Internet for landlocked developing countries (LLDCs)*](https://www.itu.int/en/council/cwg-internet/Pages/consultation-mar2025.aspx)*.* The Chair’s Report to Council is presented in Document [C25/51](https://www.itu.int/md/S25-CL-C-0051/en).

**4.2** ITU participated in the 19th IGF meeting in Riyadh, Saudi Arabia, on 15-19 December 2024, including the opening ceremony and high-level sessions. ITU also organized several sessions, including on the WSIS+20 process, WSIS Forum 2024 Open Consultation, and the CWG-Internet. ITU also contributed to various working groups and dynamic coalitions of the IGF. ITU will continue to participate at the highest level at the 20th IGF meeting in Lillestrom, Norway.

**4.3** ITU continues to follow the issue of protecting IGO names and acronyms in any new gTLDs, as part of the IGO coalition composed of 35 IGOs including OECD, UN, UPU, WHO, WIPO, and the World Bank.

**4.4** In allthe activities listed in the various sections of this Report, particularly with regard to beneficiary countries on IPv6, broadband and capacity building activities, ITU aims to address the challenges faced by landlocked developing countries as per the Vienna Programme of Action.

**4.5** ITU continues to actively follow discussions in GAC as an observer.

**4.6** ITU has also been following and contributing to the ongoing Global Digital Compact process. More information on this is contained in Document [C25/52](https://www.itu.int/md/S25-CL-C-0052/en).

# 5 ENUM

[Updated information on ENUM](http://www.itu.int/ITU-T/inr/enum/) is being maintained by ITU-T. ITU-T SG2 will continue work on ENUM upon contributions being received from ITU-T members.

# 6 International Internet Connectivity (IIC)/Internet Exchange Points (IXPs)

**6.1** BDT continues its work on providing assistance on IXP related issues. IXPs locations are available at the ICT Infrastructure interactive mapping: <https://bbmaps.itu.int/bbmaps/>. BDT is constantly updating location data information.

**6.2** ITU-T SG3, through [Q6/3](https://www.itu.int/net4/ITU-T/lists/q-text.aspx?Group=3&Period=18&QNo=6&Lang=en), continues to study the international Internet fibre cables and satellite Internet connectivity, including relevant aspects of Internet protocol (IP) peering, regional traffic exchange points, fibre cables optimization, cost of provision of services, and impact of Internet protocol version 6 (IPv6) deployment.

# 7 OTT

**7.1** Under **ITU-D Q3/1**, work continues on the use of telecommunications/ICTs for disaster risk reduction and management.

**7.2** **ITU-T SG2** is progressing three work items on OTTs (TR.OTTnum “Technical report: Current use of E.164 numbers as identifiers for OTTs”, TR.OTTNumMgt, “Technical Report on OTT numbering management” and draft Recommendation ITU-T E.ACP “Alternative calling procedures”).

**7.3** **ITU-T SG3** approved one regional Recommendation for Africa on OTT voice bypass ([ITU‑T D.608R](https://www.itu.int/ITU-T/recommendations/rec.aspx?rec=14772)) and one regional Recommendation for Arab States on “Principles for dealing with OTTs”([ITU-T D.700R](https://www.itu.int/ITU-T/recommendations/rec.aspx?rec=15576)). ITU-T SG3 is also currently working on several work items on OTTs, recently agreeing on a new Technical Report on “[OTT Bypass](https://www.itu.int/pub/publications.aspx?lang=en&parent=T-TUT-ECOPO-2024-3)” and a new Technical Report on “[Dispute Resolution between telecommunications operators and providers of OTTs](https://www.itu.int/pub/publications.aspx?lang=en&parent=T-TUT-ECOPO-2024-2)”. ITU‑T SG3 has initiated a new work item ([D.GuidelinesCostContribution](https://www.itu.int/ITU-T/workprog/wp_item.aspx?isn=21323)) developing a draft new Recommendation on “Guidelines on Potential Cost Contribution mechanisms between OTT service providers and telecom network service operators towards the expansion and development of high-capacity telecom networks”.

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