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PROPOSALS FOR THE WORK OF THE CONFERENCE

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RESOLUTION 101 (REV. ~~GUADALAJARA, 2010~~BUSAN, 2014)

Internet Protocol-based networks

The Plenipotentiary Conference of the International Telecommunication Union
(~~Guadalajara, 2010~~Busan, 2014),

recalling

- a) Resolution 101 (Rev. ~~Antalya, 2006~~Guadalajara, 2010) of the Plenipotentiary Conference;
- b) the outcomes of the Geneva (2003) and Tunis (2005) phases of the World Summit on the Information Society (WSIS), especially §§ 27 c) and 50 d) of the Tunis Agenda for the Information Society, relating to international Internet connectivity;
- c) the WSIS+10 High-Level Event, in its Statement (Geneva, 2014) on the implementation of WSIS outcomes and the WSIS Vision Beyond 2015, determined that one of the priority areas that must be addressed by the Post-2015 Development Agenda must be: “(...) Encouraging the full deployment of IPv6 to ensure the long-term sustainability of the addressing space, including in light of future developments in the Internet of Things”;
- d) No. 196 of the ITU Convention, which stipulates that telecommunication standardization study groups shall pay due attention to the study of Questions and to the formulation of recommendations directly connected with the establishment, development and improvement of telecommunications in developing countries at both the regional and international levels;
- e) Resolution 23 (Rev. ~~Hyderabad, 2010~~Dubai, 2014) of the World Telecommunication Development Conference (WTDC), on Internet access and availability for developing countries and charging principles for international Internet connection;

ef) Resolution 69 (~~Johannesburg, 2008~~Rev. Dubai, 2012) of the World Telecommunication Standardization Assembly (WTSA), on non-discriminatory access and use of Internet resources;

fg) Recommendation ITU-T D.50, on general ~~tariff-charging~~ principles – principles applicable to international Internet connection;

gh) Resolution 64 (~~Johannesburg, 2008~~Rev. Dubai, 2012) of WTSA, on IP address allocation and encouraging the deployment of IPv6,

aware

a) that one of the purposes of the Union is to promote the extension of new telecommunication technologies to all the world's inhabitants;

b) that, in order to fulfil its purposes, the Union should, among other things, facilitate the worldwide standardization of telecommunications, with a satisfactory quality of service,

considering

a) that advances in the global information infrastructure, including the development of Internet Protocol (IP)-based networks and especially the Internet, and future IP developments, continue to be an issue of crucial importance, as an important engine for growth in the world economy and prosperity in the twenty-first century;

b) that the increased use of the Internet introduces new additional applications in telecommunication/information and communication technology (ICT) services based on its highly advanced technology, e.g. the utilization of social networks, steady progress in adopting cloud computing, and e-mail and text messaging, voice over IP, video, and real-time TV (IPTV) over the Internet, ~~which has become commonplace,~~ continue to record high levels of use, even though there are challenges regarding quality of service, uncertainty of origin, and the high cost of international connectivity;

c) that current and future IP-based networks and future IP developments will continue to introduce dramatic changes in the way we acquire, produce, circulate and consume information,

d) that broadband development and rising demand for Internet access being experienced in developing countries lead to the need for affordable international connectivity;

e) that Internet service providers (ISPs) of developing countries have voiced their concern that international Internet connection agreements have not struck the balance that is needed with respect to charging between developed and developing countries;

f) that costs for operators, whether regional or local, depend heavily on the type of connection (transit or peering) and the availability and cost of the backhaul network;

g) that carrier costs are an obstacle to Internet development in developing countries;

h) that Opinion 1 (Geneva, 2013) of the World Telecommunication/ICT Policy Forum deems that the establishment of Internet Exchange Points (IXP) is a priority to tackle connectivity problems, improve service quality and reduce interconnection costs, and that IXPs play an important role in rolling out Internet infrastructure and achieving the general objectives of improving quality, increasing network connectivity and resilience, fostering competition and reducing interconnection costs;

i) that a rise in international connectivity costs shall lead to lags in Internet access and benefits;

j) that it is necessary to review the models currently being applied in international interconnection;

k) Resolution 1 “Special measures for landlocked developing countries (LLDC) and small-island developing States (SIDS) for access to international optical fibre networks” of the World Conference on International Telecommunications (WCIT-12),

considering further

a) that, at the 2014 ITU Council, the Secretary General presented a Report on Activities relative to Internet Protocol-based networks (IP), the development of next-generation networks (NGN) and the Internet of the future, including policymaking and regulatory issues, that inform about international cooperation activities and initiatives undertaken by ITU;

a**b**) that the ITU Telecommunication Development Sector (ITU-D) has made significant progress and carried out several studies on the promotion of infrastructure and the use of the Internet in developing countries under its 2002 Istanbul Action Plan, through human capacity building efforts such as its Internet training centre initiative, and through the outcomes of WTDC-06, which endorsed the continuation of these studies, and called on ITU-D to give assistance to developing countries, including least developed countries, small island developing states and landlocked developing countries, to set up high-speed backbone networks for the Internet, as well as national, subregional and regional access points for the Internet, and WTDC-14 which confirmed that Internet protocol issues, such as NGN interconnection, VoIP, access technologies for broadband telecommunications, including international mobile telecommunications (IMT) and strategies to switch existing networks to NGN for developing countries, continue to be examined;

a**c**) that studies are ongoing in the ITU Telecommunication Standardization Sector (ITU-T) on IP-based network issues, including service interoperability with other telecommunication networks, numbering, signalling requirements and protocol aspects, security and infrastructure component costs, issues associated with the evolution to next-generation networks (NGN), including the migration from existing networks to NGNs, and implementation of the requirements of Recommendation ITU-T D.50;

a**d**) that the general cooperation agreement between ITU-T and the Internet Society (ISOC)/Internet Engineering Task Force (IETF), as referred to in Supplement 3 to the ITU-T Series A recommendations, continues to exist,

recognizing

a) that IP-based networks have evolved to a widely accessible medium used for global commerce and communication, and there is therefore a need to identify the global and regional activities related to IP-based networks with respect to, for example:

- i) infrastructure, interoperability and standardization;
- ii) Internet naming and addressing;
- iii) dissemination of information about IP-based networks and the implications of their development for ITU Member States, particularly the developing countries;

b) that significant work on IP-related issues and the future internet¹ is being conducted within ITU and many other international bodies;

c) that the quality of service of IP-based networks should be consistent with ITU-T recommendations and other recognized international standards;

d) that it is in the public interest that IP-based networks and other telecommunication networks should be both interoperable and provide, at a minimum, the level of quality of service provided by traditional networks, consistent with ITU-T recommendations and other recognized international standards;

e) that IP-based networks must provide security arrangements in line with the progress that is being achieved in other international organizations,

requests the ITU Telecommunication Standardization Sector

to continue its collaborative activities on IP-based networks with ISOC/IETF and other relevant recognized organizations, in respect of interconnectivity with existing telecommunication networks and migration to NGN and future networks,

requests the three Sectors

to continue to consider and update their ~~future~~ work programmes on IP-based networks, especially with respect to security and on migration to NGN and future networks,

resolves

1 to ~~explore ways and means for~~ promote actions that lead to greater collaboration and coordination between ITU and relevant organizations² involved in the development of IP-based networks and the future internet, through cooperation agreements, as appropriate, in order to increase the role of ITU in Internet governance and in those Internet issues that are relevant to the 11 WSIS Action Lines and the priorities areas to be addressed in the implementation of WSIS Outcomes Beyond 2015 so as to ensure maximum benefits to the global community;

2 that ITU shall fully embrace the opportunities for telecommunication/ICT development that arise from the growth of IP-based services, in conformity with the ITU purposes and the outcomes of the Geneva (2003) and Tunis (2005) phases of WSIS, taking into account the quality and security of services and the affordability of international connectivity for developing countries, especially for LLDC and SIDS;

3 that ITU shall clearly identify, for its Member States ~~and~~, Sector Members, multistakeholders and ~~for~~ the general public, the range of Internet-related issues that fall within the responsibilities incumbent on the Union under its basic texts and the activities in the WSIS outcome documents and the WSIS+10 Vision for WSIS Beyond 2015, where ITU has a role;

4 that ITU shall continue to collaborate with other relevant organizations to ensure that growth in IP-based networks, along with and taking into consideration traditional networks,

¹ e.g. ITU-T Kaleidoscope event on *Beyond the Internet? – Innovations for future networks and services*, held in Pune, India in December 2010

² Including, but not limited to, the Internet Corporation for Assigned Names and Numbers (ICANN), the regional Internet registries (RIRs), the Internet Engineering Task Force (IETF), the Internet Society (ISOC) and the World Wide Web Consortium (W3C), on the basis of reciprocity.

delivers maximum benefits to the global community, and shall continue to participate, as appropriate, in any directly related new international initiatives, particularly the recent initiative in cooperation with the United Nations Educational, Scientific and Cultural Organization (UNESCO) on the United Nations Broadband Commission formed for this purpose;

5 to continue the study of international Internet connectivity as an urgent matter, as called for in § 50 d) of the Tunis Agenda, and to call upon ITU-T, in particular Study Group 3 which has responsibility for Recommendation ITU-T D.50, and to continue working on the supplement that will have to be submitted to the next WTSA, for its adoption; to complete as soon as possible its studies that have been ongoing since WTSA-2000,

6 especially take into account the provisions of Resolution 23 (Rev. Dubai, 2014) of the 2014 World Telecommunication Development Conference (WTDC-14), in particular conducting studies on the international Internet connection cost structure for developing countries, with emphasis on the influence and effects of the connection model (transit and peering) and a review of the current models applied in international interconnection,

instructs the Secretary-General

1 to prepare an annual report to the ITU Council with the appropriate input from Member States, Sector Members, the three Sectors and the General Secretariat, that provides a comprehensive summary both of the activities that ITU is already undertaking in regard to IP-based networks and any changes thereto, including the development of NGNs and future networks, and of the roles and activities of other relevant international organizations, describing their involvement in IP-based network issues; the report shall indicate the degree of cooperation between ITU and these organizations, drawing the required information wherever possible from existing sources, and containing concrete proposals on improving ITU activities and such cooperation, and shall be distributed widely among the Member States and Sector Members, the advisory groups of the three Sectors and other groups involved one month before the Council session;

2 based on this report, to continue collaborative activities related to IP-based networks, especially those related to the implementation of the relevant outcomes of the two phases of WSIS, Geneva 2003 and Tunis 2005, and to consider the WSIS+10 Statement on the implementation of the WSIS and the emergence of new challenges to achieve the goals of the Post-2015 Development Agenda;

~~3 — to propose to the 2011 session of the Council that a special forum under Resolution 2 (Rev. Guadalajara, 2010) of this conference or workshop be convened in the first quarter of 2013 to discuss all the issues raised in this resolution and also in Resolutions 102 and 133 (Rev. Guadalajara, 2010) of this conference, preferably collocated with other relevant major ITU events,~~

invites the Council

to consider the above-mentioned report and take into account comments, if any, made by the advisory groups of the three Sectors through their respective Bureau Directors on implementation of this resolution and, when appropriate, undertake further steps, and to study the Secretary-General's proposal calling for a forum under Resolution 2 (Rev. Guadalajara, 2010) or workshop to address all issues related to this resolution and to Resolutions 102 and 133 (Rev. ~~Guadalajara, 2010~~ Busan, 2014) of this conference,

invites Member States and Sector Members

- 1 to participate in, and follow the progress of, the current work of the Sectors of the Union;
- 2 to increase awareness at national, regional and international level among all interested non-governmental parties and to encourage their participation in relevant ITU activities, and in any other ~~relevant~~ activities ~~emanating from relevant to~~ the Geneva (2003) and Tunis (2005) phases of WSIS ~~and with respect to the debate about the Post-2015 Development Agenda.~~

Reasons: This draft amendment suggests updating Resolution 101 on Internet Protocol-based Networks (IP) with the results linked to IP networks of the principal recent international conferences and assemblies, while incorporating aspects related to infrastructure and the international connectivity of networks.

It must be stressed that, at the 2014 ITU Council, the Secretary General submitted a Report on Activities related to Internet Protocol-based Networks (IP), the development of next-generation networks (NGN), and Internet of the future, including policymaking and regulatory issues, which provides information about the international cooperation activities and initiatives undertaken by ITU.

Meanwhile, the WSIS+10 High Level Event, in its Statement (Geneva, 2014) regarding the implementation of WSIS outcomes and the corresponding WSIS Vision Beyond 2015 (WSIS+10), determine that one of priorities that must be addressed by the Post-15 Development Agenda is: “(...) *Encouraging the full deployment of IPv6 to ensure the long-term sustainability of the addressing space, including in light of future developments in the Internet of Things.*”

Furthermore, WTDC-14 confirmed that issues relating to the Internet protocol, such as NGN interconnection, VoIP, broadband access technologies, including international mobile telecommunications (IMT), and the strategies for switching existing networks to NGN for developing countries, continue to be examined.

It is also taken into account that the development of broadband and increased demand for Internet access that developing countries are experiencing is creating the need to have affordable international connectivity and it is recognized that IP-based networks must offer security arrangements in line with the progress currently being achieved in other international organizations.

Finally, the Secretary General is instructed not only to take into account the relevant results of both phases of the World Summit on the Information Society (WSIS), but also to consider the WSIS+10 Statement on the implementation of the WSIS and the emergence of new challenges to achieve the goals of the Post-2015 Development Agenda.
