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Report by the Secretary-General

ITU INTERNET ACTIVITIES: RESOLUTIONS 101, 102, 133 AND 180

Summary

This report summarizes ITU's activities related to Plenipotentiary Resolution 101 (Rev. Guadalajara, 2010): "Internet Protocol-based Networks"; Resolution 102 (Rev. Guadalajara, 2010): "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. Guadalajara, 2010): "Roles of administrations of Member States in the management of Internationalized (multilingual) domain names"; and Resolution 180 (Guadalajara, 2010): Facilitating the transition from IPv4 to IPv6 .

Action required

The Council is invited to **note** the report.

References

[Resolution 101 \(Rev. Guadalajara, 2010\)](#), [Resolution 102 \(Rev. Guadalajara, 2010\)](#), [Resolution 133 \(Rev. Guadalajara, 2010\)](#), [Resolution 180 \(Guadalajara, 2010\)](#), [Council Resolution 1282 \(MOD 2008\)](#), [Resolution 1305 \(2009\)](#), [Resolution 1336 \(2011\)](#), [Resolution 1344 \(2012\)](#); [WTSA-12 Resolutions 47, 48, 50, 52, 59, 64, 69, 75 \(Rev. Dubai, 2012\)](#); [WTDC-10 Programme 2, Resolutions 20, 30, 45 \(Rev. Hyderabad, 2010\) and 63 \(Hyderabad, 2010\)](#); [Council Documents C99/51, C2000/27, C2000/27Add.A, C2000/27Add.B, C01/EP/8, C02/46, C03/27, C04/28, C05/32, C05/EP/10, C06/4, C07/42, C08/32\(Rev.1\), C09/49, C10/13, C11/31, C12/28, C13/62](#)

1. Introduction

This report describes ITU activities related to the 2010 Plenipotentiary Resolutions 101, 102, 133 and 180 since Council 2013.

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.

2.1.1 ITU-T SG13 approved new Recommendations ITU-T Y.3043 and Y.3044 on Smart Ubiquitous Networks, Y.3022, Y.3032 and Y.3033 on Future Networks, Y.2723, Y.2724 and Y.2725 on NGN security, and consented to Y.3300 on Software Defined Networking.

2.1.2 ITU-T SG15 is progressing its work on G.hn (Home Networking), G.hnem (Home Networking Energy Management) and G.fast (Fast Access to Subscriber Terminals). Recommendation ITU-T G.9701 was consented to in December 2013. Recommendations on network/equipment management, protection switching to enhance resilience, network/equipment architecture, etc. for Ethernet and MPLS-TP have been realized and the work is continuing in collaboration with IEEE and IETF respectively.

2.1.3 ITU-T SG12 approved Recommendations ITU-T P.1501 “subjective testing methodology for web browsing”, E.804 “QoS Aspects for Popular Services in Mobile Networks”, G.1031 “QoE factors in web-browsing”, and G.1030 “Estimating end-to-end performance in IP networks for data applications”.

2.1.4 ITU-T SG5 approved Recommendation ITU-T L.1430 which provides a framework to measure reductions in Green House Gas emissions and energy consumption resulting from implementations of ICT projects including smart buildings, smart transport, and telepresence or videoconferencing services.

2.1.5 ITU-T SG16 approved Recommendation ITU-T H.810 “Interoperability design guidelines for personal health systems” and continues working on H.86x on Multimedia e-health data exchange services and standardizing full interoperability between telepresence systems.

2.1.6 ITU-T SG17 is the lead study group on telecommunication security and identity management. More information on ITU-T SG17 related activities can be found in Document [C14/23](#).

2.1.7 Standardization activities on Internet of Things (IoT) progressed in various ITU-T study groups with the approval of Recommendations ITU-T Y.2060 “Overview of the IoT”, Y.2069 “Terms and definitions for the IoT”, Y.2061 “Requirements for the support of machine-oriented communication applications in the NGN environment”, Y.2062 “Framework of object-to-object communication for ubiquitous networking in NGN”, Y.2063 “Framework of the web of things (WoT)”, Y.2064 “Energy saving using smart objects in home networks”, F.747.2 “Deployment guidelines for USN applications and services for mitigating the climate change”, F.747.3 “Requirements and functional model for ubiquitous network robot platform to support USN applications and services” and F.747.1 “Capabilities of USN for supporting requirements of smart metering systems”.

2.1.8 The [Focus Group on Machine-to-Machine](#) completed its work with five deliverables to ITU-T SG11 in July 2014: (1) M2M standardization activities and gap analysis: e-health; (2) M2M enabled ecosystems: e-health; (3) M2M use cases: e-health; (4) M2M service layer: Requirements and architectural framework; and (5) M2M service layer: APIs and protocols guideline.

2.2 Twelve [workshops](#) have been organized by TSB since Council 2013 in order to raise awareness and facilitate discussions on NGN-related topics.

2.3 BDT is involved in various activities to integrate IP-based applications in telecommunication networks.

2.3.1 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](#).

2.3.2 BDT is 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. e.g. Mobile WiMax Broadband Network, standard IEEE802.16e, was implemented in Djibouti in December 2013.

2.4 ITU-R approved Recommendations ITU-R M.2012-1 “Detailed specifications of the terrestrial radio interfaces of IMT-Advanced” and ITU-R M.2047-0 “Detailed specifications of the satellite radio interfaces of IMT-Advanced”.

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

3. IPv6

3.1 The ad hoc group (AHG) of ITU-T SG2 continues to propose the methodology and work items needed to pursue the implementation of the parts of WTS-12 Resolution 64 relevant to ITU-T SG2. Its next meeting will be during the next SG2 meeting (28 May – 6 June 2014). At its meeting in May 2013, ITU-T SG3 requested that SG2 set up a joint rapporteur group to study Resolution 64 and submitted a terms of reference for review.

3.2 Work continues on the global IPTV IPv6 test bed set up in 2013 among ITU members with the support of ITU secretariat to test interoperability of IPTV equipment/services as well as other IPv6-based technologies, and to also promote IPv6 capability deployment in developing countries. Two organizations COSTECH (Rwanda) and CSIR (South Africa) have recently joined the test bed – now called [I3GT](#).

3.3 BDT is involved in many activities aimed at fostering the adoption of IPv6.

3.3.1 Several [events](#) dealing with technical, policy and economic aspects of the adoption of IPv6 were organized by BDT, often in close collaboration with various organizations including the Regional Internet Registries.

3.3.2 BDT is working on a collaboration with NAV6 (National Advanced IPv6 Centre), Malaysia in order to implement the IPv6 project: “IPv6 Country Readiness Assessment and Capacity Building”. The main objectives include: (a) IPv6 deployment – country readiness assessment (b) human capacity building to better facilitate IPv4-IPv6 transition, and (c) establishment of a IPv6 Taskforce (in the countries that do not have one) to facilitate the drafting of national plans on IPv6 deployment.

3.3.3 Activities related to Technical Assistance on IPv6 issues include the implementation of an IPv6 test bed in Côte d’Ivoire, assistance to support Yemen on IPv6 integration/deployment and a national awareness campaign for IPv6 strategy, support for IPv6 deployment in the Americas region and development of an IPv6 Implementation guide at the end of 2013 to support developing countries.

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 \(CWG-Internet\)](#) held two meetings - its third meeting on 11-12 November 2013 and fourth meeting on 3-4 March 2014. More information can be found in [Document C14/39](#).

4.2 Building upon the discussion at WTPF-13 and subsequently at Council 2013, the ITU Secretary-General launched “[Open Talks](#)”, a series of informal consultations on international Internet-related public policy issues, in variety of informal, open and inclusive discussion formats: (a) World Café, 8 October 2013 in Geneva, Switzerland; (b) Town Hall meeting, 25 October 2013 at IGF Bali 2013; and (c) online crowdsourcing platform launched on 15 October 2013.

4.3 At Council 2012, the ITU Secretary-General was strongly urged to continue his efforts to protect Intergovernmental Organization (IGO) names and acronyms in any new gTLDs. Recent developments and activities are summarized below.

4.3.1 The IGO coalition, composed of approximately 40 IGOs, including ITU, has sustained its efforts to discuss this issue with various constituencies of ICANN, such as the GAC, new gTLDs Program Committee (NGPG), and a bilateral meeting with Mr Fadi Chehadé, President and CEO of the ICANN.

4.3.2 Since the 45th ICANN meeting in Toronto (April 2013), the GAC has issued multiple advices to the ICANN Board indicating that IGOs are in an objectively different category to other rights holders thus warranting special protection by ICANN (GAC Communiqué, ICANN 47). ICANN's final decision on this issue has not been made yet, but the GAC, together with IGOs, remains committed to continuing the dialogue with other ICANN communities on finalizing the modalities for permanent protection of IGO acronyms at the second level, by putting in place mechanisms, including allowing an IGO timely opportunity to effectively prevent potential misuse and confusion at no cost or at a nominal cost to the IGO (GAC Communiqué, ICANN 48).

4.4 In October 2013, TELNIC, the domain name registry operator for .tel gTLD, launched a new service providing all-numeric domain names. This raises a number of policy, legal, and practical implications on the potential usage of all-digit strings, not only under .tel, but also under any new telephony-related gTLDs, because of the possible perceived mapping of the ITU-T E.164 numbering plan into the DNS, without appropriate procedures to ensure protection for the rights of assignees of ITU-T E.164 numbers.

ITU-T SG2, responsible for implementation and further development of ITU-T E.164, at its September 2013 meeting, invited the TSB Director to initiate a correspondence with ICANN seeking assistance in clarifying related issues. On 11 October 2013, TSB Director sent a letter to ICANN highlighting the concerns of ITU membership, followed by a conference call between the ITU and ICANN. As follow up, on 3 February 2014, ITU provided ICANN with a brief explanation of ITU-T E.164 and some preliminary thoughts on the validation requirements.

5. Internationalized Domain Names (IDN)

Technical assistance was provided to the Arab Region for their establishment of a new .arab gTLD and its Arabic equivalent.

6. ENUM

[Updated Information on ENUM](#) is being maintained by ITU-T. This includes information on Approved ENUM Delegations and on ENUM trials.

7. International Internet Connectivity (IIC)/Internet Exchange Points (IXPs)

7.1 BDT continues to provide assistance to the East African Community (EAC) and South African Development Community (SADC) countries on the creation of national IXPs, and on achieving efficient and cost-effective regional Internet connectivity. An IXP Feasibility Study for the East African Region is ongoing.

7.2 At its May 2013 meeting, ITU-T SG3 approved Supplement 2 to Recommendation D.50, which provides guidelines for reducing the costs of International Internet Connectivity.

8. Internet Governance Forum (IGF)

At the 8th IGF in Bali, Indonesia, in October 2013, three Dynamic Coalition meetings and several workshops, organized or co-organized by ITU, aimed at raising awareness of ITU initiatives, particularly in the areas of Internet and Climate Change, Accessibility and Disability, and Child Online Protection. An ITU-UNICEF Joint Open Forum on Child Online Protection was organized in order to officially launch a public consultation on the updated version of the Child Online Protection Guidelines for Industry. Furthermore, one of the phases of the ITU Secretary-General's 'Open Talks' was also held in an open and inclusive town hall meeting format.
