



INTERNATIONAL TELECOMMUNICATION UNION

ITU-T

TELECOMMUNICATION
STANDARDIZATION SECTOR
OF ITU

WORLD TELECOMMUNICATION STANDARDIZATION
ASSEMBLY

Dubai, 20-29 November 2012

Resolution 64 – IP address allocation and facilitating the transition to and deployment of IPv6

CAUTION !

PREPUBLISHED RESOLUTION

This prepublication is an unedited version of a recently approved Resolution. It will be replaced by the published version after editing. Therefore, there will be differences between this prepublication and the published version.

FOREWORD

The International Telecommunication Union (ITU) is the United Nations specialized agency in the field of telecommunications, information and communication technologies (ICTs). The ITU Telecommunication Standardization Sector (ITU-T) is a permanent organ of ITU. ITU-T is responsible for studying technical, operating and tariff questions and issuing Recommendations on them with a view to standardizing telecommunications on a worldwide basis.

The World Telecommunication Standardization Assembly (WTSA), which meets every four years, establishes the topics for study by the ITU-T study groups which, in turn, produce Recommendations on these topics.

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RESOLUTION 64

IP address allocation and facilitating the transition to and deployment of IPv6

(Johannesburg, 2008; Dubai, 2012)

The World Telecommunication Standardization Assembly (Dubai, 2012),

recognizing

- a) Resolutions 101 (Rev. Guadalajara, 2010), 102 (Rev. Guadalajara, 2010), 180 (Rev. Guadalajara, 2010) of the Plenipotentiary Conference, and Resolution 63 (Hyderabad, 2010) of the World Telecommunication Development Conference;
- b) that exhaustion of IPv4 addresses requires acceleration of IPv4 to IPv6 migration, which becomes an important issue for Member States and Sector Members;
- c) the result of the ITU IPv6 Group which has carried out work that was assigned to it;
- d) future work of IPv6 human capacity building is to be continued and led by BDT, in collaboration with other relevant organizations, if required,

noting

- a) that IP addresses are fundamental resources that are essential for the future development of telecommunication/information and communication technology (ICT) IP-based networks and for the world economy;
- b) that many countries believe that there are historical imbalances related to IPv4 allocation;
- c) that large contiguous blocks of IPv4 addresses are becoming scarce and that it is urgent to promote migration to IPv6;
- d) the ongoing collaboration and coordination between ITU and relevant organizations on IPv6 capacity building in order to respond to the needs of Member States and Sector Members;
- e) the progress towards adoption of IPv6 that has been made over the last few years,

considering

- a) that, among the relevant stakeholders in the Internet community, there is a need to continue discussions related to IPv6 deployment and disseminate information in this regard;
- b) that IPv6 deployment and migration is an important issue for Member States and Sector Members;
- c) that many developing countries are experiencing challenges in IPv4-IPv6 transition process including due to the limited technical skills in this area;
- d) that Member States have an important role to play in promoting the deployment of IPv6;
- e) that prompt deployment of IPv6 is increasingly urgent on account of the rapid rate of depletion of IPv4 addresses;
- f) that many developing countries want ITU-T to become a registry of IP addresses in order to give the developing countries the option of obtaining IP addresses directly from ITU, whilst other countries prefer to use the current system,,

resolves

1 to instruct Study Groups 2 and 3, each according to its mandate, to continue to study the question associated with the allocation and economic aspects of IP addresses, and to monitor and evaluate the allocation of IPv4 addresses which may be still available, returned or unused, in the interests of the developing countries;

2 to instruct Study Group 2 and 3, each according to its mandate, to study the question of IPv6 address allocation and registration for interested members and, especially, developing countries;

3 to enhance the exchange of experiences and information with all stakeholders regarding the deployment of IPv6, with the aim of creating opportunities for collaborative efforts, and to ensure that feedback exists to enrich ITU efforts to support the transition to and deployment of IPv6,

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 TSB and the Telecommunication Development Bureau (BDT), taking into consideration the involvement of those partners willing to participate and bring their expertise to assist developing countries¹, with IPv6 migration and deployment, and to respond to their regional needs as identified by the BDT, especially through capacity building programs through BDT programmes 2 and 4;

2 to maintain the website which provides information about global activities related to IPv6, to facilitate awareness-raising and the importance of IPv6 deployment for all ITU members and interested entities, and provides information related to training events being undertaken by ITU and relevant organizations (e.g. Regional Internet Registries (RIR), network operator groups and the Internet Society(ISOC));

3 to promote awareness of the importance of IPv6 deployment, to facilitate joint training activities, involving appropriate experts from the relevant entities, to provide information including roadmaps, guidelines, and to assist in the establishment of IPv6 Test bed Laboratories in developing countries in collaboration with appropriate related organisations,

further instructs the Director of the Telecommunication Standardization Bureau to take appropriate action to facilitate the activities of SG2 and SG3 in the area of IP addresses and to report annually to Council and to WTSA 2016, regarding the progress on action taken with respect to *resolves* above.

invites Member States and Sector Members

1 through the knowledge gained in resolves 3, to promote specific initiatives at the national level, which foster interaction with governmental, private and academic entities and civil society for the purposes of the information exchange necessary for the deployment of IPv6 in their respective countries;

2 to ensure that newly deployed communication and computer equipment has IPv6 capability, as appropriate, taking into consideration a necessary period for the transition from IPv4 to IPv6.

invites Member States

¹ These include the least developed countries, small island developing states, landlocked developing countries and countries with economies in transition.

to develop national policies to promote the technological update of systems in order to ensure that the public services provided utilizing the IP protocol and the communications infrastructure and relevant applications of the Member States are compatible with IPv6.