

Report of
ITU Regional Workshop for the CIS
“Recommendations on Transition from IPv4 to IPv6 in CIS Region»
Tashkent, Republic of Uzbekistan, 16-18 April 2014

The ITU Regional Workshop for the CIS “Recommendations on Transition from IPv4 to IPv6 in CIS Region» organized in cooperation with State Committee of Communication, Informatization and Telecommunication Technologies of the Republic of Uzbekistan in the city of Tashkent from 16 to 18 April 2014.



The Workshop was attended by representatives of communication administrations, regulators, telecommunication providers, scientific and research institutions and universities of 8 ITU Member States of the CIS region (Republic of Azerbaijan, Republic of Belarus, Republic of Moldova, Republic of Kazakhstan, Kyrgyz Republic, Russian Federation, Republic of Tajikistan, Republic of Uzbekistan), as well as by representatives of the International Telecommunication Union: Mr. Mr. Desire Karyabwite, IP Coordinator of the Telecommunication Development Bureau, Mr. Denis Andreev, C&I Programme Coordinator of the Telecommunication Standardization Bureau and Mr. Andrei Untila, Programme Officer of the ITU Area Office for CIS. The Workshop number of participants totaled 55.



Within the framework of the official opening, the participants were welcomed by Mr. Jamol Makhsudov, Deputy Director General, JSC Uzbektelecom and Andrei Untila, who, in particular, expressed thanks to the Communication Administration of Uzbekistan for the support of the ITU activities in the region and the hope that the exchange of opinions and information on the specific topic of the workshop would be efficient and useful for the further work of the telecommunication providers, especially in those countries, where the IPv6 transition is only expected.

Within the framework of 8 Sessions, 16 presentations were delivered, dedicated predominantly to the experiences and issues related to IPv6 transition. In particular, during Session 1, Mr. Desire Kariabwite presented the best practices in the field of IPv6 transition in the world and the issues related in IPv6 development in the developing countries, as well as some IPv6 Public Policy Making Aspects and IPv6 Migration Challenges and Security.



Mr. Anatoly Nevmerzhitsky, Head of Telecommunication Division of the Scientific and Research Department of ICT Development of Giprosvyaz JSC under Ministry of Communications and Informatization of the Republic of Belarus delivered several presentations dedicated to Evaluation of Current Deployment of IPv6 in the World, technical standards of Internet Protocol Version 6 (IPv6) and institutional arrangements on IPv6 transition on communication provider networks.

Mr. Denis Andreev, who represented Standardization Development Bureau, acquainted the participants with the TSB activities in the field of IPv6-based technologies.



Certain aspects of IPv6 transition were presented by Mr. Sergiu Cazac, Deputy Technical Director of JSC Moldtelecom, such as: IPv6 Migration of the Internet Access Services for a Mobile Communication Provider, Particularities of Fixed telephony and NGN Migration to IPv6m Analysis of Solutions of Providers of Central Internet Nodes.

The participants discussed the issues of IPv6 transition in the conditions of limited number or deficit of IPv4 addresses and weak address aggregation, difficulties in header processing in IPv4 compared to IPv6, as well as lack of data protection means as such in IPv4. The participants also noted that there is no universal say of IPv6 transition. The main mechanism of IPv4 and IPv6 network interface is dual stack and tunneling.

In the first case, it goes of simultaneous presence of IPv4 and IPv6 between application and the data link level, which could be considered as ideal, allowing to work with both protocols. The only problem, which cannot be solved through the dual stack, is lac of IPv4 addresses. Also, there is a technical problem relating to the equipment used by communication providers.

In case of tunneling, when IPv6 packets are encapsulated in IPv4 packets, the communication providers can provide their services using IPv4 version available on the basis of IPv6. This solution is convenient because the infrastructure available can be used. It is only required that the edge routers supported IPv6 tunneling function. However, this cannot ensure full use of IPv6. The new potential of IPv6 will not work over IPv4. IPv4 routers do not possess those functions which are available in IPv6.

The participants also touched the issues of evaluation of efficiency of protocol redundancy reducing technology implementation, such as: lack of efficiency of IP over Ethernet technology in closed homogenous networks, availability of a great number of solutions for redundancy prevention; lack of economic evaluation of viability of implementation of these solutions in acting networks; lack of a tool for evaluation of investment attractiveness of the innovation use; non-efficient spending of funds in case of availability of protocol redundancy reducing technologies.

The IPv6 issues were evaluated from three points of view: of regulator, consumer, and telecommunication provider.

Representatives of the Republic of Uzbekistan also informed the participants of the activities in the field of IPv6 transition in the Republic.

The summing up roundtable noted that within the framework of the workshop all issues of agenda were covered and that the presentations delivered provided practical information, which can be used by the participants in their further work.

The successfulness of the event can be evaluated based on the great number of participants (55), significant number of the topical presentations (16), which show that the workshop was necessary and important for the region, and positive feedback from the participants, who highly appreciated the organization and the content of the workshop. In particular the participants expressed gratitude to the ITU Area Office for CIS and to the Communication Administration of Uzbekistan for organization of the workshop.

The ITU, in its turn, expresses gratitude to the workshop participants and to the State Committee of Communication, Informatization and Telecommunication Technologies of the Republic of Uzbekistan and JSC Uzbektelecom for cooperation and support.