



Ministry of Information Technology and Communications

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ITU Regional Forum

«Shared use of infrastructure as a tool to promote development of broadband networks»



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Spectrum management program and National numbering plan

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Spectrum management program

Radiofrequency spectrum policy harmonization



Radio Spectrum management Program for 2013-2020 years (hereinafter - The Program) is developed in accordance with European Commission Directive D2002/21/CE (Framework Directive), amended by Directive D2009/140/CE, Law on Electronic Communications no.241-XVI of 15 November 2007, the National Table of Frequency Allocations, approved by the State Commission for Radio Frequencies of Moldova No. 11 of 27 April 2000.

National radiofrequency spectrum resources

The Program reflects the importance of the availability and efficient use of radio spectrum as limited resource – state public property for domestic market of networks and electronic communications services and other sectors of the national economy of the Republic of Moldova.

The main purpose of the Program is promotion of the efficient management of radio spectrum resources, in particular, to ensure the availability of sufficient spectrum for the continuous development of public electronic communications services and mobile terrestrial broadband technologies implementation and new generation services.

National radiofrequency spectrum resources



The Program aims spectrum resources between 300 MHz and 3800 MHz, which are part of the UHF radio frequency range (UHF), according to the classification set out in the Radio Regulations (RR) of the International Telecommunication Union (ITU), in particular the following UHF frequency bands:

National radiofrequency spectrum resources

- 453,0-457,5/463,0-467,5 MHz (450 MHz);
- 790-862 MHz (800 MHz);
- 880-915/925-960 MHz (900 MHz);
- 1710-1785/1805-1880 MHz (1800 MHz);
- 1900-2025/2110-2170 MHz (2100 MHz);
- 2300-2400 MHz (2300 MHz);
- 2400-2483,5 MHz (2400 MHz);
- 2500-2690 MHz (2600 MHz);
- 3400-3800 MHz (3800 MHz).

Radio frequency spectrum program



The purpose of the Program is to accommodate both public and social interest, as well as a maximum benefit for users of radio frequencies, whether network providers and / or electronic communications services or end users, while ensuring the effective management of spectrum resources and to establish the principles, conditions and procedures for granting rights of use of these resources target bands to ensure the implementation and deployment of BWA (Broadband Wireless Access).

Radio frequency spectrum program

The overall objective of the Program is to ensure continuous development of the electronic communications industry, information and communications technology sector in Republic of Moldova, in particular, mobile broadband networks and electronic communications services with mandatory maintenance and further development of the mobile voice services GSM (2G) according to the market requirements and refers to providing the necessary spectrum resources for continuous development of terrestrial mobile networks to broadband electronic communications; efficient use of these limited resources; ensuring regulatory predictability and certainty regarding the rules acting in the management of radio spectrum.

Implementation of technological neutrality

In order to ensure technological neutrality , as well as to comply with the European Commission Decisions 2009/766/EC and 2011/251/EU regarding the use of 900 MHz and 1800 MHz frequency bands for terrestrial systems providing pan European electronic communications networks and services, due to the proposal submitted by Ministry of Communications and Information Technology, the State Commission for Radio Frequencies by Decision No. 1 of 11 May 2012 operated changes in national regulations RN037 and RN044A in Annex 2 of the National Table of Frequency Allocation. These amendments state that the frequency bands 876-915 MHz paired with 921-960 MHz and the frequency bands 1710-1785 MHz paired with 1805-1880 MHz are allocated for the implementation of systems providing terrestrial electronic communications networks and services. These systems will be determined by the Ministry for Information Technology and Communications in accordance with the relevant CEPT decisions and recommendations for these bands.

Radio frequency spectrum program selection procedure

For sustainable development of mobile broadband electronic communications, the following frequency bands are identified to be given the right of use, based on a competitive selection procedure established by the Program, which will be organized by the National Regulatory Agency for Electronic Communications and Information Technology:

- 790 - 862 MHz (800 MHz);
- 880 - 915 / 925 - 960 MHz (900 MHz);
- 1710 - 1785 / 1805 - 1880 MHz (1800 MHz);
- 1900 - 2025 / 2110 - 2170 MHz (2100 MHz);
- 2500 - 2690 MHz (2600 MHz);
- 3400 - 3800 MHz (3800 MHz).

Radio frequency spectrum program selection procedure

Radio Spectrum resources, which will be awarded by competitive selection procedure are divided into blocks (sub bands), as follows:

Frequency Band, MHz.	Available sub bands
790 - 862	3 sub bands (2x10 MHz, FDD mode)
880 - 915 / 925 - 960	5 sub bands (2x5 MHz, FDD mode, GSM) 2 sub bands (2x5 MHz, FDD mode, eGSM)
1710 - 1785 / 1805 - 1880	15 sub bands (2x5 MHz, FDD mode)
1900 - 1920	1 sub band (5 MHz, TDD mode)
2010 - 2025	1 sub band (15 MHz, TDD mode)
1920 - 1980 / 2110 – 2170	1 sub band (2x14,8 MHz, FDD mode)
2500 - 2690	1 sub band (2x20 MHz, FDD mode) 1 sub band (40 MHz, TDD mode) 1 sub band (2x10 MHz, FDD mode)
3400 - 3600	4 sub bands (50 MHz, TDD mode)
3600 – 3800	4 sub bands (50 MHz, TDD mode)

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National numbering plan

General information with regard on use of numbering resources in the Republic of Moldova

- Numbering resources are limited resources and are under public propriety.
- The National Numbering Plan (NNP) is official act that establishes the manner of numbering resource distribution and the structure of number ranges used in the electronic communications networks.
- NNP is developed by the National Regulatory Agency for Electronic Communications and Information Technology (ANRCETI) and approved by the central sector authority.
- ANRCETI manages NNP, regulates and issues numbering resources. Use of numbering resources that were not have been allocated by the regulation body is strictly **forbidden**.

Regulatory framework governing the use of numbering resources

- Law No 241-XVI dated 15.11.2007. «Electronic Communications Act»;
- Order No 15 dated 04.03.2010 of the Ministry of Information Technology and Communications «with regard on approval of National Numbering Plan»;
- Administrative Board Decision of ANRCETI No 58 dated 21.12.2010 «with regard to Telephone Numbering Resources administration procedures»;
- Administrative Board Decision of ANRCETI No 57 dated 21.12.2010 «with regard on approval of Provisions of the general authorization regime and licensing for use of limited resources for providing of public electronic communications networks and services»;

Regulatory framework governing the use of numbering resources

- **Administrative Board Decision of ANRCETI No 08 dated 25.02.2010 «with regard to Procedure for concession of Licenses for the Use of Limited Resources»;**
- **Administrative Board Decision of ANRCETI No 79 dated 17.04.2009 with regard to regulation for providing Freephone access in public electronic communications networks;**
- **Administrative Board Decision of ANRCETI No 16 dated 19.05.2010 «with regard to use of Premium Rate services in electronic communications networks»;**
- **Offences Code of the Republic of Moldova No 218 dated 24.10.2008.**

General information about National Numbering Plan

- **NNP of the Republic of Moldova is closed numbering plan (from 01.06.2012), which provides a set of phone numbers from NNP, including geographical, set by the national prefix «0» before the national number «N(S)N» or short national number.**
- **Numbering resources structure from NNP is established in accordance to Recommendation E.164 of ITU Telecommunication Standardization Sector and Decisions/Recommendations of European Conference of Postal and Telecommunications Administrations (CEPT).**

General information about National Numbering Plan

Depending on the length, numbers can be:

- 1) numbers of 6 digits for the Chişinău municipality and of 5 digits for the other geographical areas, used in public electronic communications networks, provided by fix terminals;
- 2) numbers of 4 digits for services of general interest at the local level, delivered to end users in a particular geographic area;
- 3) numbers of 4 digits, which are part of the numbers, independent of location;
- 4) numbers of 5 digits for electronic communication services provided for mobile terminals.

General structure of NNP of the Republic of Moldova

Number format from NNP	Allocation	Number type
0	National prefix	
00	International prefix	
1XXXXXX	Short national codes and numbers	Non geographical
2XXXXXXXX	Numbers for public electronic communication networks and services provided for fix points	Geographical
3XXXXXXXX	Numbers for public electronic communication networks and services provided for fix points and numbers independent from geographical area	Geographical and geographically independent, provided for fix and nomad points
4XXXXXXXX	Reserve	

General structure of NNP of the Republic of Moldova



Number format from NNP	Allocation	Number type
5XXXXXXXX	Numbers for public electronic communication networks and services provided for fix points	Geographical
6XXXXXXXX	Numbers for public electronic communication networks and services provided for mobile points	Non geographical
7XXXXXXXX	Numbers for public electronic communication networks and services provided for mobile points	Non geographical
8XXXXXXXX	Numbers for various services (services of free access, services with distributed costing, etc.)	Non geographical
9XXXXXXXX	Numbers for special charging services	Non geographical



Thank you for your attention!

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