## **REPORT**

## Of ITU Regional Workshop for CIS and Georgia on Trends in Converged Communication Networks: Post-NGN, 4G and 5G Solutions Kiev, Ukraine, 17-18 November 2016

The ITU Reginal Workshop for CIS and Georgia on *Trends in Converged Communication Networks: Post-NGN, 4G and 5G Solutions,* organized by the Telecommunication Development Bureau in cooperation with the State University of Telecommunications of the Ministry of Education and Science of Ukraine, was held in Kiev, Ukraine, from 17 to 18 November 2016.

The workshop was attended by over **100** representatives of 8 countries, including **5** CIS countries (Republic of Azerbaijan, Kyrgyz Republic, Republic of Moldova, Republic of Tajikistan, Ukraine), as well as Republic of Bulgaria, the Republic of Hungary, and Kingdom of the Netherlands.

Within the framework of the opening ceremony, greetings to the participants were delivered by Mr. Vladimir Tolubko, Rector, State University of Telecommunications; Mr. Orozobek Kaiykov, Head, ITU Area Office for CIS; Mr. Alexander Chauzov, Chair, State Committee of Special Communications of Ukraine; Mr. Alexander Starinets, Head of Secretariat, Committee on Informatization and Communications, Verkhovna Rada of Ukraine; Mr. Leonid Osherov, Chair of Council, *Telas* Association; Mr. Rostislav Korobka, Vice President, Chamber of Commerce and Industry of Ukraine.

The Workshop covered following topics:

- Role of Governments and International Organizations in the Development of post-NGN, 4G and 5G Networks;
- Strategic and Regulatory Aspects of the Development of post-NGN, 4G and 5G Networks;
- Legal and Economic Aspects of 4G and 5G Implementation;
- Technical Aspects of 4G and 5G Implementation;
- Security Issues in 4G and 5G Technologies.

Among the participants, there were leading specialists in the above areas, representatives of communication administrations and regulators, telecommunication companies and ICT-specialized universities. The workshop was also attended by heads of chairs, PhD graduates and postgraduate students of the State University of Telecommunications. The International Telecommunication Union was represented by Orozobek Kaiykov, Head, ITU Area Office for CIS; Farid Nakhli, Programme Officer, ITU Area Office for CIS; and Chungsang Ryu from Radiocommunication Bureau/ITU.

The workshop was conducted in Russian with simultaneous interpretation into English.

## **24 topical presentations** were delivered within 5 sessions of the workshop.

In particular, the role of the governments in post-NGN networks was covered by the presentations delivered by Mr. Vladimir Tolubko, Rector, State University of Telecommunications and Mr. Vladimir Vornic, representing the Communication Administration of the Republic of Moldova. The ITU activities in the field of the converged networks development was presented by Mr. Chungsang Ryu from Radiocommunication Bureau/ITU; Mr. Viktor Katok from OJSC Ukrtelecom and Mr. Vadim Kaptur, Prorector on Scientific Work, A.S.Popov Odessa National Academy of Telecommunications and Vice Chair, ITU-D SG-1.

The strategic and regulatory aspects of post-NGN networks development were presented by representatives of Ukraine: Mr. Ivan Hohotva, Director, Telecommunications Department, National Commission for the State Regulation of Telecommunications and Informatization; Mr. Vladimir Korsun,

Director General, Ukrainian State Center of Radio Frequencies; and Mr. Donald Connor, Group Director Regulatory Affairs, Vimpelcom Ltd. from the Netherlands.

Legal and Economic Aspects of 4G and 5G Implementation were presented by Mr. Nikolay Sokirko, Director, Licensing Department, National Commission for the State Regulation of Communications and Informatization (Ukraine); Ms. Galya Blateva, Head of Department Terrestrial Mobile Networks, Authorization and Frequency Planning Directorate, Communications Regulation Commission (Bulgaria); Mr. Igor Yereshchenko, Regulatory and Spectrum Strategy Expert, JSC "Kyivstar" (Ukraine); Mr. Sergii Gulei, Implementation Manager, Huawei Ukraine; and Ms. Olga Guseva, Head of Chair "Entrepreneurship, Trade and Stock Operations", State University of Telecommunications (Ukraine).

Extensive coverage of technical aspects of 4G and 5G technology implementation was provided mainly by representatives of the State University of Telecommunications (Ms. Lyubov Berkman, Mr. Sergei Kozelkov, Mr. Vladimir Saiko). Presentations by Mr. Oleg Kokotov and Mr. Vadim Blagodarny were dedicated to the issues of radiofrequency monitoring.

Final session, where speakers were from the host organization (Vladimir Nakonechny, Vladmir Buryachok, Dmitry Ryabchun), was almost entirely dedicated to the security Issues in 4G and 5G technologies.

When summing up, the participants noted:

- Topicality of the event;
- Practical significance of the presentations delivered, the content of which can be used by the participants in their daily professional activities;
- Essential role of the governments and international organizations in the development of post-NGN, 4G and 5G networks;
- Significant role of the regulation in the 4G and 5G implementation;
- Importance of information resource protection in the post-NGN networks;
- Necessity to continue conducting the ITU workshops, forums, and conferences dedicated to the development of converged networks.

The ITU Reginal Workshop for CIS and Georgia on *Trends in Converged Communication Networks: Post-NGN, 4G and 5G Solutions* was a success and implemented the objectives fixed in the ITU-D OP-16. The KPIs of the successfulness are: great number of participants, including specialists of the issues of NGN, as well as great number of substantive presentations, evidencing the topicality of the workshop. The successfulness of the event is also confirmed by the positive feedback from the participants, who highly appreciated the organizational arrangement and the content of the event.

The successfulness of the event can be evaluated using following KPIs:

- Total number of participants: 104 persons.
- Total number of participating countries: 8 countries, including 5 CIS countries.
- Total number of presentations delivered: 24 presentations.
- **Positive feedback** from the participants confirms the event topicality and usefulness: the participants expressed their satisfaction with the information provided at the workshop and noted the topicality of the event for all CIS countries.
- Information and experience obtained: participants significantly raised their awareness of the development of converged networks, in particular in the area of regulation, as well as in legal and economic aspects of 4G and 5G technology implementation.

The workshop participants expressed their gratitude to the moderators of the sessions and the speakers of the event, the ITU and the State University of Telecommunications for the organization and conduction of the workshop.

The International Telecommunication Union, in its turn, expresses its gratitude to the State University of Telecommunications for cooperation in the organization and conduction of the event. Also, the ITU highly appreciates the work done by the speakers of the event and thanks all participants of the event for attending the 5 sessions of the workshop and active participation in the discussions.