Securing implementation of 5G in the Republic of Moldova

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Advantages of 5G networks

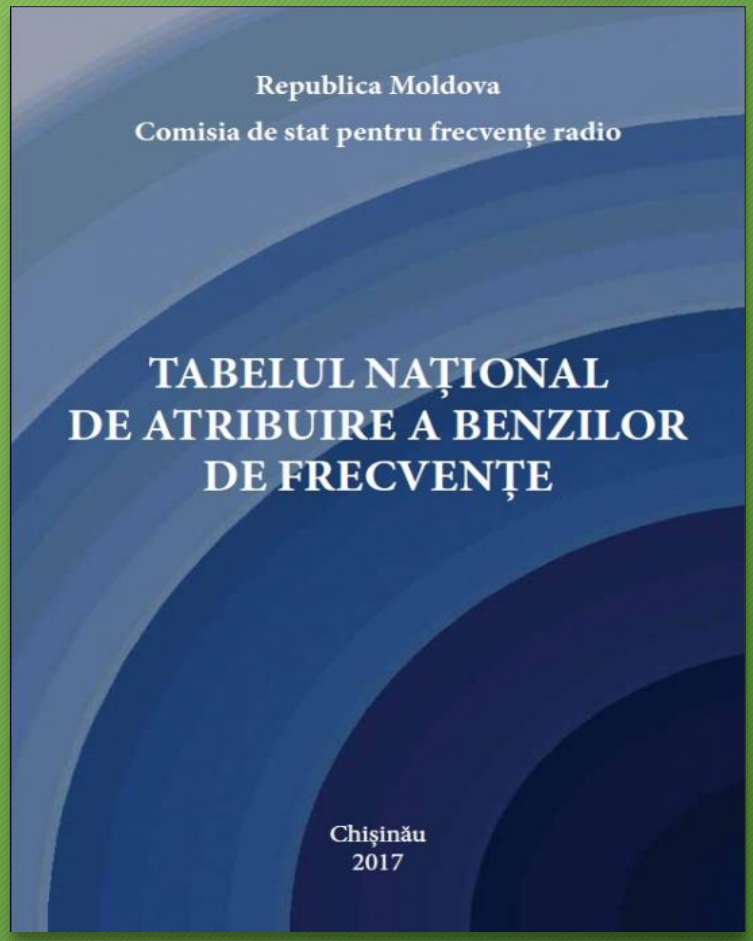
- New applications and services
- Gigabit speeds
- Increased reliability
- Increased efficiency
- **5G technology is the next generation of mobile communications standards that can improve the quality of service for end users by offering new applications and services delivered at gigabit speeds, as well as significantly improving the efficiency and reliability of communications and the possibility of developing new business models. 5G technology will bring with it high data transfer speed and low latency, thanks to which society will rapidly enter a new era of smart cities and the Internet of things (IoT)**

Current situation

- Ministry of Economy and Infrastructure of the Republic of Moldova, in partnership with experts from ITU (provided by ITU Regional Office for Europe) and Korean Information Society Development Institute is developing the spectrum management program for the 2021-2025 years, which continues the spectrum management program for the 2013-2020 years, previously developed by the ministry.

Implementing WRC-19 decisions in NTFA

The program is developed simultaneously with the draft modification of the National Table of Frequency Allocations of the Republic of Moldova, which reflects the changes in the Radio Regulation decided during WRC-19. Overall, the program continues the harmonization measures established in the previous program with common European practice, all technical requirements and channel arrangements included in the program are based on CEPT Decisions and Recommendation.



Existing networks

- 3 mobile network operators:
- Orange Moldova
- Moldcell
- Moldtelecom.

- **At the moment, in the Republic of Moldova there are 3 mobile communication operators with nationwide coverage. It should be noted that all licenses were issued on the principles of technological neutrality, providing flexibility in the use of frequency resources and the possibility of using various business models. The spectrum of the bands 800, 900, 1800, 2100 and 2600 MHz is used.**

Preconditions for the new Program

- creating the legal framework for a sustainable development of terrestrial mobile electronic broadband communications and other types of communications for the years 2021-2025 by continuing the Radio Spectrum Management Program for the years 2013-2020;
- the need to harness the available radio spectrum resources;
- the need to continue the application of best practice with reference to the implementation of the EU's Multiannual Policy Program in the field of radio spectrum (Radio Spectrum Policy Program-RSPP, Decision 243/2012 / EU of 14.03.2012);
- ensuring the possibility of implementing new generation (5G) mobile broadband communications services, which offer citizens and industries the competitive advantages necessary for a development in a favorable environment.

Targets for future spectrum usage policy

The program aim is to ensure a continuous development of the electronic communications industry, information technology and communications sector in the Republic of Moldova, in particular, public broadband mobile electronic communications networks and services, according to market requirements and providing of radio spectrum resources necessary for the continuous development of terrestrial mobile broadband electronic communications networks.

Targets for future spectrum usage policy

The main focus of the program is on frequency bands identified for IMT in the ITU Radio Regulations, particularly designated in Europe for early 5G implementation. Targeted bands are the following: 700 MHz, 3600 MHz, 26 GHz, and also 1500 MHz (L band) and 2300 MHz.

The program also targets available spectrum resources from the 450MHz, E900, 2100 MHz and 2600 MHz bands.

Current status of Program development

The program is developed in a transparent manner, in cooperation with the main stakeholders; all concerned parties are involved in discussions at an early stage. The program is at an advanced drafting stage and the main executive part is structured in 2 stages:

- 1st stage: consolidation of the current networks (2021-2022 years, some refarming and consolidation activities on the current bands and technologies);
- 2nd stage: (2022-2025 years, creation of conditions and enabling the environment for implementation of 5G networks).

The main tasks of the future policy

- Concluding the activities for releasing of the spectrum in the 700 MHz band.
- Creating the legal framework for organization of an objective, transparent, non-discriminatory and proportionate auction process for the targeted spectrum resources.
- Developing long-term spectrum policy and ensuring medium and long-term predictability of radio spectrum resources usage.
- Maximizing the efficiency of the use of limited radio spectrum resources and stimulating the competition on the mobile electronic communications market.

Expected outcomes for the period 2021-2025

- Ensuring with sufficient spectrum resources that will make possible the implementation of 5G networks, and consequently the new applications and business cases that 5G can deliver.
- Implementing new broadband technologies and services and increasing the capacities of existing networks;
- Attracting new investments in the information and communications technology sector of the national economy;

Expected outcomes for the period 2021-2025

- Increasing the turnover of companies in this sector;
- Increase of the incomes to the state budget generated by the capitalization of the radio spectrum resources and by the economic activities in the market of the mobile electronic communications services;
- Development of other sectors of the national economy as a result of modernization and continuous development of the radio communications infrastructure and the diversification of the offer of mobile electronic broadband communications services.

Expected outcomes for the period 2021-2025

- increasing the accessibility of broadband mobile electronic communications services to the population as a result of establishing a fair and efficient competitive environment on the mobile electronic communications services market;
- improving the quality of services provided; reducing the digital divide between rural and urban areas;
- creating new jobs and increasing the average wage in the ICT sector.

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- creating new jobs and increasing the average wage in the ICT sector.

Objectives to achieve

- radio spectrum resources available in amounts capable of meeting the market demand for the period determined by the Program;
- predictability of the regulatory act and certainty regarding the rules acting in the process of managing the radio frequency spectrum;
- efficient investments in the national radio communications infrastructure;

Objectives to achieve

- technological neutrality and acceleration of the implementation of new technologies and services;
- efficient competition on the market of mobile broadband electronic communications services;
- increased use of broadband Internet access services, including in rural areas;
- substantially reduced digital divide between urban and rural areas.

Thank you for attention! Questions ?

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