

TECHNICAL NOTEBOOK: “IPv6 TRANSITION STRATEGY GUIDELINES AND BEST PRACTICES”

The XXVI Meeting of Permanent Consultative Committee I: Telecommunications/Information and Communication Technologies (PCC.I),

CONSIDERING:

- a) The exhaustion of IPv4 addresses capacity;
- b) The additional demands for address space from businesses, governments and organizations and the rapidly evolving RFID technologies;
- c) The need for co-existence of IPv4 and IPv6 for some time into the future and the need for dual stacks in all kinds of equipment to facilitate interworking;
- d) That it may be somewhat late for some Member States to put into place a transition strategy to IPv6 and that there are more developed economies that have studied this issue and have developed transition strategies which in most cases they may be willing to share;
- e) That IPv6 discussions have been ongoing within the Working Group on Deployment of Technologies and Services (WGDTs);
- f) That the ongoing mandate of the Rapporteurship on Telecommunications Numbering, Portability and Addressing includes:
 - i) To identify and evaluate technical issues related to Numbering Plans for the evolution of networks and new services,
 - ii) To identify recommendations of the ITU and other bodies and forums, as appropriate,
 - iii) To establish liaisons with other standard bodies and industry forums, as necessary, to advance the work,
 - iv) To carry out studies on the impact of new services on converging networks,
 - v) To study issues related to services, numbering systems and addressing,
 - vi) To draw up best practices guidelines of Numbering Plans,
 - vii) To study and assess technical issues related to portability.

RESOLVES:

1. To create a Technical Notebook on “IPv6 Transition Strategy Guidelines and Best Practices” in accordance with the work item discussed in the previous PCC.I meeting held in Asuncion, Paraguay, August 5 to 8, 2014, as a repository of relevant and current IPv6 strategies, guidelines and best practices reference material for PCC.I information sharing and as source material for future external communications (e.g., liaisons, IAPs),

¹ CCP.I-TIC/doc. 3616/15 rev.1

2. To urge the Member States and Associate Members to contribute to its contents and utilize this Notebook for the purposes of sharing information, raising awareness, and drafting future documents on this topic.

ANNEX TO RESOLUTION PCC.I/RES. 245 (XXVI-15)

RECOMMENDED CONTENTS OF THE TECHNICAL NOTEBOOK: “IPv6 TRANSITION STRATEGY GUIDELINES AND BEST PRACTICE”

Contents of the Technical Notebook should provide information on national experience with the implementation of IPv6, especially regarding best practices, guidelines, initiatives, projects and public policies that helped in speeding up the transition to IPv6, covering the following topics:

- a) Transition techniques from IPv4 to IPv6, for example, CG-NAT44.
- b) Challenges in the transition to IPv6.
- c) Consumer Premises Equipment compatibility with IPv6.
- d) Certification of IPv6 end user equipment.
- e) Operator network’s readiness with IPv6 and transition timeline.
- f) Content provider’s readiness to IPv6.
- g) Legacy network equipment compatibility (NAT64).
- h) Economic impacts of the implementation of IPv6.

The Technical Notebook should include relevant reference material from:

- a) PCC.I (documents, presentations, IAPs).
- b) Regional Standards Development Organizations (especially from within the Americas Region).
- c) ITU Recommendations, Resolutions, and other related documents.
- d) Relevant material from other Internet non-governmental organizations experts.