

**WTPF-IEG/3/28**

**DRAFT OPINION (USA-2) IN SUPPORT OF CAPACITY BUILDING FOR THE DEPLOYMENT OF IPv6 AND TRANSITION FROM IPv4**

The fifth World Telecommunication Policy Forum (Geneva, 2013),

 *considering*

a) WTSA Resolution 64 (Rev. Dubai, 2012) on the subject of IP address allocation and facilitating the transition to and deployment of IPv6 which, *inter alia*, instructs the Director of the TSB in close collaboration with the Director of the BDT to:

1) continue the ongoing activities between the Telecommunication Standardization Bureau (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 countries with IPv6 migration and deployment, and to respond to their regional needs as identified by the BDT, especially through capacity building programs;

2) 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 entities in the Internet community (e.g. Regional Internet Registries (RIRs), network operator groups, and the Internet Society (ISOC));

3) promote awareness of the importance of IPv6 deployment, to facilitate joint training activities involving appropriate experts from the relevant entities, and 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 organizations;

4) take appropriate action to facilitate the activities for Study Group 2 and Study Group 3 in the area of IP addresses and to report annually to the ITU Council and to WTSA 2016;

b) Plenipotentiary Resolution 180 (Guadalajara, 2010) on Facilitating the transition from IPv4 to IPv6;

c) the completion of the activity by the IPv6 working group, that was established by the Council at its 2009 session (see document C09/93);

d) WTPF Opinion 5 (Lisbon, 2009) calling for acceleration of activities related to WTSA Resolution 64;

e) the work of BDT and TSB already undertaken on the subject of IPv6;

f) that IPv6 address allocation and deployment is an important issue for Member States and Sector Members;

g) the ongoing work of the RIRs, ISOC, and other stakeholders in the areas of IPv4, IPv6, and relevant capacity building,

 *recognizing*

a) that the IANA functions operator has allocated the last IPv4 blocks to the RIRs;

b) that some RIRs have already exhausted or are close to exhausting their allocations and that all other RIRs are expected to exhaust their allocations within a few years;

c) that migration to IPv6 is gaining speed and that many prominent international web-based businesses have already implemented IPv6 portals;

d) that IPv6 extremely large address space enables global connectivity to many more electronic devices, mobile phones, laptops, in-vehicle computers, televisions, cameras, building sensors, medical devices, etc;

e) that IPv6‘s security, when enabled and configured with the appropriate key infrastructure, in form of IPsec, will enhance authentication, encryption, and integrity protection at the network layer;

f) that, nevertheless, the proportion of IPv6 traffic on the Internet remains very small;

g) that, because of incompatibility between IPv4 and IPv6, parallel (dual stack) operation is required and there will be a need for IPv4 addresses for an undetermined period until a critical mass of web-based services is available via IPv6 addresses, thereby allowing IPv4 to be taken out of service;

h) that new entrant Internet service providers may continue to require access to IPv4 addresses until that undetermined time when they can be taken out of service;

i) that consistent with the policies developed through the RIRs, all IP numbers continue to be allocated for use on a needs basis and should be returned to the numbering pool when no longer needed,

 *recognizing further*

a) that the RIR’s are developing policies to manage the transfer of legacy address space, underpinned by needs based demand for IPv4 addresses;

b) that needs based address allocation should continue to underpin IP address allocation, irrespective of whether they are IPv6 or IPv4 addresses;

c) that all IPv4 transaction be reported to the relevant RIRs, including transactions of legacy addresses that are not necessarily subject to the policies of the RIRs regarding transfers, as supported by the policies developed by the RIR communities;

d) that issues regarding IPv4 can be minimized by accelerating the transition to IPv6,

 *is of the view*

a) that every effort should be made to encourage and facilitate the transition to IPv6;

b) that policies of inter RIR transfer across all RIRs should work to ensure that such transfers are needs based and be common to all RIRs irrespective of the address space concerned,

 *encourages*

the TSB and BDT to continue their work related to WTSA Resolution 64 in collaboration with the RIRs, ISOC, ICANN, the IETF and all other stakeholders as articulated in PP-10 Resolution 102 footnote 1,

 *invites*

a) Member States to consider policies and incentives to encourage, facilitate and support the fastest possible adoption and migration to IPv6 within their jurisdictions;

b) Members to offer their Internet services via IPv6 as quickly as possible.