

**MONTENEGRO**

**AGENCY FOR ELECTRONIC COMMINICATIONS**

**AND POSTAL SERVICES**

**No: 0504-4464/2**

**PUBLIC BIDDING**

**DOCUMENTS**

**(draft)**

**FOR AWARDING THE APPROVALS FOR THE USE**

**OF RADIO-FREQUENCIES IN THE BANDS**

**900 MHz, 1800 MHz, 2 GHz AND 2.6 GHz**

**FOR THE IMPLEMENTATION OF PUBLIC MOBILE ELECTRONIC COMMUNICATIONS NETWORKS**

**non-binding translation**

**Podgorica, October \_\_, 2021**

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**MONTENEGRO**

**AGENCY FOR ELECTRONIC COMMUNICATIONS**

**AND POSTAL SERVICES**

AGENCY FOR ELECTRONIC COMMUNICATIONS AND POSTAL SERVICES (hereinafter: the Agency), based on Article 11 Item 10 and Article 106 Paragraphs 1, 2, 3 and 5 of the Law on Electronic Communications (Official Gazette of Montenegro, 40/13, 56/13, 56/13, 2/17 and 49/19) in the session of the Council held on October \_\_, 2021 adopted the following

**D E C I S I O N**

**on launching the public bidding procedure**

**for awarding the approvals for the use of radio-frequencies**

**in the 900 MHz, 1800 MHz, 2 GHz and 2.6 GHz bands**

**for the implementation of public mobile electronic communications networks**

1. A public bidding procedure for awarding the approvals for the use of radio-frequencies in the 880-915/925-960 MHz band (band 900 MHz), 1710-1785-1805-1880 MHz band (band 1800 MHz), 1920-1980/2110-2170 MHz (band 2 GHz) and 2500-2690 MHz (band 2.6 GHz) for the implementation of public mobile electronic communications networks (hereinafter: the public bidding) shall be launched.

2. Radio-frequencies subject to the public bidding shall be awarded for the use on an exclusive basis in the entire territory of Montenegro, in accordance with the conditions set out in the relevant radio-frequencies assignment plan.

3. The public bidding shall be conducted by means of spectrum auction in the combined format of adjusted multi-round sequential bidding (clock auction) and adjusted single-round bidding through sealed bids (sealed-bid auction). The auction process shall be conducted in two phases: bidding for the reserved spectrum (pre-auction phase) and bidding for the unreserved spectrum (main auction phase). Bidding in the pre-auction phase shall involve one primary round in "*clock*" format, and in the main auction phase one or more primary rounds in "*clock*" formatu and one supplementary sealed bid round, which is performed only if not all frequency blocks have been assigned in the last primary round.

4. Frequency blocks shall be the subject of the public bidding procedure in accordance with allotments presented in the corresponding radio-frequencies assignment plan as follows: 2 blocks of 2x5 MHz width in the 900 MHz band (blocks B1 and B2), 4 blocks of 2x5 MHz width in the 1800 MHz band (blocks C12 to C15), 4 blocks of 2x5 MHz width in the 2 GHz band (blocks D1 to D4), 8 blocks of 2x5 MHz width and 8 blocks of 5 MHz width in the 2.6 GHz band (blocks F7 to F14 and G1 to G8), which are classified for the purpose of public bidding into 9 categories. The categories of frequency blocks per band, block width, the number of blocks for the awarding, the validity period of the approval for the use of radio-frequencies, a description of the block and the minimum amount of one-off fee for the awarding of approvals for the use of radio-frequencies (the reserve price) per block are given in the following Table.

|  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- |
| **Band** | **Cate-**  **gory** | **Block**  **width** | **Number of**  **blocks for award** | **Period of**  **approval validity** | **Description** | **Reserve price per block [EUR]** |
| 900 MHz | PA1 | 2x5 MHz | 2 | from 21 April 2022 to 1 September 2031 | Blocks B1 and B2 (reserved spectrum for the incumbent mobile operators, subject to the award in the pre-auction phase) | 946,000.00 |
| 900 MHz | GA1 | 2x5 MHz | 0 (1 or 2 if one or both of blocks in category PA1 are not awarded in the pre-auction phase) | from 21 April 2022 to 1 September 2031 | Frequency generic blocks from the range B1 to B2 (subject to the award in the pre-auction phase) | 946,000.00 |
| 1800 MHz | PA2 | 2x5 MHz | 4 | from 21 April 2022 to 1 September 2031 | Frequency generic blocks from the range C12 to C15 (reserved spectrum for the incumbent mobile operators, subject to the award in the pre-auction phase) | 440,000.00 |
| 1800 MHz | GA2 | 2x5 MHz | 0 (1 or 4 if one or more blocks in category PA2 are not awarded in the pre-auction phase) | from 21 April 2022 to 1 September 2031 | Frequency generic blocks from the range C12 to C15 (subject to the award in the pre-auction phase) | 440,000.00 |
| 2 GHz | PA3 | 2x5 MHz | 3 | from 21 April 2022 to 1 September 2031 | Frequency generic blocks from the range D2 to D4 (reserved spectrum for the incumbent mobile operators, subject to the award in the pre-auction phase) | 406,000.00 |
| 2 GHz | GA3 | 2x5 MHz | 0 (1 or 3 if one or more blocks in category PA3 are not awarded in the pre-auction phase) | from 21 April 2022 to 1 September 2031 | Frequency generic blocks from the range D2 to D4 (subject to the award in the main auction phase) | 406,000.00 |
| 2 GHz | GA4 | 2x5 MHz | 1 | from date of approval issuance to 1 September 2031 | Block D1 (subject to the award in the main auction phase) | 406,000.00 |
| 2.6 GHz | GA5 | 2x5 MHz | 8 | from date of approval issuance to 1 September 2031 | Frequency generic paired blocks from the range F7 do F14 (subject to the award in the main auction phase) | 200,000.00 |
| 2.6 GHz | GA6 | 5 MHz | 8 | from date of approval issuance to 1 September 2031 | Frequency generic unpaired blocks from the range G1 to G8 (subject to the award in the main auction phase) | 55,000.00 |

5. The offered price shall be the criteria for the selection of the best bidder. The bids in primary round of pre-auction phase and last primary round of main auction phase, as well as a combination of bids with the highest total offered bid value in the supplementary round of main auction phase, represent a winning bids. For awarding of frequency blocks included in his the winning bids, the bidder shall pay one-off fee, which represents the sum of the amounts of all his winning bids.

6. Any interested party which has purchased the Public Bidding Documents with the minimum of five years experience in the implementation of public mobile electronic communications networks and the provision of public mobile electronic communications services (qualification requirement) shall have the right to participate in the public bidding procedure.

A group of bidders (consortium) shall also have the right to participate in the public bidding. Any legal entity, either before or after the purchase of the Public Bidding Documents, may form a consortium with another legal entity and such consortium may apply for participation in the spectrum auction.

The consortium shall be considered to meet the qualification requirement if at least one of its members, who has undertaken the obligation to implement public mobile communications network and provide public mobile electronic communications services, shall have at least five years of experience in these matters.

The applicant for participation in the spectrum auction, regardless of whether it acts independently or as a member of the consortium, which on the day of the adoption of this Decision was not the holder of the approval for the use of radio-frequencies in the 900 MHz, 1800 MHz and 2 GHz bands (a new entrant in the market), must not be status or proprietary related to the existing holders of the approval for the use of radio-frequencies in these bands (the incumbent mobile operators: "Telenor" d.o.o. Podgorica, "Crnogorski Telekom" a.d. Podgorica and Društvo za telekomunikacije "MTEL" d.o.o. Podgorica).

7. The qualified bidder shall, before the beginning of the Zero Primary Round of the pre-auction phase, ie before the beginning of the First Primary Round of the main auction phase, submit a bid guarantee to the Agency for the amount covering at least 100% of the total amount of the bid submitted in that round. In the subsequent primary rounds of the main auction phase and the supplementary round of the main auction phase, the submitted guarantee, which refers to the bid in the First Primary Round of the main auction phase, must cover at least 25% of the total bid amount.

In case the submitted bid guarantee does not allow the submission of a higher bid in the next round (the guarantee does not cover 25% of the bid intended to be submitted), if the qualified bidder intends to submit a higher bid in the next round of the auction, the qualified bidder shall submit an additional bid guarantee to the Agency, which will allow the fulfilment of the above condition.

8. To purchase the Public Bidding Documents the amount of EUR 5,000.00 (five thousand Euros) shall be paid to the Agency's bank account number 510-2125-67 (specify: "To Purchase the Public Bidding Documents 2021").

The authorized representatives of interested parties may take the Public Bidding Documents in the premises of the Agency at the following address: Bulevar Džordža Vašingtona 56, 81000 Podgorica, Montenegro, every day from 8:00 untill 14:00h (CET), after establishing that the fee for the purchase of the Public Bidding Documents has been paid.

Entities which have purchased the Public Bidding Documents may submit the request for clarification of the requirements of the Public Bidding Documents within 10 days before the expiration of the deadline for the submission of the Application for participation in the spectrum auction.

Contact person for the purpose of obtaining information regarding the public bidding procedure as well as regarding the purchase and receival of the Public Bidding Documents is Boris Jevrić ([boris.jevric@ekip.me](mailto:boris.jevric@ekip.me)).

9. The Application for participation in the public bidding procedure shall be submitted directly to the headquarters of the Agency, at address: Bvl. George Washington 56, 81000 Podgorica, Montenegro, every working day from 8:00 untill 14:00h (CET), at latest by \_\_\_\_ \_\_, 2021 (deadline for the submission of applications for participation in the spectrum auction).

10. The applicant for participation in the spectrum auction whose eligibility has been determined shall pay one-off fee for participation in the spectrum auction to the Agency in the amount of EUR 30,000.00 (thirty thousand Euros) within three days as of the date of the submission of the Decision on eligibility of the applicant.

9. Bids in all phases of the spectrum auction shall be submitted in paper form through an authorized representative of a qualified bidder by direct delivery to an authorized representative of the Agency at the Agency's headquarters at Bvl. George Washington 56, 81000 Podgorica, Montenegro.

12. Tentative dates for the start of the spectrum auction are as follows: \_\_\_\_\_ \_\_ - November \_\_, 2021. The qualified bidders shall be informed on the exact start date of the spectrum auction at least 7 days in advance.

13. The Decision on the selection of the best bidder in the public bidding procedure shall be issued within 30 days as of the completion of the spectrum auction.

14. This Decision shall come into force on the day of its adoption.

|  |  |  |
| --- | --- | --- |
| No: 0504-\_\_\_\_/1  Podgorica, October \_\_, 2021 |  | **Agency for electronic communications and postal services**  **PRESIDENT OF THE COUNCIL**  **Branko Kovijanić** |

**INTRODUCTION**

The Agency for Electronic Communications and Postal Services (hereinafter: the Agency), in accordance with Article 106, Paragraph 2 of the Law on Electronic Communications (Official Gazette of Montenegro, 40/13, 56/13, 2/17 and 49/19) (hereinafter: LEC), based on the Decision No. 0504-\_\_/1 of October \_\_, 2021, initiated the public bidding procedure for awarding the approvals for the use of radio-frequencies in the 900 MHz, 1800 MHz, 2 GHz and 2.6 GHz bands for the implementation of public mobile electronic communications networks (the public bidding).

Given that the adequate radio-frequencies assignment plans establish that radio-frequencies in the 900 MHz, 1800 MHz, 2 GHz and 2.6 GHz bands are awarded on an exclusive basis in the entire territory of Montenegro for the implementation of public mobile electronic communications network in accordance with Article 100 paragraph 2 and Article 117 paragraph 3 of the LEC, the approvals for the use of radio-frequencies are issued on the basis of the conducted public bidding procedure. The public bidding procedure is conducted based on the spectrum auction method. In order to prepare and implement the public bidding procedure in an objective, transparent, non-discriminatory and proportionate way, the Agency has organized two rounds of public consultations on the objectives and the strategy for the awarding of radio-frequencies, and the public bidding rules and procedures. The final views of the Agency on these issues are contained in the Decision on launching the public bidding procedure and the Public Bidding Documents.

In accordance with Article 108 of the LEC the Public Bidding Documents define in details and clarify the conditions, requirements and other elements of the Decision on launching the public bidding procedure, public bidding procedural requirements, format and rules of the auction, deadlines for the completion of individual phases of the procedure, as well as the criteria for the selection of bidders and the manner of their evaluation.

The Public Bidding Documents is structured as follows. Objectives and general considerations with regard to the procedure of awarding the respective radio-frequencies are presented in Chapter 1. Chapter 2 contains an overview of the level of technological development and availability of fixed and mobile broadband electronic communications networks in Montenegro as well as an overview of the current assignments in the 900 MHz, 1800 MHz, 2 GHz and 2.6 GHz bands. The subject of the public bidding for awarding the approvals for the use of available radio-frequencies for the implementation of public mobile electronic communication networks, with the structure of radio-frequency blocks in each of the aforementioned five bands is described in Chapter 3. Chapter 4 presents a legal framework for the implementation of the bidding procedure, an overview of the bidding procedure, conditions related to eligibility for participation in public bidding, the procedure for the submission and consideration of bids, as well as general conditions which bidders must observe in the public bidding procedure. This Chapter also contains the information on terms and conditions relating to the bid guarantees, a minimum one-off fee for awarding the approvals for the use of radio-frequencies as well as a general description of the spectrum auction format and the course of the procedure. Special conditions and obligations related to the reserved spectrum, spectrum caps and spectrum floors, and special conditions and obligations related to the dynamics of coverage provision and network implementation are given in Chapter 5. The auction rules are presented in Chapter 6, while Chapter 7 presents general technical conditions for the use of radio-frequencies which are the subject of bidding procedure, and Chapter 8 provides an overview of regulatory fees paid for the use of radio-frequencies and regulatory fees for the provision of public electronic communications services. At the end of the Public Bidding Documents, in annexes, corresponding forms and additional information relevant for the public bidding procedure are provided.

**1. OBJECTIVES AND GENERAL PROVISIONS**

According to the Radio-frequency Allocation Plan in Montenegro (hereinafter: the Allocation Plan), (Official Gazette of Montenegro, 89/20 and 104/20) the following radio-frequency bands are determined for the implementation of radio access part of the public mobile electronic communications networks:

- 694-790 MHz (the 700 MHz band), for MFCN systems;

- 790-862 MHz (the 800 MHz band), for MFCN (TRA-ECS) systems;

- 880-915/925-960 MHz (the 900 MHz band), for GSM and MFCN (TRA-ECS) systems;

- 1427-1518 MHz (the 1500 MHz band), for MFCN systems;

- 1710-1785/1805-1880 MHz (the 1800 MHz band), for GSM/DCS1800 and MFCN (TRA-ECS) systems;

- 1920-1980/2110-2170 MHz (the 2 GHz band), for MFCN (TRA-ECS) systems;

- 2300-2400 MHz (the 2.3 GHz band), for MFCN systems;

- 2500-2690 MHz (the 2.6 GHz band), for MFCN (TRA-ECS) systems;

- 3400-3800 MHz (the 3.6 GHz band), for MFCN systems;

- 24.25-27.5 MHz (the 26 GHz band) for MFCN systems.

The radio-frequencies in the 800 MHz band, as well as parts of the 900 MHz, 1800 MHz, 2 GHz and 2.6 GHz bands were awarded in the spectrum auction in 2016, with the approval period valid until September 1, 2031. Approvals for the remaining parts of the 900 MHz band (2x10 MHz block) and 1800 MHz (2x20 MHz block), as well as for the 2x15 MHz block in the 2 GHz band, expire on April 20, 2022. Total resources in the 700 MHz, 1500 MHz, 2.3 GHz and 3.6 GHz bands (part of the band is allocated for the FWA system until April 20, 2022), as well as a 2x5 MHz block in the 2 GHz band, 2x40 MHz FDD and 40 MHz TDD blocks in the 2.6 GHz band and the 1000 MHz block (potentially two more blocks of 600 MHz each) in the 26 GHz band are available for the award for MFCN systems.

Given the fact that the Agency has a legal obligation, ex officio to initiate a public bidding procedure not later than six months prior to the expiry of the validity period of approvals for the use of radio-frequencies for the implementation of the public electronic communications networks, the Agency has decided to conduct the re-award of the radio-frequencies in the 900 MHz, 1800 MHz and 2 GHz bands, for which the approvals expire in April 2022, together with available radio-frequencies in the 2 GHz and 2.6 GHz bands, in a single public bidding procedure, which would be launched by the end of the third or beginning of the fourth quarter of 2021 and completed by the end of that year or the beginning of 2022, and to conduct the award of available radio-frequencies in the bands 700 MHz, 1500 MHz, 2.3 GHz, 3.6 GHz and 26 GHz also in a single public bidding procedure during 2022.

Therefore, the subject of the upcoming public bidding for awarding the approvals for the use of radio-frequencies for the implementation of the public mobile electronic communications networks is a total of 220 MHz of the spectrum in five bands which is available for use from April 21, 2022 (resources in the 900 MHz band, 1800 MHz and 2x15 MHz block in the 2 GHz band), ie from the date of issuance of the approval (2x5 MHz block in the 2 GHz band and available resources in the 2.6 GHz band). All assignments are expected to be valid until September 1, 2031.

The strategy of awarding the available radio-frequencies for mobile networks is designed in a way that enables the achievement of the following goals:

- preserving and encouraging the effective competition in the market of mobile electronic communication services;

- providing a stable business environment for mobile operators and other investors;

- creating conditions for further development of mobile electronic communications networks and services and enabling the implementation and development of advanced technologies (eg 5G NR) through the timely allocation of adequate frequency resources;

- enabling the availability of broadband data transmission services of appropriate quality over as much of the territory of Montenegro as possible;

- ensuring the development of electronic communications services and infrastructure to support the social and economic progress of Montenegro;

- generating the revenues for the budget of Montenegro from the award of radio-frequencies that reflect the market value of the spectrum.

The Agency has designed the spectrum allocation process in accordance with the objectives to be achieved and with full respect for the situation on the national market, in a transparent procedure based on best comparative practice. Taking into account the goals set, characteristics and situation in the electronic communications market in Montenegro, the Agency decided to conduct the procedure of radio-frequency award in the bands 900 MHz, 1800 MHz, 2 GHz and 2.6 GHz for mobile communications networks by method of multiband spectrum auction. The radio-frequency resources subject of the award will be available for the implementation of the MFCN (TRA-ECS) system with full application of the principle of technological neutrality, which we believe will lead to their maximum valorization.

In the present procedure of radio-frequency award, the Agency tried, as much as possible by carefully creating conditions, to satisfy the needs of mobile operators in the direction of further development of mobile electronic communications networks and services in Montenegro. In doing so, a special attention is paied to maintaining competition in the market of public mobile electronic communications services and enabling the continuity of providing services to a large number of users. Since the mentioned radio-frequencies were subject to award in the public bidding procedure in 2016, the Agency decided to apply identical conditions related to the spectrum cap and reserved spectrum in this award procedure, which will enable equal access for all incumbent mobile operators to a package of frequency blocks in the bands 900 MHz (2x10 MHz), 1800 MHz (2x20 MHz) and 2 GHz (2x15 MHz), in order to enable the continuation of the provision of services to customers with the required quality.

According to Article 100 of the LEC, the approvals for the use of radio-frequencies in these radio-frequency bands will be issued on the basis of public bidding, in the procedure prescribed in Art. 106-112 of the LEC.

The approved radio-frequencies will be used in accordance with the Allocation Plan and radio-frequency assignment plans for the 900 MHz, 1800 MHz, 2 GHz and 2.6 GHz bands, and conditions for their use will be prescribed by respective approvals for the use of radio-frequencies issued in accordance with the LEC provisions, after the completion of the public bidding procedure.

**2. DEGREE OF TECHNOLOGICAL DEVELOPMENT AND AVAILABILITY OF BROADBAND NETWORKS AND SERVICES IN MONTENEGRO**

An implementation of modern ICT services that require high data rates is inconceivable without the development of broadband internet access and the construction of appropriate infrastructure. Development and construction of modern electronic communication networks, efficient use of radio frequency spectrum, geographical and economic availability of broadband access is a goal in the function of the development of digital Montenegro. The principle of technological neutrality and creating opportunities for the implementation of all current next generation access network (NGA) technologies is the direction in which fixed and mobile electronic communications networks in Montenegro should be developed.

According to Census of Population, Households and Dwellings in Montenegro 2011, there were 620,029 inhabitants and 192.242 householods. According to population characteristics, Montenegro is a predominantly rural country, with an average population density of 44.9 inhabitants per km2. It is territorially divided into 24 municipalities with 1,307 settlements, of which 58 are urban. Most of the population is concentrated in urban areas where 64% of the population lives.

* 1. **Degree of technological development and availability of broadband electronic communications networks in Montenegro**

The broadband data services at a fixed location are provided in Montenegro using several different technologies and a number of wired and wireless networks. When it comes to fixed networks, from the aspect of physical transmission medium, telecommunication cables with copper pairs, fiber optic cables and coaxial cables dominate, while fixed wireless access systems (WiMAX, RLAN) and satellite systems are slightly represented in the total number of active connections.

The fixed broadband connections based on copper pair telecommunication cables are available in all municipalities in Montenegro, in all urban, suburban and partially rural areas. The dominant technology used for broadband access via copper pair telecommunication cables is ADSL/VDSL. The availability of xDSL service for users who own a fixed telephone connection is 99.51%. ADSL packages for residential users with a maximum enabled bitrate of up to 10/1Mb/s (DL/UL) and VDSL packages with a maximum enabled bitrate of up to 40/5Mb/s (DL/UL) are offered.

A key feature of fixed broadband access services market in Montenegro in the last few years is the intensive development of access networks based on fiber optic cables (FTTH/B). At the end of 2020, fiber optic connections were available to end users in 23 municipalities, mainly in urban areas, with the network developing rapidly to an increasing number of suburban areas. The packages for residential users with a maximum enabled bitrate between 100/10Mb/s and 300/30Mb/s (DL/UL) are mostly offered.

The cable distribution systems (CDS), through the implementation of DOCSIS 3.0 standards, in addition to the distribution of audio-visual media (AVM) content enable the provision of voice telephony and Internet access. In the previous period, the migration of the classic CDS with coaxial cables to advanced systems, the so-called HFC networks, was completed by introducing fiber optic cables into the distribution part of the network. CDS and HFC-based connections are available in 18 municipalities. The packages with a maximum data rate of up to 140/6Mb/s (DL/UL) are offered.

The share of certain fixed broadband access technologies in Montenegro at the end of 2020 is shown in Figure 2.1. It may be noticed that over 97% of active ports are based on FTTx, xDSL and HFC/KDS fixed access technologies. The largest number of users, almost 40%, access to fiber optics based on FTTH or FTTB technology.

Figure 2.1 *Market share of certain fixed broadband access technologies in Montenegro*

Figure 2.2 illustrates the structure of fixed data service users in terms of access rate at the end 2020. The figure shows that as many as 98% of users of fixed data service gains access rate greater than 2Mb/s, and almost 84% to rates greater than 10Mb/s. The largest number of users gains fixed data access rates of 2-4 Mb/s (27.49%). Access rates greater than 30Mb/s are used by 66% of active users, while more than 30% of the total number of fixed broadband users gain access rates greater than 100 Mb/s.

The structure of fixed broadband users in relation to the bitrate at the end of 2020 is provided in Figure 2.2. The figure shows that almost 98% of users of fixed data services have access rates greater than 2Mb/s, and almost 84% to rates greater than 10Mb/s. Access rates higher than 30Mb/s is achieved with over 66% of active connections, and rates higher than 100Mb/s with over 30% of the total number of fixed broadband access connections.

According to data at the end of 2020, at least 17% of the total number of active fixed broadband connections is based on technologies that do not allow a bitrate of 30 Mb/s, and most of them probably do not have the possibility to switch to more advanced technology.

Figure 2.2 *Structure of fixed broadband access users in relation to access rate in Montenegro*

More information on situation on the market of public electronic communications services in Montenegro may be found on the Agency's website http://www.ekip.me.

* 1. **Degree of technological development, availability and usage of mobile broadband electronic communications networks and services**

According to the degree of technological development and availability of advanced services, as well as according to the degree of market competition, mobile communications represent a very important segment of the electronic communications market in Montenegro. The award of radio-frequencies in the 800MHz and 2.6GHz bands and the reallocation of resources in the 900MHz, 1800MHz and 2100MHz bands in the spectrum auction procedure for mobile networks, which was conducted in September 2016, enabled further accelerated development of mobile communication networks in Montenegro, primarily in direction of national broadband coverage.

The networks of all three mobile operators: Telenor, Crnogorski Telekom and Mtel, are based on harmonized standards of the second generation - 2G (GSM/DCS1800, including the package segment - GPRS and EDGE), third generation - 3G (IMT-2000/UMTS, including HSPA + and DC-HSDPA) and fourth generation - 4G (LTE / LTE-Advanced). Radio access part of GSM/DCS1800 networks is realized in the bands 900MHz and 1800MHz, while the access part of UMTS networks is realized in the bands 2100MHz and 900MHz. The bands 800MHz or 900MHz, 1800MHz and 2100MHz or 2600MHz are used for the implementation of the radio access segment of LTE networks. The bands 900MHz, 1800MHz and 2100MHz for UMTS and LTE are used based on spectrum refarming.

The level of technological development of modern mobile communications networks is reflected in capabilities of network to support broadband data services in the first place. When it comes to data service support, GPRS/EDGE is implemented at all GSM/DCS1800 radio base stations of all operators. In access part of 3G (regardless of the applied band), all three mobile operators in Montenegro have implemented HSUPA technology (3GPP *Release* 6) for uplink and HSPA+ technology (3GPP Release 7) for downlink. All 3G radio base stations of all three mobile operators theoretically provide maximum bitrate of 21.1 Mb/s to the user and 5,76Mb/s from the user in the 2x5 MHz channel bandwidth. Depending on the capacity needs at a larger number of locations in urban parts of major cities, a dual-carrier concept (DC) has been implemented which theoretically allows a bitrate of a maximum of 42.2 Mb/s in the downlink by using two adjacent channels of 2x5 MHz bandwidth. DC-HSDPA (3GPP Release 8) is currently the latest commercially available version of the IMT-2000/UMTS of the standards at the global level.

LTE technology, implemented in the networks of mobile operators in Montenegro, allows maximum bitrates of 150 Mb/s in the downlink and 50-75 Mb/s in the uplink, in the 2x20 MHz channel bandwidth and using 64-QAM modulation and 2x2 MIMO (Multiple Input Multiple Output) techniques. By applying the technique of aggregation (CA - Carrier Aggregation) of LTE carriers from two or three bands, depending on the width of the engaged spectrum, the downlink achieves relatively higher rates (specifically, 225-300 Mb/s in the service area of ​​base stations in which it is implemented 2CA technique, ie 300-375 Mb/s at locations where 3CA technique is implemented). It should be noted that these values ​​represent the theoretical maximum capacity of the base station, which is rarely achieved in real conditions.

According to the results of measuring the quality parameters of data transmission services in mobile networks, conducted by the Agency for Electronic Communications and Postal Services (EKIP) at the end of 2019, average bitrate in urban areas, depending on the network, range from 15-20 Mb/s in the downlink, or 20-30 Mb/s in the uplink. Comparative bitrates on the roads are slightly lower: 10-18 Mb/s in the downlink and 11-28 Mb/s in the uplink.

When it comes to the presence of radio interface technology in the access network for providing data transmission services, according to the results of the mentioned measurements, LTE technology dominates with a share of over 99% of the total number of data transmission sessions in cities, and over 95% on roads in networks of two of the three operators. Remaining data traffic in these networks is realized through UMTS networks, while GSM technology is not significantly used for data transmission.

The voice service is provided in all three mobile networks via GSM/DCS1800 and UMTS networks, based on circuit switching. VoLTE (Voice over LTE) technology has not yet been implemented. According to the results of measuring the quality of service parameters in mobile networks conducted by the Agency at the end of 2018, about 95% of the total number of voice calls in cities and about 75% of the total number of voice calls on roads were made in UMTS networks, and the rest in GSM/DCS1800 networks.

In terms of IoT/M2M technologies, only Crnogorski Telekom has implemented NB-IoT technology (specified in 3GPP Release 13) at several locations, mainly in order to respond to individual customer requests in a limited service area. The NB-IoT carrier is implemented in the guard band between adjacent LTE carriers in the 800MHz band.

GSM/DCS1800, UMTS i LTE/LTE-*Advanced* networks operate integrally with all three operators, with integrated core and a shared transmission network. In the networks of all three mobile operators the so-called "vertical handover" is available i.e. the automatic connection switching from one technology to another, resulting in the achievement of maximum transmission performance and connection continuity.

The transmission part of the Telenor and MTEL network is based on the microwave radio relay links, for now with still less significant transmission by optical fibres, but which has been expanding in recent years. On the other hand, Crnogorski telekom uses fibre optic transmission capacities in its backbone, and in "last mile" section it also relies on microwave radio relay links. All three mobile operators have migrated to All IP transmission earlier.

Montenegro can be compared to the most developed countries in Europe in terms of coverage of the population by the mobile communications networks signal. Namely, according to the results of coverage prediction, at the end of 2020, the composite coverage of the population with the GSM signal was between 98% and 99%, while the composite coverage of the UMTS and LTE network signals was between 97% and 98%. The coverage of the territory by the signal of mobile networks includes almost all populated areas (all urban settlements, all suburban areas and most rural areas), main roads (including tunnels), tourist centers and for GSM amounts to about 84%, and for UMTS and LTE about 80% of the total territory of Montenegro. Composite signal coverage of LTE networks, in terms of availability of data transmission services with a minimum bitrate to the user of 10Mb/s, based on user experience (10Mb/s DL), was achieved for about 97% of the population.

Given the very demanding terrain configuration in Montenegro in terms of the mobile networks signal coverage, radio access part of networks of all three operators ware realized with a fairly large number of radio base stations. At the end of 2020, Crnogorski Telekom had active radio base stations for external and tunnel coverage at about 385 locations, Telenor at about 420, and Mtel at about 370 locations.

The degree of development of mobile communications networks and availability of mobile communications services in Montenegro at the end of 2020 is characterized by:

* GSM signal coverage of 98-99% of the population,
* UMTS and LTE signal coverage of 97-98% of the population of Montenegro,
* in the territory where about 97% of the population of Montenegro lives, a data transmission service with a functional bitrate of 10Mb/s or more in the downlink is enabled,
* the average bitrate in the downlink in urban areas 15-20Mb/s, and along main highways 10-18Mb/s,
* two of the three mobile operators of the LTE/LTE-Advanced networks participate in the service of user data traffic with over 99% in urban areas, ie over 95% along the main highways, while the rest of the data traffic is realized through UMTS networks,
* UMTS networks participate in the service of voice traffic with a share of over 95% in urban areas, ie over 75% along the main highways, and the rest of the voice traffic is realized through GSM/DCS1800 networks,
* the degree of technological development of UMTS networks stopped at HSPA+ and DC-HSPA (3GPP Release 7 and 8) when it comes to downlink, and HSUPA (3GPP Release 6) when it comes to uplink,
* the degree of technological development of LTE networks at the level of LTE-Advanced (3GPP Release 10-12), e-Node B stations with up to three aggregated LTE carriers with a width of 10MHz or 20MHz, 64-QAM modulation and 2x2 MIMO technique;
* VoLTE technology is not implemented,
* NB-IoT technology (3GPP Release 13) is implemented in the network of one operator, for a small number of locations.

The number of users of mobile electronic communications services, at the end of 2020, in Montenegro amounted to 1,080,089, which corresponds to a penetration of 174.20%. Of the total number, there were 57.89% postpaid users (625,217), while there were 42.11% (454,872) prepaid users.

The mobile telephony penetration trend on an annual level for the period 2009-2020 is provided in Figure 2.3.

Figure 2.3 *The mobile telephony penetration trend on an annual level for the period 2009 - 2020*

The total number of mobile service users who accessed the Internet (via mobile phones and modems) during 2020 was 539,547, with 449,625 using 3G and 392,198 using 4G access technology. The number of Crnogorski Telekom users who accessed the Internet via mobile networks is 202,774 (37.58%), Telenor 180,059 (33.37%), and the number of MTEL users 156,714 (29.05%). The number of users who accessed the Internet via mobile networks during December 2020 was higher by 6.73% compared to December 2019.

The number of users who accessed the Internet via 2G/3G/4G networks by operators and the total is shown in the Figure 2.4.

Figure 2.4 *The number of users who accessed the Internet via mobile networks*

More information on the situation on the market of public electronic communications services in Montenegro may be found on the Agency's website http://www.ekip.me.

* 1. **An overview of the current radio-frequency awards to mobile operators**

The radio-frequency awards for mobile networks issued in 2007 and 2016 are currently in force. At the spectrum auction in 2016, when all resources in the 800 MHz, 900 MHz, 1800 MHz, 2 GHz and 2.6 GHz bands were awarded, except for the award of radio-frequencies in the new 800 MHz and 2.6 GHz bands, the re-awards to Crnogorski Telekom and Telenor of radio-frequencies in the bands 900 MHz, 1800 MHz and a 2x5 MHz block in the 2 GHz band for the period from January 2017 to September 1, 2031, and a 2x15 MHz block from 2 GHz band for the period from April 2022 to 1 September 2031, were executed. The third mobile operator MTEL did not use the possibility of re-awarding the radio-frequencies from aforementioned three bands.

Plans of radio-frequency awards in the 800 MHz, 900 MHz, 1800 MHz, 2 GHz and 2.6 GHz bands are given in Tables 2.1 to 2.5 respectively.

Table 2.1 *The plan of radio-frequency awards in the 800 MHz band*

|  |  |  |  |  |
| --- | --- | --- | --- | --- |
| **In the period from 1 September 2016 to 1 September 2031** | | | | |
| **Block name** | **Block bandwidth** | **Frequency range [MHz]** | **Holder of the approval** | **Technology in use** |
| A1, A2 | 2x10 MHz | 791-801 / 832-842 | MTEL | LTE |
| A3 - A6 | 2x20 MHz | 801-821 / 842-862 | Crnogorski Telekom | LTE |

Table 2.2 *The plan of radio-frequency awards in the 900 MHz*

|  |  |  |  |  |
| --- | --- | --- | --- | --- |
| **In the period from 1 February 2017 to 20 April 2022** | | | | |
| **Block name** | **Block bandwidth** | **Frequency range [MHz]** | **Holder of the approval** | **Technology in use** |
| B1, B2 | 2x10 MHz | 880-890 / 925-935 | MTEL | GSM, UMTS |
| B3 - B5 | 2x15 MHz | 890-905 / 935-950 | Telenor | GSM, UMTS, LTE |
| B6, B7 | 2x10 MHz | 905-915 / 950-960 | Crnogorski Telekom | GSM, UMTS |
|  |  |  |  |  |
| **In the period from 21 April 2022 to 1 September 2031** | | | | |
| **Block name** | **Block bandwidth** | **Frequency range [MHz]** | **Holder of the approval** | **Technology in use** |
| B1, B2 | 2x10 MHz | 880-890 / 925-935 | unawarded |  |
| B3 - B5 | 2x15 MHz | 890-905 / 935-950 | Telenor |  |
| B6, B7 | 2x10 MHz | 905-915 / 950-960 | Crnogorski Telekom |  |

Table 2.3 *The plan of radio-frequency awards in the 1800 MHz*

|  |  |  |  |  |
| --- | --- | --- | --- | --- |
| **In the period from 1 February 2017 to 20 April 2022** | | | | |
| **Block name** | **Block bandwidth** | **Frequency range [MHz]** | **Holder of the approval** | **Technology in use** |
| C1 - C5 | 2x25 MHz | 1710-1735 / 1805-1830 | Telenor | DCS1800, LTE |
| C6 - C10 | 2x25 MHz | 1735-1760 / 1830-1855 | MTEL | DCS1800, LTE |
| C11 - C15 | 2x25 MHz | 1760-1785 / 1855-1880 | Crnogorski Telekom | DCS1800, LTE |
|  |  |  |  |  |
| **In the period from 21 April 2022 to 1 September 2031** | | | | |
| **Block name** | **Block bandwidth** | **Frequency range [MHz]** | **Holder of the approval** | **Technology in use** |
| C1 - C5 | 2x25 MHz | 1710-1735 / 1805-1830 | Telenor |  |
| C6 | 2x5 MHz | 1735-1740 / 1830-1835 | MTEL |  |
| C7 - C11 | 2x25 MHz | 1740-1765 / 1835-1860 | Crnogorski Telekom |  |
| C12 - C15 | 2x20 MHz | 1765-1785 / 1860-1880 | unawarded |  |

Table 2.4 *The plan of radio-frequency awards in the 2 GHz*

|  |  |  |  |  |
| --- | --- | --- | --- | --- |
| **In the period from 1 February 2017 to 20 April 2022** | | | | |
| **Block name** | **Block bandwidth** | **Frequency range [MHz]** | **Holder of the approval** | **Technology in use** |
| D1 | 2x5 MHz | 1920-1925 / 2110-2115 | unawarded |  |
| D2  D7 - D9 | 2x5 MHz  2x15 MHz | 1925-1930 / 2115-2120  1950-1965 / 2140-2155 | Crnogorski Telekom | UMTS, LTE |
| D3 - D6 | 2x20 MHz | 1930-1950 / 2120-2140 | Telenor | UMTS, LTE |
| D10 - D12 | 2x15 MHz | 1965-1980 / 2155-2170 | MTEL | UMTS |
|  |  |  |  |  |
| **In the period from 21 April 2022 to 1 September 2031** | | | | |
| **Block name** | **Block bandwidth** | **Frequency range [MHz]** | **Holder of the approval** | **Technology in use** |
| D1 - D4 | 2x20 MHz | 1920-1940 / 2110-2130 | unawarded |  |
| D5 - D8 | 2x20 MHz | 1940-1960 / 2130-2150 | Crnogorski Telekom |  |
| D9 - D12 | 2x20 MHz | 1960-1980 / 2150-2170 | Telenor |  |

Table 2.5 *The plan of radio-frequency awards in the 2,6 GHz*

|  |  |  |  |  |
| --- | --- | --- | --- | --- |
| **In the period from 1 September 2016 to 1 September 2031** | | | | |
| **Block name** | **Block bandwidth** | **Frequency range [MHz]** | **Holder of the approval** | **Technology in use** |
| F1, F2 | 2x10 MHz | 2500-2510 / 2620-2630 | Crnogorski Telekom | LTE |
| F3 - F6 | 2x20 MHz | 2510-2530 / 2630-2650 | MTEL | LTE |
| F7 do F14 | 2x40 MHz | 2530-2570 / 2650-2690 | unawarded |  |
| G1 - G8 | 40 MHz | 2570-2610 | unawarded |  |
| G9 | 5 MHz | 2610-2615 | Crnogorski Telekom | Not in use |
| G10 | 5 MHz | 2615-2620 | unawarded |  |

**3. THE SUBJECT OF PUBLIC BIDDING**

The subject of public bidding is the award of approvals for the exclusive use of available radio-frequencies in the 800 MHz, 900 MHz, 1800 MHz, 2 GHz and 2.6 GHz bands in the entire territory of Montenegro for the implementation of the public mobile electronic communications networks.

The subject of the award is a total of 220 MHz of radio-frequency spectrum (2x90 MHz of paired and 40 MHz of unpaired) in the above mentioned four bands. namely: two 2x5 MHz blocks from the 900 MHz band, four 2x5 MHz blocks from the 1800 MHz band, four 2x5 MHz blocks from the 2 GHz band, eight 2x5 MHz blocks and eight 5 MHz blocks from the 2.6 GHz band.

An overview of radio-frequency resources, which are the subject of the award, is given in Table 3.1.

Table 3.1 *The overview of radio-frequency resources subject of the award*

|  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- |
| **Band** | **Available resources** | **Block name** | **Frequency range [MHz]** | **Available from** | **Applicati-on** |
| 900 MHz | 2x10 MHz  (2 blocks  of 2x5 MHz bandwidth) | B1 | 880-885/925-930 | 21 April 2022 | GSM,  MFCN |
| B2 | 885-890/930-935 |
| 1800 MHz | 2x20 MHz  (4 blocks  of 2x5 MHz bandwidth) | C12 | 1765-1770/1860-1865 | 21 April 2022 | DCS1800,  MFCN |
| C13 | 1770-1775/1865-1870 |
| C14 | 1775-1780/1870-1875 |
| C15 | 1780-1785/1875-1880 |
| 2 GHz | 2x20 MHz  (4 blocks  of 2x5 MHz bandwidth) | D1 | 1920-1925/2110-2115 | The date of the approval issuance | MFCN |
| D2 | 1925-1930/2115-2120 | 21 April 2022 |
| D3 | 1930-1935/2120-2125 |
| D4 | 1935-1940/2125-2130 |
| 2.6 GHz  (paired) | 2x40 MHz  (8 blocks  of 2x5 MHz bandwidth) | F7 | 2530-2535/2650-2655 | The date of the approval issuance | MFCN |
| F8 | 2535-2540/2655-2660 |
| F9 | 2540-2545/2660-2665 |
| F10 | 2545-2550/2665-2670 |
| F11 | 2550-2555/2670-2675 |
| F12 | 2555-2560/2675-2680 |
| F13 | 2560-2565/2680-2685 |
| F14 | 2565-2570/2685-2690 |
| 2.6 GHz  (unpaired) | 40 MHz  (8 blocks  of 5 MHz bandwidth) | G1 | 2570-2575 | The date of the approval issuance | MFCN |
| G2 | 2575-2580 |
| G3 | 2580-2585 |
| G4 | 2585-2590 |
| G5 | 2590-2595 |
| G6 | 2595-2600 |
| G7 | 2600-2605 |
| G8 | 2605-2610 |

**3.1. The structure of frequency blocks in the 900 MHz band**

The subject of the award in the 900 MHz band is a total of 2x10 MHz paired radio-frequency spectrum divided into two frequency blocks of 2x5 MHz bandwidth (blocks B1 and B2).

Validity period of the approvals for the use of radio-frequencies in the 900 MHz band is from 21 April 2022 to 1 September 2031. Frequency blocks are available from 21 April 20211.

For the purpose of public bidding, frequency blocks in the 900 MHz band are grouped into two categories. The categories of frequency blocks in the 900 MHz band, subject to the award, are given in Table 3.2.

Table 3.2 *The categories of frequency blocks in the 900 MHz band*

|  |  |  |  |  |
| --- | --- | --- | --- | --- |
| **Cate-**  **gory** | **Block width** | **Number of**  **blocks for award** | **Period of approval validity** | **Description** |
| PA1 | 2x5 MHz | 2 | From 21 April 2022 to 1 September 2031 | Blocks B1 and B2 (reserved spectrum for the incumbent mobile operators, subject to the award in the pre-auction phase) |
| GA1 | 2x5 MHz | 0 (1 or 2 if one or both of blocks in category PA1 are not awarded in the pre-auction phase) | From 21 April 2022 to 1 September 2031 | Frequency generic blocks from the range B1 to B2 (subject to the award in the main auction phase) |

Frequency blocks of 2x5 MHz bandwidth in category PA1 (reserved spectrum for the incumbent mobile operators in the 900 MHz band) will be subject to the award in the pre-auction phase. If in the pre-auction phase one or both of blocks in category PA1 are not awarded for any reason, the number of blocks in category GA1 will be increased by respectively.

**3.2. The structure of frequency blocks in the 1800 MHz band**

The subject of the award in the 1800 MHz band is a total of 2x20 MHz paired radio-frequency spectrum divided into four frequency blocks of 2x5 MHz bandwidth (blocks C12 to C15).

The approvals for the use of radio-frequencies in the 900 MHz band are awarded with the validity period from 21 April 2022 to 1 September 2031.

For the purpose of public bidding, frequency blocks in the 1800 MHz band are grouped into two categories. The categories of frequency blocks in the 1800 MHz band, subject to the award, are given in Table 3.3.

Table 3.3 *The categories of frequency blocks in the 1800 MHz band*

|  |  |  |  |  |
| --- | --- | --- | --- | --- |
| **Cate-**  **gory** | **Block width** | **Number of**  **blocks for award** | **Period of approval validity** | **Description** |
| PA2 | 2x5 MHz | 4 | From 21 April 2022 to 1 September 2031 | Frequency generic blocks C12 and C15 (reserved spectrum for the incumbent mobile operators, subject to the award in the pre-auction phase) |
| GA2 | 2x5 MHz | 0 (1 to 4 if one or more blocks in category PA2 are not awarded in the pre-auction phase) | From 21 April 2022 to 1 September 2031 | Frequency generic blocks C12 and C15 (subject to the award in the main auction phase) |

Frequency blocks of 2x5 MHz bandwidth in category PA2 (reserved spectrum for the incumbent mobile operators in the 1800 MHz band) will be subject to the award in the pre-auction phase. If in the pre-auction phase one or two blocks in category PA2 are not awarded for any reason, the number of blocks in category GA2 will be increased respectively.

**3.3. The structure of frequency blocks in the 2 GHz band**

The subject of the award in the 2 GHz band is a total of 2x20 MHz paired radio-frequency spectrum divided into four frequency blocks of 2x5 MHz bandwidth (blocks D1 to D4).

The approvals for the use of radio-frequencies in the 2 GHz band are awarded with the validity period for the frequency block D1 as of the date of the approval issuance, and the frequency blocks D2 to D4 from 21 April 2022, untill 1 September 2031. The frequency block D1 is available from the date of the approval issuance, while frequency blocks D2 to D4 are available from 21 April 2022.

For the purpose of public bidding, frequency blocks in the 2 GHz band are grouped into three categories. The categories of frequency blocks in the 2 GHz band, subject to the award, are given in Table 3.4.

Table 3.4 *The categories of frequency blocks in the 2 GHz band*

|  |  |  |  |  |
| --- | --- | --- | --- | --- |
| **Cate-**  **gory** | **Block width** | **Number of**  **blocks for award** | **Period of approval validity** | **Description** |
| PA3 | 2x5 MHz | 3 | From 21 April 2022 to 1 September 2031 | Frequency generic blocks D2 to D4 (reserved spectrum for the incumbent mobile operators, subject to the award in the pre-auction phase) |
| GA3 | 2x5 MHz | 0 (1 to 3 if one or more blocks in category PA3 are not awarded in the pre-auction phase) | From 21 April 2022 to 1 September 2031 | Frequency generic blocks D2 to D4 (subject to the award in the main auction phase) |
| GA4 | 2x5 MHz | 1 | From date of the approval issuance to 1 September 2031 | Block D1 (subject to the award in the main auction phase) |

Frequency blocks of 2x5 MHz bandwidth in category PA3 (reserved spectrum for the incumbent mobile operators in the 2 GHz band) will be subject to the award in the pre-auction phase. If in the pre-auction phase one or more blocks in category PA3 are not awarded for any reason, the number of blocks in category GA3 will be increased respectively.

Paired frequency blocks in the 2 GHz band marked D1 and D2 may be affected at a limited number of locations and with a limited duration by harmful interference caused by using non-standard DECT 6.0 devices. The Agency will resolve each interference case individually as reported by the mobile operator in the most efficient way in accordance with its statutory powers.

**3.4. The structure of frequency blocks in the 2.6 GHz band**

The subject of the award in the 2.6 GHz band is a total of 2x40 MHz paired radio-frequency spectrum divided into eight frequency blocks of 2x5 MHz bandwidth (blocks F7 to F14) and a total of 40 MHz unpaired radio-frequency spectrum divided into eight frequency blocks of 5 MHz (blocks G1 to G8).

The approvals for the use of radio-frequencies in the 2.6 GHz band are awarded with the validity period as of the date of the approval issuance until 1 Sptember 2021. All frequency blocks in the 2.6 GHz band which are the subject of public bidding are available from the date of the approval issuance.

For the purpose of public bidding, frequency blocks in the 2.6 GHz band are grouped into two categories. The categories of frequency blocks in the 2.6 GHz band, subject to the award, are given in Table 3.5.

Table 3.5 *The categories of frequency blocks in the 2.6 GHz band*

|  |  |  |  |  |
| --- | --- | --- | --- | --- |
| **Cate-gory** | **Block**  **width** | **Number of blocks**  **for award** | **Period of approval validity** | **Description** |
| GA5 | 2x5 MHz | 8 | as of the date of the approval issuance untill 1 September 2031 | Frequency generic unpaired blocks F7 to F14 (subject to the award in the main auction phase) |
| GA6 | 5 MHz | 8 | as of the date of the approval issuance untill 1 September 2031 | Frequency generic unpaired blocks G1 to G8 (subject to the award in the main auction phase) |

Unpaired frequency block 2570-2575 MHz (block G1), except when used for the uplink, as well as any lowest unpaired frequency block 5 MHz wide in the band 2575-2620 MHz which is part of the assigned block of one TDD network if it borders on the lower side with the assigned block of another non-synchronized TDD network, are considered to be restricted blocks. All frequency blocks in the paired part of the band and other frequency blocks in the unpaired part of the 2500-2690 MHz band are considered to be non-restricted blocks. The maximum allowed EIRP base stations of MFCN system inside and outside of awarded restricted block is reduced compared to non-restricted blocks.

**4. AN OVERVIEW OF THE PUBLIC BIDDING PROCEDURE AND LEGAL OBLIGATIONS**

**4.1. Legal basis of the radio-frequency spectrum management**

The legal basis of the radio-frequency spectrum management in Montenegro is represented by the Law on Electronic Communications from 2013 (LEC) and a set of by-laws issued under the LEC, out of which for this public bidding procedure are important:

* The Radio-Frequency Spectrum Allocation Plan (Official Gazette of Montenegro, 89/20 and 104/20);
* The Radio-Frequency Assignment Plan in the 880-915/925-960 MHz band for GSM and TRA-ECS systems (Official Gazette of Montenegro, 53/14);
* The Radio-Frequency Assignment Plan in the 1710-1785/1805-1880 MHz band for GSM/DSC1800 and TRA-ECS systems (Official Gazette of Montenegro, 53/14);
* The Radio-frequency Assignment Plan in the 1920-1980/2110-2170 MHz bands for MFCN systems (Official Gazette of Montenegro, 127/20);
* The Radio-Frequency Assignment Plan in the 2500-2690 MHz band for MFCN systems (Official Gazette of Montenegro, 127/20);
* The Rulebook on form of technical solution for the use of radio-frequencies (Official Gazette of Montenegro, 5/21);
* The Rulebook on the methodology and method for the calculation of annual fees for the use of radio-frequencies (Official Gazette of Montenegro, 16/14, 81/18 and 6/19);
* The Decision of the Government of Montenegro on pricing fees for administration of radio-frequency spectrum (Official Gazette of Montenegro, 16/14);
* The Rulebook on the width of the protection zone and type of radio corridors where the planning and construction of other facilities is not allowed (Official Gazette of Montenegro, 33/14);
* The Rulebook on radio equipment (Official Gazette of Montenegro, 45/17);
* The Rulebook on establishing a list of standards in the field of radio equipment and telecommunication terminal equipment (Official Gazette of Montenegro, 46/14);
* The Rulebook on limits of exposure to electromagnetic fields (Official Gazette of Montenegro, 6/15).

The LEC prescribes responsibilities of the Government, the Ministry responsible for telecommunications (the Ministry for Economic Development) and the Agency for Electronic Communications and Postal Services, as the national regulatory authority in the field of radio-frequency spectrum management.

The activity in the field of electronic communications and management and the use of limited resources, inter alia, are based on the following principles (Article 3 of the LEC):

* objectivity, transparency, non-discrimination and proportionality;
* providing conditions for even development of electronic communications market in the territory of Montenegro;
* ensuring predictability of business environment and equal conditions for business operations of operators;
* harmonizing electronic communications activities with the Montenegrin and international standards;
* protecting and promoting competitiveness in the electronic communications market for the purpose of ensuring benefits for the users;
* promoting efficient management and the use of limited resources;
* encouraging investments and innovations and development of a new and improved infrastructure; and
* improving service quality in the area of electronic communications on continuous basis.

The radio-frequency spectrum management, as a limited natural resource, includes planning, assignment, coordination, control and monitoring of the radio-frequency spectrum. The Agency manages radio-frequency spectrum in accordance with international agreements (the Convention and Radio Regulations of the International Telecommunications Union - ITU) and LEC (Article 96 of the LEC).

The Radio-Frequency Spectrum Allocation Plan specifies the allocation of radio frequency bands for individual radio communications services in accordance with Radio Regulations of the International Telecommunications Union. The Radio-Frequency Spectrum Allocation Plan is adopted by the Government (Article 97 of the LEC).

The plan of radio-frequency assignment in a particular band defines the radio-frequency channels arranged in the band, more detailed terms and the manner of usage and the method for the assignment of radio-frequencies to one or more specific radio-communications services, in accordance with the Radio-Frequency Spectrum Allocation Plan. The Radio-Frequency Assignment Plans are adopted by the Agency while taking into account the needs and demands of users, upon the conducted procedure of public consultations (Article 98 of the LEC).

Certain radio-frequency assignment plans in the 900 MHz, 1800 MHz, 2 GHz and 2.6 GHz bands in accordance with provisions of the LEC prescribe that radio-frequencies in these bands are assigned on an exclusive basis in the entire territory of Montenegro, for the implementation of public mobile electronic communications networks.

In addition to the LEC, The Radio-Frequency Spectrum Allocation Plan, specific radio-frequency assignment plans and other regulatory acts in the field of management and usage of radio-frequency spectrum, regulatory and technical framework for the implementation of the public mobile electronic communications networks in the 900 MHz, 1800 MHz, 2 GHz and 2.6 GHz bands in Montenegro are also represented by relevant technical agreements on coordination of radio-frequencies with administrations of neighbouring countries.

Natural and legal persons may use radio-frequencies based on the approval for the use of radio-frequencies issued by the Agency. Radio-frequencies which may be used without the approval and terms and conditions of their use are defined in a relevant secondary legislation document (Article 99 of the LEC).

The approval for the use of radio-frequencies is issued by the Agency based on the application for the approval of the use thereof. The approval for the use of radio-frequencies in the bands which have been determined to be assigned on an exclusive basis in the territory of Montenegro for the purpose of implementation of the public electronic communications network, that is when, in accordance with Article 105 of the LEC, it is determined that the expressed interest is greater than availability of radio-frequency resources, the approval is issued based on the conducted public bidding procedure (Article 100 of the LEC).

The approval for the use of radio-frequencies are issued by the Agency for a period of up to five years, and for the exclusive use of radio-frequencies in the territory of Montenegro, for no more than 15 years (Article 115 of the LEC).

Validity period for the use of radio-frequencies may be extended upon the application of the holder of the approval if the requirements for the use of radio-frequencies defined in the approval have been met. In the event of the use of public electronic communications networks in the territory of Montenegro on an exclusive basis, validity of the approval for the use of the public electronic communications network is extended based on the conducted procedure of public bidding. The Agency initiates, ex officio or at the request of the radio-frequency users, a public bidding procedure not later than six months prior to the expiry of the approval validity period (Article 117 of the LEC).

The right to use radio-frequencies may be transferred or assigned to another legal person, with the approval of the Agency. When deciding on giving approval to transfer or assign the rights of the use of radio-frequencies which are used for the implementation of public electronic communications networks, the Agency particularly appreciates the application of the principle of efficiency of the radio-frequency spectrum management, or the application of other principles as prescribed in Article 3 of the LEC (Article 118 of the LEC).

The Agency may amend the approval for use of radio-frequencies if:

* the amendment occurs in the Radio-Frequency Spectrum Allocation Plan, Assignment Plan or regulations defining the conditions for the use of radio-frequencies;
* established public interest cannot be met in any other way;
* the amendment is necessary for the purpose of effective use of radio-frequency spectrum;
* harmful interference or excessive emission cannot be eliminated in any other way;
* the amendment is necessary for the purpose of compliance with international agreements and other regulations.

Upon the consultations conducted with the holder of the approval for the use of radio-frequencies, the Agency issues an amended approval with an appropriate deadline within which the holder of the approval is obliged to align the use of radio-frequencies with new conditions (Article 119 of the LEC).

The Agency revokes the approval for use of radio-frequencies if it establishes that:

* incorrect data were specified in the application for approval;
* the holder of the approval does not comply with conditions prescribed in this Law or in the approval;
* deficiencies were not eliminated within the prescribed time limit and upon the request of the Agency;
* in the event of prohibition to carry on business activity in accordance with the Law;
* fees for the use of radio-frequencies have not been paid even after the warning of the Agency;
* harmful interference cannot be avoided in any other way (Article 120 of the LEC).

The Agency revokes the approval for the use of radio-frequencies if it establishes that the holder of the approval has violated some of the rules of the procedure laid down in the public bidding documents.

The approval for the use of radio-frequencies expires:

* upon the expiry of the period for which the approval has been issued;
* upon the request of the holder of the approval;
* by transfer of the right to use radio-frequencies onto another person;
* if the holder of the approval ceases to exist;
* if the approval holder has not started to use radio-frequencies within the period defined in the approval, not later than within one year from the date of the approval issuance (Article 121 of the LEC).

The Law on Electronic Communications and a set of secondary legislation documents passed under the Law thereof make the regulatory framework for building and use of electronic communications infrastructure and associated facilities, conducting activities of the public electronic communications, protecting competition in the area of electronic communications, universal service, management and the use of numeration and addresses, the right and protection of interests of users of the public electronic communications services, protection of electronic communications, and supervision in the area of electronic communications. All relevant documents are available on the website of the Agency ([www.ekip.me](http://www.ekip.me)).

**4.2. An overview of the public bidding procedure**

Bearing in mind the fact that some radio-frequency assignment plans establish that radio-frequencies in the 900 MHz, 1800 MHz, 2 GHz and 2.6 GHz bands are assigned on an exclusive basis in the entire territory of Montenegro for the implementation of the public mobile electronic communications network, in accordance with Article 100 paragraph 2 and Article 117 paragraph 3 of the LEC the approvals for the use of radio-frequencies are awarded, ie extended on the basis of the public bidding procedure.

The public bidding procedure of awarding the approvals for the use of radio-frequencies in the, 900 MHz, 1800 MHz, 2 GHz and 2.6 GHz bands for the implementation of public mobile electronic communication networks is conducted by means of the spectrum auction.

**4.2.1. Initiation of the public bidding procedure**

According to the Article 106 of the LEC, by Decision no. 0504-\_\_\_/1 from \_\_ \_\_\_\_ 2021 Agency is initiated public bidding procedure for award of the approvals for the use of radio-frequencies in the 900 MHz, 1800 MHz, 2 GHz and 2.6 GHz bands for the implementation of public mobile electronic communications networks. Text of the Decision on the initiation of the public bidding procedure is given at the beginning of the Public Bidding Documents and is considered as its integral part.

**4.2.2. Submission of application for participation in the spectrum auction**

The application for participation in the spectrum auction will be submitted directly to the archive of the Agency, every working day from 8:00 to 14:00 (CET), until \_\_ \_\_\_\_ 2021 (the deadline for the submission of applications for participation in the spectrum auction). Address and contact details of the Agency are given in Annex 1. The Agency will issue a confirmation on receiving the application for participation in the spectrum auction stating the name of the applicant, date and time of the reception of the application, and the list of documents submitted with the application.

The application for participation in the spectrum auction is submitted in the form given in Annex 2.

The Agency will keep confidential the list of applicants for participation in the spectrum auction until the expiry date of the deadline for the submission of applications for participation in the spectrum auction.

The application for participation in the spectrum auction and all documents relating to the participation in the spectrum auction will be submitted in the Montenegrin language. The documents originally drafted in a foreign language will be submitted in the language in which they are originally made and translated to the Montenegrin language by an authorized court interpreter.

The application for participation in the spectrum auction, together with other documents will be submitted in an non-transparent envelope addressed as follows: "Application for participation in the spectrum auction 2021".

The application for participation in the spectrum auction received by the Agency after the deadline for the submission of applications for participation in the spectrum auction will not be treated further in the process of public bidding and will be returned unopened to the applicant at its address.

The Agency has the right to extend the deadline for the submission of applications for participation in the spectrum auction, in which case all interested parties will be informed about the new deadline via the Agency’s website [www.ekip.me](http://www.ekip.me).

An applicant for participation in the spectrum auction has the right to modify, supplement, replace or withdraw its application before the deadline for the submission of applications for participation in the spectrum auction, by sending a written notice to the Agency.

**4.2.3. Consideration of applications for participation in spectrum auction**

In the procedure of consideration of the timely submitted applications for participation in the spectrum auction, the Agency will examine eligibility of the bidder interested in participation in the spectrum auction and check whether the application for participation in the spectrum auction was submitted in accordance with the Public Bidding Documents and whether the applicant meets all the requirements prescribed in Section 4.4.

The Agency will reject the application for participation in the spectrum auction which has not been submitted on time or the application which has not been submitted in accordance with the Public Bidding Documents, as well as the application of the applicant who does not meet the requirements prescribed in Section 4.4.

In the event that it deems necessary, the Agency will request from the applicant for participation in the spectrum auction, further information, documentation or explanation that the applicant is obliged to submit within three days.

The Agency will issue the Decision on eligibility of the applicant interested in participation in the auction within 15 days from the expiry date of the deadline for the submission of applications for participation in the spectrum auction, and inform the applicant about it within three days from the day of the issuance of the abovementioned Decision.

An applicant for participation in the spectrum auction whose eligibility has been determined is obliged within three days from the date of submission of the Decision on eligibility of the applicant, to pay the one-off fee for participation in the spectrum auction in the amount of EUR 30,000.00 (thirty thousand Euros) to one of the Agency’s bank accounts given in Annex 1 (noting the following: "Fee for participation in the spectrum auction 2021").

An applicant for participation in the spectrum auction whose eligibility has been determined who failed to pay one-off fee for participation in the spectrum auction within the prescribed period of time will be excluded from the further procedure of public bidding.

An applicant for participation in the auction whose eligibility has been determined and who has paid the one-off fee for participation in the spectrum auction within the prescribed deadline will acquire the status of a qualified bidder in the auction in the further procedure of public bidding.

The fee paid for the purchase of the Public Bidding Documents will not be returned to the applicant for participation in the spectrum auction if its application is not timely submitted or the applicant failed to meet the conditions laid down in Section 4.4 and to applicant for participation in the auction whose eligibility has been determined who failed to pay the one-off fee for participation in the spectrum auction within the prescribed deadline.

After concluding the list of qualified bidders the Agency will inform all qualified bidders about the total number of qualified bidders and their identity.

**4.2.4. Spectrum auction**

The Agency will notify qualified bidders of the start date of the spectrum auction at least seven days in advance. For the approximate start date of the spectrum auction, see Section 4.2.7.

The spectrum auction will be conducted in the Montenegrin language. Bids in any round of bidding shall be submitted in the Montenegrin language. All communication between the Agency, as an auctioneer, and the bidder in the spectrum auction procedure will take place in the Montenegrin language. It is not envisaged that any stage of the proceedings will be conducted in any language other than Montenegrin and the Agency will not provide any translation from Montenegrin into any other language.

The spectrum auction format is described in Section 4.6.

The spectrum auction rules are given in Chapter 6.

**4.2.5. Adoption of Decision on the selection of bidders**

After the completion of the spectrum auction procedure, a ranking list of the auction participants will be made, based on which the Agency will issue the Decision on the selection of bidders in the public bidding procedure (by which action winners will be identified).

The Decision on the selection of bidders in the public bidding procedure will be issued within 30 days from the end date of the auction.

**4.2.6. Issuance of approvals for the use of radio-frequencies**

Based on the Decision on the selection of bidders in the public bidding procedure, the selected bidder (auction winner) submits an application for the issuance of the approval for the use of radio-frequencies in accordance with Article 101 Paragraph 2 Items 1, 2 and 3 and Paragraph 4 of the LEC. The Agency will issue the approval for the use of radio-frequencies upon a duly submitted application and evidence of the payment of the fee for the issuance of the approval for the use of radio-frequencies.

Draft approvals for the use of radio-frequencies by bands are provided in Annexes 1 to 4.

The amount of the one-off fee generated in the public bidding procedure will be paid to the budget of Montenegro within 15 days from the date of the issuance of the Decision on the selection of bidders in the public bidding procedure. If the selected bidder fails to pay one-off fee for awarding the approval for the use of radio-frequencies in the prescribed period of time, the Agency will activate the submitted banking guarantee.

**4.2.7. Provisional schedule of certain phases of the spectrum auction procedure**

The provisional schedule of certain phases of the spectrum auction procedure is given in Table 4.1.

Table 4.1 *Provisional schedule of certain phases of the spectrum auction*

|  |  |  |
| --- | --- | --- |
|  | **Phase description** | **Provisional date** |
| 1. | Issuance of the Decision on the initiation of the public bidding procedure | \_\_ October 2021 |
| 2. | Deadline for the submission of applications for participation in the spectrum auction | \_\_ October 2021 |
| 3. | Issuance of the Decision on eligibility of the applicant | \_\_ November 2021 |
| 4. | Start of the spectrum auction | in the period from \_\_ to \_\_ November 2021 |
| 5. | Issuance of the Decision on the selection of bidders | 30 days after the auction completion |
| 6. | Issuance of the approvals for the use of radio-frequencies | 45 days from the date of the issuance of the Decision on the selection of bidders |

**4.3. General provisions related to the implementation of public bidding procedure**

**4.3.1. Confidentiality**

The information and data relating to the implementation of the public bidding procedure which the Agency established to be confidential, either by the Public Bidding Documents or in any other manner must not be disclosed to third parties nor publicly released.

All data related to the applicants for participation in the spectrum auction will be considered confidential for the purpose of effective implementation of the auction in accordance with the auction rules.

The applicants for participation in the auction are obliged to treat the information received by the Agency during the spectrum auction as confidential.

The Agency will treat the information received by a qualified bidder in the auction procedure as confidential.

The information about the bids submitted during any phase of the spectrum auction process, will be considered confidential.

The Decision on eligibility of the applicant for participation in the auction, as well as any other decision that has been made in connection with the exclusion of the applicant for participation in the auction or a qualified bidder from the further bidding procedure is forbidden to disclose to third parties, except in cases prescribed by law.

Upon the completion of the spectrum auction, the Agency will allow access to qualified bidders to information on progress of the spectrum auction. The information about the course of the spectrum auction is considered confidential.

The obligation to maintain confidentiality of data and information received by the Agency remain in force until the issuance of the approvals for the use of radio-frequencies to the bidders who have gained that right in the auction procedure.

**4.3.2. Prohibition of collusive behaviour**

Upon the issuance of the Decision on the initiation of the public bidding procedure, the applicants for participation in the auction and qualified bidders in the auction are prohibited to enter into secret conspiracy and collusion in any form that could compromise integrity of the bidding procedure.

As of the date of the issuance of the Decision on the initiation of the public bidding procedure all parties interested in participation in the procedure are forbidden to establish contacts and/or exchange information with other interested parties directly or indirectly with the aim to influence the outcome of the bidding procedure.

In particular, the following activities will be considered secret conspiracy or collusion:

* any cooperation with bidders and/or potential bidders, particularly with the intention of influencing the course or the result of the bidding procedure,
* disclosure of any information concerning participation in the bidding procedure,
* disclosure of bid amounts or bidding strategies, specific bids or other statements likely to influence the participation or bidding behaviour of third parties in the public bidding procedure,
* making any statements and/or announcements that might provide an indication of the intended behaviour throughout the bidding procedure,
* coordinating bidding in the auction.

The applicants for participation in the auction, or qualified bidders in the auction for whom there is an evidence that they have taken some of the aforementioned activities will be excluded from the further bidding procedure, without the right of reimbursement of fee paid for purchase of the Public Bidding Documents and the one-off fee for the participation in the spectrum auction, and the Agency will activate the bid guarantee if the guarantee has been submitted. In that case, the entire auction process will be cancelled and conducted from the beginning.

Should a secret conspiracy or collusive behaviour become known after the completion of the bidding procedure or after issuing the approvals for the use of radio-frequencies, the Agency will revoke the approvals for the use of radio-frequencies issued based on the public bidding procedure thereof to the bidders who has conducted aforementioned activities, without the right of reimbursement of the fee paid for purchase of the Public Bidding Documents, the one-off fee for participation in the spectrum auction, the one-off fee for the awarding of approvals for the use of radio-frequencies and annual regulatory fees.

**4.3.3. Correctness and completeness of information**

A qualified bidder in the auction, for which is determined that its application for participation in the spectrum auction and other acts submitted with the application contain incorrect or incomplete information will be excluded from the further public bidding procedure, without the right of reimbursement of the fee paid for purchase of the Public Bidding Documents and the one-off fee for participation in the spectrum auction and the Agency will activate the bid guarantee if the guarantee has been submitted. In that case, the entire auction process will be cancelled and conducted from the beginning.

Should it be determined that, at any point in time after the completion of the public bidding procedure, the qualified bidder has submitted the application for participation in the spectrum auction, or any other document that accompanies the application, with incorrect or incomplete information, the Agency will revoke the approval for the use of radio-frequencies issued to that bidder based on the public bidding procedure thereof, without the right of reimbursement of the fee paid for purchase of the Public Bidding Documents, the one-off fee for participation in the spectrum auction, the one-off fee for the awarding of approvals for the use of radio-frequencies and annual regulatory fees.

**4.3.4. Documents submitted with the application for participation in the spectrum auction**

The applicant will submit the following documents along with the application for participation in the auction:

* Registration certificate issued by the competent authority;
* Evidence of the existence of at least five years of experience in the implementation of public mobile electronic communications networks and in the provision of public mobile electronic communications services (only for new entrants in the market);
* Evidence that the applicant is not status or proprietary related to the incumbent mobile operators in Montenegro ("Telenor" d.o.o. Podgorica, "Crnogorski Telekom" a.d. Podgorica and "MTEL" d.o.o. Podgorica);
* A declaration confirming that the applicant is familiar with the content of the Public Bidding Documents and that it accepts the terms and conditions set out in the Documents (form of declaration is given in Annex 3);
* A declaration of correctness and completeness of submitted information and that the applicant is aware of the consequences which submission of incorrect and incomplete information brings (form of declaration is given in Annex 4);
* A declaration that the applicant did not undertake the activities of secret conspiracy or collusion in a way that would compromise an integrity of the public bidding procedure and that the applicant is aware of the consequences which taking of these activities brings (form of declaration is given in Annex 5);
* A declaration that the applicant is solvent and that it is not associated with any bankruptcy procedure, the procedure of enforced collection or forced liquidation, which could have an impact on its participation in the spectrum auction procedure, and that in relation to the current business operations there are no reasons for initiating the aforementioned actions or potential judicial and other procedures that the applicant may be related to which could have an impact on its participation in the spectrum auction procedure (form of declaration is given in Annex 6).

In case the applicant is a group of bidders (consortium), the aforementioned documents shall be delivered to each member of the consortium, except for the proof from indent 2 which shall be submitted only to the consortium member who has undertaken the obligation to implement public mobile electronic communication network and the provision of public mobile electronic communications services.

**4.3.5. Requests for clarification**

Interested parties who have purchased the Public Bidding Documents may submit to the Agency a request for clarification of the Public Bidding Documents not later than 10 days before the expiration of the deadline for the submission of applications for participation in the spectrum auction.

The request for clarification of the Public Bidding Documents will be submitted in electronic form to the following e-mail address: [aukcija2021@ekip.me](mailto:aukcija2021@ekip.me) with indication "Clarifications in regard to the public bidding procedure for awarding the approvals for the use of radio-frequencies".

The request for clarification of the Public Bidding Documents will be submitted in the Montenegrin language.

The Agency will not respond to the requests for clarifications received after the expiry of the deadline.

The Agency will publish the requests for clarification and answers in anonymous form on its website [www.ekip.me](http://www.ekip.me) within eight days from the date of their receipt.

**4.3.6. Modifications and/or amendments to the Public Bidding Documents**

The Agency may modify and/or amend the Public Bidding Documents at any time after the adoption of the Decision on launching the public bidding procedure until the expiration of the deadline for the submission of applications for participation in the spectrum auction.

The Agency will inform the entities which have purchased the Public Bidding Documents about the contents of modifications and/or amendments to the Public Bidding Documents within three days.

**4.3.7. Bid guarantee**

The qualified bidder is required to submit to the Agency, in order to secure its bid submitted at any phase of the public bidding procedure, a bid guarantee in a form of an unconditional bank guarantee in favour of the Agency, payable at first call, issued by a bank registered in Montenegro or a foreign bank awarded a credit rating by a reputable credit rating agency corresponding to the credit quality level 3 (investment grade) or higher. A reputable rating agency is the agency that is on the list of registered and certified rating agencies published by the European Securities and Markets Authorities - ESMA.

The bank guarantee shall be made in accordance with the form given in Annex 7.

The bank guarantee shall be submitted in Montenegrin or in a foreign language translated into Montenegrin certified by a certified court translator.

The bank guarantee shall be submitted in the original in a non-transparent sealed envelope marked as "Bank Guarantee", containing the name of the bidder. The bank guarantee must be delivered by a direct delivery to the authorized member of the Commission for the implementation of the public bidding procedure to the premises of the Agency. The Agency shall issue a confirmation of the receipt of the bank guarantee containing the name of the bidder and date and time of the receipt.

The qualified bidder shall, before the beginning of the Zero Primary Round of the pre-auction phase, ie before the beginning of the First Primary Round of the main auction phase, submit a bid guarantee to the Agency for the amount covering at least 100% of the total amount of the bid submitted in that round. In the subsequent primary rounds of the main auction phase and the supplementary round of the main auction phase, the submitted guarantee, which refers to the bid in the First Primary Round of the main auction phase, must cover at least 25% of the total bid amount.

If the submitted bid guarantee does not allow the submission of a higher bid in the next round of the auction (the guarantee does not cover 25% of the bid which is to be submitted), a qualified bidder, who intends to submit a higher bid in the next auction round is obliged to submit an additional bid guarantee to the Agency which will allow the fulfilment of the above condition. After determining that the additional bid guarantee is valid, the Agency will increase the maximum allowed bid amount for the appropriate bidder in the next round of the bidding.

The qualified bidder which fails to submit a valid bid guarantee before the beginning of the spectrum auction will be excluded from the further public bidding procedure, without the right to reimburse the fee paid for the purchase of the Public Bidding Documents and one-off fee for participation in the spectrum auction.

The qualified bidder which submits invalid additional bid guarantee will not be able to submit in the coming rounds a bid whose amount exceeds the maximum allowed bid amount, determined by the previously submitted correct bid guarantees.

**4.3.8. Annulment and suspension of the public bidding procedure**

The Agency may take a decision on the annulment of the public bidding procedure at any stage of the bidding procedure, prior to an issuance of the Decision on the selection of bidders in the public bidding procedure.

The Agency will take a decision on the annulment of the public bidding procedure in cases where a further extension of bidding procedure may violate the principles in the area of electronic communications determined by Article 3 of the LEC.

The Agency will take a decision on the suspension of the public bidding procedure in case that no application for participation in the spectrum auction is submitted or in case that no applicant for participation in the spectrum auction gets the status of a qualified bidder in the auction.

A decision on the annulment or suspension of the public bidding procedure will be released in the same way as the Decision on the initiation of public bidding procedure.

In the event of the annulment or suspension of the public bidding procedure, fee paid for the purchasing Public Bidding Documents and one-off free paid for the participation in the spectrum auction will not be reimbursed.

**4.3.9. Non-participation in the spectrum auction**

A qualified bidder who before start of the spectrum auction retreats from participation in the spectrum auction or for any reason does not participate in the spectrum auction will not be entitled to reimbursement of the fee paid for the purchasing Public Bidding Documents and one-off free paid for the participation in the spectrum auction.

**4.3.10. Legal remedy**

Pursuant to Article 32, Paragraph 5 of the LEC, decisions of the Agency are final acts. A complaint may be filed/administrative dispute initiated against all decisions issued by the Agency during the public bidding procedure before the Administrative Court of Montenegro, within 30 days of their adoption.

**4.4. Eligibility of applicants to participate in the public bidding procedure**

Any interested legal entity who purchases the Public Bidding Documents, with at least five years of experience in the implementation of the public mobile electronic communications networks and the provision of the public mobile electronic communications services (qualification requirement) is entitled for participation in the public bidding procedure.

A group of bidders (consortium) is entitled for participation in the public bidding procedure. Any legal entity, either before or after the purchase of the Public Bidding Documents, may form a consortium with another legal entity and such consortium may apply for participation in the spectrum auction.

The consortium will be considered to meet the qualification requirement if at least one of its members, which has undertaken the obligation to implement the public mobile electronic communications network and provision of public mobile electronic communications services, has at least five years of experience in these matters.

An applicant for participation in the spectrum auction, whether it acts independently, or as a member of the consortium, who on day of the issuance of the Decision on the initiation of public bidding procedure is not the holder of the approval for the use of radio-frequencies in the 800 MHz, 900 MHz, 1800 MHz and 2 GHz bands (a new entrant in the market), must not be status or proprietary related to the incumbent mobile operators in Montenegro ("Telenor" d.o.o. Podgorica, "Crnogorski Telekom" a.d. Podgorica and "MTEL" d.o.o. Podgorica).

**4.5. The reserve price**

The minimum amount of the one-off fee for the awarding of approvals for the use of radio-frequencies (reserve price) is the price offered for a frequency block in categories PA1 to PA3 in the Zero Primary Round of the pre-auction, or for a frequency block in categories GA1 to GA6 in the First Primary Round of the main auction. The price reached in the spectrum auction for frequency blocks of any category may not be lower than the reserve price.

The minimum amount of the one-off fee for the awarding of approvals for the use of radio-frequencies (reserve price) in each category of frequency blocks subject to the principal stage of the auction is given in Table 4.2.

Table 4.2 *The reserve prices for individual categories of frequency blocks*

|  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- |
| **Band** | **Cate-**  **gory** | **Block**  **width** | **Number of**  **blocks for award** | **Period of**  **approval validity** | **Description** | **Reserve price per block**  **[EUR]** |
| 900 MHz | PA1 | 2x5 MHz | 2 | from 21 April 2022 to 1 September 2031 | Blocks B1 and B2 (reserved spectrum for incumbent mobile operators, subject to the award in the pre-auction phase) | 946,000.00 |
| GA1 | 2x5 MHz | 0 (1 or 2 if one or both of blocks in category PA1 are not awarded in the pre-auction phase) | from 21 April 2022 to 1 September 2031 | Frequency generic blocks from the range B1 to B2 (subject to the award in the pre-auction phase) | 946,000.00 |
| 1800 MHz | PA2 | 2x5 MHz | 4 | from 21 April 2022 to 1 September 2031 | Frequency generic blocks from the range C12 to C15 (reserved spectrum for incumbent mobile operators, subject to the award in the pre-auction phase) | 440,000.00 |
| GA2 | 2x5 MHz | 0 (1 to 4 if one or more blocks in category PA2 are not awarded in the pre-auction phase) | from 21 April 2022 to 1 September 2031 | Frequency generic blocks from the range C12 to C15 (subject to the award in the pre-auction phase) | 440,000.00 |
| 2 GHz | PA3 | 2x5 MHz | 3 | from 21 April 2022 to 1 September 2031 | Frequency generic blocks from the range D2 to D4 (reserved spectrum for incumbent mobile operators, subject to the award in the pre-auction phase) | 406,000.00 |
| GA3 | 2x5 MHz | 0 (1 to 3 4 if one or more blocks in category PA3 are not awarded in the pre-auction phase) | from 21 April 2022 to 1 September 2031 | Frequency generic blocks from the range D2 to D4 (subject to the award in the main auction phase) | 406,000.00 |
| GA4 | 2x5 MHz | 1 | from date of approval issuance to 1 September 2031 | Block D1 (subject to the award in the main auction phase) | 406,000.00 |
| 2.6 GHz | GA5 | 2x5 MHz | 8 | from date of approval issuance to 1 September 2031 | Frequency generic paired blocks from the range F7 do F14 (subject to the award in the main auction phase) | 200,000.00 |
| G6 | 5 MHz | 8 | from date of approval issuance to 1 September 2031 | Frequency generic unpaired blocks from the range G1 to G8 (subject to the award in the main auction phase) | 55,000.00 |

**4.6. Format of the spectrum auction**

The public bidding procedure of awarding the approvals for the use of radio-frequencies in the 900 MHz, 1800 MHz, 2 GHz and 2.6 GHz bands for the implementation of public mobile electronic communications networks will be conducted by means of the spectrum auction in the combined format of adjusted multi-round sequential bidding (clock auction) and adjusted single-round bidding through sealed bids (sealed-bid auction). A diagram of the spectrum auction procedure is shown in Figure 4.1.

The spectrum auction is conducted in two phases:

* **the pre-auction** (bidding for the reserved spectrum), in which the frequency blocks in categories PA1 to PA3 (reserved spectrum for incumbent operators) are subject to the award, for which the bids may be submitted only by qualified bidders who on day of the issuance of the Decision on the initiation of public bidding procedure were the holders of the approvals for the use of radio-frequencies in the 800 MHz, 900 MHz, 1800 MHz and 2 GHz bands;
* **the main auction** (bidding for the unreserved spectrum), in which the frequency blocks in categories GA1 to GA6 are subject to the award, for which all qualified bidders may equally compete.

The pre-auction phase is conducted in the form of a single-round bidding consisting of one primary bidding round (Zero Primary Round) in which eligible bidders (incumbent mobile operators) submit initial bids (requests) for frequency blocks of categories PA1 to PA3 at the reserve price. Given the rules regarding spectrum caps, in the Zero Primary Round of bidding it is not possible for excess demand to occur in any category of blocks (situation that the total number of blocks required is greater than the total number of blocks subject to award). The winners of the pre-auction phase are the bidders who have submitted the correct bid in the Zero Primary Round (winning bid in the pre-auction phase). Each winner of the pre-auction phase is awarded the number of blocks of each category as specified in his winning bid in the pre-auction phase for the amount of fee corresponding to the total amount of the bid.

Based on the outcome of the pre-auction phase, the number of blocks of categories GA1 to GA6, which are the subject of bidding in the main auction phase, is determined.

The main auction is conducted in the form of multiple round bidding which consists of one or more primary rounds, and possibly one supplementary round.

The primary bids rounds follow the clock bidding format. In the First Primary Round, the qualified bidders submit initial bids (requests) for the frequency blocks of categories GA1 to GA6 at the reserve price. In the event of no excess demand in any category of blocks in the First Primary Round, the auction ends. In event of excess demand in any category of blocks, the bidding continues with the Second Primary Round in which bidders submit bids (requests) for blocks at an increased (clock) price in the categories in which excess demand is recorded. In the event that in the Second Primary Round there is no excess demand in any category of blocks and that all blocks in each category are awarded (that the number of required blocks in each category is equal to the number of blocks subject to the award), the auction ends. In the event that there is no excess demand in any category of blocks in the Second Primary Round and if there are unawarded blocks, the bidding continues with the Supplementary Round. In the event that there is an excess demand in any category of blocks in the Second Primary Round, the bidding continues with the subsequent primary round and so on.

The Supplementary Round follows the sealed-bid auction format. In the Supplementary Round, bidders submit one or more supplementary bids (the number of blocks and the total bid amount) for sets of blocks of different categories that remained unawarded in the last primary round of the main auction phase, where the total bid amount cannot be lower than the sum of fees per block for the categories of blocks included in the last primary round in which there was an excess demand nor higher than the sum of fees per block for categories of blocks included in the last primary round. The auction ends with the Supplementary Round.

The winners of the main auction phase are the bidders who submitted the correct bid in the last primary round (winning bid in the last primary round of the main auction phase) and, if the Supplementary Round of bidding is conducted, the bidders whose bids in the Supplementary Round are part of the bid combination with the the highest sum of the offered total bid amounts (winning bid in the Supplementary Round of the main auction phase). The same bidder may be the winner in both the last primary round and the Supplementary Round of the main auction phase. Each winner of the main auction phase is awarded the number of blocks of each category as stated in its winning bid in the last primary round and the Supplementary Round of the main auction phase, for the amount of fee corresponding to the sum of the total amounts of these bids.

Upon completion of the spectrum auction, the Agency shall determine the physical boundaries of the frequency blocks to be awarded to each auction winner in each band, in accordance with current awards and the outcome of the auction, according to the criteria given in Section 4.8.



Figure 4.1 *Diagram of the spectrum auction procedure*

**4.7. One-off fee for awarding the approvals for the use of radio-frequencies**

The total amount of one-off fee for awarding the approvals for the use of radio-frequencies in the public bidding procedure (the total one-off fee), that upon completion of the spectrum auction each winner needs to pay, is the sum of the following:

* the amount of its winning bid in the pre-auction phase;
* the amount of its winning bid in the last primary round of the main auction phase;
* the amount of its winning bid in the Supplementary Round of the main auction phase.

The amount of the one-off fee generated in the public bidding procedure will be paid to the budget of Montenegro within 15 days from the date of the issuance of the Decision on the selection of bidders in the public bidding procedure.

**4.8. Determination of the physical boundaries of awarded frequency blocks**

According to the outcome of the spectrum auction, in terms of the number of blocks awarded to each winner, the Agency will determine the physical boundaries of the awarded blocks in each of the bands, taking into account the current awards valid after April 20, 2022, applying the following criteria:

* all awards in the 900 MHz and 1800 MHz bands, part of the 2 GHz band consisting of frequency blocks D3 to D12 and in the 2.6 GHz band must be continuous, ie each holder of the approval may have only one frequency block, which is continuous;
* if necessary, the boundaries of the frequency blocks for which the current awards are valid after 20 April 2022, may be shifted by the minimum distance on the frequency axis that allows the continuity of the overall awards in the band;
* in the event that, in order to ensure the continuous award of one holder, it is necessary to shift the boundaries of the frequency block for which the current awards to another holder is valid after April 20, 2022, such a shift may be only downwards;
* frequency block D1 in the band 2 GHz is awarded as specific and may be separated from the rest of the award to the same holder;
* the winner of the auction who is awarded the frequency blocks from the 2 GHz band, and who does not have the current awards in that band valid after April 20, 2022, will be awarded the frequency blocks D3 and D4, respectively;
* in the event when the application of the previous criteria cannot determine the physical boundaries of the awarded frequency blocks, the winner of the auction who has won a lower number of blocks in a certain band will be awarded a lower position on the frequency axis.

# **SPECIAL CONDITIONS AND OBLIGATIONS**

## **Reserved radio-frequency spectrum**

Reserved radio-frequency spectrum for the incumbent mobile operators consists of the following:

- two frequency blocks of 2x5 MHz bandwidth in category PA1 in the 900 MHz band;

* four frequency blocks of 2x5 MHz bandwidth in category PA2 in the 1800 MHz band;
* three frequency blocks of 2x5 MHz bandwidth in category PA3 in the 2 GHz band.

Reserved spectrum will be the subject of the award in the pre-auction phase.

Only qualified bidders who were the holders of the approvals for the use of radio-frequencies in the 900 MHz, 1800 MHz and 2 GHz bands on day of the issuance of the Decision on the initiation of public bidding procedure may apply in the pre-auction phase for the award of spectrum reserved for the incumbent mobile operators (frequency blocks in categories PA1 to PA3).

If one or few blocks in categories PA1 to PA3 are not awarded in the pre-auction phase for any reason, a number of blocks in categories GA1 to GA3 in the main auction phase will increase respectively.

For the award of any frequency block in categories GA1 to GA6 all qualified bidders may equally bid in the main auction phase.

## **Spectrum caps and spectrum floors**

The holder of the approval for the use of radio-frequencies in the 800 MHz, 900 MHz, 1800 MHz, 2 GHz and 2.6 GHz bands for the implementation of the public mobile electronic communications networks at any time may dispose of the following amount of spectrum (general spectrum caps) to a maximum:

* 2x30 MHz in the 800 MHz and 900 MHz band together,
* 2x30 MHz in the 1800 MHz band,
* 2x40 MHz in the 2.6 GHz band (only for paired spectrum),
* 2x105 MHz across all five bands (only for paired spectrum).

A qualified bidder, who was the holder of the approvals for the use of radio-frequencies in the 900 MHz, 1800 MHz and 2 GHz bands on day of the issuance of the Decision on the initiation of the public bidding procedure (incumbent mobile operator), in the pre-auction phase may submit a bid for a maximum number of frequency blocks in a specific category in the 900 MHz, 1800 MHz and 2 GHz bands whose total bandwidth, gathered with the total bandwidth of the previously awarded frequency blocks in those bands, at any time does not exceed the following spectrum caps:

- 2x10 MHz in the 900 MHz band;

- 2x20 MHz in the 1800 MHz band;

- 2x15 MHz in the 2 GHz band.

A qualified bidder may submit a bid in the main auction phase for a maximum number of frequency blocks in each band whose total bandwidth gathered with the total bandwidth of the previously awarded frequency blocks and a total bandwidth of frequency blocks awarded in the pre-auction phase, at any time does not exceed the value of defined general spectrum caps.

A qualified bidder who is interested in the award of radio-frequencies in the 2.6 GHz band, at any phase of the spectrum auction may submit a bid for the minimum of two paired frequency blocks of 2x5 MHz bandwidth in the 2.6 GHz band (spectrum floor).

## **Coverage obligations and network deployment (coverage requirements)**

In order to achieve the prescribed level of coverage of the population of Montenegro by the network signal which allows the provision of services with the defined quality, any technology may be used as well as any band available to the operator in line with the corresponding radio-frequencies allotment plan. The operator which disposes of the spectrum in several bands for which different coverage requirements have been defined is obliged to fulfil a more demanding criterion, but it is not required to develop the network in each band in parallel.

### **Coverage requirements in the 900 MHz band**

The incumbent operator of the mobile electronic communications services in Montenegro who was assigned radio-frequencies in the 900 MHz band based on the public bidding procedure is obliged by September 1, 2022, to provide coverage of 99% of the population of Montenegro, in terms of availability of voice telephony and SMS services.

A new entrant in the market who was assigned radio-frequencies in the 900 MHz band based on the public bidding is obliged to observe the minimum of the following when it comes to the scope and dynamics of the coverage of the population of Montenegro in terms of availability of voice telephony and SMS services:

* 25% of the population by the end of the second year of the approval validity,
* 50% of the population by the end of the third year of the approval validity,
* 75% of the population by the end of the fifth year of the approval validity.

### **Coverage requirements in the bands above 1 GHz**

The incumbent mobile operator in Montenegro who was awarded radio-frequencies in the 1800 MHz and/or 2.6 GHz band based on the public bidding procedure is obliged by September 1, 2022, to provide coverage of 75% of the population of Montenegro with the network signal, in terms of availability of data transmission service with the required quality.

A new entrant in the market who was awarded radio-frequencies in the 1800MHz and/or 2.6 GHz band based on the public bidding procedure, in terms of availability of data transmission service with the required quality, is obliged to observe the minimum of the following:

* 15% of the population by the end of the second year of the approval validity,
* 30% of the population by the end of the third year of the approval validity,
* 50% of the population by the end of the fifth year of the approval validity.

A network coverage, in terms of availability of data transmission service with the required quality, means the ability to provide data services with minimum bitrate towards the user (downlink) of 10 Mb/s based on user experience, and a guaranteed bitrate towards the user (downlink) of 2 Mb/s and guaranteed bitrate from the user (uplink) of 1 Mb/s, in case of outdoor mobile reception.

The request for the minimum bitrate towards the user (downlink) of 10 Mb/s based on user experience will be considered fulfilled if in at least 90% of measurements conducted during one day (00-24h) the measured data transfer rate towards the user is 10 Mb/s or more, with level of successfully initiated and finished measurement sessions of 95%, excluding the measurements made during a pick 2 hours of the maximum network load. The request is not relevant for measurements made during 45 days of summer tourist season.

The request for a guaranteed bitrate towards the user (downlink) of 2 Mb/s will be considered fulfilled if in at least 95% of measurements conducted during any time interval of 120 minutes duration the measured data transfer rate towards the user is 2 Mb/s or more, with level of successfully initiated and finished measurement sessions of 95%.

The request for a guaranteed bitrate from the user (uplink) of 1 Mb/s will be considered fulfilled if in at least 95% of measurements conducted during any time interval of 120 minutes duration the measured data transfer rate towards the user is 1 Mb/s or more, with level of successfully initiated and finished measurement sessions of 95%.

**5.3.3. Methods for the assessment of compliance with coverage requirements**

The fulfilment of requirements with regard to the scope and dynamics of the network signal coverage (coverage requirements), including requirements with regard to the service quality will be assessed by:

* the calculation based on the prediction of the network signal coverage according to Recommendation ITU-R P.1812 using DTM model of Montenegro in 50x50m resolution with appropriate population clutter;
* measurements of availability and quality of service using specialized measuring equipment, including measurements in move;
* measurements of quality of service at the location of end user using specialized equipment and/or authorized software application.

In order to verify the fulfilment of the coverage requirements, including the requirements related to service quality, the methodology based on relevant international instruments (ITU-R, CEPT, ETSI and others) and best comparative practice will be used. The operators will be acquainted with the methodology of verification of the fulfilment of the coverage requirements at least three months before the expiration of the deadline for meeting a specific requirement.

Information on availability and quality of mobile communications services the Agency will publish periodically on its website.

## **Obligations regarding the start of use of approved radio-frequencies**

The holder of the approval for the use of radio-frequencies subject to the award, who is not the incumbent mobile operator, is obliged to start using the approved radio-frequencies and providing public mobile electronic communication services to end users within one year from the date of entry into force of the Approval for the use of radio-frequencies.

**5.5. Transfer of rights to use radio-frequencies**

The right to use radio-frequency assigned on the basis of the public bidding procedure can be transferred or assigned to another legal entity with the approval of the Agency, under conditions prescribed by Article 118 of the LEC.

The right to use radio-frequencies assigned to the new entrant in the market based on the public bidding procedure cannot be transferred to another legal entity before the expiry of the period of five years from the date of the issuance of the approval for the use of radio-frequencies.

**5.6. National roaming**

The incumbent operator of mobile electronic communications services in Montenegro who was assigned radio-frequencies based on the public bidding procedure, is obliged to provide to the new entrant in the market who was awarded radio-frequencies for the implementation of the public mobile electronic communications network based on the public bidding procedure at its request the national roaming service under reasonable (fair), economically justified and non-discriminatory conditions for a period of five years from the issuance date of the approval for the use of radio-frequencies.

The right to national roaming includes any public mobile electronic communications service which the incumbent operator provides by using any technology in any frequency band. All services must be available to users of the new entrant in the market with the same quality and level of coverage as the services provided to their own users.

**6. SPECTRUM AUCTION RULES**

**6.1. General rules**

**6.1.1. Rules on the subject of the spectrum auction**

**AR1.** A total of 26 frequency blocks in the 900 MHz, 1800 MHz, 2 GHz and 2.6 GHz bands, grouped into 9 categories, are available for award in the spectrum auction process. Table 6.1 provides an overview of the blocks that are subject to auction by category with the lowest amount of one-time fee for the award of approval for the use of radio-frequencies (reserve price) and eligibility points for bidding. For more information on the subject of the public bidding and the categories of frequency blocks per bands see Chapter 3. For more information on the reserve price see Section 4.5.

Table 6.1 *Frequency blocks subject to the spectrum auction*

|  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- |
| **Band** | **Cate-**  **gory** | **Block**  **bandwidth** | **Number of blocks for award** | **Reserve price per block [EUR]** | **Eligibility points per block** |
| 900 MHz | PA1 | 2x5 MHz | 2 | 946,000.00 | / |
| GA1 | 2x5 MHz | 0 (1 or 2 if one or both of blocks in category PA1 are not awarded in the pre-auction phase) | 946,000.00 | 4 |
| 1800 MHz | PA2 | 2x5 MHz | 4 | 440,000.00 | / |
| GA2 | 2x5 MHz | 0 (1 to 4 if one or more blocks in category PA2 are not awarded in the pre-auction phase) | 440,000.00 | 2 |
| 2  GHz | PA3 | 2x5 MHz | 3 | 406,000.00 | / |
| GA3 | 2x5 MHz | 0 (1 to 3 if one or more blocks in category PA3 are not awarded in the pre-auction phase) | 406,000.00 | 2 |
| GA4 | 2x5 MHz | 1 | 406,000.00 | 2 |
| 2.6 GHz | GA5 | 2x5 MHz | 8 | 200,000.00 | 2 |
| GA6 | 5  MHz | 8 | 55,000.00 | 1 |

**AR2.** For the frequency blocks of all categories, except for the block in category GA4, at any round of bidding a bid is submitted at the frequency generic basis, that is for the abstract blocks with which none of the specific (physical) frequency range is associated. A frequency block of category GA4 is a specific block with initially defined physical boundaries. According to the outcome of the spectrum auction, in terms of the number of blocks awarded to each auction winner, the Agency shall determine the physical boundaries of the frequency blocks in each bands, taking into account the current awards valid after 20 April 2022, applying the criteria defined in Section 4.8.

**AR3.** Frequency blocks of categories PA1 to PA3 represent the reserved spectrum for the incumbent mobile operators and are subject to award in the pre-auction phase. The frequency blocks of categories GA1 to GA6 represent the unreserved spectrum and are subject to award in the main auction phase.

**6.1.2. Rules on the spectrum auction format**

**AR4.** The spectrum auction is conducted in two phases:

- **the pre-auction** (bidding for the reserved spectrum), in which the frequency blocks in categories PA1 to PA3 (reserved spectrum for incumbent operators) are subject to the award, for which the bids may be submitted only by qualified bidders who on day of the issuance of the Decision on the initiation of public bidding procedure were the holders of the approvals for the use of radio-frequencies in the 800 MHz, 900 MHz, 1800 MHz and 2 GHz bands (the incumbent mobile operators);

- **the main auction** (bidding for the unreserved spectrum), in which the frequency blocks in categories GA1 to GA6 are subject to the award, for which all qualified bidders may equally compete.

For more information on the auction format see Section 4.6.

**AR5.**  The pre-auction phase is conducted in the form of a single-round bidding consisting of one primary bidding round (Zero Primary Round) in which eligible bidders (incumbent mobile operators) submit initial bids (requests) for frequency blocks of categories PA1 to PA3, by specifying the number of frequency blocks of each category they intend to gain at the reserve price. In the Zero Primary Round of bidding it is not possible to occur that the total number of blocks required is greater than the total number of blocks subject to be awarded in any category of blocks (excess demand).

**AR6.** The winners of the pre-auction phase are the bidders who have submitted the correct bid in the Zero Primary Round (winning bid in the pre-auction phase). Each winner of the pre-auction phase is awarded the number of blocks of each category as specified in his winning bid in the pre-auction phase. The amount of fee to be paid by the winners of the pre-auction phase for the award of the blocks covered by their winning bid in the pre-auction phase is equal to the total amount of that bid.

**AR7.** Based on the outcome of the pre-auction phase, the number of blocks of categories GA1 to GA6, which are the subject of bidding in the main auction phase, is determined taking into account Rule AR13.

**AR8.** The main auction is conducted in the form of multiple round bidding which consists of one or more primary rounds, and possibly one supplementary round.

**AR9.** The primary bids rounds follow the clock bidding format. In the First Primary Round, the qualified bidders submit initial bids (requests) for the frequency blocks of categories GA1 to GA6 by specifying the number of frequency blocks of each category they intend to gain at the reserve price. In the event of no excess demand in any category of blocks in the First Primary Round, the auction ends. In event of excess demand in any category of blocks, the bidding continues with the Second Primary Round in which bidders submit bids (requests) for blocks at an increased (clock) price in the categories in which excess demand is recorded. In the event that in the Second Primary Round there is no excess demand in any category of blocks and that all blocks in each category are awarded (that the number of required blocks in each category is equal to the number of blocks subject to the award), the auction ends. In the event that there is no excess demand in any category of blocks in the Second Primary Round and if there are unawarded blocks, the bidding continues with the Supplementary Round. In the event that there is excess demand in any category of blocks in the Second Primary Round, the bidding continues with the subsequent primary round and so on.

**AR10.** The Supplementary Round follows the sealed-bid auction format. In the Supplementary Round, bidders submit one or more supplementary bids (number of blocks and total bid amount) for sets of blocks of different categories that remained unawarded in the last primary round of the main auction phase, where the total bid amount cannot be lower than the sum of fees per block for the categories of blocks included in the last primary round in which there was an excess demand nor higher than the sum of fees per block for categories of blocks included in the last primary round. The auction ends with the Supplementary Round.

**AR11.** The winners of the main auction phase are the bidders who submitted the correct bid in the last primary round (winning bid in the last primary round of the main auction phase) and, if the Supplementary Round of bidding is conducted, the bidders whose bids in the Supplementary Round are part of the bid combination with the highest sum of the offered total bid amounts (winning bid in the Supplementary Round of the main auction phase). The same bidder may be the winner in both the last primary round and the Supplementary Round of the main auction phase. Each winner of the main auction phase is awarded the number of blocks of each category as stated in its winning bid in the last primary round and the Supplementary Round of the main auction phase. The amount of fee to be paid by the winners of the main auction phase for the award of blocks included by their winning bids in the last primary round of the main auction phase and the Supplementary round of the main auction phase is equal to the sum of the total amounts of these bids.

**6.1.3. Rules on bidding restrictions**

**6.1.3.1. Rules on reserved spectrum**

**AR12.** Two frequency blocks of 2x5 MHz bandwidth in category PA1 in the 900 MHz band, four frequency blocks of 2x5 MHz bandwidth in category PA2 in the 1800 MHz band and three frequency blocks of 2x5 MHz bandwidth in category PA3 in the 2 GHz band represent the reserved spectrum for the incumbent mobile operators. Only qualified bidders who were the holders of the approvals for the use of radio-frequencies in the 900 MHz, 1800 MHz and 2 GHz bands on day of the issuance of the Decision on the initiation of public bidding procedure may apply in the pre-auction phase for the award of spectrum reserved for the incumbent mobile operators (incumbent mobile operators). For more information on reserved spectrum see Section 5.1.

**AR13.** If one or few blocks in categories PA1 to PA3 are not awarded in the pre-auction phase for any reason, a number of blocks in categories GA1 to GA3 in the main auction phase will increase respectively. For more information on reserved spectrum see Section 5.1.

**6.1.3.2. Rules on spectrum caps and spectrum floors**

**AR14.** A qualified bidder, considered as incumbent mobile operator, in the pre-auction phase may submit a bid for the maximum number of frequency blocks in a specific category in the 900 MHz, 1800 MHz and 2 GHz bands whose total bandwidth gathered with the total bandwidth of the previously awarded frequency blocks in those bands, at any time of the approval validity does not exceed the following spectrum caps:

- 2x10 MHz in the 900 MHz band;

- 2x20 MHz in the 1800 MHz band;

- 2x15 MHz (paired) in the 2 GHz band.

For more information on spectrum caps see Section 5.2.

**AR15.** A qualified bidder may submit a bid in the main auction phase for the maximum number of frequency blocks in each band whose total bandwidth gathered with the total bandwidth of the previously awarded frequency blocks and the total width of the frequency blocks won in the pre-auction phase, at any time of the approval validity does not exceed the following values of the general spectrum caps:

- 2x30 MHz in the 800 MHz and 900 MHz together;

- 2x30 MHz in the 1800 MHz band;

- 2x40 MHz in the 2.6 GHz band (only for paired spectrum);

- 2x105 MHz in the 800 MHz, 900 MHz, 1800 MHz, 2 GHz and 2.6 GHz together (only for paired spectrum).

For more information on spectrum caps see Section 5.2.

**AR16.** A qualified bidder who is interested in the award of radio-frequencies in the 2.6 GHz band, may submit a bid in any phase of the spectrum auction for the minimum two paired frequency blocks of 2x5 MHz bandwidth in the 2.6 GHz band (*spectrum floor*). For more information on spectrum floors see Section 5.2.

**6.1.3.3. Rules on the bid guarantee**

**AR17.** The qualified bidder shall, before the beginning of the Zero Primary Round of the pre-auction phase, ie before the beginning of the First Primary Round of the main auction phase, submit a bid guarantee to the Agency for the amount covering at least 100% of the total amount of the bid submitted in that round. In the following primary rounds of the main auction phase and the Supplementary Round of the main auction phase, the submitted guarantee, which refers to the bid in the First Primary Round of the main auction phase, must cover at least 25% of the total bid amount.

**AR18.** If a submitted bank guarantee does not allow the submission of a higher bid in the next round of the auction (a guarantee does not cover 25% of the bid to be submitted), a qualified bidder who intends to submit a higher bid in the next auction round, is obliged to submit to the Agency an additional bid guarantee, which will allow the fulfilment of the above condition. After determining that the additional bid guarantee is valid, the Agency will increase the maximum allowed bid amount for the appropriate bidder in the next auction round.

**AR19.** The qualified bidder which fails to submit a valid bid guarantee before the beginning of the spectrum auction will be excluded from the further public bidding procedure, without the right to reimburse the fee paid for the purchase of the Public Bidding Documents and one-off fee for participation in the spectrum auction.

**AR20.** The qualified bidder which submits invalid additional bid guarantee will not be able to submit in the coming rounds a bid whose amount exceeds the maximum allowed bid amount, determined by the previously submitted correct bid guarantees.

**AR21.** Bidders are responsible for the correctness and timeliness of the submitted additional bid guarantees. In the event of any doubt in the correctness of the submitted additional bid guarantee, the Agency does not guarantee to perform its verification in a certain period of time.

**6.1.4. Rules on the prohibition of collusive behaviour**

**AR22.** After the issuance of the Decision on the initiation of the public bidding procedure, the applicants for participation in the spectrum auction and qualified bidders at the spectrum auction are prohibited to enter into secret conspiracy and collusion in any form which could result with compromised integrity of the bidding procedure. For more information on the prohibition of collusive behaviour see Section 4.3.2.

**6.1.5.** **Breach of the auction rules**

**AR23.** A qualified bidder who breaches the auction rules will be excluded from the further bidding procedure, without the right to reimbursement of the fee paid for the purchasing Public Bidding Documents and one-off free paid for the participation in the spectrum auction, and the Agency will activate a bid guarantee, if it has been submitted. In that case, the entire auction process will be cancelled and conducted from the beginning.

**6.1.6.** **Rules on communication with the Agency**

**AR24.** A communication between the Agency, as an auctioneer, and qualified bidders at the spectrum auction is done by e-mail, ie by telephone. The procedure for communication between the Agency and eligible bidders at the spectrum auction by e-mail and telephone is described in detail in the document Communication procedure between the Agency and eligible bidders at the spectrum auction. The document will be delivered to the qualified bidders at least five days before the start of the spectrum auction.

**AR25.** An e-mail communication is used to send messages related to the conduct of auction rounds by the Agency to qualified bidders and to send a confirmation of receipt of the message by qualified bidders to the Agency.

**AR26.** For sending messages by qualified bidders to the Agency, which are not an acknowledgment of receipt of messages sent by the Agency by e-mail, telephone communication is used. Communication via telephone is also used in the event of problems in communication via e-mail (failure to deliver a message, delay in transmitting a message, etc.), but only in order to clarify the situation.

**AR27.** Bidders are obliged to confirm the receipt of each message sent by the Agency by e-mail within 10 minutes from the moment of its receipt. In the event that the Agency does not receive an acknowledgment of receipt of the message sent to the bidder by e-mail within 15 minutes from the moment of sending the message, the Agency will contact the bidder by phone and require an explanation.

**6.1.7. Time, place and language of the auction**

**AR28.** The spectrum auction will be conducted over several business days. The Agency will inform the qualified bidders at least three days in advance about the date and time schedule for the implementation of individual phases of the spectrum auction. For the approximate date of the spectrum auction, see Section 4.2.7.

**AR29.** The spectrum auction will be conducted at the Agency's premises. The address of the Agency is given in Annex 1.

**AR30.** The spectrum auction will be conducted in the Montenegrin language. All communication between the Agency, as an auctioneer, and the bidder in the spectrum auction procedure will take place in the Montenegrin language. It is not envisaged that any stage of the proceedings will be conducted in any language other than Montenegrin and the Agency will not provide any translation from Montenegrin into any other language.

**6.1.8. Exceptional circumstances**

**AR31.** In the event of exceptional circumstances during any phase of the auction, the Agency may at its own discretion perform the following:

* postpone the release of results of a round;
* change the schedule of further rounds;
* interrupt the round that is either underway or for which round outcome have not been released yet and conduct the same round again;
* void all bids submitted in the auction procedure and start the auction again.

**AR32.** The Agency determines whether a situation of exceptional circumstances has arisen. The exceptional circumstances may include, for example, failure of communication links between the Agency and the bidder at the spectrum auction for a long period of time caused by a technical malfunction or breakdown beyond the Agency's control and the bidder, suspicion of possible secret association between the bidders or other unforeseen situation that may jeopardize or may have the effect of compromising the integrity of public bidding.

**6.2. Conduction of auction rounds**

**6.2.1. Stages in the realization of auction rounds**

**AR33.** From the bidder's perspective, each round of bidding is divided into the following stages:

* **Start of round:** The Agency announces the start of a round by sending an appropriate message to qualified bidders via email. In the message, the Agency shall specify the categories and number of frequency blocks that are the subject of the tender and the "clock" prices by categories applicable in that round, if it is the primary round, as well as the beginning and end of the bid submission interval;
* **Submission of bids:** Qualified bidders submit bids through an authorized representative by direct submission to an authorized representative of the Agency. Bids may be submitted only during the bid submission interval. The interval for submission of bids ends at the specified time (including any extensions);
* **Opening of bids:** After the end of the interval for submission of bids, the authorized representatives of the Agency shall proceed with the opening of bids. Qualified bidders may follow the bid opening process via a video link;
* **Announcement of round outcome:** After determining the correctness of the submitted bids in terms of compliance with the rules of the spectrum auction and determining the results of the current round of bidding in terms of supply and demand, or further steps in the bidding process, the Agency will provide qualified bidders with information envisaged in the auction rules, by sending the appropriate message via e-mail.

Upon the announcement of the outcome of the previous round of bidding, the qualified bidders wait for the Agency to announce the start of the next round, unless the end of the previous round does not end the spectrum auction.

**6.2.2. Schedule and duration of individual auction rounds**

**AR34.** Schedule and duration of individual auction rounds are determined by the Agency. The time interval between the announcement of the start of a round and the start of the interval for submission of bids in that round shall not be less than 45 nor longer than 90 minutes. The bidding interval is 15 minutes.

**AR35.** Since the internal clocks of the Agency's e-mail server and the provider through which e-mails are exchanged may not be synchronized, any activity of the provider carried out within 5 minutes after the deadline specified by the Agency will be considered timely.

**AR36.** All rounds of bidding will be scheduled on working days (Monday to Friday) between 08:00 and 16:00 (CET).

**AR37.** The Zero Primary Round is conducted during the first auction day, as the only bidding round on that day. Other primary rounds are conducted starting on the second auction day. There is no upper limit on the number of primary rounds per day. The Supplementary Round is conducted during the last auction day, as the only bidding round on that day. There is a one-day break between the first and second auction day (ie between the end of the Zero Primary Round and the start of the First Primary Round) and between the penultimate and last auction day (ie between the end of the last primary round and the start of the Supplementary Round).

**AR38.** The Agency will announce the planned organization schedule of the bidding rounds at the end of the auction day for the next auction day, by sending an appropriate message to the qualified bidders via e-mail. The schedule of primary rounds thus published is considered provisional and serves for informational purposes only. The Agency is not bound by the provisional schedule of rounds announced in advance for the following day and the Agency reserves the discretion to determine the schedule of the organization of primary rounds, in accordance with Rule AR34.

**6.2.3. Announcement of the start of the auction round**

**AR39.** Prior to the start of each auction round, each bidder will receive an e-mail announcing the start of the round with the following information:

* official announcement of the start of the primary round;
* the number of blocks by categories that are the subject of the bidding;
* the (minimum) amount of fee per block for each block category applicable in the subject round;
* the maximum total amount of the bid the bidder may submit based on the submitted bid guarantee;
* the start time and the end time of the interval for submission of bid;
* the instructions for access to the video link to follow the bid opening procedure;
* the number of eligibility points of bidders for submission of bids (for primary rounds of the main auction phase);
* the bidder’s remaining number of extension rights for submission of bids.

The form of bid to used in the subject round will be submit to the qualified bidders by the Agency, as an attachment to the e-mail announcing the start of the round.

**6.2.4. Composition and submission of bids**

**AR40.** Bids in all phases of the spectrum auction shall be submitted in paper form through an authorized representative of a qualified bidder by direct delivery to an authorized representative of the Agency at the Agency's headquarters.

**AR41.** Bids may be submitted only during the bidding interval, including the extension in accordance with Rule AR61. In the event that a qualified bidder does not submit a bid during the bid submission interval, including the extension in accordance with Rule AR61, it shall be deemed to have submitted a "zero bid" (request for 0 blocks of each category).

**AR42.** Bids shall be submitted in a sealed non-transparent envelope. The bid must be signed by an authorized person of the bidder and certified by the bidder's seal.

**AR43.** The bid form depends on the bidding round being conducted. When announcing the start of each round, the Agency shall attach to the message sent by e-mail to all qualified bidders the bid form applicable in that round. Examples of the bid form in the Zero Primary Round, the First Primary Round, the other primary rounds and the Supplementary Round are given in Annex 8.

**AR44.** The bid form in the Zero Primary Round and the First Primary Round shall be completed by stating in the appropriate fields the number of frequency blocks by categories that the bidder intends to gain at the reserve price, the bid amount for awarding the desired number of blocks by categories (obtained by multiplying the number of blocks and pre-defined amount of fee per block) and the total amount of the bid (obtained by summation of all amounts of the bid by categories of blocks).

**AR45.** The bid form in other primary rounds shall be completed by stating in the appropriate fields the number of frequency blocks by categories that the bidder intends to gain at the price applicable in the current round (amount of fee per block), the bid amount for awarding the desired number of blocks by categories (obtained by multiplying the number of blocks and pre-defined amount of fee per block) and the total amount of the bid (obtained by summation of all amounts of the bid by categories of blocks).

**AR46.** The bid form in the Supplementary Round shall be completed by stating in the appropriate fields the number of frequency blocks by categories that the bidder intends to gain and the total amount of the bid for the award of the specified set of frequency blocks of different categories.

**AR47.** For each category of blocks, an integer value written in Arabic numerals (eg 1 or 2) is entered in the **"Number of blocks"** field.

**AR48.** For each category of blocks, a decimal value with two decimal places written in Arabic numerals (eg 880,000.00 or 1,218,000.00, etc.) is entered in the field "**Bid amount [EUR]"**. In bids submitted in the primary bidding rounds, this value shall be equal to the product of the value entered in the field **"Number of blocks"** and the pre-defined value specified in the field **"Fee per block [EUR]"**.

**AR49.** A decimal value with two decimal places written in Arabic numerals (eg 3,680,000.00) is entered In the field **"Total bid amount [EUR]"**. For bids submitted in primary rounds, this value shall be equal to the sum of the values entered in the field **"Bid amount [EUR]"** for each block category.

**AR50.** All fields in the bid form shall be completed. If the bidder does not intend to submit a bid for blocks of a category, the value "0" shall be entered in the field **"Number of blocks"** on the bid form, and the value "0.00" in the field **"Bid amount [Euro]**".

**AR51.** Each bid refers to a set of frequency blocks of different categories specified by the bidder, where the bid is considered as a whole and will not be divided. In the primary round, each bidder may submit a maximum of one bid for a set of frequency blocks per category. In the Supplementary Round of the main auction phase, each bidder may submit one or more bids for sets of frequency blocks by category.

**AR52.** The bid shall be deemed to have been submitted when the representative of the Agency issues a confirmation of receipt of the bid to the bidder's representative. From that moment, the bid is binding and there is no possibility of its modification, withdrawal or submission of any other bid in that round by the same bidder.

**AR53.** Each submitted bid is considered valid. A valid bid is a binding commitment of the bidder to obtain a specified set of frequency blocks by category at a price equal to the specified total bid amount.

**AR54.** The submitted bid remains valid until it is canceled by the Agency in accordance with Rule AR31, ie in the event of a bid submitted in the primary round of the main auction phase, until it is replaced by another bid by the same bidder in the next primary round, ie "zero bid" in accordance with Rule AR41, Rule AR63, Rule AR70, Rule AR78 or Rule AR106.

**6.2.5. Opening of bids**

**AR55.** After the expiration of the interval for submission of bids, the authorized representatives of the Agency open the submitted bids (take out the completed bid form from the sealed envelope).

**AR56.** The bids are opened in a purpose-equipped room in the Agency's headquarters. Bids are opened in the order of their arrival.

**AR57.** Qualified bidders may follow the bid opening process via a video link. Instructions for access to the video link are provided by the Agency in a message announcing the start of the round. The bid opening procedure is conducted in such a way that the bidders are not enabled to gain insight into the content of any submitted bid. The Agency will not provide bidders with any information on the bids of other bidders, except for the winning bids in the pre-auction phase (after the completion of the Zero Primary Round) and the main auction phase (after the end of the last primary round and the Supplementary Round).

**6.2.6. Review of bids and announcement of round outcome**

**AR58.** Upon the bid opening phase is completed, the Agency initiates the procedure of reviewing the bids submitted in that round, in accordance with the auction rules. When the outcome of the review become available, the information defined by the auction rules will be delivered to the bidders by e-mail.

**AR59.** Normally, round outcome should be available in a maximum of 15 minutes. However, in some situations, a time required to obtain the outcome may be longer.

**AR60.** At the end of each primary round of bidding, each bidder will receive an email about the results of the round. Depending on the type of round, qualifying bidders will be provided with information in accordance with Rule AR71, Rule AR77 and Rule AR105.

**6.2.7. Right on extension of bid submission interval**

**AR61.** The extension right allows a bidder additional time to submit a bid. In the event that a bidder with non-zero eligibility and one or more extension rights fails to submit a bid during the originally specified bid submission interval, the interval will be automatically extended for that bidder by an additional 60 minutes, and one of his remaining extension rights will be revoked. The bidder may inform the Agency that he is not able to submit a bid during the period for submission of bids and that he will exercise the right to extend the interval for submission of bids. This notification is optional, but contributes to easier administration of the process.

**AR62.** Bidders who have already submitted bids during the round cannot take any further activities during the extension period. Such bidders will be informed that the round has been extended and should wait for the announcement that the extension period has ended.

**AR63.** Bidder who has not submitted a bid during the extension period and has no remaining extension rights will not be able to submit s bid. In that event, a zero bid will considered as sbmitted on his behalf (request for 0 blocks in each category).

**AR64.** Each bidder starts the spectrum auction with three rights to extend the auction round.

**6.3. Bidding in the pre-auction phase**

**AR65.** The bidding in the pre-auction phase consists of one round (Zero Primary Round). The Zero Primary Round is conducted during the first auction day, as the only bidding round on that day.

**AR66.** Only qualified bidders who were holders of approvals for the use of radio-frequencies in the 900 MHz, 1800 MHz and 2 GHz bands (incumbent mobile operators) on the day of the Decision on initiating the public bidding procedure have the right to submit a bid in the Zero Primary Round.

**AR67.** The incumbent mobile operator, who did not submit a bid in the Zero Primary Round, will be considered to have submitted a "zero bid" (request for 0 blocks in each category).

**AR68.** In the Zero Primary Round, the amount of fee per block is equal to the amount of reserve price for the blocks of the corresponding category. For more information on reserve price see Section 4.5.

**AR69.** A valid bid in the Zero Primary Round shall meet the following conditions:

* it is made on the prescribed form in accordance with Rule AR44;
* the bid form has been completed in accordance with Rule AR47, Rule AR48, Rule AR49 and Rule AR50;
* it is signed and certified and delivered in an non-transparent sealed envelope in accordance with Rule AR42;
* the specified number of frequency blocks by categories that the bidder intends to gain does not exceed the number of blocks to be awarded and it complies with Rule AR14;
* the total amount of the bid is not higher than the amount of the submitted bid guarantee, in accordance with Rule AR17.

**AR70.** A bid submitted in the Zero Primary Round that does not meet the conditions specified in Rule AR69 will be considered invalid, and in the further procedure will be treated as if a "zero bid" was submitted (request for 0 blocks of each category).

**AR71.** At the end of the Zero Primary Round, each eligible bidder will receive an email about the outcome of the bidding in the pre-auction phase with the following information:

* the number of required blocks per category and the total amount of the bid of that bidder;
* statement on the correctness/incorrectness of the submitted bid of that bidder;
* total number of awarded frequency blocks by categories in the pre-auction phase (number of blocks for which demand is expressed in all correct bids together);
* number of unawarded frequency blocks by categories in the pre-auction phase;
* winning bids in the pre-auction phase (identity of the winner, number of blocks by categories and the amount of fee the winners shall pay).

**AR72.** The winners of the pre-auction phase are the bidders who have submitted the correct bid in the Zero Primary Round (winning bid in the pre-auction phase). Each winner of the pre-auction phase is awarded the number of blocks of each category as specified in his winning bid in the pre-auction phase for the amount of fee corresponding to the total amount of the bid. The amount of the fee that each winner of the pre-auction phase has to pay for the award of the blocks covered by his winning bid in the pre-auction phase is equal to the total amount of that bid.

**6.4. Bidding in the main auction phase**

**AR73.** The main auction is conducted in the form of multiple round bidding which consists of one or more primary rounds, and possibly one supplementary round. The primary rounds of the main auction phase are conducted starting from the second auction day. Several primary rounds are conducted during one auction day. The Supplementary Round of the main auction phase is conducted during the last auction day, as the only round of bidding on that day.

**AR74.** The right to submit a bid in the rounds of the main auction phase have all qualified bidders, regardless of whether they submitted a bid in the pre-auction phase, in accordance with the rules of the auction.

**6.4.1. Primary rounds of the main auction phase**

**AR75.** The primary rounds of the main auction phase follow a “clock” auction format. The bidding procedure is conducted in discrete rounds, where all bidders are invited to submit bids within a fixed time interval, where each bidder has the right to extend that interval, in accordance with the rules given in Section 6.2.7.

**AR76.** Bidding in the main auction phase begins with the First Primary Round. Depending on the outcome of the First Primary Round, the procedure continues in accordance with Rule AR9.

**AR77.** A correct bid in the primary round of the main auction phase shall meet the following conditions:

* it is made on the prescribed form in accordance with Rule AR45;
* the bid form has been completed in accordance with Rule AR47, Rule AR48, Rule AR49 and Rule AR50;
* it is signed and certified and delivered in an non-transparent sealed envelope in accordance with Rule AR42;
* the specified number of frequency blocks by categories that the bidder intends to gain does not exceed the number of blocks to be awarded and it complies with Rule AR15 and Rule AR16;
* the total activity associated with the bid does not exceed the bidder's eligibility to bid in that round (Rule AR88);
* the total amount of the bid is not higher than the amount of the submitted bid guarantee, in accordance with Rule AR17.

**AR78.** A bid submitted in the primary round of the main auction phase that does not meet the conditions specified in Rule AR77 will be considered invalid, and in the further procedure will be treated as if a "zero bid" was submitted (request for 0 blocks of each category).

**AR79.** At the end of each primary bidding round of the main auction phase, each eligible bidder will receive an email about the round outcome with the following information:

* the number of required blocks per category and the total amount of the bid of that bidder;
* statement on the correctness/incorrectness of the submitted bid of that bidder;
* the total demand by categories of frequency blocks (number of blocks for which demand is expressed in all correct bids together);
* whether there is excess demand by frequency block categories;
* the next step in the public bidding process.

**AR80.** The last primary round of the main auction phase is a round in which there is no longer an excess demand for frequency blocks in any category. Upon completion of the last primary round, the procedure shall continue in accordance with Rule AR9.

**AR81.** Upon completion of the last primary round of the main auction phase, each eligible bidder will receive an e-mail notification of the outcome of the bidding in the primary rounds of the main auction phase with the following information:

* the total number of awarded frequency blocks by categories in the last primary round of the main auction phase (number of blocks for which demand is expressed in all correct bids together);
* the number of unawared frequency blocks by categories in the last primary round of the main auction phase;
* winning bids in the last primary round of the main auction phase (winner's identity, number of blocks by categories and the amount of fee the winners shall pay).

**AR82.** Bidders who have submitted a valid bid in the last primary round of the main auction phase (winning bid in the last primary round of the main auction phase) shall be awarded as many blocks of each category as specified in their winning bids in the last primary round of the main auction phase. The amount of the fee that each winner has to pay for the award of the blocks covered by his winning bid in the last primary round of the main auction phase is equal to the total amount of that bid.

**AR83.** The Agency may announce the earlier completion of the bidding in the primary rounds of the main auction phase (while the demand is still above the supply of available blocks in one or more categories). In that event, the winning bids in the last primary round will not be determined, the main auction phase continues directly with the Supplementary Round, and further primary rounds will no longer be conducted.

**AR84.** The Agency shall announce the earlier termination of the bidding in the primary rounds of the main auction phase only if considers that the continuation of the main auction phase directly by the Supplementary Round is in the general interest of conducting an efficient spectrum award procedure at that time.

**6.4.1.1. Amount of fee per block in the primary rounds**

**AR85.** For each primary round of the main auction phase, the Agency will specify the amount of the fee per block ("clock" price), which applies to the frequency blocks of each category in that round.

**AR86.** In the First Primary Round, the amount of the fee per block is equal to the amount of the reserve price for the blocks of the corresponding category. For more information on the reserve price see Section 4.5.

**AR87.** In the next primary rounds (after the First Primary Round), the amount of fee per block for a frequency block of a certain category will increase if there is an excess demand for blocks of that category in the previous round.

**AR88.** There is an excess demand for frequency blocks of a certain category when the total number of required blocks of that category in all correct bids is greater than the number of available blocks of that category.

**AR89.** For the category of frequency blocks for which there is no excess demand in a round, the amount of fee per block in the next round remains unchanged.

**AR90.** Reducing the amount of fee per block for blocks of any category is not possible during the primary rounds.

**AR91.** In the event of excess demand, the amount of fee per block for frequency blocks of a certain category is increased in the subsequent round by 5% of the initial price for blocks of that category (increment of "clock" price).

**AR92.** The amount of the fee per block is an integer value expressed in EUR.

**6.4.1.2. Activity rules in the primary rounds**

**AR93.** Each frequency block subject to the spectrum auction is assigned a number of eligibility points, as set out in Table 6.1.

**AR94.** A bidder starts each primary round with a specific number of eligibility points, which represents the bidder’s eligibility for that round.

**AR95.** A bidder's activity in a primary round represents the sum of eligibility points associated with all blocks included in the package submitted by the bidder in the same round.

**AR96.** In each primary round of the main action phase, a bidder may only submit a bid associated with an activity level that does not exceed the bidder’s current eligibility to bid, which also complies with the bidding restrictions set out in Section 6.1.3.

**AR97.** The eligibility of a bidder for bidding in the First Primary Rzeroound (the bidder’s initial eligibility) is equal to the sum of eligibility points associated with all blocks that are subject to award in the main auction phase. For each subsequent primary round, a bidder’s eligibility to bid is equal to their level of activity in the previous primary round. This means that the bidder’s eligibility can stay the same or reduce over successive primary rounds, but can never increase.

**AR98.** In the course of primary rounds, a bidder may switch eligibility between categories of blocks. Therefore, it is possible that a bidder’s activity in one or more categories may increase provided that the bidder’s activity in other categories is reduced by the same amount.

**AR99.** In the event the bidder submits a "zero bid", or when in accordance with Rule AR41, Rule AR63 or Rule AR78 it is considered that the bidder has submitted a "zero bid", the bidder's eligibility for the subsequent primary round of the main auction is set to zero, and the bidder will no longer be able to submit bids in the primary rounds of the main auction phase.

**6.4.2. Supplementary Round of the main auction phase**

**AR100.** The Supplementary Round of the main auction phase consists of one round of bidding in which eligible bidders may submit one or more supplementary bids for sets of blocks that remain unawarded in the last primary round of the main auction phase.

**AR101.** The Supplementary Round follows the sealed-bid auction format. With each supplementary bid, the bidder specifies a set of frequency blocks of different categories (from the blocks that remained unawarded in the last primary round of the main auction phase) that intends to be awarded and the amount of the total bid for the award of specified blocks.

**AR102.** The bid in the Supplementary Round of the main auction phase may contain any combination of frequency blocks that complies with the restrictions given in Section 6.1.3.

**AR103.** The total bid amount in the Supplementary Round of the main auction phase is determined at the discretion of the bidder, with the restrictions given in Rule AR104 and the requirement that the total bid amount must be an integer value expressed in EUR.

**AR104.** The total bid amount in the Supplementary Round of the main auction phase cannot be lower than the sum of fees per block for categories of blocks included in the last primary round in which there was an excess demand (minimum fee per block), nor higher than the sum of fees per block for categories of blocks included in the last primary round (maximum fee per block).

**AR105.** A correct bid in the Supplementary Round of the main auction phase shall meet the following conditions:

* it is made on the prescribed form in accordance with Rule AR46;
* the bid form has been completed in accordance with Rule AR47, Rule AR49 and Rule AR50;
* it is signed and certified and delivered in an non-transparent sealed envelope in accordance with Rule AR42;
* the specified number of frequency blocks by categories that the bidder intends to gain does not exceed the number of blocks to be awarded and it complies with Rule AR15 and Rule AR16;
* the total bid amount satisfies the rule regarding the minimum and maximum bid amount (Rule AR104);
* the total amount of the bid satisfies the rule regarding the submitted bid guarantee (Rule AR17).

**AR106.** A bid submitted in the Supplementary Round of the main auction phase that does not meet the conditions specified in Rule AR105 will be considered invalid, and in the further procedure will be treated as if a "zero bid" was submitted (request for 0 blocks of each category).

**AR107.** Upon completion of the Supplementary Round of the main auction phase, the Agency will proceed to determine the combination of winning bids. In the process of determining the winning bids, in addition to the valid supplementary bids submitted by bidders, individual bids for each frequency block that is the subject of the Supplementary Round will be included in an amount equal to the amount of the minimum fee per block (reserved bids). Reserved bids will be treated in the same way as bids submitted by bidders in the Supplementary Round.

**AR108.** A combination of winning bids in the Supplementary Round of the main auction phase is the combination of valid bids submitted by bidders, including the reserve bids, that, taken together, have the highest total amount of bids, subject to the conditions that:

* a maximum of one supplementary bid per bidder may be a winning bid;
* the total number of frequency blocks of one category contained in all winning bids cannot exceed the number of blocks available in that category which are subject of the Supplementary Round;
* the total amount, defined as the sum of the amount of winning bids and the amount of minimum bids for each unawarded frequency blocks, cannot be lower than the total amount of any alternative combination of bids that meets the two aforementioned conditions.

**AR109.** If there is only one combination of supplementary bids that meets the requirements of Rule AR108, that combination will be considered the winning bid combination.

**AR110.** If several combinations of supplementary bids meet the conditions given by Rule AR108, then the combination of supplementary bids that includes the maximum number of bidders is considered the winning bid combination.

**AR111.** If several combinations of supplementary bids meet the conditions given by Rule AR108 and include the same (maximum) number of bidders, then the winning bid combination is determined by random selection. The procedure for determining the combination of winning bids in this case will be prescribed specifically.

**AR112.** Upon completion of the Supplementary Round of the main auction phase, each eligible bidder will receive an e-mail notification of the outcome of the bidding in the Supplementary Round of the main auction phase with the following information:

* the total number of awared frequency blocks by categories in the Supplementary Round of the main auction phase (number of blocks for which demand is expressed in all winning bids together);
* the number of unawared frequency blocks by category in the Supplementary Round of the main auction phase;
* winning bids in the Supplementary Round of the main auction phase (winner's identity, number of blocks by categories and the amount of fee to be paid by the winners).

**AR113.** The winners are the bidders who submitted the bids which are part of the winning bid combination (winning bid in the Supplementary Round of the main auction phase). Each winner is awarded the number of blocks of each category as stated in its winning bid in the Supplementary Round of the main auction phase. The amount of the fee to be paied by each winner for the award of the blocks included in his winning bid in the Supplementary Round of the main auction phase is equal to the total amount of that bid.

**6.5. End of the auction**

**AR114.**  Upon completion of the spectrum auction, the Agency will communicate the following information to all bidders:

* identity of the all auction winners;
* the number of frequency blocks by categories to be awared to each winner;
* the total amount of the one-off fee for awarding the approvals for the use of radio-frequencies to be paid by the each winner of the auction.

**7. GENERAL TECHNICAL CONDITIONS FOR THE USE OF RADIO-FREQUENCIES**

General conditions for the use of radio-frequencies in the 900 MHz, 1800 MHz, 2 GHz and 2.6 GHz bands for the implementation of public mobile electronic communications networks are defined by relevant radio-frequency assignment plans, pursuant to the Radio-frequency Spectrum Allocation Plan and corresponding CEPT/ECC documents. Pursuant to Article 114, Paragraph 2 of the LEC, technical and operational conditions for the use of radio-frequencies in the relevant bands on individual sites or coverage areas will be determined by a special acts issued by the Agency, at the request of the holder of the approval.

**7.1. General technical conditions for the use of radio-frequencies in the 900 MHz band for GSM and TRA-ECS systems**

The Radio-frequency Assignment Plan in the 880-915/925-960 MHz band for GSM and TRA-ECS systems determine the assignment of this band for mobile radio-communications service, radio-frequency channels arrangement in the band, more detailed terms and conditions of usage, as well as the method for assigning radio-frequencies for GSM and TRA-ECS systems, in accordance with the Radio-Frequency Spectrum Allocation Plan. The use of 880-915/925-960 MHz band for GSM and TRA-ECS system is based on Decisions ERC/DEC/(94)01, ERC/DEC/(97)02 and ECC/DEC/(06)13 and recommendation ECC/RC/(05)08 and ECC/REC/(08)02.

In this band for GSM and TRA-ECS systems, separation between uplink and downlink is performed by using frequency division duplex (FDD) only. The uplink uses radio-frequencies in the 880-915 MHz band and downlink uses radio-frequencies in the 925-960 MHz band. The separation between the transmission and reception frequencies for the base station and terminal is 45 MHz. The 880-915/925-960 MHz band for GSM and TRA-ECS systems is divided into seven paired radio-frequency blocks of 2x5 MHz bandwidth. The Assignment plan determines that the Agency may divide 2x5 MHz bandwidth block into smaller blocks. One or few successive frequency blocks may be assigned to an entity.

A graphical presentation of frequency arrangement in the 880-915/925-960 MHz band for GSM and TRA-ECS systems is given in Figure 7.1.



Figure 7.1 *Graphical presentation of frequency arrangement*

*in the 880-915/925-960 MHz band for GSM and TRA-ECS systems*

The Radio-frequency Assignment Plan prescribes technical conditions for GSM and TRA-ECS systems as well as the conditions enabling the work of GSM and TRA-ECS systems in the adjacent parts of the band without any harmful interference. It has been defined that GSM system must be in conformity with ETSI standards EN 301 502 and EN 301 511, and that TRA-ECS includes: UMTS (in accordance with ETSI standards EN 301 908-1, EN 301 908-2, EN 301 908-3 and EN 301 908-11), LTE (in accordance with ETSI standards EN 301 908-1, EN 301 908-13, EN 301 908-14 and EN 301 908-11) and WiMAX (in accordance with ETSI standards EN 301 908-1, EN 301 908-21 and EN 301 908-22) systems.

The Radio-frequency Assignment Plan in the 880-915/925-960 MHz band for GSM and TRA-ECS systems has been published in the Official Gazette of Montenegro, 53/14, and may be downloaded from the Agency’s website http://www.ekip.me.

**7.2. General technical conditions for the use of radio-frequencies in the 1800 MHz band for GSM/DCS1800 and TRA-ECS systems**

The Radio-frequency Assignment Plan in the 1710-1785/1805-1880 MHz band for GSM/DCS1800 and TRA-ECS systems determines the assignment of this band for mobile radio-communications service, radio-frequency channels arrangement in the band, more detailed terms and conditions of usage, as well as the method of assigning radio-frequencies for GSM/DCS1800 and TRA-ECS systems, in accordance with the Radio-Frequency Spectrum Allocation Plan. The use of 1785/1805-1880MHz band for GSM/DCS1800 and TRA-ECS system is based on Decisions ERC/DEC/(95)03 and ECC/DEC/(06)13 and Recommendations ECC/REC/(05)08 and ECC/REC/(08)02.

In this band for GSM/DCS1800 and TRA-ECS systems separation between uplink and downlink is planned by using frequency division duplex (FDD) only. The uplink uses radio-frequencies in the 1710-1785 MHz band and downlink uses radio-frequencies in the 1805-1880 MHz band. The separation between the transmission and reception frequencies for base and terminal station is 95 MHz. This band is divided into fifteen paired radio-frequency blocks of 2x5 MHz bandwidth and the Agency may divide 2x5 MHz block into smaller blocks. One or few successive frequency blocks may be assigned to an entity.

A graphical presentation of frequency arrangement in this band for GSM/DCS1800 and TRA-ECS systems is given in Figure 7.2.



Figure 7.2 *Graphical presentation of frequency arrangement*

*in the 1710-1785/1805-1880MHz band for GSM/DCS1800 and TRA-ECS systems*

The Radio-frequency Assignment Plan prescribes technical conditions for GSM/DCS1800 and TRA-ECS systems as well as conditions enabling the work of GSM/DCS 1800 and TRA-ECS systems in the adjacent parts of the band without any harmful interference. The same standards apply for GSM and TRA-ECS technologies as for the 900 MHz band.

The Radio-frequency Assignment Plan in the 1710-1785/1805-1880 band for GSM/DCS1800 and TRA-ECS systems was published in the Official Gazette of Montenegro, 53/14, and may be downloaded from the Agency’s website http://www.ekip.me..

**7.3 General technical conditions for the use of radio-frequencies in the 2 GHz band for MFCN systems**

The Radio-frequency Assignment Plan in the 1920-1980/2110-2170 MHz band for TRA-ECS systems determined the assignment of these bands for mobile radio-communications service, radio-frequency channels arrangement in the band, more detailed terms and conditions of usage, as well as the method for assigning radio-frequencies for MFCN systems, in accordance with the Radio-Frequency Spectrum Allocation Plan. The use of 1980/2110-2170 MHz band for MFCN systems is based on Decision ECC/DEC/(06)01 and Recommendation ECC/REC/(01)01.

In the radio-frequency 1920-1980/2110-2170 MHz band for MFCN systems separation between uplink and downlink is planned by using frequency division duplex (FDD) only. The uplink uses radio-frequencies in the 1920-1980 MHz band and downlink uses radio-frequencies in the 2110-2170 MHz band. The 1920-1980/2110-2170 MHz band is divided into twelve paired radio-frequency blocks of 2x5 MHz bandwidth. The separation between the transmission and reception frequencies for base and terminal station is 190 MHz. One or few successive paired or unpaired frequency blocks may be assigned to an entity.

A graphical presentation of frequency arrangements in the 1920-1980/2110-2170 MHz band for MFCN systems are given in Figure 7.3.

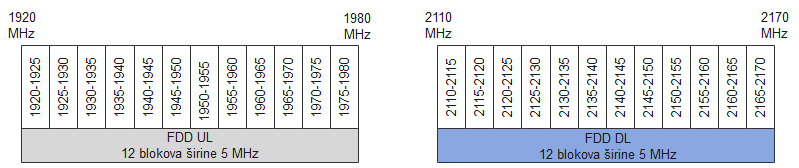


Figure 7.3 *Graphical presentations of frequency arrangements in the 1920-1980/2110-2170 MHz band for MFCN systems*

The Radio-frequency Assignment Plan prescribes conditions that enable operations of FDD systems without appearance of any harmful interference to the systems operating in the adjacent parts of the band. Technical conditions for MFCN base and terminal stations (FDD and TDD) are defined based on Block-Edge-Mask (BEM) for in-block emissions and out-of block emissions (in terms of assigned blocks).

The Radio-frequency Assignment Plan in the 1920-1980/2110-2170 MHz band for MFCN systems was published in the Official Gazette of Montenegro, 127/20, and may be downloaded from the Agency’s website http://www.ekip.me.

**7.4. General technical conditions for use of radio-frequencies in the 2.6 GHz band for MFCN systems**

The Radio-frequency Assignment Plan in the 2500-2690 MHz band for MFCN systems determines the assignment of radio-frequencies for mobile radio-communication service, radio-frequency channels arrangement in the band, more detailed terms and conditions of usage, as well as the method of assigning radio-frequencies for MFCN systems, in accordance with the Radio-Frequency Spectrum Allocation Plan. The use of 2500-2690 MHz band for MFCN system is based on Decisions ECC/DEC/(02)06 and ECC/DEC/(05)05 and Recommendation ECC/REC/(11)05.

In the radio-frequency band 2500-2570/2620-2690 MHz for MFCN systems separation between uplink and downlink is planned by using frequency division duplex (FDD). The 2500-2570/2620-2690 MHz band for MFCN systems is divided into 14 paired radio-frequency blocks of 2x5 MHz bandwidth. The uplink uses radio-frequencies in the 2500-2570 MHz band and downlink uses radio-frequencies in the 2620-2690 MHz band. The separation between the transmission and reception frequencies for the base and terminal station is 120 MHz. In the radio-frequency 2570-2620 MHz band for MFCN systems separation between uplink and downlink is planned by using time division duplex (TDD). The 2570-2620 MHz band is divided into ten unpaired radio-frequency blocks of 5 MHz bandwidth. The plan stipulates that the 2570-2620 MHz band may be alternatively used for supplementary FDD downlink (SDL). One or few successive paired or unpaired frequency blocks may be assigned to one entity.

A graphical presentation of frequency arrangements in the 2500-2690 MHz band for MFCN systems is given by Figure 7.4.



Figure 7.4 *Graphical presentation of frequency arrangement*

*in the 2500-2690 MHz* band *for MFCN systems*

The Radio-frequency Assignment Plan determine technical conditions for MFCN base and terminal stations, defined based on Block-Edge-Mask (BEM) for in-block emissions and out-of block emissions (in terms of assigned blocks), for restricted and non-restricted spectrum blocks.

Unpaired frequency block 2570-2575 MHz marked as G1, except when used for the uplink, as well as any lowest unpaired frequency block 5 MHz wide in the band 2575-2620 MHz which is part of the assigned block of one TDD network if it borders on the lower side with the assigned block of another non-synchronized TDD network, are considered to be restricted blocks. All frequency blocks in the paired part of the band and other frequency blocks in the unpaired part of the 2500-2690 MHz band are considered to be non-restricted blocks.

The Radio-frequency Assignment Plan in the 2500-2690 MHz band for MFCN systems has been published in the Official Gazette of Montenegro, 127/20, and may be downloaded from the Agency’s website http://www.ekip.me.

**7.5. The use of radio-frequencies in border areas between Montenegro and neighbouring countries**

Radio-frequencies in the 900 MHz, 1800 MHz, 2 GHz and 2.6 GHz bands for the implementation of public mobile electronic communications networks in the border areas between Montenegro and neighbouring countries are used in accordance with relevant agreements on coordination and relevant CEPT/ECC recommendations.

The following agreements on coordination of radio-frequencies for public mobile communication networks with administrations of neighbouring countries are in force:

* *Technical Agreement between the national frequency management authorities of Montenegro and Republic of Kosovo on border coordination of GSM/DCS1800 system in the frequency bands 880-915/925-960 MHz and 1710-1785/1805-1880 MHz (2013);*
* *Technical Agreement between the national frequency management authorities of Montenegro and Republic of Albania on border coordination of GSM/DCS1800 system in the frequency bands 880-915/925-960 MHz and 1710-1785/1805-1880 MHz (2014);*
* *Technical agreement between the national frequency management authorities of Montenegro, Republic of Croatia and Bosnia and Herzegovina on border coordination of GSM systems in the frequency bands 880-915/925-960 MHz and 1710-1785/1805-1880 MHz (2015);*
* *Technical agreement between the national frequency management authorities of Bosnia and Herzegovina, Republic of North Macedonia, Montenegro and Republic of Serbia on border coordination of fixed/mobile communication networks (MFCN) in the frequency bands 880-915 MHz i 925-960 MHz (2019);*
* *Technical agreement between the national frequency management authorities of Bosnia and Herzegovina, Republic of North Macedonia, Montenegro and Republic of Serbia on border coordination of fixed/mobile communication networks (MFCN) in the frequency bands 1710-1785 MHz i 1805-1880 MHz (2019);*
* *Technical agreement between the national frequency management authorities of Bosnia and Herzegovina, Republic of North Macedonia, Montenegro and Republic of Serbia on border coordination of fixed/mobile communication networks (MFCN) in the frequency bands 1920-1980 MHz i 2110-2170 MHz (2019);*
* *Technical agreement between the national frequency management authorities of Bosnia and Herzegovina, Republic of North Macedonia, Montenegro and Republic of Serbia on border coordination of fixed/mobile communication networks (MFCN) in the frequency band 2500-2690 MHz (2019).*

**7.6. Limits of exposure to electromagnetic fields**

Radio and Telecommunications Terminal Equipment (R&TTE) and elements of electronic communications networks may be used in a manner and under conditions that ensure that parameters of electromagnetic fields at a specific location must not exceed the limits prescribed by the Rulebook on the limits of exposure to electromagnetic fields (Official Gazette of Montenegro, 6/15).

The reference levels for general public exposure to electromagnetic fields of radio-frequencies between 100 kHz and 300 GHz are given in Table 7.1.

Table 7.1 *Reference levels for general public exposure*

|  |  |  |  |  |
| --- | --- | --- | --- | --- |
| **Frequency band** | **Electric filed strength,**  **E [V/m]** | **Magnetic field strength,**  **H [A/m]** | **Magnetic flux density,**  **B [μT]** | **Equivalent plain wave power density,**  **Sekv [W/m2]** |
| **100-150 kHz** | 87 | 5 | 6.25 | - |
| **0.15 – 1 MHz** | 87 |  |  | - |
| **1 – 10 MHz** |  |  |  | - |
| **10 – 400 MHz** | 28 | 0.073 | 0.092 | 2 |
| **400 – 2000 MHz** |  |  |  | f/200 |
| **2 – 300 GHz** | 61 | 0.16 | 0.2 | 10 |
| All limits are given as root mean square (RMS) value.  *f* represents the frequency expressed in units referred to in the first column. | | | | |

The reference levels of exposure to electromagnetic fields of radio-frequencies between 100 kHz and 300 GHz in the areas of increased sensitivity (public, residential and commercial buildings intended for human habitation: schools, pre-schools, maternity wards, hospitals, tourist facilities and children’s playgrounds) are given in Table 7.2.

Table 7.2 *Reference levels for the exposure in the area of increased sensitivity*

|  |  |  |  |  |
| --- | --- | --- | --- | --- |
| **Frequency band** | **Electric filed strength,**  **E [V/m]** | **Magnetic field strength,**  **H [A/m]** | **Magnetic flux density,**  **B [μT]** | **Equivalent plain wave power density,**  **Sekv [W/m2]** |
| **100 – 150 kHz** | 43.5 | 2.5 | 3.125 | - |
| **0.15 – 1 MHz** | 43.5 |  |  | - |
| **1 – 10 MHz** |  |  |  | - |
| **10 – 400 MHz** | 14 | 0.037 | 0.046 | 0.5 |
| **400 – 2000 MHz** |  |  |  |  |
| **2 – 300 GHz** | 31 | 0.08 | 0.10 | 2.5 |
| All limits are given as root mean square (RMS) value.  *f* represents the frequency expressed in units referred to in the first column. | | | | |

**8. REGULATORY FEES**

**8.1. Fees paid for the use of radio-frequencies**

The holder of the approval for the use of radio-frequencies is obliged to pay:

* to the Agency the annual fee for the use of radio-frequencies;
* to the Budget of Montenegro the annual fee for the covering of the costs for the radio-frequency spectrum administration.

The annual fee for the use of radio-frequencies is used solely for covering the costs of radio-frequency spectrum management and supervision. The methodology and manner of the calculation of this fee, expressed in points, are prescribed by the Rulebook on the methodology and the method of the calculation of annual fees for the use of radio-frequencies (Official Gazette of Montenegro, 16/14, 81/18 and 6/19).

In accordance with Article 4 of above Rulebook, the amount of the annual fee for the use of radio-frequencies on an exclusive basis in the entire territory of Montenegro for the implementation of public mobile/fixed electronic communication networks is determined by the following formula:

***N* = *B* x *M***,

where ***N*** is the amount of the annual fee expressed in points, ***B*** is the coefficient determined when the total width of the assigned radio-frequency resources expressed in MHz, is divided by 1 MHz, and ***M*** coefficient which depends on the frequency band whose values are (for the bands that are the subject of public bidding) are given in Table 8.1.

Table 8.1 *Values of the coefficient M for the bands which are the subject of public bidding*

|  |  |  |
| --- | --- | --- |
| **Radio-frequency band** | **Type of network/Technology** | ***M*** |
| 900 MHz | GSM oe MFCN | 1000 |
| 1800 MHz | GSM/DCS1800 or MFCN | 400 |
| 2 GHz | MFCN | 250 |
| 2.6 GHz | MFCN | 225 |

The annual fee for covering the cost for administration of radio-frequency spectrum in accordance with the Decision of the Government of Montenegro on the list of fees for covering the cost radio-frequency spectrum administration (Official Gazette of Montenegro, 16/14) for fixed and mobile communication services equals 10% of the annual fee for the use of radio-frequencies.

The amount of the annual fee for the use of radio-frequency and the annual fee for covering the costs for radio-frequency spectrum administration is established by a separate decision of the Agency issued for each calendar year, according to the monetary value of points, as determined by the financial plan of the Agency. The monetary value of points for the calculation of annual fee for the use of radio-frequencies for 2021 is EUR 2.11.

An overview of the amounts of annual fees for the use of radio-frequencies per block of 5 MHz width of paired or unpaired spectrum, in the bands that are the subject of public bidding in 2021 is given in Table 8.2.

Table 8.2 *An overview of the amounts of annual fees per 5 MHz block width in 2021*

|  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- |
| **Radio-frequency band** | **Block width**  **[MHz]** | **Fee for the use of [points]** | **Fee for the use of [EUR]** | **Fee for the administration of [EUR]** | **Total fee**  **[EUR]** |
| 900 MHz (paired) | 2x5 | 10,000 | 21,100.00 | 2,110.00 | 23,210.00 |
| 1800 MHz (paired) | 2x5 | 4,000 | 8,440.00 | 844.00 | 9,284.00 |
| 2 GHz (paired) | 2x5 | 2,500 | 5,275.00 | 527.50 | 5,802.50 |
| 2,6 GHz (paired) | 2x5 | 2,250 | 4,747.50 | 474.75 | 5,222,25 |
| 2.6 GHz (unpaired) | 5 | 1,125 | 2,373.75 | 237.37 | 2,611.12 |

The method of calculation of annual fees for the use of radio-frequencies in other bands and other services (e.g. fixed "point-to-point" links) may be found in the Rulebook on the methodology and the method for the calculation of annual fees for the use of radio-frequencies.

In addition to the annual fees regarding the use of radio-frequencies, the holder of the approval is required, in order to define technical and operational conditions for the use of radio-frequencies at individual locations or areas of coverage, to provide the Agency with technical solution for the use of radio-frequencies for each location and pay a relevant fee for processing of the application. Pursuant to the Decision on determining the amount of the one-off fee for processing the applications for the approvals for the use of radio-frequencies No. 0505-4829/1 from 3 October 2013, the applicant is required to pay a one-off fee of EUR 50.00 for the base/repeater station in a cellular network, for the purpose of determination of technical conditions for the use of the approved radio-frequencies. The fee, in the same amount, is paid in the event of submission of the request for modification and/or amendment of the approval for the use of radio-frequencies.

**8.2. Other regulatory fees**

The holder of the approval entitled to provide a publicly available electronic communications service or make the public electronic communications network or the public electronic communications infrastructure and associated facilities available for use in line with the LEC, is considered an operator and must be registered in the Registry of Operators kept by the Agency. The operator is obliged to pay an annual fee to the Agency for the activities of market regulation and supervision in the area of electronic communications. The amount of this fee is up to 1.5 % of the total operator’s revenue generated in the previous year for the provision of publicly available electronic communications services and granting the electronic communications network, electronic communications infrastructure and associated facilities for use, up to the level which covers costs of market regulation and market supervision activities in the sector of electronic communications, determined in the Financial Plan of the Agency. The Agency will determine the amount of this fee by a decision issued for each calendar year.

The operator may use the numbers and/or addresses from the Numbering Plan and Addressing Plan under the approval for the use of numbers and/or addresses issued by the Agency. The holder of the approval for the use of numbers and/or addresses is obliged to pay to the Agency an annual fee for the use of numbers and/or addresses, which may be used solely to cover the costs of supervision and management of numbers and/or addresses. The methodology and method of the calculation of this annual fee expressed in points is prescribed by the Rulebook on the methodology and the method of the calculation of annual fees for the use of numbers and/or addresses (Official Gazette of Montenegro, 13/14). The amount of annual fee for the use of numbers and/or addresses is determined by a separate decision of the Agency for each calendar year, according to the monetary value of points, as determined by the financial plan of the Agency. The monetary value of points for the calculation of annual fee for the use of numbers and/or addresses for 2021 equals to EUR 0.6452. The approval for the use of numbers and/or addresses is issued based on the submitted application in accordance with the LEC, for which the applicant is obliged to pay a relevant fee to the Agency for processing the application whose amount, in accordance with the Decision on determining a one-off fee for processing the applications for the issuance of the approvals for the use of numbers and/or addresses No. 0403-4859/1 from 3 October 2013 is in the amount of EUR 50.00.

Operators whose share in the total annual revenue in the area of electronic communications exceeds 2%, in accordance with the LEC are required to contribute to the compensation of net costs of the Universal Service. The amount of contribution and method of payment for each operator is determined by the Agency in proportion to the share of their revenues generated from the provision of public electronic communications services, that is, granting the electronic communications network, electronic communications infrastructure and associated facilities for use in the total annual revenue generated in the electronic communications sector.

**Annex 1: Address of the headquarter and contact details of the Agency**

**Postal address:**

AGENCY FOR ELECTRONIC COMMUNICATIONS AND POSTAL SERVICES

Bvl. Džordža Vašingtona No. 56

81000 Podgorica

Montenegro

**Contact details:**

Tel: +382 20 406 700

Fax: +382 20 406 702

E-mail: [aukcija2021@ekip.me](mailto:aukcija2015@ekip.me)

Web: [www.ekip.me](http://www.ekip.me)

**Other business details:**

Tax identification number (PIB): 02326710

Bank account number:

510-2125-67 ("Crnogorska komercijalna banka" A.D. Podgorica)

535-5737-37 ("Prva banka Crne Gore" A.D. Podgorica)

540-10586-09 ("Erste banka" A.D. Podgorica

520-10969-51 ("Hipotekarna banka" A.D. Podgorica)

565-670-17 ("Lovćen banka" A.D. Podgorica)

530-6701-86 ("NLB banka" A.D. Podgorica)

**Annex 2: Form of application for participation**

**in the spectrum auction**

*(name of the applicant)­­­\_\_*

No: \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_

Place and date: \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_

**APPLICATION**

**FOR PARTICIPATION IN THE SPECTRUM AUCTION**

The Applicant is hereby expressing its decision to participate in the spectrum action conducted in accordance with the Decision of the Agency for Electronic Communications and Postal Services on launching the public bidding procedure for awarding the approval for the use of radio-frequencies in the 800 MHz, 900 MHz, 1800 MHz, 2 GHz and 2.6 GHz bands for the implementation of public mobile electronic communications networks No. 0504-\_\_\_\_/1 of \_\_ \_\_\_ 2021.

|  |  |
| --- | --- |
| **Relevant information on the Applicant** | |
| Name |  |
| Address of the seat |  |
| Registration No. |  |
| Personal Identification No. |  |
| Address for the official mail receipt |  |
| Tel. |  |
| Fax |  |
| E-mail |  |
| Bank account number |  |
| Name of the bank |  |
| International Bank Account Number (IBAN) |  |
| Bank Identification Code (BIC) |  |

|  |  |  |
| --- | --- | --- |
| Authorized person on behalf of the Applicant: | | |
|  | | |
|  | | |
|  | | |
| (*name, surname and position*) | | |
|  | | |
|  | | |
| (*signature*) | | |
| M.P. |  |

**Annex 3: Form of declaration of the applicant for participation**

**in the spectrum auction about being aware of the content of the Public Bidding Documents and fully accepting the terms and conditions relating to the public bidding**

Form I.1

*(name of the applicant)­­­\_\_\_*

No: \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_

Place and date: \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_

I, the undersigned,  *(full name and surname)\_\_\_\_\_\_\_*

**DECLARE**

That \_\_\_\_\_\_*(name of the applicant)­­­*\_\_\_\_\_\_, as the Applicant for participation in the spectrum auction *\_\_\_\_\_(Application No. and date)*, is aware with the content of the Public Bidding Documents for awarding the approvals for the use of radio-frequencies in the 900 MHz, 1800 MHz, 2 GHz and 2.6 GHz bands for the implementation of public mobile electronic communications networks No. 0504-\_\_\_\_/1 of \_\_ \_\_\_ 2021 and fully accepts the terms and conditions set out in the Documents thereof relating to the public bidding.

|  |
| --- |
| Authorized person on behalf of the Applicant: |
|  |
|  |
|  |
| (*name, surname and position*) |
|  |
|  |
| (*signature*) |

|  |  |
| --- | --- |
| M.P. |  |
|  |  |

**Annex 4: Form of declaration of the applicant for participation**

**in the spectrum auction on correctness and completeness of the submitted information**

Form I.2

*(name of the applicant)­­­\_\_\_*

No: \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_

Place and date: \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_

I, the undersigned,  *(full name and surname)\_\_\_\_\_\_\_*

**DECLARE**

That the information stated in Application for participation in the spectrum auction No. *\_\_\_\_\_(Application No. and date)* \_\_\_\_\_ submitted by the Applicant *(name of the Applicant)­­­\_\_\_* and other documents submitted together with the Application are correct and complete and that the Applicant is aware that should it be established that prior to the end of the public bidding procedure the submitted Application for participation in the spectrum auction and other documents submitted together with the Application contain incorrect or incomplete information, the Applicant will be excluded from the further public bidding procedure without the right to reimbursement of fees paid for the purchase of the Public Bidding Documents, including one-off fee for participation in the spectrum auction, and the Agency will activate the bid guarantee, if the guarantee thereof has been submitted, or should it be established that at any time after the end of the public bidding procedure the submitted Application for participation in the spectrum auction and other documents submitted together with the Application thereof contain incorrect or incomplete information, the Agency will revoke the approval for the use of radio-frequencies awarded to the bidder on the basis of the public bidding procedure, without the right to reimburse the fee paid for the purchase of the Public Bidding Documents, including one-off fee for participation in the spectrum auction, one-off fee for awarding the approvals for the use of radio-frequencies and annual regulatory fees.

|  |  |  |
| --- | --- | --- |
| Authorized person on behalf of the Applicant: | | |
|  | | |
|  | | |
|  | | |
| (*name, surname and position*) | | |
|  | | |
|  | | |
| (*signature*) | | |
| M.P. |  |
|  |  |

**Annex 5: Form of declaration of the applicant for participation**

**in the spectrum auction about not undertaking activities of**

**secret conspiracy or collusion**

Form I.3

*(name of the applicant)­­­\_\_\_*

No: \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_

Place and date: \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_

I, the undersigned,  *(full name and surname)\_\_\_\_\_\_\_*

**DECLARE**

That *(name of the Applicant)­­­\_\_* , as the Applicant for participation in the spectrum auction *\_\_\_\_\_(Application No. and date)*, did not undertake activities of secret conspiracy or collusion in any form that could result in compromising integrity of the public bidding procedure and that the Applicant is aware of the fact that should it be proved that it had taken any of the aforementioned activities it will be excluded from the further public bidding procedure, without the right to reimburse the fee paid for the purchase of the Public Bidding Documents and a one-off fee for participation in the spectrum auction, and that the Agency will activate the bid guarantee, if it has been submitted, i.e. if the evidence of the secret conspiracy or collusion between the qualified bidders are provided after the end of the public bidding procedure or after awarding the approval for the use of radio-frequencies, the Agency will revoke the approvals for the use of radio-frequencies issued based on the public bidding procedure thereof to the bidders which have conducted the aforementioned activities, without the right to reimburse the fee paid for the purchase of the Public Bidding Documents, one-off fee for participation in the spectrum auction, one-off fee for the awarding of approvals for the use of radio-frequencies and annual regulatory fees.

|  |
| --- |
| Authorized person on behalf of the Applicant: |
|  |
|  |
|  |
| (*name, surname and position*) |
|  |
|  |
| (*signature*) |

|  |  |
| --- | --- |
| M.P. |  |

**Annex 6: Form of declaration of the applicant for participation**

**in the spectrum auction on its solvency**

Form I.4

*(name of the applicant)­­­\_\_\_*

No: \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_

Place and date: \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_

I, the undersigned,  *(full name and surname)\_\_\_\_\_\_\_*

**DECLARE**

That *(name of the Applicant)­­­\_\_\_\_ , as* the Applicant for participation in the spectrum auction *\_\_\_\_\_(Application No. and date)* is solvent and not related to any bankruptcy proceedings, the process of forced liquidation or forced collection procedure, which could have an impact on its participation in the spectrum auction procedure, and that in relation to the current business operations there are no reasons for initiating the aforementioned actions or potential judicial and other procedures that the Applicant may be related to which could have an impact on its participation in the spectrum auction procedure.

|  |  |  |
| --- | --- | --- |
| Authorized person on behalf of the Applicant: | | |
|  | | |
|  | | |
|  | | |
| (*name, surname and position*) | | |
|  | | |
|  | | |
| (*signature*) | | |
|  | | |
| M.P. |  |
|  |  |

**Annex 7: Form of bank guarantee**

*(Commercial Bank Memorandum)*

**BID GUARANTEE**

**Type of guarantee:** Bid Security Guarantee

**Guarantee No:** (*Guarantee Ref. No.*)

**Guarantor:** (*Name and address of the bank and the place of the guarantee issuance)*

**Ordering Party:** (*Name and address of the Ordering Party*)

**Beneficiary:** Agency for Electronic Communications and Postal Services,

Bvl. Džordža Vašingtona 56, 81000 Podgorica, Montenegro

**Amount of guarantee:** (*Amount of the guarantee in number and words*)

**Manner of presentation:** Paper-express mail or paper-direct delivery

**Place of presentation:** (*Address of the guarantor's branch office for the presentation receipt*)

**Guarantee validity period:** 120 days from the start of the spectrum auction, including the start date of the spectrum auction

**Subject matter jurisdiction and territorial jurisdiction in case of dispute resolution:** Commercial Court in Podgorica

**Credit rating of the Guarantor**: Credit quality level (investment grade) (*specify the level*), according to the rating agency (*specify the name of the rating agency*) (Note: This item is included in the guarantee only if the guarantor is a foreign bank)

We have been informed that (*specify the name and address of the Ordering Party*) (*the Ordering Party*) has gained the status of qualified bidder in the public bidding procedure for awarding the approvals for the use of radio-frequencies in the 900 MHz, 1800 MHz, 2 GHz and 2.6 GHz bands for the implementation of public mobile electronic communications networks launched by the Decision No. 0504-\_\_\_/1 of \_ \_\_\_\_ 2021.

In the capacity of Guarantor, we are hereby irrevocably and unconditionally confirming our commitment to pay any amount of the guarantee to the Beneficiary or the amounts lower than the amount of the guarantee (*specify the maximum payable amount and currency in which it is payable in number and words*), following the first presentation of the Beneficiary's one or more harmonized calls stating that:

* the Ordering Party, which submitted the winning bid in any phase of the public bidding procedure failed to pay one-off fee for the awarding of approvals for the use of radio-frequencies within the set deadline;
* the Ordering Party, as a qualified bidder in the auction, has submitted the Application for participation in the spectrum auction and other accompanying documents which contain incorrect or incomplete data;
* the Ordering Party, as a qualified bidder in the auction, has undertaken actions of collusion in order to compromise integrity of the public bidding procedure;
* the Ordering Party, as a qualified bidder in the auction, has violated the rules of the auction.

We shall receive every notification on the failure to conduct payments required by the guarantee on the expiry date or before the expiry date in the above-designated place for the presentation.

On behalf of the Guarantor:

..................................

*(stamp, position, signature)*

........................................

Place and issuance date

**Annex 8: Example forms of the spectrum auction bids**

Name of the bidder: \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_

Date: \_\_ \_\_ 2021

**SPECTRUM AUCTION BID**

As a qualified bidder at the spectrum auction, in the public bidding procedure for awarding the approvals for the use of radio-frequencies in the bands 900 MHz, 1800 MHz, 2 GHz and 2.6 GHz for the implementation of public mobile electronic communications network, initiated by the Agency for Electronic Communications and Postal Services No. 0504-\_\_\_\_ / 1 of October \_\_ 2021, below we submit the binding bid.

|  |  |
| --- | --- |
| **Spectrum auction phase:** | Pre-auction |
| **Round of bidding:** | Primary #0 |

|  |  |  |  |  |
| --- | --- | --- | --- | --- |
| **Radio-frequency band** | **Block category** | **Fee per block**  **[EUR]** | **Number of blocks** | **Bid amount**  **[EUR]** |
| **900 MHz** | PA1 | 946,000.00 |  |  |
| **1800 MHz** | PA2 | 440,000.00 |  |  |
| **2 GHz** | PA3 | 406,000.00 |  |  |
| **Total bid amount [EUR]** | | | |  |

|  |
| --- |
| Authorized person on behalf of the qualified bidder: |
|  |
|  |
|  |
| (*name, surname and position*) |
|  |
|  |
| (*signature*) |

|  |  |
| --- | --- |
| M.P. |  |

Name of the bidder: \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_

Date: \_\_ \_\_ 2021

**SPECTRUM AUCTION BID**

As a qualified bidder at the spectrum auction, in the public bidding procedure for awarding the approvals for the use of radio-frequencies in the bands 900 MHz, 1800 MHz, 2 GHz and 2.6 GHz for the implementation of public mobile electronic communications network, initiated by the Agency for Electronic Communications and Postal Services No. 0504 -\_\_\_\_/1 of October \_\_\_ 2021, below we submit the binding bid.

|  |  |
| --- | --- |
| **Spectrum auction phase:** | Main auction |
| **Round of bidding:** | Primary #1 |

|  |  |  |  |  |
| --- | --- | --- | --- | --- |
| **Radio-frequency band** | **Block category** | **Fee per block**  **[EUR]** | **Number of blocks** | **Bid amount**  **[EUR]** |
| **900 MHz** | GA1 | 946,000.00 |  |  |
| **1800 MHz** | GA2 | 440,000.00 |  |  |
| **2 GHz** | GA3 | 406,000.00 |  |  |
| GA4 | 406,000.00 |  |  |
| **2.6 GHz** | GA5 | 200,000.00 |  |  |
| GA6 | 55,000.00 |  |  |
| **Total bid amount [EUR]** | | | |  |

|  |  |  |
| --- | --- | --- |
| Authorized person on behalf of the qualified bidder: | | |
|  | | |
|  | | |
|  | | |
| (*name, surname and position*) | | |
|  | | |
|  | | |
| (*signature*) | | |
| M.P. |  |

Name of the bidder: \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_

Date: \_\_ \_\_ 2021

**SPECTRUM AUCTION BID**

As a qualified bidder at the spectrum auction, in the public bidding procedure for awarding the approvals for the use of radio-frequencies in the bands 900 MHz, 1800 MHz, 2 GHz and 2.6 GHz for the implementation of public mobile electronic communications network, initiated by the Agency for Electronic Communications and Postal Services No. 0504 -\_\_\_\_/1 of October \_\_\_ 2021, below we submit the binding bid.

|  |  |
| --- | --- |
| **Spectrum auction phase:** | Main auction |
| **Round of bidding:** | Primary #X |

|  |  |  |  |  |
| --- | --- | --- | --- | --- |
| **Radio-frequency band** | **Block category** | **Fee per block**  **[EUR]** | **Number of blocks** | **Bid amount**  **[EUR]** |
| **900 MHz** | GA1 | xxxxxx |  |  |
| **1800 MHz** | GA2 | xxxxxx |  |  |
| **2 GHz** | GA3 | xxxxxx |  |  |
| GA4 | xxxxxx |  |  |
| **2.6 GHz** | GA5 | xxxxxx |  |  |
| GA6 | xxxxxx |  |  |
| **Total bid amount [EUR]** | | | |  |

|  |
| --- |
| Authorized person on behalf of the qualified bidder: |
|  |
|  |
|  |
| (*name, surname and position*) |
|  |
|  |
| (*signature*) |

|  |  |
| --- | --- |
| M.P. |  |

Name of the bidder: \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_

Date: \_\_ \_\_ 2021

**SPECTRUM AUCTION BID**

As a qualified bidder at the spectrum auction, in the public bidding procedure for awarding the approvals for the use of radio-frequencies in the bands 900 MHz, 1800 MHz, 2 GHz and 2.6 GHz for the implementation of public mobile electronic communications network, initiated by the Agency for Electronic Communications and Postal Services No. 0504-\_\_\_\_/1 of October \_\_\_ 2021, below we submit the binding bid.

|  |  |
| --- | --- |
| **Spectrum auction phase:** | Main auction |
| **Round of bidding:** | Supplementary |

|  |  |  |  |
| --- | --- | --- | --- |
| **Radio-frequency band** | **Block category** | **Minimum amount of fee per block**  **[EUR]** | **Number of blocks** |
| **900 MHz** | GA1 | xxxxxx |  |
| **1800 MHz** | GA2 | xxxxxx |  |
| **2 GHz** | GA3 | xxxxxx |  |
| GA4 | xxxxxx |  |
| **2.6 GHz** | GA5 | xxxxxx |  |
| GA6 | xxxxxx |  |
| **Total bid amount [EUR]** | | |  |

|  |
| --- |
| Authorized person on behalf of the qualified bidder: |
|  |
|  |
|  |
| (*name, surname and position*) |
|  |
|  |
| (*signature*) |

|  |  |
| --- | --- |
| M.P. |  |

**Enclosure 1: Draft approval for the use of**

**radio-frequencies in the 900 MHz band**



**MONTENEGRO**

**AGENCY FOR ELECTRONIC COMMUNICATIONS**

**AND POSTAL SERVICES**

No: \_\_\_\_-\_\_\_\_/\_

Podgorica, \_\_ \_\_ 2021

AGENCY FOR ELECTRONIC COMMUNICATIONS AND POSTAL SERVICES (hereinafter: the Agency), based on Article 11 Item 11 and Art. 99-102, 112-115, 124 and 125 of the Law on Electronic Communications (Official Gazette of Montenegro, 40/13, 56/13, 56/13, 2/17 and 49/19), the Radio-Frequency Spectrum Allocation Plan (Official Gazette of Montenegro, 89/20 and 104/20), the Radio-Frequency Assignment Plan in the 880-915/925-960 MHz band for GSM and TRA-ECS systems (Official Gazette of Montenegro, 53/14), the Rulebook on the methodology and method for the calculation of annual fees for the use of radio-frequencies (Official Gazette of Montenegro, 16/14, 81/18 and 6/19), the Decision of the Government of Montenegro on pricing fees for administration of radio-frequency spectrum (Official Gazette of Montenegro, 16/14); the Decision on the selection of bidders in the public bidding procedure No. \_\_\_\_-\_\_\_\_/\_ of \_\_ \_\_ 2021 and Art. 18 and 144 of the Law on Administrative Procedure ("Official Gazette of Montenegro", No. 56/14, 20/15, 40/16 and 37/17), acting upon the request of the company ***\_\_\_\_\_(name)\_\_\_\_\_\_***, in the subject of issuing the approvals for the use of radio-frequencies in the band **880-915/925-960 MHz** for the implementation of **public mobile electronic communications network**, in the session of the Council held on \_ \_\_\_\_\_ 2021 adopted the following

**A P P R O V A L**

**for the use of radio-frequencies**

1. It is approved to the company ***\_\_\_\_\_(name)\_\_\_\_\_\_*** (hereinafter: the Holder of the approval for the use of radio frequencies), the use of radio-frequencies in the band **880-915/925-960 MHz** for the implementation of the **public mobile electronic communications network**.
2. This approval allocates \_\_ paired 2x5 MHz radio-frequency blocks, with the following boundaries (hereinafter: the Approved radio-frequencies):

**880-885 / 925-930 MHz** (block **B1**);

**885-890 / 930-935 MHz** (block **B2**).

1. The Approved radio-frequencies are allocated **for use on an exclusive basis in the entire territory of Montenegro**, for the implementation of a public mobile electronic communications network.
2. The Approval for the use of radio-frequencies is valid **until September 1, 2031**.
3. The Holder of the approval for the use of radio-frequencies is obliged to pay the Agency an annual fee for the use of radio-frequencies, which expressed in points amounts to **\_\_\_\_ points**.

The Holder of the approval for use of radio-frequencies shall pay the annual fee for covering the costs for administration of radio-frequency spectrum in the amount of **10% of the annual fee for the use of radio-frequencies** referred to in previous paragraph.

The monetary amount of fees from the previous paragraphs and the manner of their payment shall be determined by a special decision of the Agency for each calendar year.

1. The conditions for the use of the Approved radio-frequencies are given in the Annex, which is an integral part of this approval.
2. The procedure of extension of the Approval validity period for the use of radio-frequencies, transfer and/or assignment of the right to use the Approved radio-frequencies, amendment, revocation and expiration of validity period of the Approval for use of radio-frequencies shall be carried out in accordance with Art. 117-121 of the Law on Electronic Communications.

The right to use the Approved radio-frequencies may not be transferred to another legal entity before the expiration of a period of five years from the date of issuance of the Approval for the use of radio-frequencies. (this provision applies only to the approval issued to the new entrant in the market)

In addition to provisions prescribed by Article 120, paragraph 1 of the Law on Electronic Communications, the Agency shall revoke the Approval for the use of radio-frequencies in the event that at any time after the completion of the public bidding procedure on the basis of which the approval was issued, determines that the Holder of the approval for use of radio-frequencies, as a qualified bidder in the public bidding procedure:

- submitted an application for participation in the spectrum auction or other act enclosed that contains incorrect or incomplete information;

- in the course of the public bidding procedure, undertook activities of secret conspiracy and collusion in any form that could result in compromising the integrity of the public bidding procedure.

1. This approval shall enter into force on **April 21, 2022**.
2. This approval is enforceable in administrative proceedings.

**Justification**

#######

#######

**Legal remedy**

No appeal is allowed against this approval, but an administrative dispute may be initiated with the Administrative Court of Montenegro within 20 days from the day of its receipt.

**PRESIDENT OF THE COUNCIL Branko Kovijanić**

**Annex: Conditions for the use of approved radio-frequencies**

**1. Purpose of the service, type of network or technology for**

**which the right to use radio-frequencies is awarded**

1.1. The Approved radio-frequencies are used for the implementation of GSM systems and/or MFCN (TRA-ECS) systems, in accordance with the Radio-Frequency Assignment Plan in the 880-915/925-960 MHz band for GSM and TRA-ECS systems, in order to provide public mobile electronic communications services in the entire territory of Montenegro.

**2. Measures to ensure efficient use of radio-frequencies,**

**including requirements regarding coverage or signal strength**

2.1. *(for the approval to be issued to the incumbent mobile operator)*

The Holder of the approval for the use of radio-frequencies is obliged to provide coverage of 99% of the population of Montenegro, in terms of availability of voice telephony and SMS services by the end of the first year of the Approval validity period.

*(for the approval to be issued to the new entrant in the market)*

The Holder of the approval for the use of radio-frequencies is obliged to observe the minimum of the following when it comes to the scope and dynamics of the coverage of the population of Montenegro in terms of availability of voice telephony and SMS services:

- 25% of the population by the end of the second year of the Approval validity;

- 50% of the population by the end of the third year of the Approval validity;

- 75% of the population by the end of the fifth year of the Approval validity.

2.2. In order to achieve the prescribed level of coverage of the population of Montenegro by the network signal which allows the provision of services with the defined quality, any technology may be used as well as any band available to the Holder of the approval for the use of radio-frequencies, in line with the corresponding radio-frequencies assignment plan.

2.3. The fulfilment of requirements with regard to the scope and dynamics of the network signal coverage (coverage requirements), including requirements with regard to the service quality will be assessed by:

- the calculation based on the prediction of the network signal coverage according to Recommendation ITU-R P.1812 using DTM model of Montenegro in 50x50m resolution with appropriate population clutter;

- measurements of availability and quality of service using specialized measuring equipment, including measurements in movement;

- measurements of quality of service at the location of end user using specialized equipment and/or authorized software application.

In order to verify the fulfilment of the coverage requirements, including the requirements related to service quality, the methodology based on relevant international instruments (ITU-R, CEPT, ETSI and others) and best comparative practice will be used. The Holder of the approval for the use of radio-frequencies will be acquainted with the methodology of verification of the fulfilment of the coverage requirements at least three months before the expiration of the deadline for meeting a specific requirement.

Information on availability and quality of mobile communications services the Agency will publish periodically on its website.

2.4. The Approved radio-frequencies may be used in a manner and under conditions that ensure that the parameters of electromagnetic fields at a particular location do not exceed the limits established by the law governing protection against non-ionizing radiation, as well as Montenegrin and international standards applicable in Montenegro.

**3. Technical and operational conditions necessary**

**to avoid harmful interference**

3.1. Base and terminal stations of GSM systems and MFCN (TRA-ECS) systems shall meet the standards prescribed by the Radio-Frequency Assignment Plan in the 880-915/925-960 MHz band for GSM and TRA-ECS systems.

3.2. Technical and operational conditions for the use of Approved radio-frequencies at individual locations, ie coverage areas are determined by a special act of the Agency, at the request of the Holder of the approval for the use of radio-frequencies, with the validity period until the expiration of the Approval for the use of radio-frequencies.

**4. Additional obligations assumed by the bidder**

**in the public bidding procedure**

4.1. The Holder of the approval for the use of radio-frequencies is obliged to provide to the new entrant in the market who was awarded radio-frequencies for the implementation of the public mobile electronic communications network based on the public bidding procedure at its request the national roaming service under reasonable (fair), economically justified and non-discriminatory conditions for a period of five years from the issuance date of the approval for the use of radio-frequencies.

The right to national roaming includes any public mobile electronic communications service which the Holder of the approval for the use of radio-frequencies provides by using any technology in any frequency band. All services must be available to users of the new entrant in the market with the same quality and level of coverage as the services provided to their own users. *(only in the approval issued to the incumbent mobile operator in case the radio-frequencies in the public bidding procedure have been assigned also to a new entrant in the market)*

**5. Obligations in accordance with international agreements**

**and regulations in the field of radio-frequencies**

5.1. The Holder of the approval for the use of radio-frequencies is obliged to observe the international agreements and other documents in the field of electronic communications to which Montenegro is a signatory.

**Enclosure 2: Draft approval for the use of**

**radio-frequencies in the 1800 MHz band**



**MONTENEGRO**

**AGENCY FOR ELECTRONIC COMMUNICATIONS**

**AND POSTAL SERVICES**

No: \_\_\_\_-\_\_\_\_/\_

Podgorica, \_\_ \_\_ 2021

AGENCY FOR ELECTRONIC COMMUNICATIONS AND POSTAL SERVICES (hereinafter: the Agency), based on Article 11 Item 11 and Art. 99-102, 112-115, 124 and 125 of the Law on Electronic Communications (Official Gazette of Montenegro, 40/13, 56/13, 56/13, 2/17 and 49/19), the Radio-Frequency Spectrum Allocation Plan (Official Gazette of Montenegro, 89/20 and 104/20), the Radio-Frequency Assignment Plan in the 1710-1785/1805-1880 MHz band for DCS1800 and TRA-ECS systems (Official Gazette of Montenegro, 53/14), the Rulebook on the methodology and method for the calculation of annual fees for the use of radio-frequencies (Official Gazette of Montenegro, 16/14, 81/18 and 6/19), the Decision of the Government of Montenegro on pricing fees for administration of radio-frequency spectrum (Official Gazette of Montenegro, 16/14); the Decision on the selection of bidders in the public bidding procedure No. \_\_\_\_-\_\_\_\_/\_ of \_\_ \_\_ 2021 and Art. 18 and 144 of the Law on Administrative Procedure ("Official Gazette of Montenegro", No. 56/14, 20/15, 40/16 and 37/17), acting upon the request of the company ***\_\_\_\_\_(name)\_\_\_\_\_\_***, in the subject of issuing the approvals for the use of radio-frequencies in the band **1710-1785/1805-1880 MHz** for the implementation of **public mobile electronic communications network**, in the session of the Council held on \_ \_\_\_\_\_ 2021 adopted the following

**A P P R O V A L**

**for the use of radio-frequencies**

1. It is approved to the company ***\_\_\_\_\_(name)\_\_\_\_\_\_*** (hereinafter: the Holder of the approval for the use of radio frequencies), the use of radio-frequencies in the band **1710-1785/1805-1880 MHz** for the implementation of the **public mobile electronic communications network**.
2. This approval allocates \_\_ paired 2x5 MHz radio-frequency blocks, with the following boundaries (hereinafter: the Approved radio-frequencies):

\_\_\_-\_\_\_ / \_\_\_-\_\_\_ MHz (block C\_);

\_\_\_-\_\_\_ / \_\_\_-\_\_\_ MHz (block C\_);

...

1. The Approved radio-frequencies are allocated **for use on an exclusive basis in the entire territory of Montenegro**, for the implementation of a public mobile electronic communications network.
2. The Approval for the use of radio-frequencies is valid **until September 1, 2031**.
3. The Holder of the approval for the use of radio-frequencies is obliged to pay the Agency an annual fee for the use of radio-frequencies, which expressed in points amounts to **\_\_\_\_ points**.

The Holder of the approval for use of radio-frequencies shall pay the annual fee for covering the costs for administration of radio-frequency spectrum in the amount of **10% of the annual fee for the use of radio-frequencies** referred to in previous paragraph.

The monetary amount of fees from the previous paragraphs and the manner of their payment shall be determined by a special decision of the Agency for each calendar year.

1. The conditions for the use of the Approved radio-frequencies are given in the Annex, which is an integral part of the this approval.
2. The procedure of extension of the Approval validity period for the use of radio-frequencies, transfer and/or assignment of the right to use the Approved radio-frequencies, amendment, revocation and expiration of validity period of the Approval for use of radio-frequencies shall be carried out in accordance with Art. 117-121 of the Law on Electronic Communications.

The right to use the Approved radio-frequencies may not be transferred to another legal entity before the expiration of a period of five years from the date of issuance of the Approval for the use of radio-frequencies. (this provision applies only to the approval issued to the new entrant in the market)

In addition to provisions prescribed by Article 120, paragraph 1 of the Law on Electronic Communications, the Agency shall revoke the Approval for the use of radio-frequencies in the event that at any time after the completion of the public bidding procedure on the basis of which the Approval was issued, determines that the Holder of the approval for use of radio-frequencies, as a qualified bidder in the public bidding procedure:

- submitted an application for participation in the spectrum auction or other act enclosed that contains incorrect or incomplete information;

- in the course of the public bidding procedure, undertook activities of secret conspiracy and collusion in any form that could result in compromising the integrity of the public bidding procedure.

1. This approval shall enter into force on **April 21, 2022**.
2. This approval is enforceable in administrative proceedings.

**Justification**

#######

#######

**Legal remedy**

No appeal is allowed against this approval, but an administrative dispute may be initiated with the Administrative Court of Montenegro within 20 days from the day of its receipt.

**PRESIDENT OF THE COUNCIL Branko Kovijanić**

**Annex: Conditions for the use of approved radio-frequencies**

1. **Purpose of the service, type of network or technology**

**for which the right to use radio-frequencies is awarded**

1.1. The Approved radio-frequencies are used for the implementation of DCS1800 and/or MFCN (TRA-ECS) systems and/or MFCN (TRA-ECS) systems, in accordance with the Radio-Frequency Assignment Plan in the 1710-1785/1805-1880 MHz band for DCS1800 and TRA-ECS systems, in order to provide public mobile electronic communications services in the entire territory of Montenegro.

**2. Measures to ensure efficient use of radio frequencies,**

**including requirements regarding coverage or signal strength**

2.1. *(for the approval to be issued to the incumbent mobile operator)*

The Holder of the approval for the use of radio-frequencies is obliged by September 1, 2022, to provide coverage of 75% of the population of Montenegro with the network signal, in terms of availability of data transmission service with the required quality.

*(for the approval to be issued to the new entrant in the market)*

The Holder of the approval for the use of radio-frequencies is obliged to observe the minimum of the following when it comes to the scope and dynamics of the coverage of the population of Montenegro in terms of data transmission service with the required quality:

- 15% of the population by the end of the second year of the Approval validity;

- 30% of the population by the end of the third year of the Approval validity;

- 50% of the population by the end of the fifth year of the Approval validity.

2.2. In order to achieve the prescribed level of coverage of the population of Montenegro by the network signal which allows the provision of services with the defined quality, any technology may be used as well as any band available to the Holder of the approval for the use of radio-frequencies, in line with the corresponding radio-frequencies assignment plan. If the Holder of the approval for the use of radio-frequencies disposes the spectrum in several bands for which different coverage requirements have been defined is obliged to fulfil a more demanding criterion, but it is not required to develop the network in each band in parallel.

2.3. A network coverage, in terms of availability of data transmission service with the required quality, means the ability to provide data services with minimum bitrate towards the user (downlink) of 10 Mb/s based on user experience, and a guaranteed bitrate towards the user (downlink) of 2 Mb/s and guaranteed bitrate from the user (uplink) of 1 Mb/s, in case of outdoor mobile reception.

The request for the minimum bitrate towards the user (downlink) of 10 Mb/s based on user experience will be considered fulfilled if in at least 90% of measurements conducted during one day (00-24h) the measured data transfer rate towards the user is 10 Mb/s or more, with level of successfully initiated and finished measurement sessions of 95%, excluding the measurements made during a pick 2 hours of the maximum network load. The request is not relevant for measurements made during 45 days of summer tourist season.

The request for a guaranteed bitrate towards the user (downlink) of 2 Mb/s will be considered fulfilled if in at least 95% of measurements conducted during any time interval of 120 minutes duration the measured data transfer rate towards the user is 2 Mb/s or more, with level of successfully initiated and finished measurement sessions of 95%.

The request for a guaranteed bitrate from the user (uplink) of 1 Mb/s will be considered fulfilled if in at least 95% of measurements conducted during any time interval of 120 minutes duration the measured data transfer rate towards the user is 1 Mb/s or more, with level of successfully initiated and finished measurement sessions of 95%.

2.4. The fulfilment of requirements with regard to the scope and dynamics of the network signal coverage (coverage requirements), including requirements with regard to the service quality will be assessed by:

- the calculation based on the prediction of the network signal coverage according to Recommendation ITU-R P.1812 using DTM model of Montenegro in 50x50m resolution with appropriate population clutter;

- measurements of availability and quality of service using specialized measuring equipment, including measurements in movement;

- measurements of quality of service at the location of end user using specialized equipment and/or authorized software application.

In order to verify the fulfilment of the coverage requirements, including the requirements related to service quality, the methodology based on relevant international instruments (ITU-R, CEPT, ETSI and others) and best comparative practice will be used. The Holder of the approval for the use of radio-frequencies will be acquainted with the methodology of verification of the fulfilment of the coverage requirements at least three months before the expiration of the deadline for meeting a specific requirement.

Information on availability and quality of mobile communications services the Agency will publish periodically on its website.

2.5. The Approved radio-frequencies may be used in a manner and under conditions that ensure that the parameters of electromagnetic fields at a particular location do not exceed the limits established by the law governing protection against non-ionizing radiation, as well as Montenegrin and international standards applicable in Montenegro.

**3. Technical and operational conditions necessary to avoid harmful interference**

3.1. Base and terminal stations of DCS1800 systems and MFCN (TRA-ECS) systems shall meet the standards prescribed by the Radio-Frequency Assignment Plan in the 1710-1785/1805-1880 MHz band for DCS1800 and TRA-ECS systems.

3.2. Technical and operational conditions for the use of approved radio-frequencies at individual locations, ie coverage areas are determined by a special act of the Agency, at the request of the Holder of the approval for the use of radio-frequencies, with the validity period until the expiration of the Approval for the use of radio-frequencies.

**4. Additional obligations assumed by the bidder in the public bidding procedure**

4.1. The Holder of the approval for the use of radio-frequencies is obliged to provide to the new entrant in the market who was awarded radio-frequencies for the implementation of the public mobile electronic communications network based on the public bidding procedure at its request the national roaming service under reasonable (fair), economically justified and non-discriminatory conditions for a period of five years from the issuance date of the approval for the use of radio-frequencies.

The right to national roaming includes any public mobile electronic communications service which the Holder of the approval for the use of radio-frequencies provides by using any technology in any frequency band. All services must be available to users of the new entrant in the market with the same quality and level of coverage as the services provided to their own users. *(only in the approval issued to the incumbent mobile operator in case the radio-frequencies in the public bidding procedure have been assigned also to a new entrant in the market)*

**5. Obligations in accordance with international agreements and regulations in the field of radio-frequencies**

5.1. The Holder of the approval for the use of radio-frequencies is obliged to observe the international agreements and other documents in the field of electronic communications to which Montenegro is a signatory.

**Enclosure 3: Draft approval for the use of radio-frequencies**

**in the 2 GHz band**



**MONTENEGRO**

**AGENCY FOR ELECTRONIC COMMUNICATIONS**

**AND POSTAL SERVICES**

No: \_\_\_\_-\_\_\_\_/\_

Podgorica, \_\_ \_\_ 2021

AGENCY FOR ELECTRONIC COMMUNICATIONS AND POSTAL SERVICES (hereinafter: the Agency), based on Article 11 Item 11 and Art. 99-102, 112-115, 124 and 125 of the Law on Electronic Communications (Official Gazette of Montenegro, 40/13, 56/13, 56/13, 2/17 and 49/19), the Radio-Frequency Spectrum Allocation Plan (Official Gazette of Montenegro, 89/20 and 104/20), the Radio-Frequency Assignment Plan in the 1920-1980/2110-2170 MHz band for MFCN systems (Official Gazette of Montenegro, 127/20), the Rulebook on the methodology and method for the calculation of annual fees for the use of radio-frequencies (Official Gazette of Montenegro, 16/14, 81/18 and 6/19), the Decision of the Government of Montenegro on pricing fees for administration of radio-frequency spectrum (Official Gazette of Montenegro, 16/14); the Decision on the selection of bidders in the public bidding procedure No. \_\_\_\_-\_\_\_\_/\_ of \_\_ \_\_ 2021 and Art. 18 and 144 of the Law on Administrative Procedure ("Official Gazette of Montenegro", No. 56/14, 20/15, 40/16 and 37/17), acting upon the request of the company ***\_\_\_\_\_(name)\_\_\_\_\_\_***, in the subject of issuing the approvals for the use of radio-frequencies in the band **1920-1980/2110-2170 MHz** for the implementation of **public mobile electronic communications network**, in the session of the Council held on \_ \_\_\_\_\_ 2021 adopted the following

**A P P R O V A L**

**for the use of radio-frequencies**

1. It is approved to the company ***\_\_\_\_\_(name)\_\_\_\_\_\_*** (hereinafter: the Holder of the approval for the use of radio frequencies), the use of radio-frequencies in the band **1920-1980/2110-2170 MHz** for the implementation of the **public mobile electronic communications network**.
2. This approval allocates \_\_ paired 2x5 MHz radio-frequency blocks, with the following boundaries (hereinafter: the approved radio-frequencies):

\_\_\_-\_\_\_ / \_\_\_-\_\_\_ MHz (block D\_);

\_\_\_-\_\_\_ / \_\_\_-\_\_\_ MHz (block D\_);

...

1. The Approved radio-frequencies are allocated **for use on an exclusive basis in the entire territory of Montenegro**, for the implementation of a public mobile electronic communications network.
2. The Approval for the use of radio-frequencies is valid **until September 1, 2031**.

*(for the frequency block D1)*

The Approved radio-frequencies may be used **from the day the decision is made**.

*(for the frequency block D2 to D4)*

The Approved radio frequencies may be used **from April 24, 2022.**

1. The Holder of the approval for the use of radio-frequencies is obliged to pay the Agency an annual fee for the use of radio-frequencies, which expressed in points amounts to **\_\_\_\_ points**.

The Holder of the approval for use of radio-frequencies shall pay the annual fee for covering the costs for administration of radio-frequency spectrum in the amount of **10% of the annual fee for the use of radio-frequencies** referred to in previous paragraph.

The monetary amount of fees from the previous paragraphs and the manner of their payment shall be determined by a special decision of the Agency for each calendar year.

1. The conditions for the use of the Approved radio-frequencies are given in the Annex, which is an integral part of the this approval.
2. The procedure of extension of the Approval validity period for the use of radio-frequencies, transfer and/or assignment of the right to use the Approved radio-frequencies, amendment, revocation and expiration of validity period of the Approval for use of radio-frequencies shall be carried out in accordance with Art. 117-121 of the Law on Electronic Communications.

The right to use the Approved radio-frequencies may not be transferred to another legal entity before the expiration of a period of five years from the date of issuance of the Approval for the use of radio-frequencies. (this provision applies only to the approval issued to the new entrant in the market)

In addition to provisions prescribed by Article 120, paragraph 1 of the Law on Electronic Communications, the Agency shall revoke the Approval for the use of radio-frequencies in the event that at any time after the completion of the public bidding procedure on the basis of which the Approval was issued, determines that the Holder of the approval for use of radio-frequencies, as a qualified bidder in the public bidding procedure:

- submitted an application for participation in the spectrum auction or other act enclosed that contains incorrect or incomplete information;

- in the course of the public bidding procedure, undertook activities of secret conspiracy and collusion in any form that could result in compromising the integrity of the public bidding procedure.

1. This approval shall enter into force on the day of its adoption.
2. This approval is enforceable in administrative proceedings.

**Justification**

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**Legal remedy**

No appeal is allowed against this approval, but an administrative dispute may be initiated with the Administrative Court of Montenegro within 20 days from the day of its receipt.

**PRESIDENT OF THE COUNCIL Branko Kovijanić**

**Annex: Conditions for the use of approved radio-frequencies**

1. **Purpose of the service, type of network or technology**

**for which the right to use radio-frequencies is awarded**

1.1. The Approved radio-frequencies are used for the implementation of MFCN systems, in accordance with the Radio-Frequency Assignment Plan in the 1920-1980/2110-2170 MHz band for MFCN systems, in order to provide public mobile electronic communications services in the entire territory of Montenegro.

**2. Measures to ensure efficient use of radio frequencies,**

**including requirements regarding coverage or signal strength**

2.1. The Approved radio-frequencies may be used in a manner and under conditions that ensure that the parameters of electromagnetic fields at a particular location do not exceed the limits established by the law governing protection against non-ionizing radiation, as well as Montenegrin and international standards applicable in Montenegro.

**3. Technical and operational conditions necessary**

**to avoid harmful interference**

3.1. Base and terminal stations of MFCN systems shall meet the standards prescribed by the Radio-Frequency Assignment Plan in the 1920-1980/2110-2170 MHz band for MFCN systems.

3.2. Technical and operational conditions for the use of Approved radio-frequencies at individual locations, ie coverage areas are determined by a special act of the Agency, at the request of the Holder of the approval for the use of radio-frequencies, with the validity period until the expiration of the Approval for the use of radio-frequencies.

**4. Additional obligations assumed by the bidder**

**in the public bidding procedure**

4.1. The Holder of the approval for the use of radio-frequencies is obliged to provide to the new entrant in the market who was awarded radio-frequencies for the implementation of the public mobile electronic communications network based on the public bidding procedure at its request the national roaming service under reasonable (fair), economically justified and non-discriminatory conditions for a period of five years from the issuance date of the approval for the use of radio-frequencies.

The right to national roaming includes any public mobile electronic communications service which the Holder of the approval for the use of radio-frequencies provides by using any technology in any frequency band. All services must be available to users of the new entrant in the market with the same quality and level of coverage as the services provided to their own users. *(only in the approval issued to the incumbent mobile operator in case the radio-frequencies in the public bidding procedure have been assigned also to a new entrant in the market)*

**5. Obligations in accordance with international agreements**

**and regulations in the field of radio-frequencies**

5.1. The Holder of the approval for the use of radio-frequencies is obliged to observe the international agreements and other documents in the field of electronic communications to which Montenegro is a signatory.

**Enclosure 4: Draft approval for the use of**

**radio-frequencies in the 2.6 GHz band**



**MONTENEGRO**

**AGENCY FOR ELECTRONIC COMMUNICATIONS**

**AND POSTAL SERVICES**

No: \_\_\_\_-\_\_\_\_/\_

Podgorica, \_\_ \_\_ 2021

AGENCY FOR ELECTRONIC COMMUNICATIONS AND POSTAL SERVICES (hereinafter: the Agency), based on Article 11 Item 11 and Art. 99-102, 112-115, 124 and 125 of the Law on Electronic Communications (Official Gazette of Montenegro, 40/13, 56/13, 56/13, 2/17 and 49/19), the Radio-Frequency Spectrum Allocation Plan (Official Gazette of Montenegro, 89/20 and 104/20), the Radio-Frequency Assignment Plan in the 2500-2690 MHz band for MFCN systems (Official Gazette of Montenegro, 127/20), the Rulebook on the methodology and method for the calculation of annual fees for the use of radio-frequencies (Official Gazette of Montenegro, 16/14, 81/18 and 6/19), the Decision of the Government of Montenegro on pricing fees for administration of radio-frequency spectrum (Official Gazette of Montenegro, 16/14); the Decision on the selection of bidders in the public bidding procedure No. \_\_\_\_-\_\_\_\_/\_ of \_\_ \_\_ 2021 and Art. 18 and 144 of the Law on Administrative Procedure ("Official Gazette of Montenegro", No. 56/14, 20/15, 40/16 and 37/17), acting upon the request of the company ***\_\_\_\_\_(name)\_\_\_\_\_\_***, in the subject of issuing the approvals for the use of radio-frequencies in the band **2500-2690 MHz** for the implementation of **public mobile electronic communications network**, in the session of the Council held on \_ \_\_\_\_\_ 2021 adopted the following

**A P P R O V A L**

**for the use of radio-frequencies**

1. It is approved to the company ***\_\_\_\_\_(name)\_\_\_\_\_\_*** (hereinafter: the Holder of the approval for the use of radio frequencies), the use of radio-frequencies in the band **2500-2690 MHz** for the implementation of the **public mobile electronic communications network**.
2. This approval allocates \_\_ paired 2x5 MHz radio-frequency blocks and \_\_unpaired 5 MHz radio-frequency blocks, with the following boundaries (hereinafter: the Approved radio-frequencies):

\_\_\_-\_\_\_ / \_\_\_-\_\_\_ MHz (block F\_);

\_\_\_-\_\_\_ / \_\_\_-\_\_\_ MHz (block F\_);

.. ...

\_\_\_-\_\_\_ MHz (blok G\_);

\_\_\_-\_\_\_ MHz (blok G\_);

...

1. The Approved radio-frequencies are allocated **for use on an exclusive basis in the entire territory of Montenegro**, for the implementation of a public mobile electronic communications network.
2. The Approval for the use of radio-frequencies is valid **until September 1, 2031**.
3. The Holder of the approval for the use of radio-frequencies is obliged to pay the Agency an annual fee for the use of radio-frequencies, which expressed in points amounts to **\_\_\_\_ points**.

The Holder of the approval for use of radio-frequencies shall pay the annual fee for covering the costs for administration of radio-frequency spectrum in the amount of **10% of the annual fee for the use of radio-frequencies** referred to in previous paragraph.

The monetary amount of fees from the previous paragraphs and the manner of their payment shall be determined by a special decision of the Agency for each calendar year.

1. The conditions for the use of the Approved radio-frequencies are given in the Annex, which is an integral part of the this approval.
2. The procedure of extension of the Approval validity period for the use of radio-frequencies, transfer and/or assignment of the right to use the Approved radio-frequencies, amendment, revocation and expiration of validity period of the Approval for use of radio-frequencies shall be carried out in accordance with Art. 117-121 of the Law on Electronic Communications.

The right to use the Approved radio-frequencies may not be transferred to another legal entity before the expiration of a period of five years from the date of issuance of the Approval for the use of radio-frequencies. (this provision applies only to the approval issued to the new entrant in the market)

In addition to provisions prescribed by Article 120, paragraph 1 of the Law on Electronic Communications, the Agency shall revoke the Approval for the use of radio-frequencies in the event that at any time after the completion of the public bidding procedure on the basis of which the Approval was issued, determines that the Holder of the approval for use of radio-frequencies, as a qualified bidder in the public bidding procedure:

- submitted an application for participation in the spectrum auction or other act enclosed that contains incorrect or incomplete information;

- in the course of the public bidding procedure, undertook activities of secret conspiracy and collusion in any form that could result in compromising the integrity of the public bidding procedure.

1. This approval shall enter into force on the day of its adoption.
2. This approval is enforceable in administrative proceedings.

**Justification**

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**Legal remedy**

No appeal is allowed against this approval, but an administrative dispute may be initiated with the Administrative Court of Montenegro within 20 days from the day of its receipt.

**PRESIDENT OF THE COUNCIL Branko Kovijanić**

**Annex: Conditions for the use of approved radio-frequencies**

**1. Purpose of the service, type of network or technology**

**for which the right to use radio-frequencies is awarded**

1.1. The Approved radio-frequencies are used for the implementation of MFCN systems, in accordance with the Radio-Frequency Assignment Plan in the 2500-2690 MHz band for MFCN systems, in order to provide public mobile electronic communications services in the entire territory of Montenegro.

**2. Measures to ensure efficient use of radio frequencies,**

**including requirements regarding coverage or signal strength**

2.1. *(for the approval to be issued to the incumbent mobile operator)*

The Holder of the approval for the use of radio-frequencies is obliged by September 1, 2022, to provide coverage of 75% of the population of Montenegro with the network signal, in terms of availability of data transmission service with the required quality.

*(for the approval to be issued to the new entrant in the market)*

The Holder of the approval for the use of radio-frequencies is obliged to observe the minimum of the following when it comes to the scope and dynamics of the coverage of the population of Montenegro in terms of availability of data transmission service with the required quality:

- 15% of the population by the end of the second year of the Approval validity;

- 30% of the population by the end of the third year of the Approval validity;

- 50% of the population by the end of the fifth year of the Approval validity.

2.2. In order to achieve the prescribed level of coverage of the population of Montenegro by the network signal which allows the provision of services with the defined quality, any technology may be used as well as any band available to the Holder of the approval for the use of radio-frequencies, in line with the corresponding radio-frequencies assignment plan. If the Holder of the approval for the use of radio-frequencies disposes the spectrum in several bands for which different coverage requirements have been defined is obliged to fulfil a more demanding criterion, but it is not required to develop the network in each band in parallel.

2.3. A network coverage, in terms of availability of data transmission service with the required quality, means the ability to provide data services with minimum bitrate towards the user (downlink) of 10 Mb/s based on user experience, and a guaranteed bitrate towards the user (downlink) of 2 Mb/s and guaranteed bitrate from the user (uplink) of 1 Mb/s, in case of outdoor mobile reception.

The request for the minimum bitrate towards the user (downlink) of 10 Mb/s based on user experience will be considered fulfilled if in at least 90% of measurements conducted during one day (00-24h) the measured data transfer rate towards the user is 10 Mb/s or more, with level of successfully initiated and finished measurement sessions of 95%, excluding the measurements made during a pick 2 hours of the maximum network load. The request is not relevant for measurements made during 45 days of summer tourist season.

The request for a guaranteed bitrate towards the user (downlink) of 2 Mb/s will be considered fulfilled if in at least 95% of measurements conducted during any time interval of 120 minutes duration the measured data transfer rate towards the user is 2 Mb/s or more, with level of successfully initiated and finished measurement sessions of 95%.

The request for a guaranteed bitrate from the user (uplink) of 1 Mb/s will be considered fulfilled if in at least 95% of measurements conducted during any time interval of 120 minutes duration the measured data transfer rate towards the user is 1 Mb/s or more, with level of successfully initiated and finished measurement sessions of 95%.

2.4. The fulfilment of requirements with regard to the scope and dynamics of the network signal coverage (coverage requirements), including requirements with regard to the service quality will be assessed by:

- the calculation based on the prediction of the network signal coverage according to Recommendation ITU-R P.1812 using DTM model of Montenegro in 50x50m resolution with appropriate population clutter;

- measurements of availability and quality of service using specialized measuring equipment, including measurements in move;

- measurements of quality of service at the location of end user using specialized equipment and/or authorized software application.

In order to verify the fulfilment of the coverage requirements, including the requirements related to service quality, the methodology based on relevant international instruments (ITU-R, CEPT, ETSI and others) and best comparative practice will be used. The Holder of the approval for the use of radio-frequencies will be acquainted with the methodology of verification of the fulfilment of the coverage requirements at least three months before the expiration of the deadline for meeting a specific requirement.

Information on availability and quality of mobile communications services the Agency will publish periodically on its website.

2.5. The Approved radio-frequencies may be used in a manner and under conditions that ensure that the parameters of electromagnetic fields at a particular location do not exceed the limits established by the law governing protection against non-ionizing radiation, as well as Montenegrin and international standards applicable in Montenegro.

**3. Technical and operational conditions necessary to avoid harmful interference**

3.1. Base and terminal stations of MFCN systems shall meet the standards prescribed by the Radio-Frequency Assignment Plan in the 2500-2690 MHz band for MFCN systems.

3.2. Technical and operational conditions for the use of the Approved radio-frequencies at individual locations, ie coverage areas are determined by a special act of the Agency, at the request of the Holder of the approval for the use of radio-frequencies, with the validity period until the expiration of the Approval for the use of radio-frequencies.

**4. Additional obligations assumed by the bidder in the public bidding procedure**

4.1. The Holder of the approval for the use of radio-frequencies is obliged to provide to the new entrant in the market who was awarded radio-frequencies for the implementation of the public mobile electronic communications network based on the public bidding procedure at its request the national roaming service under reasonable (fair), economically justified and non-discriminatory conditions for a period of five years from the issuance date of the approval for the use of radio-frequencies.

The right to national roaming includes any public mobile electronic communications service which the Holder of the approval for the use of radio-frequencies provides by using any technology in any frequency band. All services must be available to users of the new entrant in the market with the same quality and level of coverage as the services provided to their own users. *(only in the approval issued to the incumbent mobile operator in case the radio-frequencies in the public bidding procedure have been assigned also to a new entrant in the market)*

**5. Obligations in accordance with international agreements**

**and regulations in the field of radio-frequencies**

5.1. The Holder of the approval for the use of radio-frequencies is obliged to observe the international agreements and other documents in the field of electronic communications to which Montenegro is a signatory.