



**Regional Spectrum Management Conference  
Yerevan, Republic of Armenia,  
12 - 14 December 2017**

**CONCLUSIONS AND RECOMMENDATIONS**

Regional Spectrum Management Conference was held from 12 to 14 December in Yerevan at the invitation of the Ministry of Transport, Communication and Information Technologies of the Republic of Armenia and was organized by Forum Global and ITU (ITU-D and ITU-R).

The Conference took place alongside an ITU Regional Workshop on Practical use of Radio Regulations, which was held from 14 to 15 December 2017.

The Conference gathered over 150 professionals, representing Communication Administrations, regulatory authorities, operators, equipment manufacturers, research and development institutions, private sector from 20 countries, Radiocommunication Bureau and Telecommunication Development Bureau of the ITU (Regional office in Moscow) as well as RCC Executive Committee and CEPT representatives.

The Conference was held in Russian and English.

The Conference considered and discussed radiofrequency aspects of information infrastructure for digital economy including:

- effective use of radiofrequency spectrum and further development of terrestrial and satellite radiocommunication systems;
- international radiocommunication regulation – current situation and trends of improvement in light of WRC-19 preparation;
- standards and their application in broadband digital radio systems of different services, including questions of harmonization;
- practical experience of the use of radiofrequency spectrum at national and regional levels;
- radiofrequency provision for perspective radiocommunication systems and technologies (5G/IMT-2020, satellite systems with high communication capacity, intelligent transport systems, Internet of things etc.);
- use of radiofrequency spectrum by public safety systems and disaster relief;
- new radiomonitoring technologies for terrestrial and space radiocommunication systems;

- risks linked with introduction of new frequency ranges, taking into account increasing environmental impact made by emission;
- results of ITU-R Study Groups activities related to WRC preparation.

The Conference recognized:

1. that it managed to apply a holistic approach to discuss the considered issues with involvement of wide range of participants, representing all interested parties;
2. high scientific and technical level and practical value of presentations and discussions;
3. that radiofrequency aspects are one of the key elements of information infrastructure for digital economy and make significant contribution to the implementation of the Sustainable Development Goals;
4. that when improving international radiofrequency spectrum regulation, alongside with promotion of new technologies and systems, one should pay serious attention to already existing systems;
5. that it is advisable to implement radio technologies, supporting IoT development (below 1 GHz), ITS (in 5.9 GHz range) and 5G/IMT-2020 (in frequency bands allocated/identified for IMT below 6 GHz, as well as in frequency bands that will be allocated/identified for IMT at WRC-19);
6. that it is desirable to study question of harmonization of frequency bands for IMT in ranges below 6 GHz at regional level;
7. that it is desirable to analyze international experience of practical application of dynamic spectrum management methods for licensed shared access aimed at the development of IMT and IMT-2020 systems, including global implementation experience of SAS (Spectrum Access System) and LSA (Licensed Shared Access);
8. that harmonized and progressive development of new digital radio technologies is possible only if the balance of interest is observed between proper quality of new digital services provided to the population and economic efficiency of new digital radio technologies implementation;
9. that a comprehensive solution for bridging “the digital divide” can be achieved only through the use of different technologies and systems, taking into account geographic, social and economic peculiarities of each country. This requires combination of different new terrestrial and satellite communication systems;
10. that it is reasonable for countries of Caspian and Black Sea regions to re-plan digital terrestrial broadcasting in 470-862 MHz band to ensure required number of coverages in frontier areas when implementing IMT;

11. that it is important to assess environmental impact of new technologies and systems;
12. it is desirable to hold similar spectrum management conferences to assist in satisfying the needs of population and bridge “the digital divide”;
13. that holding this conference in partnership between Forum Global and ITU is relevant, up-to-date, and its results might be used by experts in their professional activities, in particular, to prepare for WRC-19 and WRC-23.

Conference participants expressed sincere thanks to the management and staff of the Ministry of Transport, Communication and Information Technologies of the Republic of Armenia for excellent organization, preparation and carrying out of the Conference.

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