

RESOLUTION 180 (Guadalajara, 2010)

Facilitating the transition from IPv4 to IPv6

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

considering

- a) Resolution 64 (Johannesburg, 2008) of the World Telecommunication Standardization Assembly, which encourages the deployment of IPv6;
- b) Opinion 5 (Lisbon, 2009) of the World Telecommunication Policy Forum, on capacity building in support of the adoption of IPv6;
- c) Resolution 63 (Hyderabad, 2010) of the World Telecommunication Development Conference, on IP address allocation and encouraging the deployment of IPv6 in the developing countries,

considering further

- a) that the Internet has become a leading factor in social and economic development and a vital tool for communication and technological innovation, creating a major paradigm shift in the telecommunication and information technology sector;
- b) that in view of the imminent exhaustion of IPv4 addresses and in order to ensure the stability, growth and development of the Internet, specific actions must be defined for the transition to IPv6,

noting

the decision taken by the Council at its 2009 session to set up an IPv6 working group (see Document CO9/93),

recognizing

- a) that IPv6 deployment gives an opportunity for the development of information and communication technologies (ICT), and that its early adoption is the best way to avoid the scarcity of addresses and the consequences that exhaustion of IPv4 addresses may entail, including high costs;
- b) that governments play an important part as catalyst for the transition to IPv6,

resolves

- 1 to explore ways and means for greater collaboration and coordination between ITU and relevant organizations¹ involved in the development of IP-based networks and the future

¹ 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.

internet, through cooperation agreements, as appropriate, in order to increase the role of ITU in Internet governance so as to ensure maximum benefits to the global community;

2 to step up the exchange of experiences and information with all stakeholders regarding the adoption of IPv6, with the aim of creating opportunities for collaborative efforts, and to ensure that feedback exists to enrich efforts to support the transition to IPv6;

3 to collaborate closely with the relevant international recognized partners, including the Internet community (e.g. regional Internet registries (RIRs), the Internet Engineering Task Force (IETF) and others), in order to encourage the deployment of IPv6 by raising awareness and through capacity building;

4 to assist those Member States which, in accordance with the existing allocation policies, require support in the management and allocation of IPv6 resources, pursuant to relevant resolutions;

5 that the IPv6 group undertake detailed studies of IP address allocation as requested by the Dedicated Group on international Internet-related public policy issues, both for IPv4 addresses and for IPv6 addresses,

instructs the Director of the Telecommunication Development Bureau, in coordination with the Director of Telecommunication Standardization Bureau

1 to undertake and facilitate activities under *resolves* above in order that the relevant study group of the ITU Telecommunication Standardization Sector (ITU-T) can carry out the work;

2 while assisting those Member States that require support in the management and allocation of IPv6 resources, to monitor the current allocation mechanisms (including the equitable distribution of addresses) for ITU Member States or Sector Members, and to identify and point out any underlying flaws in the current allocation mechanisms;

3 to communicate proposals for changes to existing policies, if identified under the studies above, in accordance with the existing policy development process;

4 to develop statistics on progress made with the transition, based on information that may be compiled regionally through collaboration with regional organizations,

invites Member States

1 through the knowledge gained in *resolves* 2, 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 encourage, with support from the ITU regional offices, the regional Internet registries (RIRs) and other regional organizations in coordinating research, dissemination and training actions with participation by governments, industry and the academic community in order to facilitate the deployment of IPv6 within the countries and in the region, and to coordinate initiatives between regions to promote its deployment worldwide;

3 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;

4 to ensure, in the actions they carry out regarding communication and computer equipment, that the necessary measures are taken so that new equipment has IPv6 capacity, taking into consideration a necessary period for the transition from IPv4 to IPv6,

instructs the Secretary-General

to disseminate, as appropriate, to the ITU membership and the Internet community, information on the progress achieved on the implementation of this resolution.