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| World Telecommunication Standardization Assembly (WTSA-20)Geneva, 1-9 March 2022 |  |
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| PLENARY MEETING | Addendum 12 toDocument 39-E |
|  | **24 March 2021** |
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| Member States of the Inter-American Telecommunication Commission (CITEL) |
| Proposed modification of Resolution 64 |
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| **Abstract:** | Regarding the assignment of IP addresses and the measures necessary for its advancement, it is currently not advisable to talk about the transition from IPv4 to IPv6, but rather to think about actions to accelerate the deployment of the IPv6 protocol. In this sense, to ensure the continuity of growth and stability of the Internet at the regional and global level, it is necessary to promote and establish mechanisms to encourage the adoption of this protocol. Therefore, it is considered necessary to incorporate these concepts and mechanisms in WTSA Resolution 64 (Rev. Hammamet, 2016) on Internet Protocol address allocation and facilitating the transition to and deployment of IPv6. |

Introduction

IPv6 deployment has become a strategic aspect to develop telecommunication networks and connect the unconnected. Moreover, the large deployment of communication infrastructure, such as 4G/LTE and 5G networks, where data traffic is essential, require the massive use of addresses, and IPv6 serves as the mechanism to provide those devices’ required Internet connectivity.

Proposal

In light of the foregoing, we propose adjusting and updating the text of Resolution 64 to put a premium on the allocation of IP address space and monitor the available Internet numbering resource allocation. Furthermore, we propose entrusting the ITU’s Standardization Bureau with maintaining and updating the website which provides information about global activities related to IPv6 in order to facilitate awareness-raising and highlight the importance of IPv6 deployment for all ITU Members.

MOD IAP/39A12/1

RESOLUTION 64 (Rev. Geneva, 2022)

Internet protocol address allocation and promotion to facilitate the deployment of IPv6

(Johannesburg, 2008; Dubai, 2012; Hammamet, 2016;Geneva, 2022)

The World Telecommunication Standardization Assembly (Geneva, 2022),

recognizing

*a)* Resolutions 101 (Rev. Dubai, 2018), 102 (Rev. Dubai, 2018) and 180 (Rev. Dubai, 2018) of the Plenipotentiary Conference, and Resolution 63 (Rev. Buenos Aires, 2017) of the World Telecommunication Development Conference;

*b)* that the exhaustion of IPv4 addresses calls for the acceleration of IPv6 deployment, which is an important issue for Member States and Sector Members;

*c)* the result of the ITU IPv6 Group, which has carried out the work that was assigned to it;

*d)* that future work on IPv6 human capacity building is to be continued and led by the Telecommunication Development Bureau (BDT), in collaboration with other relevant organizations, if required;

*e)* that, in order to ensure the continuity of Internet growth and stability at the regional and global levels, it is necessary to promote and encourage the deployment of IPv6,

considering

*a)* the progress towards adoption of IPv6 that has been made over the last few years,

*b)* 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;

*c)* that IPv6 deployment is an important issue for Member States and Sector Members;

*d)* that many developing countries[[1]](#footnote-1)1 are still facing challenges in the IPv6 deployment process, including due to the limited technical skills in this area;

*e)* that in a robust deployment of new communication infrastructure such as 4G/LTE and 5G networks, where data traffic is essential, IPv6 serves as a mechanism to provide those networks required Internet connectivity;,

resolves

1 to instruct Study Groups 2 and 3, each according to its mandate, to analyse statistics for the purpose of assessing the pace of IPv6 address allocation and registration for interested members and, especially, developing countries, in collaboration with all relevant stakeholders;

2 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 the enhancement of technical skills, and to ensure that feedback exists to enrich ITU efforts to support the 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 the Telecommunication Standardization Bureau (TSB) and BDT, taking into consideration the involvement of those partners willing to participate and bring their expertise to assist developing countries with IPv6 deployment, and respond to their regional needs as identified by BDT, taking into account Resolution 63 (Rev. Buenos Aires, 2017);

2 to update and maintain the website which provides information about global activities related to IPv6, in order to facilitate awareness-raising and highlight the importance of IPv6 deployment for all ITU members and interested entities, as well as 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, facilitate joint training activities, involving appropriate experts from the relevant entities, provide information, including roadmaps and guidelines, and assist in the continued establishment of IPv6 test-bed laboratories in developing countries in collaboration with appropriate relevant organizations, and to promote awareness of the need for IPv6 deployment with regard to IoT given the substantial demand for IP addresses for IoT devices;

4 to support BDT in relevant IPv6 training for engineers, network operators and content providers, mainly in developing countries, that can enhance their skills and which they can further apply to planning, deployment, and operation at their respective organizations,

further instructs the Director of the Telecommunication Standardization Bureau

to report to the ITU Council and also to the 2024 world telecommunication standardization assembly, regarding the progress on action taken with respect to *resolves* above,

invites Member States and Sector Members

1 through the knowledge gained under this resolution, 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 collaborate with relevant international organizations, including the Internet community (e.g., RIRs, the Internet Engineering Task Force (IETF) and others), to foster and boost IPv6 deployment and report on its progress;

3 faced with the need to expand their technical knowledge on IPv6 deployment, to coordinate with their respective RIRs and other relevant organizations in order to enhance IPv6 knowledge in each region through capacity building,

invites Member States

1 to develop national policies to promote the technological update of systems, in order to ensure that the public services provided via broadband and the communications infrastructure and relevant applications of the Member States are available, accessible and compatible with IPv6;

2 to consider the possibility of national programmes to encourage Internet service providers (ISPs) and other relevant organizations to deploy IPv6;

3 to consider using government procurement requirements to encourage deployment of IPv6 among ISPs and other relevant organizations, if appropriate.

1. 1 These include the least developed countries, small island developing states, landlocked developing countries and countries with economies in transition. [↑](#footnote-ref-1)