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| **Council Working Group on International Internet Related Public Policy issues (CWG-Internet)Geneva, 6-7 February 2017** |  |
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| ITU INTERNET ACTIVITIES: RESOLUTIONS 101, 102, 133 AND 180 |

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| SummaryThis report summarizes ITU’s activities since Council 2016 related to Plenipotentiary Conference (PP) Resolution 101 (Rev. Busan, 2014), “Internet Protocol-based networks”; Resolution 102 (Rev. Busan, 2014), “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. Busan, 2014), “Roles of administrations of Member States in the management of Internationalized (multilingual) domain names”; and Resolution 180 (Rev. Busan, 2014), “Facilitating the transition from IPv4 to IPv6”. References*Plenipotentiary Resolutions* [*101*](http://www.itu.int/en/action/internet/Documents/Resolution_101_pp14.pdf)*,* [*102*](http://www.itu.int/en/action/internet/Documents/Resolution_102_pp14.pdf)*,* [*133*](http://www.itu.int/en/action/internet/Documents/Resolution_133_pp14.pdf)*,* [*180*](http://www.itu.int/en/action/internet/Documents/Resolution_180_pp14.pdf) *(Rev. Busan, 2014); Council Resolutions* [*1282*](http://www.itu.int/council/pd/council-res-dec-e.docx#r1282) *(mod 2008),* [*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*](http://www.itu.int/pub/T-RES-T.47-2012)*,* [*48*](http://www.itu.int/pub/T-RES-T.48-2012) *(Rev. Dubai, 2012)* [*49*](http://www.itu.int/en/ITU-T/wtsa16/Documents/WTSA16_Draft_Proceedings_E.pdf)*,* [*50*](http://www.itu.int/en/ITU-T/wtsa16/Documents/WTSA16_Draft_Proceedings_E.pdf)*,* [*52*](http://www.itu.int/en/ITU-T/wtsa16/Documents/WTSA16_Draft_Proceedings_E.pdf) *(Rev. Hammamet, 2016),* [*58*](http://www.itu.int/en/ITU-T/wtsa12/Documents/resolutions/Resolution%2058.pdf) *(Rev. Dubai, 2012),* [*64*](http://www.itu.int/en/ITU-T/wtsa16/Documents/WTSA16_Draft_Proceedings_E.pdf)*,* [*69*](http://www.itu.int/en/ITU-T/wtsa16/Documents/WTSA16_Draft_Proceedings_E.pdf)*,* [*75*](http://www.itu.int/en/ITU-T/wtsa16/Documents/WTSA16_Draft_Proceedings_E.pdf) *(Rev. Hammamet, 2016);* [*Dubai Action Plan Objective 4*](https://www.itu.int/en/ITU-D/TIES_Protected/WTDC14/WTDC14-FinalReport-E.pdf) *, WTDC Resolutions* [*20*](http://www.itu.int/en/action/internet/Documents/Resolution_20_wtdc10.pdf) *(Rev. Hyderabad, 2010),* [*30*](http://www.itu.int/en/action/internet/Documents/Resolution_30_wtdc14.pdf)*,* [*45*](http://www.itu.int/en/action/internet/Documents/Resolution_45_wtdc14.pdf) and [*63*](http://www.itu.int/en/action/internet/Documents/Resolution_63_wtdc14.pdf) *(Rev. Dubai, 2014); Council Documents* [*C99/51*](http://www.itu.int/itudoc/gs/council/c99/docs/docs1/051.html)*,* [*C2000/27*](http://www.itu.int/itudoc/gs/council/c00/docs/27.html)*,* [*C2000/27Add.A*](http://www.itu.int/itudoc/gs/council/c00/docs/27a.html)*,* [*C2000/27Add.B*](http://www.itu.int/itudoc/gs/council/c00/docs/27b.html)*,* [*C01/EP/8*](http://www.itu.int/itudoc/gs/council/c01/docs/ep/008.html)*,* [*C02/46*](http://www.itu.int/md/S02-CL-C-0046/en)*,* [*C03/27*](http://www.itu.int/md/S03-CL-C-0027/en)*,* [*C04/28*](http://www.itu.int/md/S04-CL-C-0028/en)*,* [*C05/32*](http://www.itu.int/md/S05-CL-C-0032/en)*,* [*C05/EP/10*](http://www.itu.int/md/S05-CL-INF-0010/en)*,* [*C06/4*](http://www.itu.int/md/S06-CL-C-0004/en)*,* [*C07/42*](http://www.itu.int/md/S07-CL-C-0042/en)*,* [*C08/32(Rev.1)*](http://www.itu.int/md/S08-CL-C-0032/en)*,* [*C09/49*](http://www.itu.int/md/S09-CL-C-0049/en), [*C10/13*](http://www.itu.int/md/S10-CL-C-0013/en), [*C11/31*](http://www.itu.int/md/S11-CL-C-0031/en)*,* [*C12/28*](http://www.itu.int/md/S12-CL-C-0028/en)*,* [*C13/62*](http://www.itu.int/md/S13-CL-C-0062/en)*,* [*C14/40*](http://www.itu.int/md/S14-CL-C-0040/en)*,* [*C15/33*](http://www.itu.int/md/S15-CL-C-0033/en)*,* [*C16/33*](http://www.itu.int/md/S16-CL-C-0033/en) |

# 1. Introduction

This report describes ITU’s activities related to PP Resolutions 101, 102, 133, and 180 since Council 2016.

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

2.1 All ITU-T study groups continue their work in different areas of NGNs and their evolution, and future network (FN) Recommendations. As of 13 December 2016, 229 new/revised ITU-T Recommendations were approved since 1 June 2016 (see detailed list [here](http://www.itu.int/ITU-T/workprog/wp_search.aspx?isn_sp=1749&isn_status=-1,2&adf=2016-06-01&adt=2016-12-13&details=0&field=acdefghijo)), including revised Recommendation [ITU-T D.271](http://www.itu.int/md/T13-SG03-R-0019/en) on “Charging and accounting principles for NGN” from ITU-T SG3 approved by WTSA-16.

2.2 ITU-T Focus Group on IMT-2020 (FG IMT-2020) concluded its preliminary study into the networking innovations required to achieve the ambitious performance targets of smart 5G systems with five draft ITU international standards and four draft ITU technical reports to be adopted by its parent group, ITU-T Study Group 13:

Draft ITU international standards:

1. Requirements of IMT-2020 from network perspective;
2. Framework for IMT-2020 network architecture;
3. Requirements of IMT-2020 fixed mobile convergence;
4. IMT-2020 network management requirements;
5. Network management framework for IMT-2020.

Draft ITU technical reports:

1. Application of network softwarization to IMT-2020;
2. Unified network integrated cloud for fixed mobile convergence;
3. Application of information centric networking to IMT-2020;
4. Terms and definitions for IMT-2020 in ITU-T.

2.3 World Telecommunication Standardization Assembly (WTSA-16) was held from 25 October to 3 November 2016 in Hammamet, Tunisia. WTSA-16 suppressed six WTSA-12 Resolutions, retained 14 WTSA-12 Resolutions unchanged, revised 31 WTSA-12 Resolutions and adopted 16 new Resolutions. With respect to Internet-related WTSA-12 Resolutions, WTSA-16 kept them largely unchanged, e.g. no changes were made to WTSA-12 Res. 47 (ccTLDs), Res. 48 (IDNs) and Res. 58 (national CIRTs); only editorial changes were made to WTSA-12 Res. 49 (ENUM) and Res. 69 (Non-discriminatory access and use of Internet resources), and some updates were made to WTSA-12 Res 64 (IPv6), as indicated in section 3 below.

2.4 ITU-D SG1 and SG2 continue to address IP-related issues such as NGN Interconnection, VoIP, Access technology for broadband telecommunications including International Mobile Telecommunications (IMT), and migration strategies from existing networks to NGNs for developing countries.

2.5 BDT continues implementing Internet broadband wireless connectivity and developing ICT applications to provide free or low cost digital access for schools and hospitals, and for underserved populations in rural and remote areas in selected countries (Burundi, Burkina Faso, Djibouti, Lesotho, Mali, Swaziland etc.).

2.6 ITU-R approved Recommendation ITU-R M.2083 "IMT Vision – Framework and overall objectives of the future development of IMT for 2020 and beyond” and 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".

2.7 ITU continues its cooperation with the Corporation for National Research Initiatives (CNRI) and the DONA Foundation on the use of the Digital Object Architecture (DOA) – an advanced architecture for information management – in the use of its advanced digital object management features in ITU and interested UN agencies.

# 3. IPv6

3.1 WTSA-16 updated Resolution 64 ‘IP address allocation and facilitating the transition to and deployment of IPv6’ with, *inter alia*, new additional requirement for the TSB Director “*to support BDT in relevant IPv6 training for engineers, network operators and content providers that can enhance their skills and which they can further apply at their respective organizations*”.

3.2 Work continues on the ITU IPTV IPv6 Global Testbed ([I3GT](http://www.itu.int/en/ITU-T/C-I/interop/I3GT/Pages/default.aspx)) project among ITU members with the support of ITU Secretariat to test various aspects of ITU-T’s IPTV standards, train academia on up-to-date IPTV technologies, showcase standardized IPTV to stakeholders and also to promote IPv6 capability deployment in developing countries.

3.3 BDT continues to provide assistance to countries on the implementation of IPv6 policies and IPv6 test bed as requested by Member States e.g. IPv6 test bed for Central Africa; IPv6 training workshop for Eastern and Southern Africa; Supporting IPv6 implementation in Asia-Pacific region etc..

3.4 In partnership with APNIC, BDT and the Ministry of ICT of Thailand co-organized the ITU Asia-Pacific Centre of Excellence (ITU ASP CoE) Programme on ["Internet and IPv6 Infrastructure Security”](http://www.itu.int/en/ITU-D/Regional-Presence/AsiaPacific/Pages/Events/2016/May-IPv6-Thailand/IPv6.aspx) for the Asia-Pacific Region from 23 to 27 May 2016. This training was part of the Broadband Access programme under the auspices of the ITU ASP CoE. In addition, technical support was provided in September 2016 to Cambodia for the transition from IPv4 to IPv6.

# 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)](http://www.itu.int/council/groups/CWG-internet/index.html) is currently conducting Online Open Consultations on the “Developmental Aspects of the Internet”, to be followed by a physical open consultation meeting on 3 February 2017. The ninth meeting of the CWG will be held on 6-7 February 2017.

4.2 ITU continues to follow the issue of protecting intergovernmental organization (IGO) names and acronyms in any new gTLDs, as part of the IGO coalition composed of approximately 35 IGOs including OECD, UN, UPU, WHO, WIPO, and World Bank. In June 2016, in coordination with the executive heads of IGOs, the Secretary-General of the United Nations sent a letter to the Foreign Ministers of all 193 Member States of the Organization, asking for their assistance with respect to the protection of IGO names and acronyms on the Domain Name System. The Secretary General of ITU also joined this executive coalition and supported the Secretary-General of the United Nations on this important matter.

4.3 Regarding the issue of possible perceived mapping of the ITU-T E.164 numbering plan into the DNS (the .tel gTLD issue), ITU-T SG2 is still awaiting contributions from ITU-T membership after a call for contributions was made in January 2016.

# 5. ENUM

[Updated Information on ENUM](http://www.itu.int/ITU-T/inr/enum/) is being maintained by ITU-T. This includes information on Approved ENUM Delegations and on ENUM trials.

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

6.1 BDT continues to provide assistance to countries on the creation of national IXPs, and on achieving efficient and cost-effective regional Internet connectivity by e.g. developing model interconnection as a basis for formulating National and Regional IXPs; supporting strengthening capabilities of the national IXPs (Montenegro) and the National Internet Exchange in Timor Leste; developing a new publication on “Internet Exchanges” including Renewable Energies for Rural Communications etc.

6.2 BDT organised the [“IV Regional Forum on Inter-connectivity & Reduction of telecommunication service prices and Internet access cost”](http://www.itu.int/en/ITU-D/Regional-Presence/Americas/Pages/EVENTS/2016/15549.aspx) on 11-12 August 2016 in Tegucigalpa, Honduras, where case studies of national IXP implementation in the Region were discussed, as well as the related benefits and future projects.

6.3 ITU-T SG3 Recommendation [ITU-T D.52](http://www.itu.int/md/meetingdoc.asp?lang=en&parent=T13-SG03-R-0017) on “Establishing and connecting Regional IXPs to reduce costs of International internet connectivity” was approved by WTSA-16.

6.4 ITU-T SG3 continues to work on IIC, including IP peering, regional traffic exchange points, cost models, and cost of provision of services.

**7. Internet Governance Forum (IGF)**

ITU participated in the 11th IGF meeting held on 5-9 December 2016 in Guadalajara, Mexico. ITU co-organised three joint Open Forums: a) with [UN Women](http://sched.co/8hv4) on the empowering effect of the use of technology by women, showcasing the “EQUALS” Global Partnership for Gender Equality in the Digital Age; b) with [UNESCO](http://sched.co/8huE) on “How can universal connectivity be used as a catalyst for achieving the SDGs?”, elaborating on the work of the Broadband Commission and how this fits into the UN efforts towards the implementation of the SDGs; and c) with other [WSIS Action Line facilitators](http://sched.co/8hv7) on the WSIS Action Lines supporting the implementation of the SDGs through national, regional and global perspectives. ITU Deputy Secretary-General represented ITU at the IGF 2016 Zero Day High-Level Meeting themed “Achieving social inclusion: A common goal for the Internet community" and the IGF 2016 Opening Ceremony/Session. ITU further participated as a speaker in some 11 sessions organised by various stakeholders.

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