Disclaimer: This is an unbinding Romanian to English translation, meant to facilitate the understanding of these Terms of Reference. Should differences appear between the Romanian version and the English one, following translation, the Romanian version prevails.

TERMS OF REFERENCE
FOR THE ORGANISATION OF THE COMPETITIVE SELECTION PROCEDURE FOR AWARDING SOME FREQUENCY USAGE RIGHTS IN THE 800 MHz, 2600 MHz AND 3400-3600 MHz BANDS

= DRAFT =

July 2021

CONTENTS

Chapter 1 – INTRODUCTION

1.1. Legal framework applicable in the selection procedure

The national legislation applicable in awarding the frequency usage rights licences, hereinafter referred to as *licences*, consists of:

- Government Emergency Ordinance no.22/2009 on the establishment of the National Authority for Management and Regulation in Communications, approved by Law no. 113/2010, with the subsequent amendments and completions;
- Government Emergency Ordinance no.111/2011 on electronic communications, approved with amendments and completions by Law no.140/2012, with the subsequent amendments and completions;
- Government Emergency Ordinance no. 18/2008 establishing certain measures for refarming the use of the radio spectrum in the 3600-3800 MHz frequency band, approved, with amendments, by Law no. 259/2008, with the subsequent amendments;
- Law no. 163/2021 on adopting certain measures regarding ICT infrastructures of national interest and the conditions for 5G networks implementation;
- Government Decision ___/2021 on setting the amount of the minimum licence fee for awarding frequency usage rights;
- ANCOM President's Decision no. ___/2021 on the selection procedure for awarding some frequency usage rights;
- ANCOM President's Decision no. 551/2012 on setting the spectrum usage tariff, with the subsequent amendments and completions;
- ANCOM President's Decision no. 390/2015 on the approval of the Strategy and of the action plan for the implementation and development of broadband communications systems in the 3400-3800 MHz band, on a national level, for the period 2015-2025 (hereinafter referred to as *The 3400-3800 MHz Strategy*);
- ANCOM President's Decision no. 353/2015 on the procedure for granting frequency usage rights, with the subsequent amendments and completions.

The main legal provisions on awarding frequency usage rights are laid down in Government Emergency Ordinance no. 111/2011 on electronic communications[1] (hereinafter referred to as *the Framework Ordinance*).

In accordance with the provisions of Art. 26(1) of the Framework Ordinance, licences are awarded by means of an open, objective, transparent, non-discriminatory and proportionate procedure.

According to Article 25 of the Framework Ordinance, The National Authority for Management and Regulation in Communications (hereinafter referred to as *ANCOM*) may decide to limit the number of licences to be granted in a radio frequency band, when it is necessary to ensure the efficient use of radio frequencies or to avoid the occurrence of harmful interferences. This measure may be adopted only upon the fulfilment of three conditions: ANCOM must consider the need that this measure should bring the users maximum benefits and foster competition; give all stakeholders - including users and consumers - the opportunity to express their views on this measure; a decision limiting the number of licenses must be published along with the reasons therefor.

In the case of licences whose number has been limited, ANCOM awards usage rights through a procedure that must fulfil – as well – a number of conditions, set out in Article 26(2) of the Framework Ordinance. Thus:

a) the procedure type must be competitive or comparative selection;
b) the procedure must be objective, transparent, non-discriminatory and proportionate;
c) the procedure must not result into restricting, preventing or distorting competition;

[1] Published in the Romanian Official Journal, Part I, no. 925/27.12.2011.

d) the granting of rights of use must normally take place within eight months from the receipt of a request therefor, a term which may be amended if necessary to comply with an international agreement on the use of the radio spectrum or of the orbital positions in which Romania is a party.

According to Art. 26(4) of the Framework-Ordinance, - within a procedure for awarding the licence for the use of radio frequencies - ANCOM may decide to preclude the participation of certain persons in the selection procedure, out of reasons related to promoting competition in the electronic communications field, with the prior consultation of the Competition Council and after undergoing the consultation procedure described in Article 135 of the Framework-Ordinance.

Paragraph (3^1) of Art. 28 of the Framework-Ordinance defines the competitive selection procedure as a "[...] procedure of awarding the licence for the use of radio frequencies whereby the usage right is granted to the winner/winners of an auction, that – having fulfilled certain pre-qualification criteria of a technical, administrative or financial nature, as applicable – offer the highest amount as a licence fee, starting from the minimum licence fee amount set by Government decision according to paragraph (1)".

According to Art. 28(4), the detailed regulation for conducting the competitive or comparative selection procedures is adopted by ANCOM President's decision[2].

1.2. Definitions and terminology clarifications

For the purposes of this document:

- *the Commission* is the auction commission designated by decision of the ANCOM president;
- *a participant* is a candidate or bidder in the selection procedure;
- *national roaming* means the possibility offered to a subscriber to use a handset or another device to make and receive calls on Romania's territory when the respective subscriber is outside the coverage area of the network to which he/she is a subscriber, based on certain agreements concluded between the operator of the network to which he/she is a subscriber and the other mobile network operators in Romania;
- *a national roaming agreement* is an access agreement which regulates the making available to a third party - holder of a licence for the use of radio frequencies with a view to providing public electronic communications networks and mobile electronic communications services - of facilities or services which are necessary for the provision of electronic communications services at mobile points in geographic areas outside the coverage of the respective party's network;
- the syntagma *"to acquire/obtain/buy/win/be awarded frequency blocks/frequencies"* are used exclusively for the sake of easier wording, to express the gaining of frequency usage rights consisting of the frequency blocks submitted to the selection procedure, together with the technical and operational usage conditions associated to the respective blocks (included in the Terms of Reference and in the applicable technical regulations), and are just a language convention, without implying other legal operations related to the respective radio frequencies;
- *the 700 MHz band* is the 694-790 MHz band;
- *the 800 MHz band* is the 790-862 MHz band;
- *the 900 MHz band* is the 880-915 MHz/925-960 MHz band;
- *the 2600 MHz band* is the 2500-2690 MHz band;
- *UMTS system* is a system complying with UMTS standards, as published by ETSI, in particular EN 301 908-1, EN 301 908-2, EN 301 908-3 and EN 301 908-11;

[2] ANCOM President's Decision no. ___/2019 on the selection procedure for awarding frequency usage rights has been published in the Romanian Official Journal no. ___ of __ June ____.

- *LTE system* is a system complying with LTE standards, as published by ETSI, in particular EN 301 908-1, EN 301 908-13, EN 301 908-14 and EN 301 908-11;
- *5G NR system* is a system in the IMT-2020 (5G) family of technologies complying with the ETSI relevant standards (adoption pending);
- *frequency sub-band/sub-bands allotted in a certain frequency band* means the total amount of frequency spectrum won by a participant in the respective band, specified in the licence issued to the winner of the selection procedure;
- *MFCN* is the acronym for Mobile/Fixed Communications Networks as defined by the Electronic Communications Committee (ECC) of the European Conference of Postal and Telecommunications Administrations (CEPT), which includes IMT (International Mobile Telecommunications)[3] networks, as well as other communications networks in the fixed and mobile services;
- *MFCN network in the 3400-3800 MHz band* is an electronic communications network complying with the sections relevant for the 3400-3800 MHz band of the standard EN 301 908, as published by ETSI, as well as with subsequent ETSI standards that are relevant for the use of the 3400-3800 MHz band;
- *RR-ITU* is the 2020 release of the Radio Regulations of the International Telecommunication Union (ITU);
- *ECA* is the acronym for the European Common Table of Frequency Bands Allocations, included in ERC Report 25 (release of November 2020) of the Electronic Communications Committee of the European Conference of Postal and Telecommunications Administrations;
- *NTFA* is the acronym for the National Table of Frequency Bands Allocations, the Table currently in force being approved by Government Decision no. 376/2020;
- *WRC* is the generic acronym for ITU's world radiocommunication conferences (e.g., WRC-15 stands for the World Radiocommunication Conference organised in 2015).

[3] IMT – according to RR-ITU, it includes IMT-2000, IMT-Advanced, IMT-2020 (5G New Radio – 5G NR) systems.

Chapter 2 – FREQUENCY BANDS IN THE SELECTION PROCEDURE

2.1. Overview

The Authority awards usage rights for the frequencies available in the following bands:

a) 790-862 MHz (the 800 MHz band);
b) 2500-2690 MHz (the 2600 MHz band);
c) 3400-3600 MHz.

The frequency sub-bands available for awarding usage rights by this selection procedure are the following:

a) 791-796 MHz/832-837 MHz;
b) 2530-2570 MHz/2650-2690 MHz;
c) 2600-2615 MHz;
d) 3400-3490 MHz.

The frequency spectrum available in the selection procedure is briefly presented in the table below:

Table 1 – Frequency resources available in the selection procedure

Frequency band	Available frequencies	Bandwidth	Validity of usage rights
800 MHz	791-796 MHz/832-837 MHz • 2 x 5 MHz FDD	10 MHz FDD	01.01.2022 – 05.04.2029
2600 MHz	2530-2570 MHz/2650-2690 MHz • 2 x 40 MHz FDD. 2600-2615 MHz • 1x15 MHz TDD.	80 MHz FDD 15 MHz TDD	01.01.2022 – 05.04. 2029 01.01.2022 – 05.04.2029
3400-3600 MHz	• 3400-3490 MHz TDD	90 MHz TDD	01.01.2022 – 31.12.2025

The frequencies available in the above-mentioned bands will be awarded exclusively for national usage, for providing MFCN public electronic communications networks and broadband wireless electronic communications services.

The frequency spectrum included in the selection procedure is organized by categories of frequency blocks (blocks). The table below indicates the block width and the number of blocks available in each category.

Table 2 – Frequency organisation by categories and blocks

Category	Frequency band	Block width	Number of blocks
A	800 MHz FDD	2 x 5 MHz	1
B	2600 MHz FDD	2 x 5 MHz	8
C	2600 MHz TDD	15 MHz	1
D	3400-3600 MHz TDD	5 MHz	18

The designation of frequency blocks within each category is detailed in section 4.1.1 of Chapter 4.

2.2. The 800 MHz band

2.2.1. International regulations

2.2.1.1. Regulations of the International Telecommunication Union

In accordance with the provisions of Art. 5 of RR-ITU in force, in Region 1 of ITU the band 790-862 MHz is allocated on a primary basis to the fixed service, to the mobile, except aeronautical mobile, service and to the broadcasting service.

In accordance with No. 5.312 of Art. 5 in the RR-ITU, in certain countries – among which Ukraine and Bulgaria – the frequency band 790-862 MHz or portions thereof are also allocated to the aeronautical radionavigation service, on a primary basis.

5.312 - *Additional allocation: in Armenia, Azerbaijan, Belarus, the Russian Federation, Georgia, Kazakhstan, Uzbekistan, Kyrgyzstan, Tajikistan, Turkmenistan and Ukraine, the frequency band 645-862 MHz, and in Bulgaria the frequency bands 646-686 MHz, 726-753 MHz, 778-811 MHz and 822-852 MHz, are also allocated to the aeronautical radionavigation service on a primary basis.* (WRC-19)

According to No. 5.319 of Art. 5 in the RR-ITU, portions of the 790-862 MHz band are additionally allocated in Ukraine to the mobile-satellite, except aeronautical mobile-satellite, service.

5.319 - *Additional allocation: in Belarus, the Russian Federation and Ukraine, the bands 806-840 MHz (Earth-to-space) and 856-890 MHz (space-to-Earth) are also allocated to the mobile-satellite, except aeronautical mobile-satellite (R), service. The use of these bands by this service shall not cause harmful interference to, or claim protection from, services in other countries operating in accordance with the Table of Frequency Allocations and is subject to special agreements between the administrations concerned.*

Furthermore, on the territory of Ukraine, terrestrial systems in the fixed service in CDMA technology are in operation in the 824-843 MHz sub-band (uplink).

The use of the 790-862 MHz band for the mobile, except aeronautical mobile, service and for IMT systems, respectively, is regulated by the provisions of No. 5.316B and No 5.317A:

5.316B - *In Region 1, the allocation to the mobile, except aeronautical mobile, service in the frequency band 790-862 MHz is subject to agreement obtained under* ***No. 9.21*** *with respect to the aeronautical radionavigation service in countries mentioned in No. 5.312. For countries party to the GE06 Agreement, the use of stations of the mobile service is also subject to the successful application of the procedures of that Agreement. Resolutions* ***224 (Rev.WRC-19)*** *and* ***749 (Rev.WRC-19)*** *shall apply, as appropriate. (WRC-19)*

5.317A - *The parts of the frequency band 698-960 MHz in Region 2 and the frequency bands 694-790 MHz in Region 1 and 790-960 MHz in Regions 1 and 3 which are allocated to the mobile service on a primary basis are identified for use by administrations wishing to implement International Mobile Telecommunications (IMT) – see Resolutions* ***224 (Rev.WRC-19)****,* ***760 (Rev.WRC-19)*** *and* ***749 (Rev.WRC-19)****, where applicable. This identification does not preclude the use of these frequency bands by any application of the services to which they are allocated and does not establish priority in the Radio Regulations. (WRC-19)*

2.2.1.2. European Union regulations

At EU level, the provisions of Commission Decision no. **2010/267/EU** on harmonised technical conditions of use in the 790-862 MHz frequency band for terrestrial systems capable of providing electronic communications services in the European Union[4], adopted on 6 May 2010, shall apply.

According to the European Commission Decision, Member States designate and make available the 800 MHz band for terrestrial systems capable of providing electronic communications services in compliance with the parameters set out in the Annex to this Decision, on a non-exclusive basis.
Any available technology that complies with the harmonized technical conditions established by the above-mentioned Decision may be used.

According to Commission Decision no. 2010/267/EU, within the band 790-862 MHz the harmonized frequency arrangement shall be as follows:

- the 790-791 MHz sub-band is reserved as a guard band as to the adjacent band and shall not be used;
- the mode of operation in the 790-862 MHz band shall be frequency division duplex (FDD);
- the sub-band 791-821 MHz is used for base station emission (downlink);
- the sub-band 832-862 MHz is used for terminal station emission (uplink);
- the duplex spacing is 41 MHz;
- the assigned block sizes shall be in multiples of 5 MHz.

The block-edge masks (BEM) are defined in Annex B to Commission Decision 2010/267/EU.

2.2.1.3. Regulations of the European Conference of Postal and Telecommunications Administrations (CEPT)

On CEPT level, concerning the frequencies in the 800 MHz band, the provisions of the following CEPT/ECC decisions, recommendations and reports will apply:

- Decision ECC/DEC/(09)03 on harmonised conditions for mobile/fixed communications networks (MFCN) operating in the band 790 - 862 MHz;
- CEPT Report 030: Identification of common and minimal (least restrictive) technical conditions for 790 - 862 MHz (the digital dividend) in the European Union;
- CEPT Report 031: Frequency (channelling) arrangement for the 790-962 MHz band;
- CEPT Report 019: Least restrictive technical conditions for WAPECS bands, with the subsequent amendments;
- Recommendation ECC/REC/(11)04 on cross-border coordination for Mobile/Fixed Communications Networks (MFCN) in the frequency band 790-862 MHz (amended on 3 February 2017),
- CEPT Report 29 on Technical considerations regarding harmonisation options for the Digital Dividend in the European Union - "Guideline on cross border coordination issues between mobile services in one country and broadcasting services in another country" (of 26 June 2009).

The harmonized frequency arrangement and the harmonized technical conditions for the use of frequencies in the 800 MHz band for MFCN networks are set out in Decision ECC/DEC/(09)03.

[4] The European Commission Decision has been adopted on grounds of the Decision no. 676/2002/EC of the European Parliament and of the Council of 7 March 2002 on a regulatory framework for radio spectrum policy in the European Community (Radio Spectrum Decision).

2.2.2. National regulations

According to the provisions of the NTFA in force, the 790-862 MHz frequency band has a non-governmental usage status and is allocated in Romania to the mobile, except aeronautical mobile, service according to Art. 5 of RR-ITU and to the relevant No. 5.316B and No. 5.317A.

Concerning the applications allowed in the 790-862 MHz band and the harmonized technical conditions for the use of this band, the provisions of the Commission Decision no. 2010/267/EU on harmonised technical conditions of use in the 790-862 MHz frequency band for terrestrial systems capable of providing electronic communications services in the European Union shall apply.

Any technology available for systems capable of providing wireless broadband electronic communications services that complies with the harmonized technical conditions (block edge masks and technical parameters) established by the above-mentioned Commission Decision may be used.

The frequency arrangement in the 790-862 MHz band for MFCN networks corresponds to the harmonised arrangement laid down in the Commission Decision 2010/267/EU.

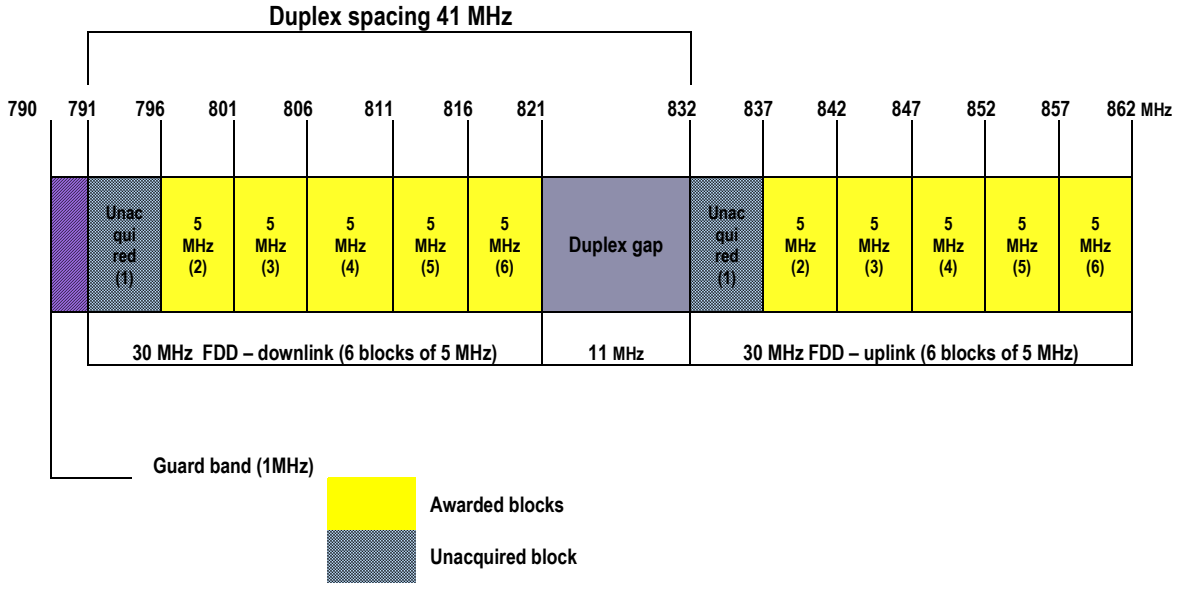
Block edge masks (BEM) as to a 5 MHz block in the 790-862 MHz band are the ones defined in the annex to the Commission Decision 2010/267/EU.

The provisions of Decision ECC/DEC/(09)03 on the harmonised conditions for mobile/fixed communications networks (MFCN) operating in the 790 - 862 MHz band are also applicable.

The layout of the frequency arrangement harmonised at European level for the 800 MHz band is the one set out in Annex 1 of Decision ECC/DEC/(09)03 on the harmonised conditions for systems operating in the 790 - 862 MHz band and is presented in the figure below.

The figure also highlights the 5 MHz blocks awarded in the 2012 auction and the block unacquired at that time and available in the selection procedure, for the implementation of MFCN networks.

Figure 1 - Harmonised frequency arrangement in the 790-862 MHz band, by 5 MHz blocks



The harmonised frequency arrangement for MFCN in the 800 MHz band, detailed by assigned and available blocks at national level, is presented in the table below.

Table 3 – Harmonised frequency arrangement for MFCN in the 800 MHz band

Frequencies (MHz)	Destination	Operation mode
790 – 791	Guard band – 1 MHz	Guard band
791 – 796	**Downlink (block 1) – 5 MHz (available)**	(30 MHz) FDD downlink
796 – 801	Downlink (block 2) – 5 MHz (assigned)	
801 – 806	Downlink (block 3) – 5 MHz (assigned)	
806 – 811	Downlink (block 4) – 5 MHz (assigned)	
811 – 816	Downlink (block 5) – 5 MHz (assigned)	
816 – 821	Downlink (block 6) – 5 MHz (assigned)	
821 – 832	Duplex gap – 11 MHz	Duplex gap
832 – 837	**Uplink (block 1) – 5 MHz (available)**	(30 MHz) FDD uplink
837 – 842	Uplink (block 2) – 5 MHz (assigned)	
842 – 847	Uplink (block 3) – 5 MHz (assigned)	
847 – 852	Uplink (block 4) – 5 MHz (assigned)	
852 – 857	Uplink (block 5) – 5 MHz (assigned)	
857 – 862	Uplink (block 6) – 5 MHz (assigned)	

Other relevant technical regulations on the use of frequencies in the 800 MHz band for MFCN networks are specified in section 3.3.3.2 of Chapter 3, concerning the technical conditions on the use of frequencies corresponding to the usage rights to be awarded in this band.

2.2.3. Status of frequency usage rights in the 800 MHz band

In the 800 MHz band, three operators hold frequency usage licences, as follows:

- Telekom Romania Mobile Communications S.A. (former Cosmote Romanian Mobile Telecommunications), hereinafter referred to as *Telekom Mobile*, holds usage rights for a 2 x 5 MHz frequency block;
- Orange Romania S.A. *(Orange)* holds usage rights for 2 blocks of 2 x 5 MHz each, i.e. a total of 2 x 10 MHz bandwidth;
- Vodafone Romania S.A. *(Vodafone)* holds usage rights for 2 blocks of 2 x 5 MHz each, i.e. a total of 2 x 10 MHz bandwidth.

The above-mentioned usage rights have been acquired following the competitive selection procedure organised by ANCOM in 2012 for awarding frequency usage rights in the 800 MHz, 900 MHz, 1800 MHz and 2600 MHz bands.
The licences awarded to Telekom Mobile, Orange and Vodafone are valid for 15 years, from 06 April 2014 to 05 April 2029.

The status of the frequency usage rights in the 800 MHz band is presented in the table below.

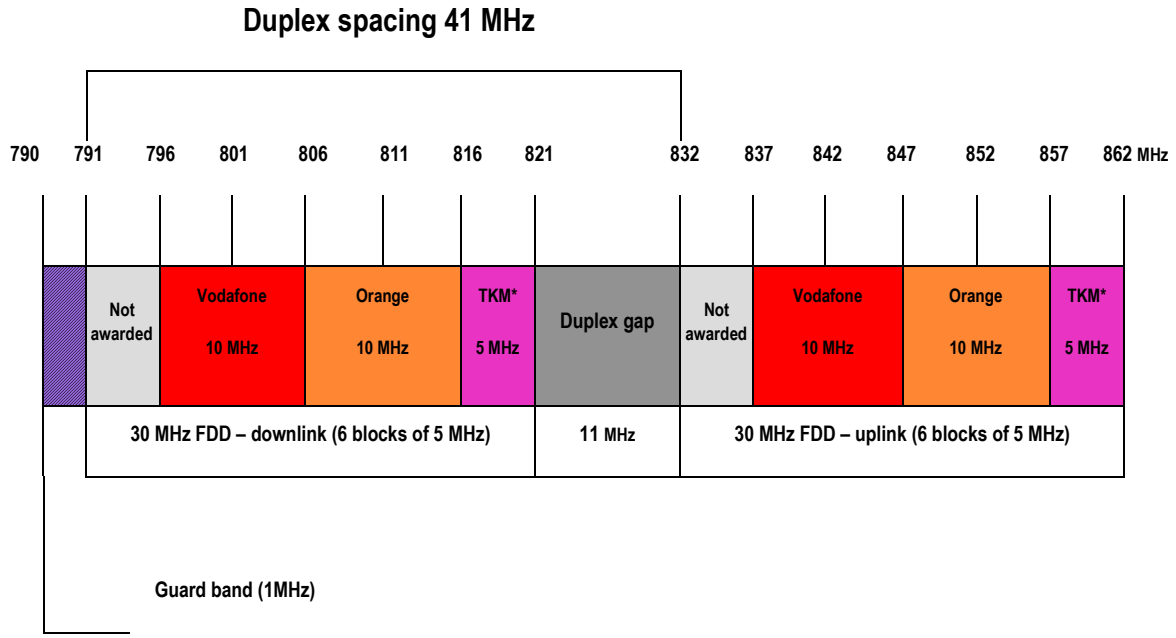
Table 4 – Current status of the frequency usage rights in the 800 MHz band

Licence holder	Spectrum amount awarded by licence	Assigned sub-bands	Licence validity
VODAFONE	2 x 10 MHz	796-806 MHz/837-847 MHz	06.04.2014 – 05.04.2029
ORANGE	2 x 10 MHz	806 -816 MHz/847-857 MHz	06.04.2014 – 05.04.2029
TELEKOM MOBILE	2 x 5 MHz	816-821 MHz/857-862 MHz	06.04.2014 – 05.04.2029

Therefore, 5 of the 6 duplex blocks of 2 x 5 MHz auctioned off in the 800 MHz band were awarded, while **one 2 x 5 MHz block** was not acquired in the auction. The paired sub-bands corresponding to the frequency block not awarded in the 800 MHz band are: **791-796 MHz/832-837 MHz**.

The status of the frequency allottments in the 800 MHz band, with assignment position highlighted by mobile communications operator, is detailed in the figure below:

Figure 2 – Status of frequency assignments in the 800 MHz band
- valid during 06.04.2014 – 05.04.2029 -



*TKM – Telekom Mobile

In Romania, the frequency spectrum for which usage rights are awarded in the 800 MHz band consists of two 5 MHz blocks in the paired sub-bands **791-796 MHz/832-837 MHz**, i.e. 1 duplex block (FDD) of **2 x 5 MHz**.

The operation mode used will be exclusively FDD in the paired sub-bands 791-796 MHz/832-837 MHz. The duplex spacing (the frequency spacing between the uplink and the downlink) is 41 MHz.

The frequency sub-bands will be used according to the harmonised arrangement:

- the 791-796 MHz sub-band for base station transmission;

- the 832-837 MHz sub-band for base station reception.

2.3. The 2600 MHz band

2.3.1. International regulations

2.3.1.1. Regulations of the International Telecommunication Union

In accordance with the provisions of Art. 5 of the RR-ITU in force, the 2500-2690 MHz band is allocated in Region 1 of the ITU on a primary basis to the fixed service, to the mobile, except aeronautical mobile, service and to the broadcasting-satellite service (the 2520-2690 MHz band).

The 2655-2670 MHz and 2670-2690 MHz sub-bands are also allocated to the Earth exploration-satellite (passive), radio astronomy and Space research (passive) services, on a secondary basis.

The use of the 2500-2690 MHz band for the mobile, except aeronautical mobile, service and respectively for IMT systems is regulated by the provisions of No. 5.384A:

5.384A - *The frequency bands 1 710-1 885 MHz, 2 300-2 400 MHz and 2 500-2 690 MHz, or portions thereof, are identified for use by administrations wishing to implement International Mobile Telecommunications (IMT) in accordance with Resolution* ***223 (Rev.WRC-15)****[*]. This identification does not preclude the use of these frequency bands by any application of the services to which they are allocated and does not establish priority in the Radio Regulations.* (WRC-15)

2.3.1.2. European Union Regulations

At EU level, the provisions of Commission Implementing Decision **(EU) 2020/636** of 8 May 2020 amending Decision **2008/477/EC** as regards an update of relevant technical conditions applicable to the 2500-2690 MHz frequency band[5], are applicable.

According to the above-mentioned decision, Member States designate and make available, on a non-exclusive basis, the 2500-2690 MHz band for terrestrial systems capable of providing electronic communications services, with due regard to the parameters set out in the Annex to the respective decision.

The frequency arrangement in the 2500-2690 MHz band, in accordance with Commission Implementing Decision (EU) 2020/636, is the following:

- the duplex spacing for FDD operation shall be 120 MHz, as follows:
  - (i) the frequencies used for terminal station transmission (uplink) are situated in the lower part of the band, from 2500 MHz up to 2570 MHz;
  - (ii) the frequencies used for base station transmission (downlink) are situated in the higher part of the band, from 2620 MHz up to 2690 MHz.
- the 2570-2620 MHz sub-band may be used in TDD mode or in SDL mode (supplemental downlink), only for base station transmission.
  - the assigned block sizes shall be in multiples of 5 MHz.

BEM emission masks for a 5 MHz block are defined in Annex C of Commission Implementing Decision (EU) 2020/636.

[*]This Resolution was revised by WRC-19.

[5] The Commission Decision was adopted on grounds of the Decision no. 676/2002/EC of the European Parliament and of the Council of 7 March 2002 on a regulatory framework for radio spectrum policy in the European Community (Radio Spectrum Decision).

2.3.1.3. Regulations of the European Conference of Postal and Telecommunications Administrations (CEPT)

At CEPT level, in the utilization of the 2600 MHz band, the provisions of the following CEPT/ECC decisions, recommendations and reports are applicable:

- Decision ECC/DEC/(05)05: Harmonised utilization of spectrum for Mobile/Fixed Communications Networks (MFCN) operating in the 2500-2690 MHz band (approved on 18 March 2005, amended on 5 July 2019);
- ECC Report 045: Sharing and adjacent band compatibility between UMTS/IMT-2000 in the band 2500-2690 MHz and other services (February 2004);
- ECC Report 119: Coexistence between mobile systems in the 2.6 GHz frequency band at the FDD/TDD boundary (June 2008);
- CEPT Report 72: Report from CEPT to the European Commission in response to the Mandate "to review the harmonised technical conditions for certain EU-harmonised frequency bands and to develop least restrictive harmonised technical conditions suitable for next-generation (5G) terrestrial wireless systems", Report A: Review of technical conditions in the paired terrestrial 2 GHz and the 2.6 GHz frequency bands, and the usage feasibility of the 900 MHz and 1800 MHz frequency bands, approved on 5 July 2019;
- ECC Report 308: Analysis of the suitability and update of the regulatory technical conditions for 5G MFCN and AAS operation in the 2500-2690 MHz band (approved on 6 March 2020);
- Recommendation ECC/REC/(11)05 on cross-border coordination for Mobile/Fixed Communications Networks (MFCN) in the frequency band 2500-2690 MHz (approved on 26 May 2011, amended on 3 February 2017).

The harmonized frequency arrangement and the harmonised technical conditions on the usage of the 2600 MHz band for MFCN networks, respectively the BEM masks per 5 MHz block are set out in Annexes 1 and 2 of Decision ECC/DEC/(05)05.

2.3.2. National regulations

According to the provisions of the NTFA in force, the frequency band 2500-2690 MHz has a non-governmental usage status and is allocated to the mobile, except aeronautical mobile, service on a primary basis.

Concerning the applications allowed in the 2500-2690 MHz band and the harmonized technical conditions for the use of this band, the provisions of the Commission Implementing Decision (EU) 2020/636 of 8 May 2020 amending Decision 2008/477/EC as regards an update of relevant technical conditions applicable to the 2500-2690 MHz frequency band for terrestrial systems capable of providing electronic communications services in the Community shall apply.

The electronic communications systems that may use the 2500-2690 MHz band are terrestrial systems that comply with the block edge masks (BEM) set out in the Annex to Decision Commission Implementing Decision (EU) 2020/636. Any available technology that complies with the harmonized technical conditions established by the above-mentioned Decision may be used.

The frequency arrangement in the 2500-2690 MHz band for MFCN networks, in accordance with the frequency arrangement harmonized by Commission Implementing Decision (EU) 2020/636, is the following:

- the 2500-2570 MHz/2620-2690 MHz sub-bands are designated for Frequency Division Duplex (FDD) operation mode;
- the 2500-2570 MHz sub-band is used for terminal station transmission and base station reception (uplink);
- the 2620-2690 MHz sub-band is used for base station transmission and terminal station reception (downlink);
- the duplex spacing is 120 MHz;

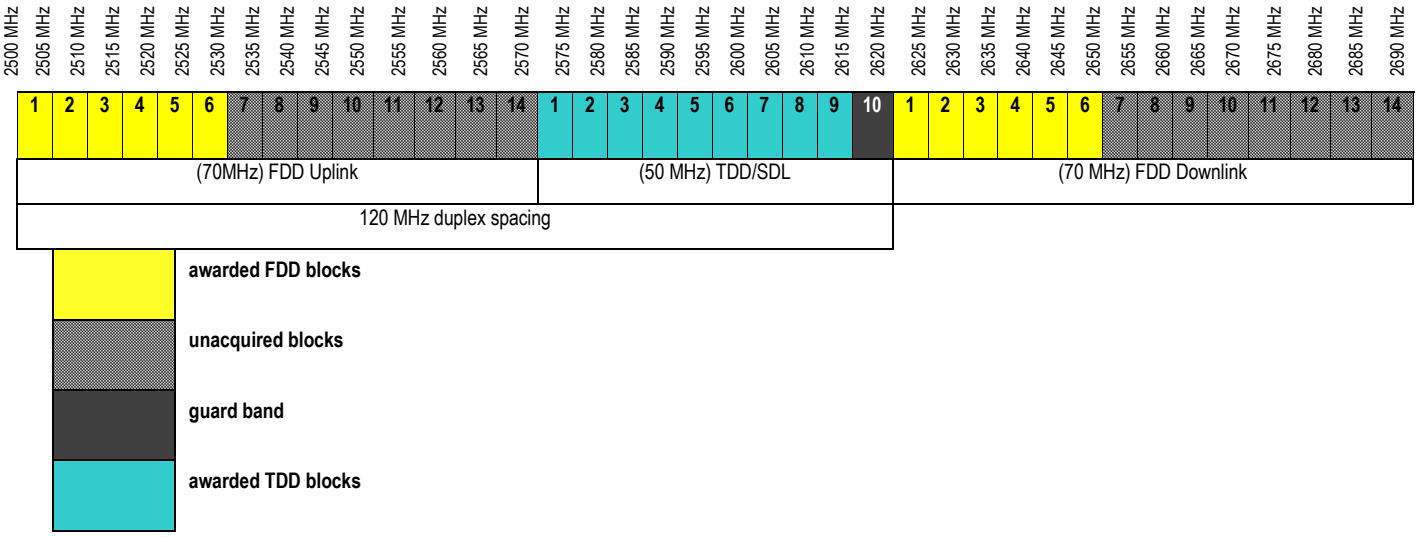
- the 2570-2620 MHz sub-band is designated for Time Division Duplex (TDD) operation mode or for supplemental downlink (SDL);
- the assigned blocks sizes shall be in multiples of 5 MHz.

Moreover, the provisions of Decision ECC/DEC/(05)05 on the harmonised utilization of spectrum for Mobile/Fixed Communications Networks (MFCN) operating in the 2500-2690 MHz band, approved on 18 March 2005 and amended on 5 July 2019 are applicable for this band.

The layout for the European harmonized frequency arrangement in the 2600 MHz band is set out in Decision ECC/DEC/(05)05 on the harmonised utilization of spectrum for Mobile/Fixed Communications Networks (MFCN) operating in the 2500-2690 MHz band and is represented in the diagram below.

The diagram also highlights the 5 MHz blocks awarded and the blocks remaining unacquired in the 2012 auction.

Figure 3 - Harmonised frequency arrangement in the 2500 – 2690 MHz band, by 5 MHz blocks



The harmonised frequency arrangement for MFCN in the 2600 MHz band, detailed by the awarded and respectively the still available blocks, on national level, is presented in the table below:

Table 5 – Frequency arrangement harmonised for MFCN in the 2600 MHz band

Frequencies (MHz)	Destination	Operation mode
2500 – 2505	Uplink (block 1) – 5 MHz (awarded)	(70 MHz) FDD uplink
2505 – 2510	Uplink (block 2) – 5 MHz (awarded)	
2510 – 2515	Uplink (block 3) – 5 MHz (awarded)	
2515 – 2520	Uplink (block 4) – 5 MHz (awarded)	
2520 – 2525	Uplink (block 5) – 5 MHz (awarded)	
2525 – 2530	Uplink (block 6) – 5 MHz (awarded)	
2530 – 2535	**Uplink (block 7) – 5 MHz**	

Frequencies (MHz)	Destination	Operation mode
	(available)	
2535 – 2540	**Uplink (block 8) – 5 MHz (available)**	
2540 – 2545	**Uplink (block 9) – 5 MHz (available)**	
2545 – 2550	**Uplink (block 10) – 5 MHz (available)**	
2550 – 2555	**Uplink (block 11) – 5 MHz (available)**	
2555 – 2560	**Uplink (block 12) – 5 MHz (available)**	
2560 – 2565	**Uplink (block 13) – 5 MHz (available)**	
2565 – 2570	**Uplink (block 14) – 5 MHz (available)**	
2570 – 2585	Block 1 TDD – 15 MHz (awarded)	(45 MHz) TDD
2585 – 2600	Block 2 TDD – 15 MHz (awarded)	
2600 – 2615	**Block 3 TDD – 15 MHz (available)**	
2615 – 2620	Guard band – 5 MHz	Guard band
2620 – 2625	Downlink (block 1) – 5 MHz (awarded)	(70 MHz) FDD downlink
2625 – 2630	Downlink (block 2) – 5 MHz (awarded)	
2630 – 2635	Downlink (block 3) – 5 MHz (awarded)	
2635 – 2640	Downlink (block 4) – 5 MHz (awarded)	
2640 – 2645	Downlink (block 5) – 5 MHz (awarded)	
2645 – 2650	Downlink (block 6) – 5 MHz (awarded)	
2650 – 2655	**Downlink (block 7) – 5 MHz (available)**	
2655 – 2660	**Downlink (block 8) – 5 MHz (available)**	
2660 – 2665	**Downlink (block 9) – 5 MHz (available)**	
2665 – 2670	**Downlink (block 10) – 5 MHz (available)**	
2670 – 2675	**Downlink (block 11) – 5 MHz (available)**	
2675 – 2680	**Downlink (block 12) – 5 MHz (available)**	
2680 – 2685	**Downlink (block 13) – 5 MHz (available)**	
2685 - 2690	**Downlink (block 14) – 5 MHz (available)**	

Other relevant technical regulations are mentioned in section 3.3.3.3 of Chapter 3.

2.3.3. Status of frequency usage licencing in the 2600 MHz band

In the 2600 MHz band, the frequency usage rights were awarded as follows:

a) in the **2500-2570 MHz/2620-2690 MHz (FDD)** sub-bands:
   - Telekom Mobile holds 2 blocks of 2 x 5 MHz each, i.e. 2 x 10 MHz bandwidth;
   - Orange holds 4 blocks of 2 x 5 MHz each, i.e. 2 x 20 MHz bandwidth;

b) in the 2570-2615 MHz (TDD) sub-band:
   - 2K Telecom S.R.L. (*2K Telecom*) acquired 2 blocks of 15 MHz each, i.e. 30 MHz bandwidth;
   - Vodafone acquired one 15 MHz block[6].

The above-mentioned usage rights were acquired following the competitive selection procedure for awarding frequency usage rights in the 800 MHz, 900 MHz, 1800 MHz and 2600 MHz bands organised by ANCOM in 2012.

The validity period of the licences awarded in 2012 to Telekom Mobile, Orange, 2K Telecom and Vodafone is 15 years, from 06 April 2014 to 05 April 2029.
The usage rights awarded to 2K Telecom in the 2570-2615 MHz sub-band were transferred to RCS&RDS S.A. (*RCS&RDS*) in 2015, while Vodafone gave up its usage rights in the 2570-2615 MHz band in May 2021.

The spectrum portfolios currently held by the mobile network operators in the 2600 MHz band are presented in the table below.

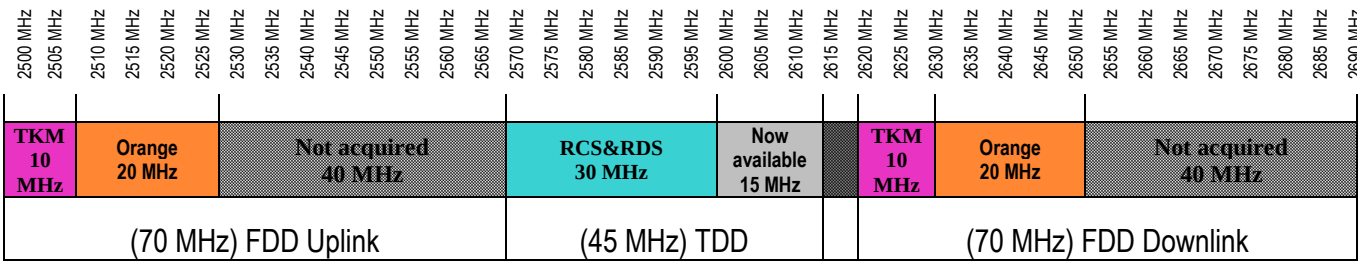
Table 6 – Current status of the licenced frequency spectrum in the 2600 MHz band

Licence holder	Amount of spectrum awarded by licence	Frequency sub-bands awarded	Validity period
TELEKOM MOBILE	2 x 10 MHz	2500-2510 MHz/2620-2630 MHz	06.04.2014 – 05.04.2029
ORANGE	2 x 20 MHz	2510-2530 MHz/2630-2650 MHz	06.04.2014 – 05.04.2029
RCS&RDS	1 x 30 MHz	2570-2600 MHz	06.04.2014 – 05.04.2029

Therefore, in the 2600 MHz band, ANCOM awarded 6 blocks of 2 x 5 MHz out of the 14 blocks available, **8 blocks of 2 x 5 MHz** remaining unacquired. The paired frequency sub-bands corresponding to the remaining 8 blocks of 2 x 5 MHz in the 2600 MHz FDD band are: **2530-2570 MHz/2650-2690 MHz**. Moreover, following Vodafone's giving up the frequency usage rights in the 2600 MHz TDD band, the **15 MHz** block in the **2600-2615 MHz** sub-band became available, as well.

The status of the frequency usage rights in the 2600 MHz band, highlighting the positions of licence holders within the band, is presented below:

Figure 4 – Current status of the frequency usage rights in the 2600 MHz band
- as valid from 09.06.2021 to 05.04.2029 -



[6] Vodafone gave up its frequency usage rights in the 2600 MHz band.

*TKM – Telekom Mobile

In Romania, the frequency spectrum available for which usage rights are awarded in the 2600 MHz band consists of two contiguous blocks of 40 MHz (2 x 40 MHz) in the paired frequency sub-bands **2530-2570 MHz/2650-2690 MHz**, i.e. **8 duplex channels** (FDD) of **2 x 5 MHz** each and one unpaired **15 MHz** block in the **2600-2615 MHz** sub-band, i.e. one TDD channel.

The operation mode will be exclusively FDD in the paired 2530-2570 MHz/2650-2690 MHz sub-bands. The duplex spacing is 120 MHz.

The paired FDD sub-bands will be used according to the harmonised arrangement:

- the 2530-2570 MHz sub-band for base station reception;
- the 2650-2690 MHz sub-band for base station transmission.

The operation mode in the unpaired frequency sub-band 2600-2615 MHz will be TDD.

2.4. The 3400-3600 MHz band

2.4.1. International regulations

2.4.1.1. Regulations of the International Telecommunication Union

For the frequency band 3400-3600 MHz, in Region 1 (where Romania is included), Art. 5 of RR-ITU provides the following:

- allocations on a primary basis for the radiocommunication services: fixed, fixed-satellite (space-to-Earth) and mobile (except aeronautical mobile);
- allocations on a secondary basis for the radiolocation service.

Footnote No. 5.430A (WRC-15) - relevant for the above-mentioned mobile service - provides that the allocation of the frequency band 3400-3600 MHz to the mobile, except aeronautical mobile, service is subject to prior cross-border coordination on the use of frequencies with the potentially affected administrations. Within the same footnote, the 3400-3600 MHz frequency band is identified for systems in the International Mobile Telecommunications (IMT) family, without establishing any priority in the RR-ITU.
The footnote also includes a set of restrictive technical conditions for base stations and mobile stations (operating in the mobile service) emissions, conditions which are relevant in the process of coordination with Earth stations of other potentially affected administrations, aimed at protecting Earth stations receptions in the fixed-satellite service. In addition, stations operating in the mobile service in this band benefit from limited protection from emissions of the space stations of the fixed-satellite service.

2.4.1.2. European Union Regulations

The European Commission issued Decision 2008/411/EC of 21 May 2008 on the harmonisation of the 3400 - 3800 MHz frequency band for terrestrial systems capable of providing electronic communications services in the Community, which was implemented in Romania's NTFA.

Commission Implementing Decision 2014/276/EU of 2 May 2014 amends Decision 2008/411/EC, updating its Annex (containing technical provisions on the usage of the above-mentioned band). Based on Commission Implementing Decision 2014/276/EU, ANCOM carried out the selection procedure for the 3400-3800 MHz band in 2015 and awarded the usage rights currently in force in this frequency band.
In 2019, Commission Implementing Decision (EU) 2019/235 of 24 January 2019 on amending Decision 2008/411/EC as regards an update of relevant technical conditions applicable to the 3400-3800 MHz frequency band has been adopted. This new decision amends, once again, the annex to the initial decision. The most important amendment provides the mandatory character of the TDD arrangement in the 3400-3600 MHz, as well, thus removing the possibility of choosing among two channel arrangements (FDD and TDD) for this frequency band, which had been previously allowed (by Decision no. 2008/411/EC, amended by Commission Implementing Decision 2014/276/EU).

Moreover, Directive (EU) 2018/1972 of the European Parliament and of the Council of 11 December 2018 establishing the European Electronic Communications Code sets out the deadline of 31 December 2020 for implementing the new technical provisions on the use of the 3400-3800 MHz frequency band, as laid down in Annex to Commission Implementing Decision (EU) 2019/235.

Commission Implementing Decision (EU) 2019/235 has been implemented in Romania by refarming the 3400-3600 MHz band in 2019 (converting the FDD channel arrangement to a TDD channel arrangement) and by amending the existing licences in the 3400-3800 MHz band, in 2019 and 2020.

2.4.1.3. Regulations of the European Conference of Postal and Telecommunications Administrations

According to the European Common Table of Frequency Bands Allocations (ECA), the allocations harmonized at CEPT level for the 3400-3600 MHz band are as follows:

- primary allocations for the following radiocommunications services: fixed, fixed-satellite (space-to-Earth), mobile (except aeronautical mobile),
- allocations on a secondary basis for the amateur and radiolocation services.

The ECA stipulates that the allocations for the two services with secondary status are limited, at the upper edge, to 3410 MHz. Thus, in the 3400-3410 MHz sub-band, the ECA accepts, on a secondary basis, civil and military radiolocation applications (as an extension of the primary allocation for the radiolocation service in the 3300-3400 MHz band) and amateur applications.

The fact that the 3400-3410 MHz band has a secondary allocation, by the ECA, for civil or military radiocommunications applications does not imply that the respective (civil or military) radiolocation equipment is actually in operation in the above-mentioned sub-band, the carrier frequencies for such applications being situated below 3400 MHz.

For the entire 3400-3600 MHz band, the ECA recommends the following harmonised applications, according to the options of the CEPT member countries and taking into account their national context:

- MFCN (mobile/fixed communications networks) applications, based on the decision ECC/DEC/(11)06 (amended in 2014 and 2018) and on the recommendations ECC/REC/(15)01 and ECC/REC/(20)03; the ECA also recognizes the use of this band for IMT applications, based on the RR-ITU (see the above-mentioned footnote);
- fixed-satellite applications (Earth stations);
- generic UWB applications, based on the following CEPT regulations: ECC/DEC/(06)04, ECC/REC/(11)09, ECC/REC/(11)10;
- PMSE applications; these applications consist of occasional trans missions for the production of audio-visual materials for radio and TV outside studios) and include ENG-OB applications (consisting of temporary, occasional transmissions to studios, of reportages, news, shows, cultural/sports events and other audio-visual materials produced outside studios).

At CEPT level, for the entire 3400-3800 MHz band, CEPT Decision ECC/DEC/(11)06 on harmonised frequency arrangements and least restrictive technical conditions (LRTC) for mobile/fixed communications networks (MFCN) operating in the band 3400-3800 MHz is applicable, as adopted on 09 December 2011 and modified (the second time) on 26 October 2018.

2.4.2. National regulations

In the NTFA currently in force, the primary allocations for the 3400-3600 MHz band coincide with those in the ECA Table, excepting the fixed-satellite service (Earth-to-space), which may be used on a secondary basis in Romania. No other uses on a secondary basis are provided in this band.

Regarding the ECA recommendations on the possible applications in the 3400-3600 MHz band, the NTFA in force does not provide, as possible to be used in Romania, either PMSE applications or applications in the amateur service.

Under the current NTFA, the entire 3400-3600 MHz band has a non-governmental usage status (NG status).
The NTFA stipulation of the upper limit for aeronautical radars at 3410 MHz does not imply that the respective (civil or military) radiolocation equipment is actually in operation in the above-mentioned sub-band, the carrier frequencies for such applications being situated in frequency bands below 3400 MHz.

2.4.3. Status of frequency usage in the band

Until 2019, frequency usage in the 3400-3800 MHz band in Romania was regulated by the CEPT Decision ECC/DEC/(11)06 on harmonised frequency arrangements and least restrictive technical conditions (LRTC) for mobile/fixed communications networks (MFCN) operating in the bands 3400-3600 MHz and 3600-3800 MHz, as adopted on 09 December 2011 and modified on 14 March 2014.

Decision 2014/276/EU, amending Decision 2008/411/EC on the harmonisation of the 3400 - 3800 MHz frequency band for terrestrial systems capable of providing electronic communications services in the Community, allowed both channel arrangement options (based on FDD, respectively on TDD technology) in the 3400-3600 MHz band and only a TDD arrangement in the 3600-3800 MHz band.

In the 3400-3800 MHz band, only usage rights for the provision of national public electronic communications networks are in force.

A snapshot of the usage status of the 3400-3800 MHz band, based on the results of the 2015 selection procedure and in compliance with the above-mentioned regulations, and also following the subsequent transferring of usage rights, is presented in the table below:

Table 7 – Status of frequency usage licences in the entire 3400-3800 MHz band, based on the selection procedure and following subsequent transferring of usage rights, until (including) 2019

HOLDER	APPLICATIONS	Spectrum amount awarded by licence	Frequency band	Validity term	Total spectrum held
VODAFONE	MFCN	2 x 20 MHz	3,4-3,6 GHz	31.XII.2025	**2 x 20 MHz**
ORANGE	MFCN	2 x 10 MHz	3,4-3,6 GHz	31.XII.2025	**2 x 35 MHz**
	MFCN	2 x 25 MHz	3,4-3,6 GHz	31.XII.2025	
ORANGE	MFCN	45 MHz	3,6-3,8 GHz	31.XII.2025	**45 MHz**
RCS&RDS	MFCN	50 MHz	3,6-3,8 GHz	31.XII.2025	**50 MHz**
SN Radiocomunicații	MFCN	50 MHz	3,6-3,8 GHz	31.XII.2025	**50 MHz**
governmental networks	MFCN	---	3,6-3,8 GHz	31.XII.2025	**55 MHz**

All licences were granted for the provision of public MFCN networks and electronic communications services at national level. The licences were issued with the observance of the principles of technological neutrality as regards both the services provided and the technology used for MFCN applications.

Following the entry into force of Commission Implementing Decision (EU) 2019/235 of 24 January 2019 on amending Decision 2008/411/EC as regards an update of relevant technical conditions applicable to the 3400-3800 MHz frequency band, the TDD arrangement became mandatory in the 3400-3600 MHz, as well.

In this context, in 2019 ANCOM carried out and completed the process of refarming the frequency usages in the respective band, thus taking preliminary steps for a smooth, effective and timely transition from one channel arrangement to another, while ensuring the uninterrupted provision of services to the end-users through the networks operated in the 3400-3600 MHz band by the affected licence holders.
Therefore, up to the end of 2019, there was a transition period, extended until the end of 2020, which meant that the holders of the valid licences for the usage of frequencies in the 3400-3600 MHz band were able to use – under the restrictive conditions in the licences amended by ANCOM as part of the above-mentioned process – the allotted frequency sub-bands in both channel

arrangements. After the transition period, the allotted frequency sub-bands, as they resulted from the frequency spectrum refarming, are used exclusively in TDD arrangement.

Since the refarming of the 3400-3600 MHz band, following the switch from the FDD arrangement to the TDD arrangement, the actual position of the frequency channels currently allotted in this band is presented in the table below.

Table 8 – Actual position of the allotted frequency channels included in the licences currently in force in the 3400-3600 MHz band

Channel limits (MHz)	Licence holder or usage
3400-3405	available at a national level
3405-3410	available at a national level
3410-3415	available at a national level
3415-3420	available at a national level
3420-3425	available at a national level
3425-3430	available at a national level
3430-3435	available at a national level
3435-3440	available at a national level
3440-3445	available at a national level
3445-3450	available at a national level
3450-3455	available at a national level
3455-3460	available at a national level
3460-3465	available at a national level
3465-3470	available at a national level
3470-3475	available at a national level
3475-3480	available at a national level
3480-3485	available at a national level
3485-3490	available at a national level
3490-3495	VODAFONE
3495-3500	VODAFONE
3500-3505	VODAFONE
3505-3510	VODAFONE
3510-3515	VODAFONE
3515-3520	VODAFONE
3520-3525	VODAFONE
3525-3530	VODAFONE
3530-3535	ORANGE
3535-3540	ORANGE
3540-3545	ORANGE
3545-3550	ORANGE
3550-3555	ORANGE
3555-3560	ORANGE
3560-3565	ORANGE
3565-3570	ORANGE
3570-3575	ORANGE
3575-3580	ORANGE
3580-3585	ORANGE
3585-3590	ORANGE
3590-3595	ORANGE
3595-3600	ORANGE

The spectrum amount unawarded in the 3400-3600 MHz band, to be auctioned off in the selection procedure – and resulted once the usage reorganisation has been completed in the networks of the two operators holding valid licences in the 3400-3600 MHz band – is **90 MHz** in the **3400-3490 MHz** sub-band.

In this competitive selection procedure for awarding frequency usage rights in multiple bands for the provision of broadband electronic communications networks and services, the usage rights in the 3400-3600 MHz band will be awarded for a four-year period, including sub-bands within the available portions in the 3400-3600 MHz band (i.e. the 3400-3490 MHz sub-band, as mentioned above), from 01 January 2022 to 31 December 2025. The validity of the new usage rights has been designed to align the duration of all frequency usage rights in the entire band.

In accordance with the provisions of the 3400-3800 MHz Strategy, the frequency usage rights will be awarded in the 3400-3800 MHz band for the provision of public electronic communications networks at a national level. Therefore, the frequency sub-bands won by the participants in the selection procedure will be allotted at a national level only.

Licence holders will take due account of the fact that ANCOM will award the sub-bands by adjacency, without providing for dedicated guard bands, these being included in the sub-bands to be awarded to licence holders. As a consequence, all licence holders must ensure radioelectric compatibility with the networks operating in sub-bands that are adjacent to those included in their licence.
Therefore, ANCOM highlights for those who intend to participate in the selection procedure that due account shall be taken of the mentions stated above, when deciding the amount of spectrum they intend to acquire in the 3400-3600 MHz frequency band.

The frequency usage licences to be awarded in the 3400-3600 MHz band following the selection procedure will contain provisions regarding:

a) the inclusion of guard bands - as to the networks operating in adjacent sub-bands - within the sub-bands in the licence;
b) flexibility in the holders' management of the frequency sub-bands under their licence, i.e. within such a sub-band – with a view to setting central frequencies for channels of various bandwidths – licence holders may derogate from the provisions of the channel arrangement mentioned in the licence, on the condition that they observe the limits of the sub-bands allotted by licence;
c) technological neutrality, the only limitation being the application type allowed for implementation, i.e. MFCN networks for the provision of wireless broadband electronic communications services (WBB ECS).

Regarding MFCN networks considered in this selection procedure, for the entire 3400-3800 MHz band, Decision ECC/DEC/(11)06 on harmonised frequency arrangements and least restrictive technical conditions for mobile/fixed communications networks (MFCN) operating in the 3400-3800 MHz band is applicable at CEPT level, as adopted on 09 December 2011 and modified (for the second time) on 26 October 2018.
At EU level – as previously mentioned –, on 08 February 2019 Commission Implementing Decision (EU) 2019/235 of 24 January 2019 on amending Decision 2008/411/EC as regards an update of relevant technical conditions applicable to the 3400-3800 MHz frequency band was published.
This new decision amends, once again, the annex to the initial decision, containing technical provisions on the usage of the above-mentioned band.

The electronic communications systems allowed to operate in the 3400-3600 MHz band are those systems that comply with:

- the TDD channel arrangement for the respective band,
- the block edge masks (BEM) as to the respective allotted block, set out in the Annex to the Commission Decision 2008/411/EC amended by Commission Implementing Decision 2014/276/EU and by Commission Implementing Decision (EU) 2019/235.

Any available technology in compliance with the technical conditions stipulated in the above-mentioned decisions may be used.

The TDD arrangement in the 3400-3600 MHz band consists of 5 MHz bandwidth channels. Larger radio channels can also be used by joining adjacent 5 MHz channels.

The channel arrangement valid in the 3400-3600 MHz band, currently in force at European level and in Romania, is available in Annex 1 to ECC/DEC/(11)06 (2018 release).

The channel arrangement in force in the 3400-3600 MHz band is presented in the table below:

Table 9 – Channel arrangement for the 3400-3600 MHz band

Channel limits (MHz)	Destination
3400-3405	TDD channel (channel 1) – 5 MHz
3405-3410	TDD channel (channel 2) – 5 MHz
3410-3415	TDD channel (channel 3) – 5 MHz
3415-3420	TDD channel (channel 4) – 5 MHz
3420-3425	TDD channel (channel 5) – 5 MHz
3425-3430	TDD channel (channel 6) – 5 MHz
3430-3435	TDD channel (channel 7) – 5 MHz
3435-3440	TDD channel (channel 8) – 5 MHz
3440-3445	TDD channel (channel 9) – 5 MHz
3445-3450	TDD channel (channel 10) – 5 MHz
3450-3455	TDD channel (channel 11) – 5 MHz
3455-3460	TDD channel (channel 12) – 5 MHz
3460-3465	TDD channel (channel 13) – 5 MHz
3465-3470	TDD channel (channel 14) – 5 MHz
3470-3475	TDD channel (channel 15) – 5 MHz
3475-3480	TDD channel (channel 16) – 5 MHz
3480-3485	TDD channel (channel 17) – 5 MHz
3485-3490	TDD channel (channel 18) – 5 MHz
3490-3495	TDD channel (channel 19) – 5 MHz
3495-3500	TDD channel (channel 20) – 5 MHz
3500-3505	TDD channel (channel 21) – 5 MHz
3505-3510	TDD channel (channel 22) – 5 MHz
3510-3515	TDD channel (channel 23) – 5 MHz
3515-3520	TDD channel (channel 24) – 5 MHz
3520-3525	TDD channel (channel 25) – 5 MHz
3525-3530	TDD channel (channel 26) – 5 MHz
3530-3535	TDD channel (channel 27) – 5 MHz
3535-3540	TDD channel (channel 28) – 5 MHz
3540-3545	TDD channel (channel 29) – 5 MHz
3545-3550	TDD channel (channel 30) – 5 MHz
3550-3555	TDD channel (channel 31) – 5 MHz
3555-3560	TDD channel (channel 32) – 5 MHz
3560-3565	TDD channel (channel 33) – 5 MHz
3565-3570	TDD channel (channel 34) – 5 MHz
3570-3575	TDD channel (channel 35) – 5 MHz
3575-3580	TDD channel (channel 36) – 5 MHz
3580-3585	TDD channel (channel 37) – 5 MHz
3585-3590	TDD channel (channel 38) – 5 MHz
3590-3595	TDD channel (channel 39) – 5 MHz
3595-3600	TDD channel (channel 40) – 5 MHz

2.4.4. Other provisions regarding the 3400-3600 MHz band

At present, there are no licences containing frequency assignments for radiocommunications stations in the fixed-satellite service in this frequency band in Romania.
According to the NTFA in force, the fixed-satellite service (space-Earth) may be used on a secondary basis in Romania.

There is an exclusion geographical area on the national territory, applicable to the 3400-3600 MHz band, as per the provisions of Law no. 73/2013 on special measures for the protection of military objectives within the national system of defence against ballistic missiles.

The limits of the exclusion geographic area are established in accordance with the provisions of the *Order of the Ministry of National Defence no. M.49 of 20.V.2013*, whereas the maximum height regime allowed for constructions is established in accordance with the *Order of the Minister of National Defence no. M50 of 20.V.2013 on the administrative-territorial units on the territory of which restrictions are applied for raising constructions, as well as the exact parameters of the maximum height regime allowed for constructions in each of the administrative-territorial units*.

The winners of the selection procedure under these Terms of Reference will operate the public electronic communications networks, for which they are to receive licences, in compliance with the provisions of Law no. 73/2013.

With a view to ensuring the coexistence of the electronic communications networks envisaged by these Terms of Reference with the special objectives provided by Law 73/2013, for protecting the operation of the above-mentioned networks, the following measures are recommended:

a) the base stations should be installed, if possible, at over 5 km away from the reference point with the geographic coordinates (in WGS84 system): 44°04'35.853"N/24°25'06.1674"E;
b) the subscriber terminal antennas should not be oriented, if possible, towards the reference point indicated under letter a), if terminals are situated at less than 35 km from the respective reference point;
c) base station sector antennas should not be oriented, if possible, towards the reference point under letter a), if these base stations are situated at less than 35 km from the respective reference point; the respective base station antennas are recommended to have an elevation below or equal to -5°;
d) the base stations situated in the special protection area, defined in the above-mentioned law, should be placed, if possible, in areas without direct visibility towards the reference point indicated under letter a);
e) receiver notch filters should be used for out-of-band emissions, with an attenuation of at least 50 dB, for preventing possible receiver saturation, caused by the emissions performed in the reference point under letter a) on the base stations situated in the special protection area defined in the above-mentioned law.

Chapter 3 – LEGAL REGIME OF THE LICENCES

3.1. Licence duration

In accordance with the provisions of Article 31(1) of the Framework-Ordinance, the usage rights granted by means of selection procedures, are awarded for a maximum 10-year period. By way of exception, under the conditions set out in Article 31(2), these rights may be granted for a maximum 15-year period, if such a longer period is adequate for the electronic communication services provided, considering the pursued goal, and takes into account the duration necessary for the investment amortization.

With a view to consolidating the validity terms of the usage rights already in force[7] at the moment of this selection procedure, with the validity terms of the usage rights to be awarded in this selection procedure, ANCOM awards the usage rights under these Terms of Reference for the validity periods presented below:

Table 10 – Frequency spectrum available and validity period of the frequency usage rights

Frequency band	Available spectrum	Bandwidth	Validity period
800 MHz	791-796 MHz/832-837 MHz: • 2 x 5 MHz FDD	10 MHz FDD	01.01.2022 – 05.04.2029
2600 MHz	2530-2570 MHz/2650-2690 MHz: • 2 x 40 MHz FDD 2600-2615 MHz • 1X15 MHz TDD	80 MHz FDD 15 MHz TDD	01.01.2022 – 05.04. 2029 01.01.2022 – 05.04. 2029
3400-3600 MHz	3400-3490 MHz TDD • 90 MHz TDD	90 MHz TDD	01.01.2022 – 31.12.2025

[7] Usage rights awarded by the selection procedures organised in 2012, respectively in 2015.

3.2. Rights conferred by licences

The holders of the licences to be awarded through the selection procedure will have the right to use the radio frequencies for providing wireless broadband publicly available electronic communications services.

Licence holders will have the right to use any available technology, if such usage does not breach the obligations regarding the observance of certain technical and operational conditions set out under Section 3.3.3 herein.

The holders will have the obligation to exercise their rights arising from the licence under such conditions as to ensure the effective, rational and efficient use of the radio frequencies and to avoid harmful interferences.

3.3. Obligations

3.3.1. Coverage obligations

3.3.1.1. Obligations attached to the frequency usage rights in the 800 MHz band

The holder of the frequency usage rights in the 800 MHz band awarded following this selection procedure, which already owns public electronic communications networks (2G, 3G or 4G), has the obligation to ensure the coverage of 95% of the population of 56 localities specified in Annex 1 (list of localities identified as uncovered or poorly covered, according to the Note below) with mobile broadband communications services with a downlink speed at user level of at least 2 Mbit/s, with a 95% probability of indoor reception, starting from 31 December 2023 at the latest, until the end of the licence validity period;

When assessing the fulfillment of the coverage obligation, the coverage achieved using the frequencies for which the licence holder has previously been awarded usage rights will be also taken into account.

Note: After completing the selection procedure, before granting licences for the use of radio frequencies, the winner of the 800 MHz block will have a 7 days deadline to submit to ANCOM a list of localities (taken from Annex 1 of these Terms of Reference) that it intends to cover.

3.3.1.2. Obligations attached to the frequency usage rights in the 3400-3600 MHz band

All the holders of frequency usage licences in the 3400-3600 MHz band have deployment obligations, as specified below.

The winners of the selection procedure acquiring usage rights in the 3400-3600 MHz band (and holding no usage rights in the 3400-3800 MHz band prior to the selection procedure) will have - in the new licenses issued following the selection procedure - the obligation to install a certain number of base stations, as follows:

- **a)** 25 base stations in operation, installed anywhere on the national territory, within one year from the entry into force of the licence,
- **b)** 50 base stations in operation, installed anywhere on the national territory, within two years from the entry into force of the licence,
- **c)** 100 base stations in operation, installed anywhere on the national territory, within three years and six months from the entry into force of the licence.

The deployment obligations described above are accompanied by other associated provisions, as detailed below:

1) The above indicated values – for the number of base stations installed and in operation at a certain moment – are minimum obligations incumbent on any holder of usage rights in the 3400-3600 MHz band, for the whole validity period of the usage rights, irrespective of the width of the frequency sub-band allotted through the licence issued in this frequency band.

2) For the purposes of this section, one base station is considered to consist of all the antennas and equipment installed in a given location and operating in the 3400-3800 MHz band, under the technical and operational conditions established by the licence in force awarded (or modified, as the case may be) in the respective band following the selection procedure, irrespective of the number of sectors installed on the base station and of the base station's sector antenna configuration – may they be installed on the same mast (or similar physical infrastructure element) or at a certain distance from each other (e.g. on the same building, including if at different heights above the ground).
In the situation provided as an example, any two sectoral antennas belong to the same base station if the distance between their installation points (in the case they are situated on the same horizontal

level) or between the ground projections of these points (in the case they are situated at different heights above the ground, based on the on-site installation configuration) is maximum 50 meters.

3) The minimum obligations provided in this section are deemed fulfilled if the cumulated number of all the base stations installed by the licence holder - and in operation - at the end of an implementation term, is greater than (or equal to) the value relevant for that implementation term, regardless of the total amount of radio spectrum assigned for each base station, within the frequency sub-band allotted by licence.

4) The base stations considered for the assessment of compliance with the minimum obligations provided in this section are only those whose frequency assignments comply with the TDD channel arrangement valid in the respective band.

3.3.2. Requirements concerning the provision of emergency communications

The holders of licences awarded following this selection procedure will ensure that calls are routed to the single number for emergency calls 112 in accordance with Article 70 paragraphs (4)-(5) of Government Emergency Ordinance no. 111/2011 on electronic communications, approved, with amendments and completions, by Law no. 140/2012, with the subsequent amendments and completions and with Government Emergency Ordinance no. 34/2008 regarding the organization and functioning of the single national system for emergency calls, approved, with amendments and completions, by Law no. 160/2008.

Considering the Government Emergency Ordinance no. 46/2019 regarding the operation of the system for warning the population in emergency situations "RO-ALERT", the holders of frequency usage licences have the obligation to connect their mobile public networks with the RO-ALERT System.

Failure to comply with the obligations referred to in the preceding paragraphs is subject to the rules established in the above-mentioned normative acts.

Where PPDR[8] radio communications are provided on a contractual basis - a relationship established between the provider/providers and the beneficiary/beneficiaries of the services - a series of specific technical requirements that lead to ensuring an adequate quality of the service provided become applicable. Thus, when PPDR services are provided by public providers of electronic communications networks and services, on a contractual basis (the parties have agreed on their objectives), a set of specific technical obligations apply, in order to ensure the adequate quality of the service provided.

Therefore, with a view to providing PPDR services, when a contractual basis has been established, the holder/holders of frequency usage rights acquired following this procedure will also pursue the fulfilment of the following requirements in relationship with the designated integrator of PPDR communications and services:

a) implementation within the network of the possibility to provide service classes and network access for the national PPDR communications integrator;
b) the possibility to ensure, and granting priority to, the services destined for the beneficiary of the national PPDR communications integrator. Priority is understood as the service feature that enables the prioritization of a user, application, traffic flow, or individual packet over the rest of the operator's customers, in setting up a data session and processing the respective session;
c) possibility of ensuring pre-emption in the provision of PPDR services. Pre-emption is understood as the service feature that enables priority allocation of communication resources to the respective service beneficiaries, even if - during periods of network

[8] PPDR – public protection and disaster relief communications (according to Recommendation 2003/558/EC (notified by C(2003)2657).

congestion - this allocation of resources is may be also performed by closing active sessions for other operator's customers.

A more detailed technical description is provided in the 3GPP Technical Specifications (TS):

- TS 22.280 Mission Critical Services Common Requirements;
- TS 23.379 Mission Critical Push To Talk call control; Protocol Specifications;
- TS 23.281 Functional architecture and information flows to support Mission Critical Video (MCVideo);
- TS 23.282 Functional architecture and information flows to support Mission Critical Data (MCData).

d) the possibility of providing services for PPDR communications beneficiaries, under national roaming conditions, upon the negotiation in good faith and following the conclusion of national roaming agreements with other holders of frequency usage licenses for the provision of mobile public electronic communications networks.

3.3.3. Obligations of compliance with certain technical and operational requirements

3.3.3.1. General requirements

The holders of frequency usage licences have the obligation to observe, during the entire validity of the usage rights, the requirements of the regulations in force on limiting the effects of the electromagnetic fields generated by electronic communications networks, according to the law[9]. When installing their own equipment, the holders of frequency usage licences will consider compliance with the limits established according to the regulations in force, as well as the reference to a value of the cumulated electromagnetic field determined according to the recommendations of the Electronic Communications Committee of the European Conference of Postal and Telecommunications Administrations.

The holders of frequency usage licenses have the obligation to ensure compliance with the security requirements of the networks and services, throughout the duration of the usage rights.

The holders of licences for the use of radio frequencies may use within their own networks only technologies, equipment and software programs manufactured by manufacturers that have been authorized in accordance with the provisions of Law no. 163/2021 on adopting certain measures regarding ICT infrastructures of national interest and the conditions for 5G networks implementation.

3.3.3.2. Technical conditions on the usage of the 800 MHz band

a) The provisions of the following EC decisions, CEPT/ECC decisions, recommendations and reports apply with regard to the use of frequencies in the 800 MHz band:
   - European Commission Decision 2010/267/EU on harmonised technical conditions of use in the 790-862 MHz frequency band for terrestrial systems capable of providing electronic communications services in the European Union;
   - ECC/DEC/(09)03: Harmonised conditions for mobile/fixed communications networks (MFCN) operating in the 790-862 MHz band;
   - CEPT Report 030: The identification of common and minimal (least restrictive) technical conditions for 790-862 MHz for the digital dividend in the European Union;
   - CEPT Report 031: Frequency (channelling) arrangements for the 790-862 MHz band;
   - CEPT Report 019: Least restrictive technical conditions for WAPECS frequency bands;

[9] On the date of laying down these Terms of Reference the applicable limits are those set by the Order of the Health Ministry of public Health no. 1193/2006 for the approvement of the Norms for limiting exposure of the general public to electromagnetic fields from 0 Hz, up to 300 GHz, which may be subsequently amended and completed.

- ECC/REC/(11)04: Frequency planning and frequency coordination for terrestrial systems for Mobile/Fixed Communication Networks (MFCN) capable of providing electronic communications services in the frequency band 790-862 MHz (amended on 3 February 2017);
- CEPT Report 29 on Technical considerations regarding harmonisation options for the Digital Dividend in the European Union - "Guideline on cross border coordination issues between mobile services in one country and broadcasting services in another country" (of 26 June 2009).

The aforementioned documents may be subject to amendments or new versions. As well, further similar documents may be adopted and influence the technical usage conditions.

b) The operation mode in the 800 MHz band will be Frequency Division Duplex (FDD). The 791-821 MHz band will be used for the base station transmission (downlink), and the 832-862 MHz band will be used for the terminal station transmission (uplink);

c) the duplex spacing in the 800 MHz band is 41 MHz;

d) the terrestrial systems which may be deployed in the 791-796 MHz/832-837 MHz sub-bands of the 800 MHz band are those compliant with Decision 2010/267/EU;

e) the channel bandwidth will be:
   - 5 MHz, for UMTS systems;
   - 1.4 MHz, 3 MHz, 5 MHz, 10 MHz, 15 MHz, 20 MHz, for LTE systems;
   - 5 MHz, 10 MHz, 15 MHz, 20 MHz, for NR systems;

f) the block edge mask for a 5 MHz block in the 790-862 MHz band is defined in the Annex to Decision 2010/267/EU and in ECC/DEC(09)03 (Annex 3);

g) the maximum mean EIRP value for a base station within a 5 MHz block awarded to a licence holder will not exceed 64 dBm/5 MHz;

h) out-of-band emission requirements for a base station, a holder must comply with, are defined by the out-of-block block edge masks (out-of-block BEM) specified in Tables 11 - 13.

Table 11 – Baseline requirements – base station BEM out-of-block EIRP limits

Frequency range of out-of-block emissions	Maximum mean out-of-block EIRP	Measurement bandwidth
832 – 862 MHz (frequencies used for FDD uplink)	-49.5 dBm	5 MHz

Table 12 – Transition requirements – base station BEM out-of-block EIRP limits per antenna(1) over frequencies of FDD downlink 791-821 MHz (BS BEM out-of-block, in the 791-862 MHz band)

Frequency range of out-of-block emissions	Maximum mean out-of-block EIRP	Measurement bandwidth
-10 to -5 MHz from lower block edge	18 dBm	5 MHz

-5 MHz to 0 MHz from lower block edge	22 dBm	5 MHz
0 to +5 MHz from upper block edge	22 dBm	5 MHz
+5 to +10 MHz from upper block edge	18 dBm	5 MHz
Remaining FDD downlink frequencies	11 dBm	1 MHz

(1) for one to four antenna/s

Table 13 – Transition requirements – base station BEM out-of-block EIRP limits per antenna (for 1 - 4 antenna/s), over the frequencies used as guard band (out-of-band BEM for a base station in the 790-791 MHz and 821-832 MHz bands, used as guard bands)

Frequency range of out-of-block emissions	Maximum mean out-of-block EIRP	Measurement bandwidth
Guard band between 790 MHz and 791 MHz	17.4 dBm	1 MHz
Guard band between the FDD downlink band edge and FDD uplink edge (duplex gap): 821-832 MHz	15 dBm	1 MHz

i) The BEM requirements for terminal stations are presented in Table 14.

Table 14 – Terminal station BEM in-block emission requirements – TS BEM in-block emission limit, over frequencies of FDD uplink

Maximum mean in-blockpower	23 dBm(1)
(1) This power limit is set as EIRP for terminal stations designed to be mounted or installed and as total radiated power (TRP) for terminal stations designed to be mobile or nomadic. EIRP and TRP are equivalent for isotropic antennas. This value has a maximum tolerance of up to + 2 dB, to take into account operation in extreme weather conditions and manufacturing standard deviation.	

j) Based on the agreements concluded between the frequency usage right holders in the 800 MHz frequency band, and upon the agreement of all the parties involved, the frequency usage right holders may al so use other applications than those provided under item e) of this section (such as NR and LTE with AAS) and may diverge from the representative applications and technical requirements in this section, excepting the operation mode defined under items b) and c). In such cases, frequency usage right holders will have to comply with the requirements for the protection of other services, applications and networks, to observe the technical conditions resulting from cross-border coordination and to tolerate any interference that may occur in the modified usage conditions.

3.3.3.3. Technical conditions on the usage of the 2600 MHz band

a) The provisions of the following EC decisions, CEPT/ECC decisions, recommendations and reports apply regarding the use of the 2600 MHz band:

- Commission Implementing Decision (EU) 2020/636 amending Decision 2008/477/EC as regards an update of relevant technical conditions applicable to the 2500-2690 MHz frequency band;
- Decision ECC/DEC/(05)05: Harmonised utilization of spectrum for Mobile/Fixed Communications Networks (MFCN) operating in the 2500-2690 MHz band (approved on 18 March 2005, amended on 5 July 2019);
- CEPT Report 72: Report from CEPT to the European Commission in response to the Mandate "to review the harmonised technical conditions for certain EU-harmonised frequency bands and to develop least restrictive harmonised technical conditions suitable for next-generation (5G) terrestrial wireless systems", Report A: Review of technical conditions in the paired terrestrial 2 GHz and the 2.6 GHz frequency bands, and the usage feasibility of the 900 MHz and 1800 MHz frequency bands (approved on 5 July 2019);
- ECC Report 308: Analysis of the suitability and update of the regulatory technical conditions for 5G MFCN and AAS operation in the 2500-2690 MHz band (approved on 6 March 2020);
- ECC Report 119: Coexistence between mobile systems in the 2.6 GHz frequency band at the FDD/TDD boundary (June 2008);
- Recommendation ECC/REC/(11)05 on cross-border coordination for Mobile/Fixed Communications Networks (MFCN) in the frequency band 2500-2690 MHz (approved on 26 May 2011, amended on 3 February 2017).

The aforementioned documents may be subject to amendments or reviews. As well, further similar documents may be adopted and influence the technical usage conditions.

b) The operation mode in the 2600 MHz will be:
   - Frequency division duplex (FDD) in the paired 2500-2570/2620-2690 MHz bands. The 2620-2690 MHz sub-band will be used for base station emission (downlink), while the 2500-2570 MHz sub-band will be used for terminal station emission (uplink);
   - Time division duplex (TDD) in the 2570-2620 MHz.

c) The duplex spacing for the FDD mode: 120 MHz;

d) The main systems and applications that are representative for the usage of the 2600 MHz band at the moment of organising this selection procedure are the following: UMTS, LTE, LTE-MTC, LTE-eMTC, NB-IoT, NR.

e) the channel bandwidth will be:
   - 5 MHz, for UMTS systems;
   - 1,4 MHz, 3 MHz, 5 MHz, 10 MHz, 15 MHz, 20 MHz, for LTE systems;
   - 180 kHz, for LTE-MTC, NB-IoT systems;
   - minimum180 kHz, maximum 1080 kHz, for LTE-eMTC systems;
   - 5 MHz, 10 MHz, 15 MHz, 20 MHz, 25 MHz, 30 MHz, 40 MHz, 50 MHz, for NR systems;

   The operation mode for IoT systems:
   - LTE-MTC, LTE-eMTC: in-band (channel);
   - NB-IoT: in-band (channel), within guard band[10];

f) Terrestrial systems to be used in the 2530-2570 MHz/2650-2690 MHz and 2600-2615 MHz sub-bands must comply with the Commission Implementing Decision (EU) 2020/636 of 8 May 2020 amending Decision 2008/477/EC as regards an update of relevant technical conditions applicable to the 2500-2690 MHz frequency band;

[10] "Guard band" – shall not be read as an actual guard band; the term is applicable in the case of NB-IoT used in frequencies at the edge of a wideband carrier frequency (LTE channel), where the block edge mask complies with the out-of-block requirements.

g) Terrestrial systems to be used in the 2600 MHz band must comply with the relevant BEM requirements in the Annex to Commission Implementing Decision (EU) 2020/636, in the absence of bilateral or multilateral agreements between the licence holders in adjacent blocks. Less restrictive technical parameters may be used where an agreement has been concluded thereon by the licence holders in the respective blocks;

h) Holders of frequency usage rights in the 2530-2570 MHz/2650-2690 MHz and 2600-2615 MHz sub-bands may use technical parameters that are less restrictive than those under paragraph 3.3.3.3.1, where the operators or the administrations involved have agreed thereon, on the condition that the respective parameters comply with the technical requirements for the protection of services or applications in the adjacent bands or subject to cross-border obligations.

i) Equipment operating in the 2600 MHz band may use, as well, different power limits than those set within paragraphs 3.3.3.3.1 and 3.3.3.3.2, on the condition of applying adequate mitigation techniques, that observe Directive 2014/53/EU of the European Parliament and of the Council of 16 April 2014 on the harmonisation of the laws of the Member States relating to the making available on the market of radio equipment and repealing Directive 1999/5/EC [11] and that ensure a protection level equivalent to that provided by the basic requirements in the directive.

j) Where harmful interference occurs, in addition to the provisions of items e), f), g) of paragraph 3.3.3.3.1, the licence holders involved have the obligation to coordinate and to apply mutually agreed mitigation techniques by amending the technical characteristics of the stations concerned, irrespective of which one was the first to install a station.

k) Based on the agreements concluded between the frequency usage right holders in the 2600 MHz frequency band, and upon the agreement of all the parties involved, the frequency usage right holders may also use other applications than those provided under items d) and e) of this section and may diverge from the technical requirements in section 3.3.3.3 and its paragraphs, excepting the operation mode defined under items b) and c). In such cases, frequency usage right holders will have to comply with the requirements for the protection of other services, applications and networks, to observe the technical conditions resulting from cross-border coordination and to tolerate any interference that may occur in the modified usage conditions.

For the purposes of this section, the following definitions apply:

- *non-active antenna system (AAS)* - means a base station and an antenna system that provides one or more antenna connectors, which are connected to one or more separately designed passive antenna elements to radiate radio waves. The amplitude and phase of the signals to the antenna elements is not continually adjusted in response to short term changes in the radio environment.
- *active antenna system (AAS)* - means a base station and an antenna system where the amplitude and/or phase between antenna elements is continually adjusted resulting in an antenna pattern that varies in response to short term changes in the radio environment. This excludes long-term beam shaping such as fixed electrical down tilt. In AAS base stations the antenna system is integrated as part of the base station system or product.
- *synchronised operation* - the operation of two or more different time division duplex (TDD) networks, where simultaneous uplink (UL - from the end-user terminal equipment to the base station of the network), and downlink (DL - from the base station of the network to the

[11] Directive 2014/53/EU of the European Parliament and of the Council of 16 April 2014 on the harmonisation of the laws of the Member States relating to the making available on the market of radio equipment and repealing Directive 1999/5/EC, transposed into national legislation by Government Decision no. 740/2016 on making available on the market of radio equipment.

terminal equipment of the end user) transmissions do not occur. That is, at any given moment in time either all networks transmit in downlink or all networks transmit in uplink.
This requires the alignment of all DL and UL transmissions for all TDD networks involved as well as synchronising the beginning of the frame across all networks.

- *unsynchronised operation* - operation of two or more different TDD networks, where at any given moment in time at least one network transmits in downlink (DL - from the base station of the network to the terminal equipment of the end user), while at least one network transmits in uplink (UL - from the end-user terminal equipment to the base station of the network).
  This might happen if the TDD networks either do not align all DL and UL transmissions or do not synchronise at the beginning of the frame.
- *semi-synchronised operation* - operation of two or more different TDD networks in a mixed mode, where part of the frame is consistent with synchronised operation, while the remaining portion of the frame is consistent with unsynchronised operation.
  This requires the adoption of a frame structure for all TDD networks involved, including slots where the UL/DL direction is not specified, as well as synchronising the beginning of the frame across all networks.
- *equivalent isotropically radiated power (EIRP)* – is the product of transmitter power and the antenna gain in a given direction relative to an isotropic antenna of a radio transmitter (absolute gain or isotropic gain).
- *total radiated power (TRP)* - is a measure of how much power a composite antenna (including AAS) radiates. It equals the total conducted power input into the antenna array system less any losses in the antenna array system.

  TRP means the integral of the power transmitted in different directions over the entire radiation sphere as shown in the formula:

$$TRP \stackrel{\text{def}}{=} \frac{1}{4\pi}\int_0^{2\pi}\int_0^{\pi} P(\theta,\varphi)\sin(\theta)d\theta d\varphi$$

where

- $P(\theta,\varphi)$ is the power radiated by an antenna array system in direction (θ,φ) given by the formula:

$$P(\theta,\varphi) = P_{Tx}g(\theta,\varphi)$$

where

- P_{Tx} denotes the conducted power (measured in Watts), which is input to the array system, and
- $g(\theta,\varphi)$ denotes the array systems directional gain along the (θ,φ) direction.

3.3.3.3.1. Technical conditions for base stations operating in the 2500-2690 MHz band

This section defines the block edge mask (BEM) by establishing the technical parameters for base stations, which – adequately aggregated – result in the respective mask.
BEM are an essential component of conditions necessary to ensure coexistence between networks exploited by different licence holders using adjacent frequency blocks, in the absence of bilateral or multilateral agreements between the operators of such neighbouring networks.

The BEM for a certain frequency block consists of several elements indicated in Table no. 15. The BEM is made up of an in-block element (for which a power limit is defined within the block) and the out-of-block elements – i.e. unwanted emissions such as out-of-band radiation - for which corresponding power limits are defined as follows:

- the baseline power limit, designed to protect the spectrum of other operators within the 2600 MHz band,
- the transitional region power limit, enabling filter roll-off from the in-block to the baseline power limit,
- the additional baseline power limit, applicable out-of-block for FDD AAS base stations, in the 2690 MHz-2700 MHz frequency range, to reduce the area of coordination with the radioastronomy service, where the administration deems necessary.

Power limits are provided separately for non-AAS and AAS. For non-AAS, the power limits apply to the mean EIRP. For AAS, the power limits apply to the mean TRP. Both the EIRP and the TRP are equivalent to the radiated power for isotropic antennas.
The mean EIRP or mean TRP are measured by averaging over a time interval and over a measurement frequency bandwidth.
In the time domain, the mean EIRP or mean TRP is averaged over the active portions of signal bursts and corresponds to a single power control setting.
In the frequency domain, the mean EIRP or mean TRP is determined over the measurement frequency bandwidth as given in Tables 16-22 below.
In general, and unless stated otherwise, the BEM power limits correspond to the aggregate power radiated by the relevant device including all transmit antennas, except in the case of baseline and transition requirements for non-AAS base stations, which are specified per antenna.

Table 15 – Definition of BEM elements

BEM element	Definition
In-block	Refers to a block for which the BEM is derived
Baseline	Spectrum within the 2500-2690 MHz frequency band used for wireless broadband electronic communications services (WBB ECS), excepting the block for which BEM is set, assigned to the operator, and the corresponding transitional regions
Transitional region	Spectrum in the frequency range within 0 to 5 MHz below and 0 to 5 MHz above the block assigned to the operator. The transitional regions do not apply to TDD blocks assigned to other operators, unless networks involved are synchronised. The transitional regions do not apply below 2500 MHz or above 2690 MHz.
Additional baseline	Spectrum between 2690 and 2700 MHz.

Explanatory note:
The coexistence of geographically adjacent networks that also use adjacent frequency blocks in the 2600 MHz band may require specific measures to mitigate radio interference. Typically, a frequency separation of at least 5 MHz should be applied in the case of two adjacent unsynchronized TDD networks or a TDD network adjacent to an FDD network. Such a separation should be implemented by either leaving a 5 MHz block unused as a guard block, or through usage of such a 5 MHz block under more restrictive BEM parameters (restricted frequency block). Any usage of a 5 MHz guard block would be subject to an increased risk of interference.

a) The BEM for a specific block, other than a restricted one, is obtained by combining the power limit conditions in Tables 16, 17 and 18 in such a way that the limit for each frequency is given by the higher value out of the power limit values corresponding to the baseline requirements and those to the block specific requirements.

b) The BEM for a restricted frequency block is obtained by combining the power limit conditions in Tables 17 and 19 in such a way that the limit for each frequency is given by the higher value out of the power limit values corresponding to the baseline requirements and those to the block specific requirements.

c) In using the FDD 2650-2690 MHz sub-band (downlink), all FDD blocks (B1 – B8) will be applied the conditions for unrestricted blocks;

d) In using the TDD 2600-2615 MHz sub-band, the following conditions shall apply:
- The conditions for restricted blocks will apply to the 5 MHz block situated at the lower edge of the TDD block C1, if the TDD block C1 is assigned to an operator other than the one holding frequency usage rights for the adjacent 15 MHz TDD block situated below 2600 MHz;
- If the TDD C1 block is assigned to the same operator holding the usage rights for the 15 MHz TDD block situated below 2600 MHz, the conditions for unrestricted blocks apply to the 5 MHz block at the lower edge of the TDD C1 block.
- Conditions for unrestricted blocks apply to the remaining 5 MHz blocks inside the TDD C1 block.

e) The base station requirements the to be met by a holder of usage rights in the FDD 2650-2690 MHz sub-band and in the 2600-2615 MHz sub-band, for unrestricted spectrum blocks, are defined by BEM whose elements are specified in Tables 16, 17 and 18:

Table 16 – In-block power limit for non-AAS and AAS base stations

BEM element	Non-AAS EIRP limit	AAS TRP limit
In-block	61 dBm/5 MHz per antenna The EIRP limit may be increased to 68 dBm/5MHz for certain use cases, e.g. in sparsely populated areas, provided this does not considerably raise the risk of blocking the terminal station receiver.	53 dBm/5 MHz per cell(*) The TRP limit may be increased to 60 dBm/5 MHz for certain use cases, e.g. in sparsely populated areas, provided this does not considerably raise the risk of blocking the terminal station receiver.
(*) In a multi-sector base station, the in-block radiated power limit applies to each one of the individual sectors (cells) of the base station.		

Table 17 – Baseline power limits for non-AAS and AAS base stations

BEM element	Frequency range	Non-AAS maximum mean EIRP limit per antenna	AAS maximum mean TRP limitper cell (*)

Baseline	Frequencies in the downlink FDD sub-band (FDD DL) below -5 MHz offset from the lower block edge (for which the BEM is defined) and above +5 MHz offset from the upper block edge; Frequencies in TDD blocks synchronised with the TDD block under consideration; Frequencies in the blocks of the 2570-2615 MHz band used for supplemental downlink only (SDL) (**); The range 2615-2620 MHz	+4 dBm/MHz (***)	+5 dBm/MHz (***)
	Frequencies in the 2500-2690 MHz band that are not covered by the definition in the row above	-45 dBm/MHz	-52 dBm/MHz
(*) In a multi-sector base station, the radiated power limit applies to each one of the individual sectors (cells) of the base station. (**) The introduction of the AAS FDD does not impact the usage conditions in the SDL mode for non-AAS/AAS base stations. (***) When applied for the protection of the spectrum used for DL transmissions, this baseline limit is based on the assumption that the emissions come from a macro base station. It should be noted that small-area wireless access points (small cells) may be deployed at lower heights and thus closer to terminal stations, which can result in higher levels of interference if the above power limits are used.			

Explanatory note to Table 17:
1) Both limits – EIRP and TRP – are determined within a bandwidth of 1 MHz.
2) The small cells referred to in this section are various cell types including in-building cells (that may typically operate at up to 20 dBm EIRP in the case of residential use scenarios and up to 24 dBm EIRP in the case of enterprise use scenario) and outdoor cells that may typically operate at up to 40 dBm EIRP.

Table 18 – Transitional region power limit for non-AAS and AAS base stations

BEM element	Frequency range	Non-AAS mean EIRP limit per antenna	AAS maximum mean TRP per cell (*)
Transitional region	-5 to 0 MHz offset from lower block edge or 0 to +5 MHz offset from upper block edge	+16 dBm/5 MHz (**)	+16 dBm/5 MHz (**)

(*) In a multi-sector base station, the radiated power limit applies to each one of the individual sectors (cells) of the base station. (**) This limit is based on the assumption that the transmissions come from a macro base station. It should be noted that small-area wireless access points (small cells) may be deployed at lower heights and thus closer to termina stations, which can result in higher levels of interference if the above power limits are used. In such cases, the Member States may set a more restrictive (lower) limit on a national level.

Explanatory note to Table 18:
The small base station cells referred to in this section are various cell types including in-building cells (that may typically operate at up to 20 dBm EIRP in the case of residential use scenarios and up to 24 dBm EIRP in the case of enterprise use scenario) and outdoor cells that may typically operate at up to 40 dBm EIRP.

f) The transmission requirements for restricted frequency blocks are defined by block edge masks (BEM) whose elements are specified in tables 17 and 19:

Table 19 - In-block power limits for non-AAS and AAS base stations, for restricted blocks

BEM element	Frequency range	Non-AAS EIRP limit per antenna	AAS TRP limit per cell (*)
In-block	Restricted block spectrum	+25 dBm/5 MHz (**)	+ 22 dBm/5 MHz (**)
(*) In a multi-sector base station, the radiated power limit applies to each one of the individual sectors (cells) of the base station. (**) It is noted that in some deployment scenarios this limit may not guarantee interference-free UL operation in adjacent channels, although this would typically be mitigated by building penetration loss and/or the difference in antenna height. Other mitigation methods may be also be applied on a national level.			

g) In the case of base stations with restrictions on antenna placement, i.e. where base station antennas are placed indoors or where the antenna height is below a certain height, alternative BEM power limits may be used. In these cases, the BEM for a restricted spectrum block for non-AAS may be in line with the power limits in Table 20, provided that the relevant power limits in Table 17 apply to the geographical borders with other EU Member States, while BEM according to table 19 remains valid nationwide. For AAS stations with restrictions on antenna placement, alternative national measures to those specified in Table 17 or Table 19 may be required, on a case-by-case basis.

Table 20 – Power limits for restricted block for non-AAS base stations with additional restrictions on antenna placement

BEM element	Frequency range	Maximum mean EIRP limit
Baseline	Lower band edge of 2500 MHz to -5 MHz offset from lower block edge, or +5 MHz offset from upper block edge to upper band edge of 2690 MHz	- 22 dBm/MHz

Transitional region	– 5 MHz to 0 MHz offset from lower block edge or 0 to 5 MHz from upper block edge	- 6 dBm/5 MHz

Table 21 – Additional baseline power limit for FDD AAS base stations, with regard to Radio Astronomy Service (RAS)

BEM element	Frequency range	Case	TRP power limit per cell
Additional baseline	2690-2700 MHz	A	+ 3 dBm/10 MHz
		B	Not applicable
Case A: This limit yields a reduced coordination zone with respect to RAS stations. Case B: Where additional baseline is not considered necessary by the concerned Member State (e.g. where there is no nearby RAS station or where no coordination zone is required).			

Explanatory note to Table 21:
The power limits in Table 21 may be applied to reduce the size of the coordination zone with RAS in specific geographical areas. Depending on the size of the necessary coordination zone required to protect RAS station(s), cross-border coordination may also be necessary. Additional measures may be needed on a national basis to protect RAS stations.

3.3.3.3.2. Technical conditions for terminal stations operating in the 2500-2690 MHz band

BEM requirements for terminal stations are specified in Table 22.

Table 22 – In-block power limits for terminal stations

BEM element	**Maximum mean EIRP limit** (including Automatic Transmitter Power Control range)	**Maximum mean TRP limit** (including the Automatic Transmitter Power Control range)
In-block	+ 35 dBm/5 MHz	+ 31 dBm/5 MHz
Note: EIRP should be used for fixed or installed terminal stations and the TRP should be used for the mobile or nomadic terminal stations.		

3.3.3.4. Technical conditions on the usage of the 3400-3600 MHz band

The provisions of the following EC decisions and CEPT/ECC decisions, recommendations and reports apply with regard to the usage of the 3400-3800 MHz band:

- Decision 2008/411/EC of 21 May 2008 on the harmonisation of the 3400 - 3800 MHz frequency band for terrestrial systems capable of providing electronic communications services in the Community, amended by Commission Implementing Decision 2014/276/EU and by Commission Implementing Decision (EU) 2019/235;
- Decision ECC/DEC/(11)06 on harmonised frequency arrangements for mobile/fixed communications networks (MFCN) operating in the band 3400-3600 MHz and 3600-3800

MHz bands, adopted on 09 December 2011 and modified on 14 March 2014 and 26 October 2018;
- CEPT Recommendation ECC/REC/(15)01 on cross-border coordination for mobile/fixed communications networks (MFCN) in the frequency bands: 1452-1492 MHz, 3400-3600 MHz and 3600-3800 MHz, approved on 13 February 2015, amended on 5 February 2016 and on 14 February 2020;
- CEPT Recommendation ECC/REC/(20)03 on frame structures to facilitate cross-border coordination of TDD MFCN in the frequency band 3400-3800 MHz;
- CEPT Report 67 containing the CEPT response to the EC *Mandate to develop harmonised technical conditions for spectrum use in support of the introduction of next-generation (5G) terrestrial wireless systems in the Union,* the section on the examination of harmonized technical conditions for the 3400-3800 MHz band;
- ECC Report 296, aimed at providing options for the national regulatory framework on synchronizing in the 3400-3800 MHz band (a toolbox for administrations regarding the coexistence of MFCNs in synchronised, unsynchronised and semi-synchronised operation in 3400-3800 MHz band);
- ECC Report 281 on the analysis of the suitability of the regulatory technical conditions for 5G MFCN operation in the 3400-3800 MHz band;
- ECC Report 278 on specific UWB applications in the bands 3.4-4.8 GHz and 6.0-8.5 GHz.
- ECC Report 203 on Least Restrictive Technical Conditions suitable for Mobile/Fixed Communication Networks (MFCN), including IMT, in the frequency bands 3400-3600 MHz and 3600- 3800 MHz;
- ECC Report 100 on compatibility studies in the 3400-3800 MHz between broadband wireless systems and other radiocommunications services.

The aforementioned regulations may be subject to amendments or reviews. As well, further documents with a similar status may be adopted and influence the technical usage conditions in the 3400-3800 MHz band. Moreover, some of the above-mentioned regulations are not relevant as a whole for the scope of these Terms of Reference.

Within this section, the technical provisions regarding the channel arrangement available in the 3400-3600 MHz band will apply, as mentioned in section 2.4.3 of these Terms of Reference.

Both in the frequency sub-bands for which a licence has been issued, and outside these sub-bands (i.e. beyond the limits of the frequency blocks at the two ends of the assigned sub-bands), the licence holder must observe, for the base station transmission and for the subscriber's terminal station, in the 3400-3800 MHz band, the block edge mask (BEM) described in subsections 3.3.3.4.1 and 3.3.3.4.2.

Holders of frequency usage rights may use technical parameters that are less restrictive than those under subsection 3.3.3.4.1, where they have concluded bilateral or multilateral arrangements thereon, including in the case of adjacent frequency blocks awarded to different holders. The conclusion of such bilateral or multilateral arrangements and the content of the respective arrangements will be notified to the Authority.

For the purposes of this section, the following definitions apply:

a) active antenna system (AAS) - a base station and an antenna system where the amplitude and/or phase between antenna elements is continually adjusted resulting in an antenna pattern that varies in response to short term changes in the radio environment.
This excludes long-term beam shaping such as fixed electrical down tilt (possible in the case of a negative elevation angle) of the main radiation lobe of an antenna, which is obtained by electrical means (not by mechanical means i.e. by physically tilting the antenna).
In AAS base stations the antenna system is integrated as part of the base station system or product.

b) *synchronised* operation - the operation of two or more different time division duplex (TDD) networks, where simultaneous uplink (UL - from the end-user terminal equipment to the base station of the network), and downlink (DL - from the base station of the network to the terminal equipment of the end user) transmissions do not occur. That is, at any given moment in time either all networks transmit in downlink or all networks transmit in uplink.
This requires the alignment of all DL and UL transmissions for all TDD networks involved as well as synchronising the beginning of the frame across all networks.

c) *unsynchronised* operation - operation of two or more different TDD networks, where at any given moment in time at least one network transmits in downlink (DL - from the base station of the network to the terminal equipment of the end user), while at least one network transmits in uplink (UL - from the end-user terminal equipment to the base station of the network).
This might happen if the TDD networks either do not align all DL and UL transmissions or do not synchronise at the beginning of the frame.

d) *semi-synchronised* operation - operation of two or more different TDD networks in a mixed mode, where part of the frame is consistent with synchronised operation, while the remaining portion of the frame is consistent with unsynchronised operation.
This requires the adoption of a frame structure for all TDD networks involved, including slots where the UL/DL direction is not specified, as well as synchronising the beginning of the frame across all networks.

e) *total radiated power* (TRP) - is a measure of how much power a composite antenna (AAS included) radiates.
By definition, TRP means the integral of the power transmitted in different directions over the entire radiation sphere as shown in the formula:

$$TRP \stackrel{\text{def}}{=} \frac{1}{4\pi}\int_0^{2\pi}\int_0^{\pi} P(\theta,\varphi)\sin(\theta)d\theta d\varphi$$

where

- TRP equals the total conducted power input into the antenna array system less any losses in the antenna array system,
- $P(\theta,\varphi)$ is the power radiated by an antenna array system in direction (θ,φ). This is given by the formula:

$$P(\theta,\varphi) = P_{Tx}g(\theta,\varphi)$$

where

- P_{Tx} denotes the conducted power (measured in Watts), which is input to the array system, and
- $g(\theta,\varphi)$ denotes the array systems directional gain along the (θ,φ) direction.

3.3.3.4.1. Technical conditions on the usage of the 3400-3800 MHz band by base stations

This section defines the block edge mask (BEM) by establishing the technical parameters for base stations, which – adequately aggregated – result in the respective mask.
BEM is an essential component of conditions necessary to ensure coexistence between networks exploited by different licence holders using adjacent frequency blocks, in the absence of bilateral or multilateral agreements between the operators of such neighbouring networks.

The BEM for a certain frequency block consists of several elements indicated in Table no. 23. The BEM is made up of an in-block element (for which a power limit is defined within the block assigned

to an operator) and of out-of-block elements – i.e. unwanted emissions such as out-of-band emission - for which corresponding power limits are defined as follows:

- the baseline power limit, designed to protect the spectrum resources of other operators,
- the transitional region power limits, enabling filter roll-off from the in-block to the baseline power limit,
- the additional baseline power limit is applicable only where necessary for the protection of radiocommunications equipment working in the frequency band below 3.4 GHz or above 3.8 GHz,
- the restricted baseline power limit, which applies only for protecting frequency blocks of other networks, in cases of unsynchronised or semi-synchronised operation (for which BEM is defined).

Table 23 – Definition of BEM elements

BEM element	Definition
in-block	Block for which the BEM is derived.
baseline	includes the whole frequency spectrum in the 3.4-3.8 GHz band used in TDD mode by MFCN networks (i.e. networks providing wireless broadband electronic communications services – WBB ECS), except for the concerned block (assigned to the operator and for which the BEM is derived) and the corresponding transitional regions.
transitional region	The transitional region applies to the 0 - 10 MHz below and above the block assigned to the operator. Note 1: Transitional regions do not apply to adjacent TDD blocks assigned to other operators, unless networks are synchronised. In such a situation, the baseline starts directly at the edge of the concerned block. Note 2: Transitional regions do not apply below 3400 MHz or above 3800 MHz.
additional baseline	below 3400 MHz and above 3800
restricted baseline	spectrum used for WBB ECS by networks unsynchronised or semi-synchronised with the block assigned to the operator

Explanatory note to Table 23:
The BEM elements are applicable to base stations with different power levels (typically referred to as macro, micro, pico, and femto[12] base stations).

To obtain the BEM for a specific block, the BEM elements defined in Table no. 23 are combined as follows:
1. The in-block power limit will be used for the specific block assigned to an operator, for which the BEM mask is derived;
2. Transitional regions are determined, and corresponding power limits are used.
3. For the rest of the spectrum actually designated for use by the MFCN networks providing WBB ECS, except for the concerned block (assigned to the operator and for which the BEM is derived) and the corresponding transitional regions, baseline power limits will be used;
4. Restricted baseline power limits corresponding to the restricted baseline will be used for frequency blocks of other MFCN networks providing WBB ECS and operating in unsynchronised or semi-synchronised mode with the respective operator's network;
5. For the spectrum situated below the 3400 MHz limit, the additional baseline power limit corresponding to the additional baseline will be used;

[12] These terms are not uniquely defined and refer to cellular base stations with different power levels, which decrease in the following order: macro, micro, pico, femto. In particular, femto cells are small base stations with the lowest power levels, which are typically used indoors.

6. For the spectrum situated above the 3800 MHz limit, the additional baseline power limit corresponding to the additional baseline will be used.

Tables 24-28 contain the power limits corresponding to the various BEM elements.

In Tables 25 and 26, parameter P_{Max} is the maximum carrier power (dBm) for the concerned base station, defined and measured differently, based on the radiating system type - as described below:

P_{Max} is defined and measured as EIRP (effective isotropic radiated power, e.i.r.p) per carrier per antenna, for base stations with a radiating system with non-active antenna system (non-AAS).

P_{Max} is defined as maximum average power per carrier of a base station and is measured as TRP per carrier in a certain cell, for base stations with a radiating system with active antennas (AAS).

In tables 25, 26 and 29 the power limits are considered as the strictest (lowest) among two comparing requirements (limits): a limit obtained by a relative attenuation as to the maximum power per carrier, and a fixed upper limit.

Table 24 - In-block power limit

BEM element	frequency range	Non-AAS and AAS base stations
in-block	block assigned to the operator	62 dBm/5 MHz per antenna

Explanatory note to Table 24:
The value in the table above is a recommended one. The value of the respective parameter will be chosen on a case-by-case basis, with a view to avoiding the occurrence of harmful interference and with due regard to the relevant provisions in section 2.4. and to all the provisions of subsection 3.3.3.4.1 of the Terms of Reference, to the provisions of the 3400-3800 MHz Strategy and to the regulations in force regarding the limitation of population exposure to electromagnetic fields, as well as to the obligations regarding the radio frequency usage in border areas.

For femto base stations, the use of power control is mandatory in order to minimise interference to adjacent channels. The requirement regarding power control for the femto base stations is triggered by the necessity to reduce interference to the equipment the consumers may use and which, therefore, may be uncoordinated with the neighbouring networks.

Table 25 – Baseline power limits for synchronised MFCN networks

BEM element	Frequency range	Power limit
baseline	In the 3400-3800 MHz band, below -10 MHz offset from lower block edge In the 3400-3800 MHz band, above 10 MHz offset from upper block edge	EIRP (for non-AAS): min (P_{Max}–43, 13) dBm / 5 MHz per antenna TRP (for AAS): min (P_{Max}–43, 1) dBm / 5 MHz per cell *
* In a multi-sector base station, the radiated power limit applies to each one of the individual sectors.		

Explanatory note to table 25:
Fixed comparison level – i.e. 13 dBm/5 MHz for non-AAS or 1 dBm/5 MHz for AAS – ensure an upper limit for harmful interference generated by a base station. When two TDD blocks are synchronised, no interference will occur between base stations.

Table 26 - Transitional power limits, for synchronised MFCN networks

BEM element	Frequency range	Power limit
transitional region	-5 to 0 MHz offset from lower block edge 0 to 5 MHz offset from upper block edge	EIRP (for non-AAS): min (P_{Max}–40, 21) dBm / 5 MHz per antenna TRP (for AAS): min (P_{Max}–40, 16) dBm / 5 MHz per cell *
transitional region	-10 to -5 MHz offset from lower block edge 10 to 5 MHz offset from upper block edge	EIRP (for non-AAS): min (P_{Max}–43, 15) dBm / 5 MHz per antenna TRP (for AAS): min (P_{Max}–43, 12) dBm / 5 MHz per cell *
* In a multi-sector base station, the radiated power limit applies to each one of the individual sectors.		

Table 27 – Restricted baseline power limits, for unsynchronised and semi-synchronised MFCN networks

BEM element	Frequency band	Power limit
restricted baseline	For the 3400-3800 MHz band, unsynchronised or semi-synchronised blocks below the lower block edge For the 3400-3800 MHz, unsynchronised or semi-synchronised blocks above the upper block edge	EIRP (for non-AAS)*: –34 dBm / 5 MHz per cell ** TRP (for AAS): –43 dBm / 5 MHz per cell **
* Where there is no risk of harmful interference to macro base stations, operators of femto base stations in adjacent channels may negotiate an exception for this value of the baseline power limit. In such cases, the value –25 dBm / 5 MHz (EIRP per cell) may be used.		
** In a multi-sector base station, the radiated power limit applies to each one of the individual sectors.		

Explanatory note to Table 27:
These restricted baseline power limits are used for operation in unsynchronised or semi-synchronised mode of base stations in different networks, if geographical separation is not possible.

Table 28 - Additional baseline power limits (for protecting radiocommunications systems below 3400 MHz)

BEM element	Frequency range	Power limit
additional baseline	below 3380 MHz	EIRP (for non-AAS): –50 dBm/MHz per antenna TRP (for AAS): –52 dBm / MHz per cell *
* In a multi-sector base station, the radiated power limit applies to each one of the individual sectors.		

Explanatory note to Table no. 28
The additional baseline power limits indicated in the table above will apply only to outdoor cells.

Table 29 – Additional baseline power limit (for protecting radiocommunications systems above 3800 MHz)

BEM element	Frequency range	Power limit
additional baseline	3800 – 3805 MHz	EIRP (for non-AAS): min (P_{Max}–40, 21) dBm / 5 MHz per antenna TRP (for AAS): min (P_{Max}–40, 16) dBm / 5 MHz per cell *
additional baseline	3805 – 3810 MHz	EIRP (for non-AAS): min (P_{Max}–43, 15) dBm / 5 MHz per antenna TRP (for AAS): min (P_{Max}–43, 12) dBm / 5 MHz per cell*
additional baseline	3810 – 3840 MHz	EIRP (for non-AAS): min (P_{Max}–43, 13) dBm / 5 MHz per antenna TRP (for AAS): min (P_{Max}–43, 1) dBm / 5 MHz per cell *
additional baseline	above 3840 MHz	EIRP (for non-AAS): –2 dBm / 5 MHz per antenna TRP (for AAS): –14 dBm / 5 MHz per cell *
* In a multi-sector base station, the radiated power limit applies to each one of the individual sectors.		

Explanatory note to Table 29:
The additional reference power limits in the table above are indicated for information purposes only and will apply only upon the Authority's request, if the case arises.

3.3.3.4.2. Technical conditions for the use of the 3400 – 3800 MHz band by terminal stations

This section defines the in-block power limit for the terminal station, according to Table 30.

Table 30 – In-block power limit

BEM element	Frequency range	Power limit

in-block	block assigned to the operator	maximum 25 dBm *
* This power limit is specified as EIRP for terminal stations designed to be fixed or installed and as TRP for terminal stations designed to be mobile or nomadic. EIRP and TRP are equivalent for isotropic antennas. This value includes a tolerance (of up to 2 dB), defined in the harmonised standards, to take into account operation under extreme weather conditions and production spread.		

Explanatory note to table no. 30:
The value in the table is recommended only. This value will be adjusted accordingly, on a case-by case basis, if harmful interference occurs or to ensure compliance with the relevant provisions of sections 2.4., and with all the provisions of section 3.3.3.4.2. of the Terms of Reference, of the 3400-3800 MHz Strategy, and of the Position Paper, with the regulations in force on limiting human exposure to electromagnetic fields, as well as with the obligations regarding frequency usage in border areas.

3.3.3.5. Technical conditions on frequency usage in border areas

In border areas, licence holder will use the allotted frequency blocks upon coordination with the communications administrations of the neighbouring countries, with due regard to the requirements arising from the application of international agreements in which Romania is a party or from the applicable international regulations regarding frequency coordination.

Future agreements or subsequent amendments of the existing agreements may complete or replace some of the provisions under section 3.3.3.5 and of its subsections.

Where technical arrangements have been concluded between the operators and approved by the authorities of the neighbouring countries involved, the frequencies may be used under different conditions than those specified in the following subsections. An arrangement concluded between operators may preclude the usage of frequencies in shared bands, on both sides of the border, in accordance with the provisions stipulated in the agreements concluded between Authorities.

The Authority will make available to the bidders the bilateral or multilateral agreements that are relevant for the frequency spectrum being auctioned off, in English, respectively in Romanian – for bilateral agreements concluded with the Republic of Moldova – as PDF files.

3.3.3.5.1. Technical conditions on the usage of the 800 MHz band in border areas

a) Coexistence between MFCN networks in border areas

- For the coexistence of MFCN to be implemented on the territory of Romania and the MFCN networks to be deployed on the territory of Ukraine and of Serbia in the 800 MHz band, in border areas, the provisions of the following multilateral agreement will apply:
  - *"Technical Arrangement between the national authorities for the management of frequencies of Austria, Croatia, Hungary, Romania, Serbia, The Slovak Republic and Slovenia on border coordination for terrestrial systems capable of providing electronic communications services in the 790-862 MHz frequency band, concluded in Budapest, on 14 February 2018".*

- For the coexistence of MFCN to be implemented on the territory of Romania and the MFCN networks to be deployed on the territory of the Republic of Moldova in the 800 MHz band, in border areas, the provisions of the following bilateral agreement will apply:
  - *"Technical Arrangement between the National Authority for Management and Regulation in Communications of Romania and the Public Institution "National Radio Frequency Management Service" (NSRFM) of the Republic of Moldova on border coordination for terrestrial systems capable of providing electronic communications services in the 790-862 MHz frequency band, concluded in 2021.*

- In the absence of bilateral agreements with the neighbouring countries, the applicable provisions are those of No. 5.316B and 5.317A of Art. 5 of RR-ITU and, where usage is harmonised for MFCN on both sides of the border, the relevant provisions of Recommendation ECC/REC/(11)04 on cross-border coordination for Mobile/Fixed Communications Networks (MFCN) in the frequency band 790-862 MHz (amended on 3 February 2017) shall apply.

b) Protection of aeronautical radionavigation systems

As previously shown in Section 2.3.1.1, in accordance with No. 5.312 of Art. 5 in the RR-ITU, the frequency band 790-862 MHz or portions thereof are allocated to the aeronautical radionavigation service on a primary basis, in Ukraine and Bulgaria.

In accordance with the provisions of No. 5.316B, the allocation to the mobile, except aeronautical mobile, service in the frequency band 790-862 MHz is subject to agreement obtained under No. 9.21 with respect to the aeronautical radionavigation service in countries mentioned in No. 5.312. According to the provisions of Resolution 749 (Rev.WRC-19), based on the criteria in Annex 1 to the resolution, administrations intending to implement mobile service in Region 1 must obtain the prior agreement under No. 9.21 of the RR-ITU as to the radionavigation service in the countries mentioned in No. 5.312 of RR-ITU.

Moreover, in accordance with No. 5.317A, the usage of the 790-862 MHz band allocated to the mobile service, on a primary basis, in Region 1, for the implementation of IMT systems, is subject to the provisions of Resolutions 224 (Rev.WRC-19) and 749 (Rev.WRC-19).

With a view to implementing the above-mentioned regulations, on grounds of Art. 6 of RR-ITU, the telecommunications administrations of Romania and Hungary have concluded the following bilateral technical agreement:

- *"Technical Agreement between the telecommunications administrations of Romania and Ukraine on the coordination of the use of the 790-862 MHz frequency band by mobile radiocommunications networks with radio navigation and fixed services, concluded at Geneva in February 2012";*

With a view to ensuring Ukraine's aeronautical radionavigation systems protection from harmful interference, the base stations of the land mobile service in Romania operating in border areas must comply with the conditions in the above-mentioned arrangement.

c) Compatibility with DTT station in the neighbouring countries

DTT in neighbouring countries

For all the countries in Region 1 of the International Telecommunication Union (ITU) participating in the Geneva 2006 Conference, the 790-862 MHz band was planned for digital terrestrial television (DTT). The Plan associated to Geneva 2006 Agreement entered into force starting from 17 June 2015.

Concerning the usage of the 790-862 MHz band by the mobile service, except aeronautical mobile, respectively by IMT systems, the provisions of No. 5.316B and No. 5.317A of Art. 5 of RR-ITU will apply.

Currently, all the neighbouring countries, except Ukraine, use this band for the land mobile service.

In relationship with Ukraine, in February 2012, a bilateral agreement has been concluded to ensure the protection of the mobile service in Romania from the digital terrestrial television in Ukraine:

- "*Technical Agreement between the telecommunications administrations of Romania and Ukraine on the coordination of DVB-T frequency assignments in the 470-790 MHz band and the technical criteria for the coordination of the broadcasting service in Ukraine in the 790-862 MHz band with the land mobile service in Romania, concluded in Geneva in February 2012*".

In Ukraine, channel 61 (790-798 MHz) is still used by DVB-T transmitters in Khust and Rakhiv, according to the GE-06 Plan, with the following technical characteristics:

Location	TV channel	Geographical coordinates	ASL (m)	AGL (m)	ERP max (dBW)	Polarisation	Hef max (m)	Directivity	System
KHUST	61	23°E14'33"/ 48°N13'24"	800	110	42	V	749	D	C2
RAKHIV	61	24°E12'30"	1360	100	42	V	845	ND	C2

Once with the implementation of the new DTT plan in the 470-694 MHz band, this channel will be replaced by one below 694 MHz.

3.3.3.5.2. Technical conditions on the usage of the 2600 MHz band in border areas

a) Coexistence between MFCN networks in border areas:
   - Concerning the coexistence between MFCN networks to be operated on the territory of Romania with the MFCN networks to be operated on the territory of Hungary in the 2530-2570 MHz/2650-2690 MHz bands and in the 2600-2615 MHz sub-band, in border areas, the provisions of the following bilateral technical arrangement are applicable:
     - *"Technical arrangement between the national authorities for the management of frequencies of Hungary and Romania concerning the coordination in border areas for terrestrial systems capable of providing electronic communications services in the 2500-2690 MHz band, concluded in 2013"*.

The above-mentioned arrangement is to be reviewed with a view to applying updated Recommendation ECC (11)05 on cross-border coordination for Mobile/Fixed Communications Networks (MFCN) in the frequency band 2500-2690 MHz (approved on 26 May 2011, amended on 3 February 2017).

   - For the coexistence of MFCN to be implemented on the territory of Romania and the MFCN networks to be deployed on the territory of the Republic of Moldova in the 2530-2570 MHz/2650-2690 MHz sub-bands and in the 2600-2615 MHz sub-band, in border areas, the provisions of the following bilateral agreement will apply:
     - *"Technical Arrangement between the National Authority for Management and Regulation in Communications of Romania and the Public Institution "National Radio Frequency Management Service" (NSRFM) of the Republic of Moldova on border coordination for terrestrial systems capable of providing electronic communications services in the 2500-2690 MHz frequency band, concluded in 2021.*

   - In the absence of bilateral or multilateral agreements with the neighbouring countries, the provisions of No. 5.384A of Article 5 of the ITU Radio Regulations and – where frequency usage is harmonised for MFCN on both sides of the border – the relevant provisions of Recommendation ECC/REC/(11)05 on cross-border coordination for Mobile/Fixed Communications Networks (MFCN) in the frequency band 2500-2690 MHz (approved on 26 May 2011, amended on 3 February 2017) shall apply.

3.3.3.5.3. Technical conditions on the usage of the 3400-3600 MHz band in border areas

Currently there are no technical agrements regarding the preferential channels arrangements in the 3400-3800 MHz band to be used by the operators in Romania and in the neighbouring countries – in the respective bilateral and trilateral border areas – that take into account the provisions of Decisions 2014/276/EU or (EU) 2019/235.

Two of the countries neighbouring Romania are EU member states and therefore are the only neighbours subject to the obligation to implement the provisions of Decision (EU) 2019/235.

Moldova, Serbia and Ukraine are not bound to implement the provisions of the EU Decision, however they are members of the European Conference of Postal and Telecommunications Administrations (CEPT), therefore they must take into account Decision ECC/DEC/(11)06, as amended in October 2018. Nevertheless, within CEPT, the decisions adopted by the bodies of this international organisation have a different status than those adopted at EU level.
Therefore, the three countries mentioned above have no constraints on choosing a certain channelling arrangement or on the deadline for deploying broadband MFCN systems in the 3400-3800 MHz band.
In this context, the conclusion of bilateral/multilateral agreements with the neighbouring countries on the usage of the respective frequencies in border areas proves to be a complex proceeding, with technical and operational difficulties.

The steps taken by ANCOM in this regard are ongoing, such draft agreements being under analysis and negotiation only with the authorities of Hungary and the Republic of Moldova, for the time being. Romania is considering the possibility of joining a multilateral technical agreement in the 3400-3800 MHz band already signed by several European states (including Hungary and Serbia). Hungary and Romania intend to extend the debate on this topic with the Ukrainian authorities, but discussions thereon are still at an early stage.

ANCOM takes due diligence for the conclusion of bilateral or - as the case may be - multilateral agreements in the 3400-3800 MHz band with the communications administrations of all the neighbouring countries.
ANCOM will take into account the interests of the Romanian operators in the process of elaborating the above-mentioned technical agreements and of negotiating with the countries involved. Moreover, before finalizing and concluding the aforementioned international agreements, ANCOM will invite the involved operators' views thereon.

In border areas, licence holders will use the allotted frequency sub-bands in compliance with the requirements resulting from the international agreements in which Romania is a part or from the international regulations on frequency usage coordination that are relevant for the respective sub-bands.

Thus, where no bilateral or multilateral agreements have been concluded with the neighbouring countries on the operation of MFCN networks, in the 3400-3600 MHz band, in border areas, the provisions of No. 5.430A of Art. 5 of RR-ITU apply.

In the above-mentioned case - if the neighbouring countries reach consensus thereon - the relevant provisions of CEPT Recommendation ECC/REC/(15)01 amended in February 2020 on Cross-border coordination and planning for mobile/fixed communications networks (MFCN) in several frequency bands, among which: 3400-3800 MHz, also apply.
However, concerning Romania's bilateral or trilateral border areas for which no relevant bilateral/multilateral technical agreements (on the use of the 3400-3800 MHz band in the respective border areas) have been concluded with the parties involved - while the respective countries have not otherwise negotiated the implementation of Recommendation ECC/REC/(15)01 -, the allotted frequency sub-bands will be used in compliance with those technical conditions for which cross-

border frequency coordination is not necessary, in accordance with the relevant specifications in Recommendation ECC/REC/(15)01.

Upon the conclusion of the above-mentioned bilateral/multilateral agreements, the licence holders will do the planning for and use the allotted frequency sub-bands, in the border areas of Romania within the scope of the respective agreements, only in compliance with these technical agreements, which shall prevail upon all other provisions mentioned in this section.

If technical arrangements are concluded between operators and approved by the relevant administrations of the neighbouring countries involved, the frequencies may be used under different conditions than those specified in the above-mentioned bilateral/multilateral technical agreements. Thus, under such an arrangement concluded between the operators on both sides of the border, frequency usage conditions may diverge from the requirements stipulated in the technical agreements concluded between the communications administrations of the countries responsible for the networks of the respective operators.

3.4. Transfer of usage rights

The usage rights to be awarded may be transferred in accordance with Article 35 of the Framework-Ordinance.
Any agreement – irrespective of the form of concluding it – by which the frequency usage rights are alienated is forbidden.
At any transfer of rights, the Authority will watch the observance of the objectives considered when those rights were initially awarded. Therefore, a series of conditions are to be considered, as follows:

- the usage rights may be transferred to a third party, fully or partially, only upon ANCOM's prior agreement, along with the commitment to fulfilling all the accompanying obligations;
- the conditions and objectives set or envisaged in awarding the usage right/rights will be considered;
- the transfer of the usage rights must not result in competition constraints, hindering or distortion; especially, the transfer of the usage rights must not be a way for eluding the limitations regarding the gaining of the usage rights or the rules regarding the participants' independence established during the selection procedure;
- where the use of radio frequencies is harmonised at the European level, the transfer of the usage rights must not lead to changing the usage destination of the licenced frequencies in such a way as to breach this harmonised usage.

3.5. Amounts to be paid by the licence holders

The persons participating in the selection procedure organised in view of awarding the usage rights for the radio frequencies will take into consideration the following:

- the payment of the licence fee established during the competitive selection procedure under the conditions stipulated in Article 28 paragraph (2) of the Framework-Ordinance and in Government Decision no. ……/…… establishing the minimum amounts of the licence fees for the award of frequency usage rights;
- the payment of the spectrum usage tariff collected annually in accordance with Article 30 of the Framework-Ordinance and with Decision of the president of the National Authority for Management and Regulation in Communications no. 551/2012 establishing the spectrum usage tariff, with the subsequent amendments and completions.

3.6. Monitoring and control of compliance with the obligations

With a view to ANCOM's verifying the fulfilment of the coverage obligations, the holder will submit a set of documents presenting the coverage status in each of the localities chosen from Annex 1, within maximum 10 working days from each deadline established according to section 3.3.1. The documents must include at least the following:

- Notifications according to the standard format, specifying information on the sites, the values of the technical parameters for all the base stations by which the coverage with voice and data services is ensured at a downlink data transfer rate of at least 2 Mbps;
- Coverage maps of data services provided at a downlink data transfer rate of at least 2 Mbps, for each of the localities chosen from Annex 1, considering the notified stations, itemized and consolidated by technology, considering all the technologies used to provide the data service at a transfer rate of at least 2 Mbps;
- The coverage percentage for each locality, pointing out the calculation method and the technical parameters considered in achieving the coverage;
- Data regarding the equipment used in the measurements, the software and the maps used for prediction, the settings of the propagation model, the technologies used in achieving the coverage with data services and other variables that could influence the final results.

The verification methodology will be established by ANCOM, and the holder will provide, upon the Authority's request, the SIM cards necessary for access to the network and will provide a test server to prevent any limitations regarding delays, speed, etc.

The measurement methodology will be prepared in accordance with the applicable IMT standards and international practice.

In principle, the coverage will be verified by simulations and/or measurements at a fixed location or in drive-test sessions, performed with a view to validating the provided coverage maps and/or the simulations performed.

For performing the measurements in drive-test sessions, there shall be used an assembly consisting of one or more universal radio networks analysers (scanners) controlled by a computer running a dedicated software, reception antennas mounted outside the vehicle, GPS, etc.

The signal measurements shall be performed in drive-test sessions, on all accessible roads in the respective locality, without exceeding the speed of 50 km/h. The measurement results will be aggregated on a virtual grid consisting of bins (tiles with a side of 50m), the radio signal level being averaged for each cell identified in that tile, and the maximum signal level resulting from the averaging process will be taken into account.
A locality will be considered covered with signal in direct proportion to the number of covered bins in the total number of measured bins.

For determining the fulfilment of the obligation to cover a locality from the list of localities identified as uncovered or poorly covered, a locality will be considered covered with signal if at least 95% of the verified bins are covered with signal.

Road signs will be used to identify the boundaries of a locality. Where these are not available, the boundaries of the locality will be identified by consulting the information provided by the National Agency for Cadastre and Land Registration (ANCPI).

ANCOM will perform measurements to verify the download data speed in any locality chosen from Annex no. 1. These measurements shall also be carried out in the event of petitions concerning the lack of coverage or the poor quality of the services provided in the locality concerned.
For checking this parameter, there shall be used a mobile terminal or a computer with a data modem that enables data transfer at a higher speed than the one to be measured, on which a specialized software is running or the Netograf platform shall be used.

Measurements for verifying the transfer speed are performed statically, in at least 20 measurement points, evenly distributed within the locality, in areas where the radio coverage has been validated by the signal measurements.

At the selected points, **FTP transfer sessions will be performed, with a server provided by the operator to prevent any delays induced by the internet connection or using the Netograf platform**.

The coverage percentage of a locality will be obtained by multiplying the percentage of signal coverage by the percentage of service coverage. A locality will be considered covered if this percentage is higher than 95%.

3.7. Licence amendment and revoking

The licences for the use of radio frequencies awarded through the selection procedure may be amended, upon ANCOM's initiative, in accordance with the provisions under Article 24(3) of the Framework-Ordinance, in the following situations:

- to meet the requirements regarding the effective, rational and efficient use of the radio frequencies;
- to avoid harmful interferences;
- to implement the European harmonisation and international cooperation objectives regarding the use of radio spectrum;
- to observe the international agreements regarding the use of radio spectrum, to which Romania is a party;
- with a view to settling the situations of limited availability of the spectrum resources, in certain geographic areas and under specified technical conditions, in the radio frequency bands designated for the type of application destined to the provision of the network subject to the licence;
- for implementing the strategy on the development of electronic communications and management of the radio frequency spectrum;
- the NTFA has been amended.

Where one of the situations above occurs, ANCOM will notify the holder of the usage rights regarding the amendments to be made and will grant a term for the implementation of these amendments, a term that is proportionate to the qualitative or quantitative nature of the necessary amendments.

Moreover, ANCOM will also amend the licences for the use of the radio frequencies due to the occurrence of any of the circumstances below:

- transfer of the rights;
- partial waiver of the rights
- partial withdrawal of the rights, as the case may be, under the provisions of Article 27, Article 147 indent b) corroborated with or of Article 148 (1) of the Framework-Ordinance.

ANCOM may revoke the licences awarded through the selection procedure in the following cases:

- the total withdrawal of the frequency usage rights, in accordance with Article 27, Article 147 indent b), corroborated with Article 141(1) or of Article 148 of the Framework-Ordinance;
- revoking of the right to use radio spectrum, in accordance with Article 6(6) of the Framework-Ordinance.

Chapter 4 – THE SELECTION PROCEDURE

4.1. Available blocks and applicable restrictions

4.1.1. Description of the blocks offered during the procedure

The awarded amount of radio spectrum and its corresponding position within the band, which will be included in each licence to be issued (or amended) to a winner of the selection procedure are not set in advance, being the result of a two-phase competitive awarding mechanism:

- a first phase in which the participants compete for obtaining abstract frequency blocks, in one or in several bands, following which the amount of radio spectrum to be awarded to each participant will be determined (the primary rounds and, if applicable, an additional round of the auction stage, see Sections 4.7.1 and 4.7.2); and
- a second phase, at the end of which specific frequency blocks are assigned to individual bidders, by specifying the position within the band of the abstract blocks obtained in the previous phase (the assignment round of the auction stage, see Section 4.7.3).

Exceptions from the above rule are those frequency blocks whose position in the band is already known before the start of the selection procedure, these being declared from the beginning as specific blocks. In this case, the second phase mentioned above will not take place, only primary rounds and, if necessary, an additional round of the auction stage will be organized.

The abstract and specific frequency blocks to be auctioned are described in greater detail below.

A total of 28 frequency blocks will be auctioned off, of which 26 abstract (generic) blocks and two specific blocks (with their position clearly indicated within the band), sub-divided into 4 categories (A-D). A description of these categories, the corresponding frequency sub-bands and the block sizes are given in the table below.

Table 31– Description of the abstract and specific frequency blocks available in the selection procedure

Category	Sub-band	Block size	Number of blocks	Usage period
A	791-821/832-862 MHz FDD	2 x 5 MHz	1	01.01.2022 - 05.04.2029
B	2530-2570 /2650-2690 MHz FDD	2 x 5 MHz	8	01.01.2022 - 05.04.2029
C	2600-2615 MHz TDD	1 X 15 MHz	1	01.01.2022 - 05.04.2029
D	3400-3490 MHz TDD	1 x 5 MHz	18	01.01.2022 - 31.12.2025

The actual bandwidths and the limits of the frequency sub-band to be assigned to the winning bidders, corresponding to the abstract blocks acquired in the categories B and D will be determined in the assignment round. The specific frequency blocks (B1-B8, D01-D18, according to the tables below), whose award at an abstract level took place in the primary and/or additional rounds, will be assigned to each successful bidder in this assignment round.
The detailed description of the frequency blocks available in the selection procedure is presented in the four tables below.

Table 32 - 800 MHz FDD

Frequency band	Category	Frequency block code	Bandwidth	Frequency range (uplink / downlink)	Usage period
791-821/832-862 MHz (FDD)	A	A1	2 x 5 MHz	791.0 - 796.0 MHz/ 832.0 - 837.0 MHz	01.01.2022 – 05.04.2029

Table 33 - 2600 MHz FDD

Frequency band	Category	Frequency block code	Bandwidth	Frequency range (uplink / downlink)	Usage period
2500 – 2570 / 2620 – 2690 MHz (FDD)	B	B1	2 x 5 MHz	2530.0 – 2535.0 MHz/ 2650.0 – 2655.0 MHz	01.01.2022 – 05.04.2029
		B2	2 x 5 MHz	2535.0 – 2540.0 MHz/ 2655.0 – 2660.0 MHz	01.01.2022 – 05.04.2029
		B3	2 x 5 MHz	2540.0 – 2545.0 MHz/ 2660.0 – 2665.0 MHz	01.01.2022 – 05.04.2029
		B4	2 x 5 MHz	2545.0 – 2550.0 MHz/ 2665.0 – 2670.0 MHz	01.01.2022 – 05.04.2029
		B5	2 x 5 MHz	2550.0 – 2555.0 MHz/ 2670.0 – 2675.0 MHz	01.01.2022 – 05.04.2029
		B6	2 x 5 MHz	2555.0 – 2560.0 MHz/ 2675.0 – 2680.0 MHz	01.01.2022 – 05.04.2029
		B7	2 x 5 MHz	2560.0 – 2565.0 MHz/ 2680.0 – 2685.0 MHz	01.01.2022 – 05.04.2029
		B8	2 x 5 MHz	2565.0 – 2570.0 MHz/ 2685.0 – 2690.0 MHz	01.01.2022 – 05.04.2029

Table 34 - 2600 MHz TDD

Frequency subband	Category	Frequency block code	Bandwidth	Frequency range (uplink / downlink)	Usage period
2600-2615 MHz (TDD)	C	C1	1 x 15 MHz	2600.0 – 2615.0 MHz	01.01.2022 - 05.04.2029

Table 35 - 3400-3600 MHz TDD

Frequency band	Category	Frequency block code	Bandwidth	Frequency range (uplink / downlink)	Usage period
3400-3600 MHz (TDD)	D	D01	5 MHz	3400 – 3405 MHz	01.01.2022 – 31.12.2025
		D02	5 MHz	3405 – 3410 MHz	01.01.2022 – 31.12.2025
		D03	5 MHz	3410 – 3415 MHz	01.01.2022 – 31.12.2025
		D04	5 MHz	3415 – 3420 MHz	01.01.2022 – 31.12.2025
		D05	5 MHz	3420 – 3425 MHz	01.01.2022 – 31.12.2025
		D06	5 MHz	3425 – 3430 MHz	01.01.2022 – 31.12.2025
		D07	5 MHz	3430 – 3435 MHz	01.01.2022 – 31.12.2025
		D08	5 MHz	3435 – 3440 MHz	01.01.2022 – 31.12.2025

		D09	5 MHz	3440 – 3445 MHz	01.01.2022 – 31.12.2025
		D10	5 MHz	3445 – 3450 MHz	01.01.2022 – 31.12.2025
		D11	5 MHz	3450 – 3455 MHz	01.01.2022 – 31.12.2025
		D12	5 MHz	3455 – 3460 MHz	01.01.2022 – 31.12.2025
		D13	5 MHz	3460 – 3465 MHz	01.01.2022 – 31.12.2025
		D14	5 MHz	3465 – 3470 MHz	01.01.2022 – 31.12.2025
		D15	5 MHz	3470 – 3475 MHz	01.01.2022 – 31.12.2025
		D16	5 MHz	3475 – 3480 MHz	01.01.2022 – 31.12.2025
		D17	5 MHz	3480 – 3485 MHz	01.01.2022 – 31.12.2025
		D18	5 MHz	3485 – 3490 MHz	01.01.2022 – 31.12.2025

4.1.2. Reserve price per block (minimum licence fee) and eligibility points

There is a reserve price attached to each block, as well as a number of eligibility points.

The reserve price is equal to the minimum licence fee for each block.

The eligibility points are quotations of the frequency blocks auctioned off in the procedure, fulfilling the role of "bargaining chip" for gaining the usage rights for the respective blocks. Once with the submission of the initial bid form and of the participation bond, the bidders "acquire" a certain score of eligibility points, which corresponds to a maximum amount of abstract (non-individualised) frequency blocks, in any band, for which a bidder may submit a bid during the auction. Eligibility is therefore a vocation for gaining usage rights over an amount of spectrum and may change during the auction, according to the activity rules (Section 4.7.1). A bidder's eligibility in a certain round means the number of eligibility points the bidder holds in that round, defining that bidder's vocation for gaining the amount of abstract frequency blocks corresponding to that number of points, should the auction stage end with the respective round.
The table below summarizes the reserve prices and the eligibility points for the A to D categories.

Table 36 – Reserve prices and eligibility points for the frequency blocks available in the selection procedure

Category	Frequency band and operation mode	Block size	Validity	Reserve price/block (minimum licence fee) -euro-	Eligibility points/block
A	800 MHz FDD	2 x 5 MHz	01.01.2022 - 05.04.2029	_____	8
B	2600 MHz FDD	2 x 5 MHz	01.01.2022 - 05.04.2029	_____	2
C	2600 MHz TDD	1 x 15 MHz	01.01.2022 - 05.04.2029	_____	1
D	3400-3600 MHz TDD	1 x 5 MHz	01.01.2022 - 31.12.2025	_____	1

4.1.3. Spectrum caps

The usage rights bidders will be able to gain in the selection procedure are limited as regards the spectrum quantity they may acquire, as follows:

a) The total maximum amount of radio spectrum in the FDD bands below 1 GHz (cumulated, i.e. including the spectrum already held in the 800 MHz and 900 MHz bands) for which a bidder may hold usage rights following the selection procedure, in Romania, is 2x20 MHz;

b) The maximum amount of radio spectrum in the 3400-3800 MHz band for which a bidder may hold usage rights (following the selection procedure) for the period 01.01.2022 – 31.12.2025, is 150 MHz.

In the calculation of the maximum radio spectrum amounts mentioned above, the spectrum amounts for which the bidders have valid usage rights on the date of submitting their initial offers (in the application stage of the selection procedure), regardless of how these rights were obtained (previous licensing procedures or licence transfer), are included.

To verify the observance of the limitations imposed by the provisions of this Section, the usage rights held by persons from the same group with the bidder are also taken into consideration, "group" having the meaning provided in Section 4.3.1.

If the additional round is carried out, due to existence of unassigned frequency blocks following the primary rounds, the rules cited above on the limitation of the maximum amount of spectrum that an operator can hold shall no longer apply.

The bidders must bear in mind that, in the next selection procedure aimed at granting frequency usage rights in the 700 MHz band, the condition will be that a tenderer cannot hold more than 2x30 MHz in the FDD bands below 1 GHz (cumulated, i.e. including spectrum already held in the 800 MHz and 900 MHz bands).

The bidders must take into account that in the next selection procedure, which will be aimed at awarding frequency usage rights in the 3400-3800 MHz band, for rights of use that will take effect from 2026, a condition will be that a bidder cannot hold more than 150 MHz cumulated in this band following that selection procedure.

The rule set out in the fourth paragraph of this section shall also apply to the selection procedure to be organized after the selection carried on in accordance with the provisions of these Terms of Reference.

4.2. Overview of the procedure

4.2.1. Launching of the procedure

The selection procedure will be launched upon the publication of an auction notice on the ANCOM website (**www.ancom.ro**). The form and content of the notice are established by ANCOM.

4.2.2. Stages of the procedure

The competitive selection procedure is structured in four stages:

- application stage;
- qualification stage;
- auction stage;
- licence issuing stage.

4.2.3. Calendar of the selection procedure

A guiding calendar of the selection procedure is provided for in Table 37 below.

Table 37 – Guiding calendar of the selection procedure

The terms included in this table may be extended by ANCOM depending on the needs or may be outrun in case the term reserved for an activity of ANCOM may be reduced. The time intervals corresponding to bidders' activities may not be reduced.

Activity	Term	Date
Publication on the website of the auction notice and of the Terms of Reference (final version)	X	_____
Deadline for the submission of clarification requests concerning the selection procedure	X+1 week	_____
Publication of the answers to the clarification requests	7 days from each request	_____
Deadline for receiving the applications (including the participation bond)	X+5 weeks	_____
Presentation of the qualified/not-qualified applications	X+6 weeks	_____
Lodging of complaints	2 days from the qualification notice	_____
Settlement of complaints	3 days from the lodging of complaints	_____
Announcement concerning the need to hold the auction stage, as well as the starting dates of the primary rounds or Announcement of the fact that the primary rounds of the auction stage are not required, as well as announcement of the successful bidders of the abstract blocks and of the starting dates of the additional round or	X+7 weeks	_____

Activity	Term	Date
Announcement of the fact that the primary and/or additional rounds of the auction stage are not required, as well as announcement of the successful bidders of the abstract blocks and of the date of the assignment round		
Information session on the auction rules, dedicated to bidders		_____
Auction stage	X+7 weeks + 3 days	_____
Closing of the primary rounds and/or of the additional primary round	Y (≥X+8 weeks)	-
Assignment round	Y+3 days	-
Presentation of the outcomes of the procedure	Y+1 week	-
Deadline for issuing the licences	10.12.2021	-

"≤" – "smaller or equal"

"≥" – "higher or equal"

4.3. Rules concerning the participation in the selection procedure

Only the persons who purchased the present Terms of Reference may participate in the selection procedure. The price of the Terms of Reference is 5,000 lei. The Terms of Reference may be obtained from the ANCOM headquarters in 2 Delea Noua Street, Sector 3, Bucharest or, upon buyer's request, may be sent to that buyer in physical or electronic format, upon presentation by the interested person of:

- the document certifying the payment of the non-reimbursable amount of 5,000 lei, representing the countervalue for the Terms of Reference, either at the ANCOM pay desk in 2 Delea Noua Street, Sector 3, Bucharest or in the ANCOM account no. RO03TREZ7005025XXX000274 opened with the Activity of Treasury and Public Accountancy of Bucharest, whereas the payment order must specify ANCOM as the ***Beneficiary*** and that the payment represents the countervalue for the Terms of Reference;
- the mandate, in original, of the person delegated to collect the Terms of Reference.

Should the payment for the Terms of Reference be made from abroad, the interested person can pay the amount mentioned above, in euro, at the exchange rate communicated by the National Bank of Romania, valid on the date of payment, in the account RO86RNCB0082044181470003 opened with the Romanian Commercial Bank – Unirea Branch.

A participant in the selection procedure may submit only one bid.

By submitting the application form, the participant unconditionally and irrevocably accepts the rules concerning the participation in the selection procedure described in Sections 4.3.1-4.3.5, as well as the applicable sanctions in the event of breaching these rules, specified in Section 4.3.6.

4.3.1. Rules on the participants' independence

A candidate/bidder that is a member of the group of another candidate/bidder may not participate in the selection procedure.

In view of enforcing this rule, the notion "group of the candidate/bidder" has the meaning set, for the purposes of verifying the economic concentrations, in the Instructions of 5 August 2010 on the concepts of economic concentration, involved company, full operation and turnover, approved by Order no. 386/2010 of the Competition Council's president. In this respect, the notion "group of the candidate/bidder" is defined as including the following entities:

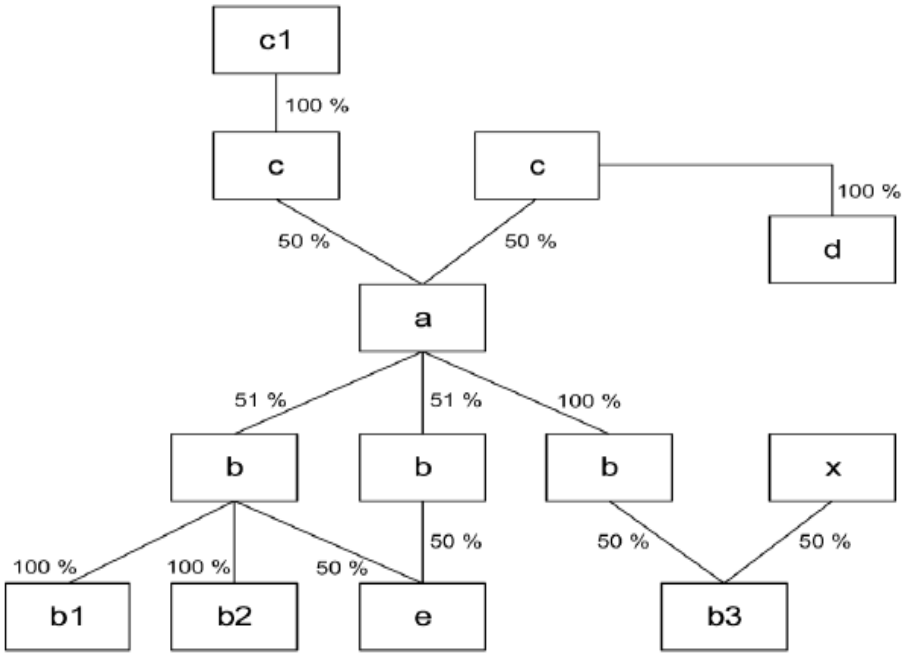
a) the candidate/bidder;
b) the companies in which the candidate/bidder, directly or indirectly:
   (i) holds more than half of the social capital or of the operating capital; or
   (ii) has the competence to exercise more than half of the voting rights; or
   (iii) has the competence to name more than half of the members of the supervision board or of the management board; or
   (iv) has the competence to name more than half of the members of the bodies which legally act on behalf of the respective companies or has the right to lead the activities of the respective companies;
c) the companies which hold within the candidate/bidder the rights or competences specified under letter b);
d) the companies in which a person holds within the candidate/bidder the rights or competences specified at letter b);
e) the companies within which two or more of the persons provided for under letters a)-d) hold together the rights or competences specified at letter b).

The competences specified under letter b), on the exercise of voting rights or naming of members, may derive from a *de jure* situation (constitutive act, contractual agreements etc.) or a *de facto* situation (the competences are exercised *de facto*, in the absence of certain provisions). The exercise of competences as a result of a *de facto* situation are determined according to the Instructions of 5 August 2010 on the concepts of economic concentration, involved company, full operation and turnover, approved by Order no. 386/2010 of the Competition Council's president.

The right to lead the activity of the company may result, among others, from holding the voting rights (standalone or in combination with contractual agreements, such as the shareholders' agreement) which allows for establishing the strategy of a company, based on certain rightful stable elements. The right to lead also includes the situations where the candidate/bidder holds, alongside third parties, the right to jointly manage the activity of a company.

The figure below provides a graphical exemplification of the notion "group of the candidate/bidder".

Figure 9 – Example of structure of the group of a candidate/bidder



Legend of the represented categories:

a = candidate/bidder;
b = subsidiaries of the candidate/bidder;
    b1, b2 = subsidiaries of the companies in category "b";
    b3 = companies jointly held by the "b" category companies with third parties;
c = parent companies of the candidate/bidder;
    c1 = parent companies of the companies in category "c";
d = other subsidiaries of the companies in category "c";
e = companies jointly held by two or more companies in a group;
x = third party.

4.3.2. Rules relating to agreements between the participants

The conclusion of, or the attempt to conclude, any agreements between the participants in relation to the selection procedure, during the procedure or previously to the procedure being held, is forbidden.

The scope of this interdiction covers the agreements between the candidates/bidders themselves and the agreements involving members of the groups of different candidates/bidders.

4.3.3. Rules relating to the confidentiality of information

The participants are forbidden to disclose confidential information to other participants or third parties, during the procedure or previously to the procedure being held.

The scope of this interdiction covers:
a) the disclosure of confidential information by the candidates/bidders themselves and by members of the group of a candidate/bidder;
b) the disclosure of confidential information to the candidates/bidders themselves and to members of the group of a candidate/bidder.

This interdiction does not apply to the disclosure of information to companies within the same group, to the candidate's/bidder's employees or to the candidate's/bidder's lawyers or consultants. These entities or persons have the obligation to keep confidential the information they received.

For enforcing this rule, "confidential information" means the information of any kind which concerns, directly or indirectly, the strategy of a participant within the selection procedure or any bid which a participant submitted or intends to submit within the procedure, regardless of the support of such information.

4.3.4. Rules relating to the participants' conduct

During the selection procedure, the participants will refrain from any actions that might affect the conduct of the procedure or its outcomes, including, for instance:
a) the attempt to influence the members of the Commission, to hinder in any way the decisions of the Commission, or to influence or hinder the actions of other participants in the procedure;
b) the attempt to contact the members of the Commission in other way or on other issues than those specified in Sections 5.1.3, 5.1.4 and 5.1.5, from the moment when the envelopes containing the application files are opened and until the moment the licences are issued;
c) any conduct which constitutes a threat for, or an intimidation to, the other participants or the members of the Commission, irrespective of the pursued goal;
d) the attempt to reach the other bidders, directly or indirectly, in any of the locations made available to them or sited in the premises where the selection procedure is being held;
e) the transmission of communications on the progress of the selection procedure, the participants in this selection procedure or any other details that may arise during the procedure;
f) the disturbance of the conduct in good conditions of the bidding rounds during the auction stage etc.

4.3.5. Rules relating to the submission of information to the Commission

At any time during the selection procedure, the Commission may request any participant any clarifications, documents or information, indicating as well the deadline by which these must be submitted, in view of establishing or clarifying the actual situation which:

a) grounds or grounded the qualification of a candidate; or
b) might lead to the finding of certain breaches by one or more participants of the rules provided for in Sections 4.3.1-4.3.4 above.

The participants have the obligation to comply with the information requests addressed by the Commission, within the term established by the latter.

Considering the importance of ensuring the integrity of the selection process, the terms granted by the Commission may sometimes be very short, to allow maintaining or rapidly restoring the normal course of the procedure and/or to prevent the destruction of certain evidence, especially if there are indications concerning the breach of the rules laid down in Sections 4.3.1-4.3.5.

Furthermore, the participants have the obligation to provide truthful, accurate and complete information in the application file as well as anytime during the procedure. In the event of changes in the information grounding the qualification, occurred subsequently to a candidate's qualification, the candidate/bidder concerned, as well as any other participant to the procedure aware of the respective changes, has the obligation to notify at once the Commission on the respective changes. The Commission has the obligation to analyse the respective changes and to reconsider the decision on the participant's admission, if the respective changes involve an alteration of the actual situation which grounded the qualification decision to such extent that the qualification criteria are not fulfilled anymore.

4.3.6. Applicable sanctions

If, during the selection procedure, the Commission discovers breaches of the rules specified in Sections 4.3.1-4.3.5 above, the Commission will disqualify from the procedure all the participants involved and will withhold the participation bond submitted by these participants. If the breach of the rules under Section 4.3.1 is discovered during the qualification stage, then the rules mentioned in Section 4.6.2 will apply.

If the breach of the aforementioned rules is discovered after the issuance of the licences for the use of radio frequencies, ANCOM may revoke the licences awarded to the participants involved and/or may withhold the participation bonds they had submitted, as applicable.

4.4. Participation bond

4.4.1. Format of the bond

The participation bond is set up as a bank guarantee letter issued by a banking company and is submitted in original within the application file, in the amount provided for in Section 4.4.2 and for the period specified in Section 4.4.3.

The bond must be irrevocable and unconditional.

The bank guarantee letter must provide that the payment of the bond will be executed unconditionally, respectively upon the first and plain request of ANCOM, based on the latter's declaration regarding the bidder's classification in one of the bond execution cases presented in Section 4.4.4.

The participation bond can be set up under the form of several bank guarantee letters that can be issued by different companies, each such letter or instrument having to observe all the format requirements stipulated in this Section.

The participation bond will be set up in the format available under Annex 5. The submission of the letter of bank guarantee in another format is not allowed.

4.4.2. Value of the bond

The value of the bond is 50% of the price of the initial bid, established according to Section 4.5.3. The participation bond will be included in the application form and submitted as part of the application file.
During the selection procedure, if the offered price exceeds the threshold of 150% of the initial bid, the Commission may ask the bidders to increase the value of the bank guarantee letter submitted within the application file so that the total value of the submitted bond/bonds could stand for at least 50% of the price offered at the respective time. In such case, the bank guarantee letter must observe all the requirements specified in Sections 4.4.1, respectively 4.4.3.

4.4.3. Validity of the bond

The participation bond will be valid at least between the date when the application file is submitted and _____[13].

4.4.4. Cases of bond withhold

The purpose of the participation bond is to protect ANCOM in the event of an improper conduct of the participants during the procedure and to ensure, in particular, that:

a) the licence fee owed by the winning bidders is paid for all the frequency blocks awarded following the selection procedure, and the corresponding licences are issued;
b) the candidates/bidders observe the rules concerning the participation in the selection procedure.

The participation bond is withheld in the following cases:

a) if the winning bidder does not pay in due time the owed price representing the licence fee, under the law;

[13] ANCOM may ask the bidders to extend the validity of the bank guarantee letter if the timeframe for carrying out the auction stage exceeds the date of _____.
The deadline for submitting the bank guarantee letters whose validity was extended according to the previous paragraph may not be longer than 10 calendar days from ANCOM's request date.

b) if the winning bidder waives the right to be awarded the licence for the use of radio frequencies;
c) if a candidate/bidder breaches the rules concerning the participation in the selection procedure, set out in Sections 4.3.1-4.3.5 herein.

4.4.5. Return of the bond

The participation bond is returned to the participants in the selection procedure, to the extent no withholds in the sense of Section 4.4.4 were made, as follows:

a) to the candidates that did not qualify to the next stages of the selection procedure, within 30 days from the communication on the candidature rejection;
b) to the bidders that did not gain radio frequency usage rights following the procedure, within 30 days from the date on which the Commission communicates the closing of the auction stage;
c) the bidders that gained radio frequency usage rights following the procedure for those blocks whose reserve prices, taken together, are below the price of the initial bid, may obtain, upon request, after the final price according to Section 4.8.1 letter a) is communicated, the reduction of the participation bond to 50% of the reserve price for the blocks won;
d) to the bidders that gained radio frequency usage rights following the procedure, within 30 days from the payment of the licence fees;
e) if the selection procedure is cancelled in accordance with the provisions of Section 6.3, the participation bond will be returned to all the candidates/bidders, within 30 days from the communication on the cancellation of the selection procedure.

In view of enforcing the provisions under letter c) above, the bidders will need to present, alongside the mentioned request, a bank guarantee letter for the reduced value indicated under letter c) above, while the initial bond will be returned within 30 days from the date when ANCOM receives the request. Where the bond was set up under the form of several bank guarantee letters or guarantee instruments, the partial return of the bond will be made by returning some of the bank guarantee letters or guarantee instruments if the provisions under letter c) may be applied by this way.

The participation bond will be returned by returning the bank guarantee letter/letters, in original, upon signature. At the express request of the participant in the selection procedure, ANCOM may issue a letter whereby to express its agreement on the cancellation of the bank guarantee letter, a document exclusively addressed to the bank which issued the bank guarantee letter.

4.5. Application submission stage

4.5.1. Application file

During this stage, the interested persons must submit to ANCOM an application file. Once the file submitted, the person concerned becomes a *candidate*, a quality which the respective person keeps until the decision on the admission to the next stages of the selection procedure (when the candidate becomes a *bidder*) is communicated, or until the decision on the rejection of the candidature (when the respective person is eliminated from the procedure) is communicated.

The application file must contain the following documents:

a) documents on the candidate's standing;
b) the application form (including the initial bid);
c) the participation bond.

These documents will be presented in detail in Sections 4.5.2-4.5.5 below.

4.5.2. Documents on the candidate's standing

The application file will contain the following documents presenting the candidate's standing:

a) the authenticated power-of-attorney granted to maximum 3 natural persons acting on behalf of the candidate, certifying that the respective persons are authorised to engage the candidate during the selection procedure and showing the limits of each of the respective power-of-attorney, without a limitation concerning the joint signature of the mandated persons; the authenticated power-of-attorney is not required in the case of the person mandated to legally represent the candidate;
b) the acknowledging certificate (in original) issued by the National Trade Register Office at most 30 days before the date of submitting the application file, which shows at least:
   (i) the legal identification attributes;
   (ii) the company life duration;
   (iii) the main and secondary (if applicable) object of activity;
   (iv) the social capital (subscribed and paid-in);
   (v) the administrators/members of the Management Board and Managers (in unitary system)/members of the Supervision Council and members of the Directorate (in dual system), the identification data and the length of the mandate with the conferred powers;
   (vi) the indicators from the annual financial statements;
   (vii) the non-existence of a dissolution procedure either voluntary, judicial or following the enforcement of the insolvency procedures;
   (viii) the status of the company.
c) the registration certificate issued by the National Trade Register Office;
d) the candidate's constitutive act (company contract and/or statute), in a consolidated updated form (including all changes to date);
e) the structure of the candidate's group, valid at the time of submitting the application file, which must include the names and addresses of all the companies enlisted at letters a)-e) in Section 4.3.1, as well as the connections between them;
f) the certificate of fiscal acknowledgement of the compliance with the outstanding payment obligations to the state budget, the social insurance budgets and special tax, contributions and other revenues funds, issued according to the legal regulations in force (in original);
g) the financial statements for the last year, approved under the law, according to the accounting standard applied; in the case of a newly established company, it is not necessary to submit this information, but it is necessary to observe the requirements concerning the subscribed and paid-in social capital;
h) the statement of the candidate's legal representative regarding the capacity as a participant in the selection procedure (in original), drawn up according to the format set in Annex 2.

As for associations, each member of the association must submit the documents enlisted at letters b)-h) above. The document under letter a) will be submitted by the representative of the association.

The associations must present an association agreement concluded between all the members of the association. This agreement will be presented, in original, in an authentic form and will contain at least the following elements:

a) the names of the members of the association and the share of each of the members within the association;
b) the legal person, member of the association, which represents the association within the present procedure;
c) the firm commitment of all the association's members to submit a joint bid during the selection procedure and grant unconditional financial and/or technical support to the legal person that will be issued the licence and represents the association;
d) the validity period of the association agreement; this is not to cease before _____.

In the cases where the original documents are not requested, the candidate will present a legalised copy or a copy of the documents certified by the candidate for the conformity with the original. The person performing the conformity certification on behalf of the candidate must be one of the persons mandated to represent the candidate according to letter a) of the first paragraph in this Section.

4.5.3. The application form (the initial bid)

The application form must be filled in by one of the persons mandated to represent the candidate according to Section 4.5.2 letter a) or by the candidate's legal representative, in the format presented in Annex 3 hereto, without deletions and/or additions, and represents the initial bid of the candidate, should the latter be admitted to the next stages of the selection procedure, following the qualification stage.

In view of completing the application form, the candidate will select the number of blocks it wishes to acquire in each of the A to D categories, using the multiple answer boxes available in the table included in the application form. The candidate must observe the limitations on the acquiring of the usage rights laid down in Section 4.1.3, as well as the conditions cited in Section 4.7.1; its candidature will otherwise be rejected.

The price of the initial bid is established as follows:

a) for each category, the number of blocks in that category included in the bid will be multiplied by the reserve price for that category (minimum licence fee), specified under Section 4.1.2; and

b) the values calculated according to letter a) will be summed up for all block categories.

The initial bid must be firm, definitive, irrevocable, unconditional and valid at least until _____.

Alternative bids are not accepted.

4.5.4. Bank guarantee letter

The application file will contain the bank guarantee letter, in original, in the format and amount provided for in Section 4.4, according to the model in Annex 5. The submission of a bank guarantee letter in another form is not allowed.

4.5.5. Preparation and submission of the application file

4.5.5.1. Language of the documents

All the application documents will be elaborated in Romanian, including the annexes. Nevertheless, in the case of the annual financial statements, although the provision of a version in Romanian is preferable, the candidates may present a version in English, if only this one is available.

4.5.5.2. Form of the documents

The representative authorised to engage the candidate has the obligation to sign each page of the application file (original and copies), as well as to attach an inventory list of the documents submitted.
As for the documents issued by official institutions/bodies authorised therefor, the respective documents must be signed and sealed according to the legal provisions. Any deletion, addition, interlining/underlining or overwriting are valid only if endorsed by the person authorised to sign the documents. These documents shall not be signed by the candidate's authorised representative.

The application file will be submitted in original and in one hardcopy, certified by the candidate for conformity with the original, as well as in electronic format, on CD with full rights over the use of files, in Microsoft Word, Microsoft Excel and/or Adobe Acrobat format. The original documents will be signed by the representative authorised to engage the candidate.

If the application file contains confidential information, an inventory list of this information will be provided in a separate annex. It is recommended that the candidate explicitly signals that the respective information is confidential. ANCOM will keep confidential this information to the extent the information is not considered public under the law.

4.5.5.3. Envelope sealing and marking

The candidate must seal the original and the copy in separate envelopes, marking the envelopes correspondingly with the wordings "ORIGINAL" and, respectively, "COPY". The envelopes will be introduced in a non-transparent and adequately closed exterior envelope. The exterior envelope must bear the inscription **"APPLICATION FILE FOR THE PARTICIPATION IN THE 2021 SELECTION PROCEDURE"**, the ANCOM address, the name and address of the candidate. If the exterior envelope is not marked according to the aforementioned provisions, ANCOM is not liable for the mislaid documents or for the delayed reception of the documents.

The candidate will cover all expenses incurred by the preparation and submission of its application file. ANCOM shall not be in any way liable for the payment of these expenses, irrespective of the progress or outcome of the selection procedure.

4.5.5.4. Transmission and reception of the application file

The application file will be sent by post with confirmation of receipt or will be submitted personally to the ANCOM headquarters in 2 Delea Noua Street, Sector 3, Bucharest, and must be received by ANCOM until_____, 17.00 hours ("deadline for receiving the applications"), Romanian time. The files received by ANCOM after the deadline set for receiving the applications will not be taken

into consideration and shall be returned unopened to the address written on the envelope. The candidate must take all measures to make sure that its file is received by ANCOM by the deadline set for receiving the applications and will assume all the risks related to the transmission of the dossier, including force majeure.

ANCOM reserves the right to extend the deadline set for receiving the applications and, consequently, the date set for opening the envelopes containing the application files, case in which it will communicate the new deadline set for receiving the applications and, respectively, the new date set for opening the envelopes containing the application files, on its website (**www.ancom.ro**), at least 10 days before the initial deadline.

4.5.5.5. Modification of the application file

Any bidder has the right to modify or withdraw its application file only prior to the deadline set for receiving the applications and only by submitting a written request therefor, received by ANCOM before the deadline set for receiving the applications. While preparing and submitting the modified documents, the candidate has to observe the instructions included in Sections 4.5.5.1-4.5.5.4, with the amendment that the exterior envelope will mandatorily be marked with the wording **"MODIFICATIONS TO THE APPLICATION FILE FOR THE PARTICIPATION IN THE 2021 SELECTION PROCEDURE"**.

If the candidate withdraws its application file after the deadline set for reception, the participation bond will not be returned.

4.5.5.6. Opening of the envelopes containing the application file

The envelopes containing the application files will be opened by the Commission, on the first working day following the deadline set for their submission.

4.5.5.7. Clarification requests

Only the persons who purchased the Terms of Reference may request clarifications.

The requests for clarification will be addressed to ANCOM in writing, to its headquarters in 2 Delea Noua Street, sector 3, Bucharest, for the attention of the **Auction Commission for the 2021 selection procedure**, or in electronic format, having included, attached or logically associated an extended electronic signature based upon a qualified certificate that has not been invalidated or revoked at the respective moment, generated using a secured device for creating electronic signature, to **licitatie2021@ancom.ro,** until _____. ANCOM shall answer to the clarification requests until _____, at the latest.

The candidates will indicate, within the application file, a fax number and a valid e-mail address to which ANCOM may send its messages.

The ANCOM fax messages will be deemed transmitted when ANCOM receives the transmission confirmation generated by the fax machine upon sending the message.

Both the questions received and the answers thereto will be communicated to all the persons who purchased the Terms of Reference and will be published on the ANCOM website, without revealing the identity of the person who asked for the respective clarifications.

4.6. The qualification stage

In the qualification stage, the Commission evaluates the compliance of the candidates that submitted files during the application submission stage with a set of qualification criteria (Section 4.6.1) and, following evaluation, decides either the admission of the candidate to the next stages of the selection procedure or the rejection of the application.

4.6.1. Qualification criteria

In order to be admitted to the next stages of the selection procedure, the candidate must cumulatively fulfil the following qualification criteria:

a) the candidate must be a legal person (company) registered according to the law[14], as applicable;
b) the candidate must have submitted all the documents provided in Sections 4.5.2-4.5.4, completely and correctly prepared, no later than the deadline set for receiving the applications;
c) the life duration of the candidate company provided in its constitutive act must run at least until 31 December 2035;
d) the average turnover of the candidate for the last year must be the equivalent in lei of minimum 10,000,000 euros; in the case of a newly established company, the subscribed and paid-in social capital must be the equivalent in lei of minimum 1,000,000 euros;
e) the candidate must not be in a state of insolvency or liquidation, its business must not be managed by a syndic judge, its commercial activities, in their entirety, must not be suspended or the candidate must not be in a situation similar to those previously mentioned, regulated by the law;
f) the candidate must not be subject to a legal procedure launched upon its initiative and aimed at declaring it in one of the situations provided for at letter e);
g) the candidate must have submitted the participation bond (in original) in the form and amount specified under Section 4.4;
h) the bidder must have fulfilled the standing payment obligations to ANCOM, the state budget, the budgets of social insurance and the special tax, contributions and other revenues funds; the taxes, contributions and other revenues which benefited from payment facilitation (postponements, phasing etc.) granted by the competent bodies are not deemed standing payment obligations, to the extent the conditions imposed at the facilitation granting were observed;
i) the candidate must not be a member of another candidate's group;
j) the candidate must have purchased the Terms of Reference;
k) the candidate must observe within the application form the limitations set in Section 4.1.3, as well as the conditions laid down in Section 4.7.1.

As for the associations, each of the association members must fulfil all the criteria mentioned above, with the following exceptions:

- the criterion under letter c), which is to be fulfilled by at least one member of the association and by the person to whom the licence will be issued; and
- the criteria specified at letters g) and j), which are to be fulfilled by the designated representative of the association.

[14] Law no. 26/1990 on Trade register, republished, with the subsequent amendments and completions and Companies' Law no. 31/1990, republished, with the subsequent amendments and completions.

4.6.2. Evaluation of the application files

After the deadline set for receiving the applications, the Commission will evaluate all received application files, based on the qualification criteria (Section 4.6.1), and will decide on the admission of the candidate to the next stages of the selection procedure or on the rejection of the application.

At any time during the evaluation of the application files, the Commission may request any specifications, documents and/or additional information and/or clarifying documents, in view of establishing or clarifying the actual situation based on which a candidate's qualification is determined, while the rules under Section 4.3.5 and the sanctions under Section 4.3.6 will apply.

As regards the criterion under Section 4.6.1 letter i), if it finds that there is a connection of the type envisaged by this criterion between two or more candidates, the Commission informs all the involved candidates about this finding, requesting them to express in writing, within a certain term, the option for only one of the applications, to be maintained within the procedure. The non-expression of an option or the expression of several different options trigger the rejection of all implicated applications. To avoid any doubt, in accordance with the provisions under Section 4.3.1, corroborated with Section 4.3.6, in case the abovementioned situation is discovered after the qualification stage, all the involved bidders will be excluded from the procedure.

4.6.3. Announcing the results of evaluation of the application files and presenting the qualified candidates

Following the evaluation of each application file, the Commission may take one of the following decisions:

a) to admit the application, if all the qualification criteria are met; or
b) to reject the application, if at least one of the qualification criteria is not met.

After completing the evaluation of the application files, the Commission will communicate to each candidate the admission or the rejection of its application within the procedure, and implicitly, the participation in the subsequent stages of the selection procedure, in the case of qualified candidates.

When informing the candidate on its application admission, theCommission shall, at the same time, inform about the change of its status within the selection procedure into *bidder*.

When informing the candidate on its application rejection, the Commission shall, at the same time, inform that it is eliminated from the procedure and the reasons thereof. The candidate will also be informed on the term within which the participation bond will be returned in accordance with the provisions of Section 4.4.5, letter a).

The Commission will not communicate to the qualified candidates either the initial eligibility of the other qualified candidates or the identity of the candidates who did not qualify to the next stages of the selection procedure.

The participation bond will be returned to the candidates who did not qualify to the next stages of the selection procedure within 30 working days from the application rejection date. These candidates are further subject to the rules on information confidentiality provided for in Section 4.3.3, for the entire duration of the selection procedure.

4.6.4. Establishing and announcing the procedure continuation

During the qualification stage, the Commission evaluates the level of the aggregated (initial) demand of frequency blocks within each of the A to D categories, based on the applications forms submitted by the qualified candidates (bidders), and may take one of the following decisions:

a) to organise the auction stage starting with the primary rounds, if the aggregated demand exceeds the number of frequency blocks available in the selection procedure in at least one category; in this situation, the Commission will communicate each bidder the identity of all other bidders, the fact that the auction stage is required, as well as the starting date of the primary rounds;
b) to organise the auction stage starting with the additional primary round, if the aggregated demand does not exceed the number of frequency blocks available in the selection procedure in any category and there are blocks for which there is no demand; in this case, the Commission:
   (i) will communicate each bidder the identity of the other bidders, as well as the fact that the primary rounds of the auction stage are not required;
   (ii) will declare as winning all the initial bids of the bidders, which will thus be declared winning bidders, and will communicate each bidder the number of abstract blocks in each of the B and D categories and/or the specific blocks in the A and C categories that it won; and
   (iii) will communicate each bidder: (i) the basic price of its winning bid, which is the total price for all frequency blocks in the initial bid, and (ii) the specific basic prices for each of the blocks included in its winning bid, for the purpose of applying the provisions of Section 4.8.2 herein, which are equal to the reserve prices for the categories to which these blocks belong;
   (iv) will communicate each bidder the starting date of the additional primary round.
c) to organise only the assignment round of the auction stage, if the aggregated demand does not exceed the number of frequency blocks available in the selection procedure in any category and there are no blocks without demand; in this case, the Commission:
   (i) will communicate each bidder the identity of the other bidders, as well as that the primary rounds of the auction stage are not required;
   (ii) will declare as winning all the initial bids of the bidders, which will thus be designated winning bidders, and will communicate each bidder the number of abstract blocks in each of the categories B and D and/or the specific blocks in the A and C categories that it won; and
   (iii) will communicate each bidder: (i) the basic price of its winning bid, which is the total price for all frequency blocks in the initial bid, and (ii) the specific basic prices for each of the blocks included in its winning bid, for the purpose of applying the provisions of Section 4.8.2 herein, which are equal to the reserve prices for the categories to which these blocks belong;
   (iv) will communicate each bidder the starting date of the assignment round, only if the respective bidder has also won blocks in the B or D categories.

4.6.5. Disputes

A participant in the procedure may challenge the rejection of its application within 2 days from receiving the communication sent by the Commission in this regard, in accordance with the provisions under Section 4.6.3. The complaint must be made in writing and submitted to the ANCOM headquarters in 2 Delea Noua Street, Sector 3, Bucharest, by the mandated representative of the candidate, upon signature, or sent by mail, with confirmation of receipt.
The complaint may also be submitted in electronic format, having included, attached or logically associated an extended electronic signature based upon a qualified certificate that has not been invalidated or revoked at the respective moment, generated using a secured device for creating electronic signature. The extended electronic signature will be put by the person mandated to legally represent the candidate.

Within 3 days from the lodging of the complaints, a commission designated by decision of the ANCOM president (the "Commission for settling the complaints"), composed of other persons than those who were members of the Commission, will examine the lodged complaints. The Commission for

settling the complaints may extend the 3-day term, if the examination of the complaints involves the processing of a large volume of information. The complaints lodged within the due term will be settled in the sense of admission or rejection, while the complaints lodged after the due term will be rejected. The Commission for settling the complaints will conclude the minutes of its meetings, approved by the president of ANCOM, and will communicate each complainant the outcome of the lodged complaint, as comprised in the minutes.

The Commission will establish and announce the continuation of the procedure in line with Section 4.6.4 only after the expiry of the period for lodging the complaints set in this Section, and if complaints are lodged within the aforementioned period, only after the approval of the minutes on the settlement of complaints, in accordance with the provisions of this Section.

4.7. Auction stage (main stage)

The main stage consists of one or several primary rounds, followed by one additional primary round (if required) and one assignment round.

All bids submitted during the main stage are bids for frequency blocks packages. This means that a bid submitted in a round may be a winning one only in its entirety and that bidders cannot win a frequency blocks package for which they did not place a bid.

The maximum amount of spectrum for which a bidder may acquire usage rights is limited by the total number of eligibility points (Section 4.1.2), by the established spectrum caps (Section 4.1.3) and by the conditions set in Section 4.7.1.

4.7.1. Primary rounds

At the beginning of each primary round, the Commission communicates the bidders the price for a frequency block in each of the A to D categories. In the first primary round, the initial price for each of the A to D categories will be equal to the reserve price (minimum licence fee) for that category.

Each bidder is invited to submit one bid stating the categories and number of blocks in each category it wishes to bid at the price set by the Commission, subject to the activity rules described below and to the overall spectrum caps. When each primary round is closed, demand is aggregated across all bidders. If, in the respective primary round, demand (represented by the total number of blocks requested according to the bids) exceeds the number of frequency blocks available in one or several categories, another primary round is scheduled.

In the next primary round, the Commission will increase the price only for the blocks in the category or categories for which the demand exceeded the availability thereof in the previous round. The increase will be made by adding a bid increment to the price of the previous round, expressed as a percentage, in a pre-established value.

Thus, for the categories for which there is demand in excess, the Commission will set in the next primary round prices higher than the prices from the previous round, with a bid increment ranging between:

- 5% of the reserve price, starting with the second primary round until the round where the price will be equal or will exceed 125% of the reserve price;
- 2% of the reserve price, starting with the round immediately following the one in which the value set in the previous bullet was reached and until the round in which the price will reach or will exceed 150% of the reserve price;
- 1% of the reserve price, starting with the round immediately following the one in which the value set in the previous bullet was reached or exceeded.

The primary rounds end after a round in which there is no demand in excess for frequency blocks in any of the categories.

During the primary rounds, bidders are subject to activity rules whose purpose is to prevent the unnecessary extension of the procedure. As shown before, each frequency block has attached a number of eligibility points (Section 4.1.2). A bidder's activity in a certain round is expressed as the sum of eligibility points pertaining to the blocks included in its bid in that round. In any round, a bidder's eligibility is equal to that bidder's activity in the previous round.

Prior to beginning the auction, upon the set-up of the participation bond, each bidder holds a budget of eligibility points (initial eligibility), which defines its vocation (maximum) for acquiring the frequency usage rights. A bidder's initial eligibility is determined by the sum of the eligibility points pertaining to all the blocks included in its application form. A bidder's activity in the first primary

round cannot exceed its initial eligibility, and its activity in each subsequent primary round may not exceed its activity in the previous round. This means that a bidder's eligibility may remain constant or decrease throughout the primary rounds but it cannot increase. Therefore, the bidders are stimulated to bid in every round at a level that would enable them to gain the desired usage rights while avoiding the loss of vocation for acquiring those usage rights.

Following the primary rounds, the winning bids, respectively the winning bidders (see Section 5.3.6) and the basic prices they must pay (see Section 5.3.7) are determined.

4.7.2. Additionalprimary round

If, upon aggregating the initial bids or following the primary rounds, there will still be frequency blocks not awarded, ANCOM may decide to organise an additional primary round, according to the additional specific rules laid down below.
In this round, each bidder will be able to submit a bid indicating one or several packages containing one or more blocks, as well as the amount it is willing to pay for acquiring each such package. There are no maximum limits as to the bid amount but there are however minimum limits in this respect, pursuant to specific rules stated in Section 5.4.3.

All bidders are allowed to participate in the additional primary round, regardless of their eligibility at the closing of the primary rounds and regardless of whether they acquired or not frequency blocks during the primary rounds.

Following the additional primary round, the winning bids for the not awarded blocks remained after the primary rounds, respectively the winning bidders (see Section 5.4.5) and the basic prices they must pay (see Section 5.4.6) are determined.

4.7.3. Assignment round

The initial bids, the primary rounds and the additional primary round allow for establishing the number of generic (abstract) blocks the winning bidders will receive in each category, as well as the basic prices for the respective frequency blocks, but not the specific positions in the band of these blocks, which will determine the frequency sub-bands these bidders are to be allotted. The only exceptions are the specific blocks A1 and C1, which are awarded upon placing a winning bid either in the primary rounds or in the additional primary round.
The purpose of the assignment round is to determine the position in the band, following the primary and additional rounds, of the abstract blocks won by bidders in the B and D categories as well as the additional prices to be paid by each winning bidder for obtaining a specific allotment of frequencies.

All bidders that have won two or more blocks in the same category will receive adjacent frequency blocks allotments within the respective frequency band/sub-band available within the procedure.

The assignment round for the 3400-3600 MHz band will take place after the assignment round for the 2600 MHz band.

Each bidder that has won frequency blocks in B or D categories, based upon the initial bid or in the primary and additional rounds, will express its preferences, based on a list of pre-defined options regarding the specific allotments in each band of the obtained frequency blocks, as provided for by the Commission. In this regard, each winning bidder has the opportunity to bid the amount that it would be willing to pay for a specific allotment in each band, in addition to the overall basic price it has to pay, as resulted from the primary and/or additional rounds.
Winners that do not have any preference as regards the allotment options do not have to make an assignment bid.

The combination of bids identified as having the highest total value for each category of blocks is the winning combination for the respective category, and the bids compounding it are declared winning bids for that category.

If, following the primary and additional (if required) rounds, there is only one winning bidder in a certain category, an assignment bid for the frequencies in that category is not necessary. In such case, the sole bidder will be allotted the frequencies obtained according to the rules on the positioning of the not awarded blocks, described in Section 5.5.6. For the 3400-3600 MHz band, the additional rules in force for this band, detailed in Section 5.5.4, will also be considered.
No additional price will be paid for the allotment of frequencies in a band which has only one winning bidder.

The additional prices will be established according to Section 5.5.7.

4.7.4. Determining the winners and establishing the licence fees

The bidders that submitted valid bids during the last primary round and/or those that compose the winning combination resulted from the additional primary round, if the case, are designated as winning bidders. These bidders will obtain the usage rights for the radio frequencies corresponding to the winning bids, provided that they pay a licence fee, the amount of which is established by summing up the basic price determined according to Sections 5.3.7 and, as the case may be, 5.4.6, to which the additional price determined according to Section 5.5.7 is added, if applicable.

4.8. Licence granting stage

4.8.1. Presentation of the procedure results

At the beginning of the licence awarding stage, the Commission will communicate each winning bidder:

a) the final price, representing the licence fee that the winning bidder shall pay for obtaining the usage rights for the frequency blocks it acquired during the procedure, which represents the sum between the basic price determined, as the case may be, following the qualification stage or/and the primary rounds and/or the additional primary round (if applicable) and the additional price determined following the assignment round;
b) the payment conditions mentioned in Section 4.8.2 and the conditions relating to the issuance of the licences.

4.8.2. Payment of the licence fees

The licence fee owed by the winning bidders following the bids they submitted within the selection procedure will be paid according to the Government Decision no. ___/_____ setting the minimum amount of the licence fee for awarding radio frequency usage rights.

The return of the bond upon the payment of the licence fee will be made according to the provisions of Section 4.4.5.

4.8.3. Granting the licences

The licences, new or amended, are granted to the winning bidders after the payment of the licence fee as resulted from the selection procedure.

The following rules will apply to the winners of the selection procedure:

- if, prior to the selection procedure, they did not hold usage rights in the band in which they gained new rights, they will be issued new licences for the newly awarded usage rights,
- if, prior to the selection procedure, they held usage rights in the band in which they gained new rights, they will be issued amended and updated licences which will include the newly awarded usage rights.

In the case of rights awarded in the 800 MHz and 2600 MHz bands and in the case indicated in the second bullet above, the rules mentioned previously will apply, for existing licencees, with reference to the licences for the usage rights below 3 GHz that they hold.

In the case of the 3400-3600 MHz band, the rules previously mentioned will apply, for existing licencees, with reference to the licences for the usage rights in the entire 3400-3800 MHz band that they hold.

The provisions of the licences in force granted for usage rights in the aforementioned frequency bands become applicable, with the due updates, for the holders that have rights in these bands, also to the blocks awarded through the selection procedure organized according to these Terms of Reference. In this circumstance, the coverage obligations will be completed with those laid down in Section 3.3.1.1.

The provision of electronic communications networks and services is bound by the observance of Article 6 of the Framework-Ordinance.

Chapter 5 – AUCTION RULES

5.1. General rules for the auction stage

5.1.1. Auction premises

The auction will take place at the headquarters of ANCOM-Bucharest Regional Division in 4 Lucian Blaga Street, block M110, Sector 3, Bucharest, where each bidder will be provided with a room endowed with wireless internet access connection. Also, in accordance with the rules under Sections 5.1.3, 5.1.4 and 5.1.5, the bidders will also have access in the room where the Commission will carry on its activities, located in the proximity of the rooms made available to the bidders.

During the auction, the bidders' representatives will be able to use their own technical means in view of communication.

The bid rounds may take place during one or several working days, as necessary, between 9.00 hours and 18.00 hours.

Access of the bidders' representatives within the premises of the auction will be allowed only as follows:

- the persons mandated according to Section 4.5.2. letter a); the maximum number of three mandated persons includes the legal representative, if the latter attends;
- two representatives without right of signature, expressly appointed, in writing, by the bidders;
- the persons mandated under the same conditions specified in Section 4.5.2. letter a), designated to replace the initial representatives mentioned in the first bullet.

5.1.2. Informing the bidders

The Commission will provide the bidders with various information at the following moments: prior to each bidding round, at the end of each type of round, as well as at any time the auction process requires it. The communication of the information at the closing of the bidding rounds will be made as soon as this become available and is properly verified by the Commission. The general rules on the provision of such information are depicted under this Section, while specific rules are mainly provided under Sections 5.2.3, 5.3.2, 5.3.8, 5.4.2, 5.4.7, 5.5.2, 5.5.5 and 5.5.8.

Information is to be made by a representative of the Commission. The information forms will be drawn up in two original copies, signed by the representatives of both parties, and each of these parties is to keep their copy. The form must be signed by only one representative of a bidder. Where no representative of a bidder can be reached until the next round begins or where the representatives of a bidder refuse to sign the information form, it will be considered that the respective bidder has waived its participation in the auction and therefore the rules under Section 4.4.4 will apply.

5.1.3. Bid submission

In order to submit the bid during a certain round, a representative of each bidder will fill in and sign a specific bid form within the timeframe established for the respective round, except if the bidder makes use of one of its extension rights (Sections 5.1.4 and 5.1.5). The bid will not be submitted before the expiry of the time provided for exercising the extension right according to Section 5.1.4.

The form will be filled in by hand. In order to be valid, the form must bear the handwritten signature of a representative of the bidder. In view of ensuring the filling in of the bid form, the Commission will provide each bidder with enough bid forms to enable the submission of bids within a certain ongoing round, and these forms will be filled in using a blue ink pen.

All bid prices, within all the rounds of the auction stage, must be expressed in euros.

After or before the bid submission, if the Commission is in the course of receiving another bid, the bidder's representative can partake at the bid submission by the other bidders, in the location reserved therefor (the room reserved for the Commission).

After each round, the chairman of the Commission (or the member of the Commission replacing the chairman) will sign the form submitted by the bidder for proof of non-alteration, will give the bidder a copy of the form and will write down the receipt of the bid in the synoptic table of the respective round.

5.1.4. Extension rights

During the auction stage, each bidder has at its disposal two extension rights that may be exercised in two distinct rounds, irrespective of their type (primary or assignment).

An extension right confers the bidder additional time for submitting a bid during a round. The extension rights are granted to the bidders in order to protect them in the event of certain circumstances which may prevent them from submitting a bid during a certain round.

On the first day of the auction stage, before starting the first primary round, the Commission will give each bidder two customised cards to be used as a "bargaining chip" for requesting and being granted an extension right.

The extension right may be exerted only during one round and by maximum 10 minutes before the ending of the respective round. Failure to observe the term for requesting the extension right triggers the refusal of the Commission to grant this right for the respective round.

The extension right may be exerted only actively and only if it has not been exerted previously by one of the bidders.

In case of exercising its extension right, the bidder will announce the Commission during a round on the occurrence of a situation that prevents it from submitting a bid in the timeframe set therefor during the respective round, and will request the granting of an extension period in order to submit the bid. The extension period is of 30 minutes from the scheduled closing time of the round. The extension may be requested only during a round [with the observance of the specifications laid down in paragraph (4) of this Section], and not during the recess between rounds or at another time.

The extension period has effects towards all bidders, regardless of whether they hold or not extension rights at the time when the extension is granted.

To request the extension right, one of the bidder's representatives will go to the room reserved to the Commission and will hand in to one of the Commission's members one of the cards it has at its disposal.

Upon receiving the request for exerting an extension right, a member of the Commission or a representative of ANCOM, which ensures the logistical support at the auction premises, will go to each of the rooms reserved to the bidders and will inform them on the exertion of the extension right.

Only one extension right may be exerted during one round, irrespective of the bidder that chooses to exert this right.

If more than 20 rounds are held during the auction, the Commission may decide to grant each bidder an additional extension right.

5.1.5. Exceptional circumstances

Should exceptional circumstances occur during the auction, the Commission may take one of the following actions:

a) to postpone the scheduling of a round, the closing of an ongoing round, or to postpone the announcement of the results of a round;
b) to cancel an ongoing round or a round of which the results have not yet been announced and to reschedule the respective round;
c) to cancel one or several rounds and the bids submitted during these rounds and to restart the auction stage from a previous round;
d) to suspend the auction stage, to cancel the auction stage and/or restart the auction stage.

The occurrence of an exceptional circumstance is ascertained by the Commission. Such circumstances may include, for example, the occurrence of natural catastrophes, demonstrations, strikes, violent conflicts or incidents of any kind, technical faults or any other exceptional events that may disturb or hinder the activities carried out at ANCOM premises, the existence of an indication or the acknowledgement of breaches of the rules regarding the participation in the selection procedure by one or several bidders, as well as any other exceptional circumstances that may in any way endanger the carrying out of the auction.

The bidders are obliged to immediately announce the Commission on the occurrence or imminence of an exceptional situation. To this end, a representative of the bidder that seized in this situation will go to the room reserved for the Commission.

5.2. Other rules for the auction stage

5.2.1. Security measures

Only the bidders' mandated representatives pursuant to Section 4.5.2 letter a) of these Terms of Reference will have access to the premises of the auction.

The access of the bidders' representatives in the premises of the auction is only allowed as long as the rounds are being held and only upon the identification of representatives in accordance with the provisions of the first paragraph. The identification will be performed based upon the submission of the identity card.

Where a bidder is legally represented by two or more persons (as resulted from the information available in the acknowledging certificate provided for in Section 4.5.2 letter b), indent (v) of these Terms of Reference), the access into the premises where the selection procedure is being held will be allowed only to one of these representatives. The person in question is to be expressly nominated by the bidder. The provisions of this paragraph apply in view of reasonably limiting the number of persons that can access the auction premises and the space that is to be allocated to each bidder.

Upon verifying the identity of the bidders' mandated representatives, ANCOM will distribute badges to each person. The badges will be worn at sight in the premises of the auction throughout the auction stage.

In the space allocated to each bidder only the representatives of that bidder will have access.

The intervention of any type on the supporting means (e.g. cables, extension cords etc.) found in the rooms reserved for each bidder and made available to the bidders is forbidden. In case of necessity, the intervention can only be performed by the ANCOM staff, upon prior notice to the Commission.

It is forbidden to connect electrical accessories (extension cords, plug, plug adapters etc.) to the electrical network in the premises of the selection procedure. If the bidders intend to use their own equipment, this will be connected directly to the electrical network or the electrical accessories made available by ANCOM. The rooms reserved to the bidders will be endowed with extension cords with minimum 3 schuko alternative power ports-220 V/50 Hz.

During the auction, the Authority reserves the right to monitor, through an audio-video system, the common spaces (including the ways of access to the rooms reserved to the bidders) and the room of the Commission. The registrations will be used in view of monitoring the observance of the auction rules and will be archived by ANCOM at the end of the procedure.
The monitoring will not concern the interior of the rooms reserved to each bidder.

5.2.2. Rules on the bidders' communication with the Commission

To ensure the bidders' communication with the Commission, each bidder will nominate a person who will facilitate the bidders' connection with the Commission.

In view of the bidders' communication with the Commission, the nominated person will go to the room reserved to the Commission.

The nominated person will go to the room reserved to the Commission exclusively for the following purposes:

a) to submit a bid within a certain round;
b) to announce the exertion of the extension right;

c) to communicate the clarifications, documents or information requested by the Commission in accordance with the provisions of Section 4.3.5 herein;
d) to inform the Commission on the occurrence of unforeseen circumstances which make it impossible for the bidder to submit a bid within a round.

5.2.3. Rules on the Commission's communication with the bidders

To ensure the Commission's communication with the bidders, one of the Commission's members will go therefor to the rooms reserved to each bidder.

The Commission's member will go to the room reserved to the bidder/bidders for the following purposes:
a) to announce on the exertion of the extension right by one of the bidders;
b) to inform on the occurrence of an exceptional situation in accordance with the provisions of Section 5.1.5 of these Terms of Reference;
c) to inform each bidder in line with the provisions of Sections 4.3.5, 5.3.2, 5.3.8, 5.4.2, 5.4.7, 5.5.2, 5.5.5. and 5.5.8 of these Terms of Reference.

The Commission will inform the bidders in accordance with the provisions of Section 5.1.2 of these Terms of Reference.

5.2.4. Language used

The language used throughout the selection procedure is Romanian.

5.3. Rules for the primary bid rounds

5.3.1. Scheduling of the primary rounds

The primary rounds are scheduled by the Commission.

Rounds are exclusively scheduled one by one, and not several rounds simultaneously, considering that, depending on the result, the scheduled round may be the last one during the auction stage. The Commission sets the starting date and time of the round as well as its duration (closing date and time). In principle, the duration of a round may not be shorter than 30 minutes and may not exceed two hours.

All primary rounds will be scheduled to take place between 9.00 and 18.00 hours, on the working days. Each bidder must ensure daily the permanent presence of its representatives at the auction premises, starting 9.00 hours and until 18.00 hours or until the receipt of the Commission's notification regarding the completion of the rounds for that respective day. The Commission will communicate the starting time of a round at least 15 minutes and at most 30 minutes in advance.

One or several rounds may be scheduled during the same day, and the duration of the recess between rounds is to be established by the Commission (but it cannot be less than 30 minutes). The rounds must begin and end on the same day, while round interruption by the end of the day and resumption during the next morning are not accepted. By the end of the last round of the day, the Commission will announce the bidders that no other rounds are to be organised during that respective day. Also, in case exceptional circumstances occur and justify the interruption of the auction for the rest of the day or for a longer period, the Commission will immediately announce the bidders thereon.

5.3.2. Informing the bidders prior to the primary rounds

Once the starting time of a primary round is announced, the Commission will inform each bidder with respect to:

a) the duration of the respective round (hours, minutes), specifying its closing time;
b) the prices for each category, applicable to the respective round;
c) the category of blocks for which demand in excess was registered;
d) its eligibility for submitting bids during the respective round (expressed as number of eligibility points); and
e) the number of remaining extension rights.

5.3.3. Bid prices

In the first primary round, the price for each of the A to D categories will be equal to the reserve price (minimum licence fee) for that category. Starting with the next primary round, for the blocks for which a demand in excess has been recorded, the Commission will set prices applicable in this round that are higher than the reserve prices with a percentage (bid increment) set pursuant to Section 4.7.1.

The same rules for setting the prices will apply to the following primary rounds. Thus, in case the block demand in a given category exceeds the availability thereof during a certain round, the price for that category will be increased during the next round.

The price will remain unchanged during the next round for those categories for which there is no demand in excess.

During a certain round, a demand in excess for a category of blocks appears when the total number of blocks in that category, as indicated in the valid bids submitted during the respective round, is greater than the number of blocks available in that category.

5.3.4. Bidding rules

All blocks in the A to D categories are available for the submission of bids during the primary rounds.

In each primary round, a bidder may submit only one bid.

Each bid will specify the number of blocks in each category the bidder wishes to acquire at the price communicated by the Commission at the beginning of the round. A bid may include any combination of blocks, while observing the spectrum caps (Section 4.1.3), as well as the conditions provided for in Section 4.7.1.

To submit a bid, the bidders fill in, by hand, the dedicated bid form indicating the number of blocks they wish to acquire in each of the categories. The bidders may choose to submit a "zero" bid that does not include any block within the A to D categories. In this case, the current amount of the eligibility points for the respective bidder will be considered "zero".
If a bidder does not submit a bid during the round or during the extension period granted to that bidder (see Section 5.1.4), the Commission will record *ex officio* a "zero" bid for that bidder.

The price of the bid is determined as follows:

a) for each category, the number of blocks in that category that have been included in the bid will be multiplied by the price for that category communicated by the Commission; and
b) the values determined according to letter a) will be summed up for all block categories.

The bid will be submitted according to the rules set out under Section 5.1.3.

Each submitted bid is considered valid and represents a firm, definitive, irrevocable and unconditional commitment to acquire the frequency block or the package of blocks specified in the respective bid, at the bid price determined in accordance with the rules set out in this Section.

A bid remains valid until:

a) it is replaced by a valid bid, submitted by the same bidder during one of the subsequent primary rounds; or
b) it is cancelled as a result of the Commission cancelling one or several rounds, as well as the bids submitted during those rounds; or
c) the winning bidders are granted licences for the rights of use gained as a result of the selection procedure.

5.3.5. Activity rules

The activity associated with a bid submission represents the total amount of eligibility points for all the blocks included in the bid and is calculated as follows:

a) for each category from A to D, the number of blocks in that category, included in the bid, will be multiplied by the eligibility points per block for that category; and
b) the values determined according to letter a) will be summed up for all block categories.

In each primary round, a bidder may submit a bid with an activity level lower than or equal to its current eligibility (corresponding to the respective round) for the A to D categories, while observing the limitations regarding the spectrum caps (Section 4.1.3), as well as the conditions mentioned in Section 4.7.1.

The eligibility of a bidder for the first primary round is its initial eligibility. The initial eligibility represents the sum of the eligibility points for all the blocks in the A to D categories included in the application form, submitted by the respective bidder as part of its application file, and is calculated as follows:

a) for each of the A to D categories, by multiplying the number of blocks specified in the application form with the eligibility points associated to each block; and
b) by summing up the value determined according to letter a) for all block categories.

For each of the subsequent primary rounds, the eligibility of each bidder is equal to the activity of that bidder during the previous primary round. Thus, after a certain number of successive primary rounds, a bidder's eligibility may remain constant or may decrease, but it can never increase. However, during the primary rounds, a bidder's eligibility may fluctuate between the different block categories, considering that, from one round to another, the bidder may change the content of the package of blocks included in its bid, including by discarding some blocks in certain categories and selecting blocks from other categories.

5.3.6. Determining the winning bidders

The valid bids submitted during the last primary round will be declared as winning bids, and those who have submitted them will be designated as winning bidders. These persons will be awarded the rights to use radio frequencies upon the payment of the corresponding licence fees.
After the completion of the primary rounds and/or of the additional primary round (should it be the case) and of the assignment round, the winning bidders will be awarded the frequency usage rights corresponding to the blocks included in the winning bids.

5.3.7. Determining the basic price

Each winning bid has an associated basic price. This basic price is the total price for the aggregate of abstract and specific frequency blocks included in the winning bid.

5.3.8. Completion of the primary rounds

The primary rounds end after a round where no demand in excess appeared for frequency blocks in any category. From this moment on, the Commission establishes the winning bids in the primary rounds, the winning bidders and the basic prices. Also, the Commission announces that the primary rounds have ended and, as the case may be, that the auction continues with the additional primary round or directly with the assignment round.

Moreover, the Commission informs each bidder on the results of the primary rounds, as follows:

a) each bidder will be informed on the number of abstract blocks in each of the categories B and D and/or the specific blocks in categories A and C that it won;
b) each winning bidder will be informed on:
    (i) the basic price corresponding to its bid declared as a winning bid;
    (ii) the specific basic prices for each of the frequency blocks included in its winning bid, with a view to applying the provisions of Section 4.8.2 herein, which are equal to the prices against which the bidder gained the respective block/blocks.
c) if the additional primary round is not scheduled, each bidder will be informed on the identity of the winning bidders after the closing of all primary rounds, as well as the number of blocks won by each of them in each category from A to D.

Information mentioned under letters a) and b) above will not be communicated to other bidders, should the additional primary round be held.

5.4. Rules for the additional primary round

5.4.1. Scheduling the additional primary round

Rules laid down in Section 5.3.1 also apply in this case.

5.4.2. Informing the bidders before the additional round

At the same time with announcing the beginning time of the additional round, the Commission will inform each bidder with respect to:

a) the number of frequency blocks still available in each category;
b) the duration of the respective round (hours, minutes), specifying its closing time;
c) the minimum applicable price for the respective round, for each category; and
d) the number of remaining extension rights.

5.4.3. Bid prices

During the additional primary round, each bidder may bid for a package consisting of one or several frequency blocks available in this round by submitting a bid and indicating therein the price it is willing to pay for acquiring the respective package, with the limitations specified below.

Thus, during the additional primary round, the bid price may not be lower than the prices which represent:

a) the prices applicable in the last primary round in the case of those categories for which a demand in excess has been recorded during the primary rounds; and
b) the reserve prices (minimum licence fee) for the categories where no demand existed for all the available blocks, during any of the primary rounds.

5.4.4. Bidding rules

Rules laid down in Section 5.3.4 apply, with the exceptions provided below.

The blocks in the A to D categories that remained not awarded following the initial bids or following the primary rounds will be the only ones available for the submission of bids during the additional primary round.

Each bid may be submitted for one or several packages, each including one or several frequency blocks. Each package represents itself a bid. For each package, the bid will specify the number of blocks in each category the bidder wishes to acquire, as well as the total package price.

As well, for each package, the bidder will indicate an individual price for each of the blocks composing the respective package, which, if the respective package will be a part of the winning combination, will represent the specific basic price for those blocks, exclusively for the purpose of applying the provisions of Section 4.8.2.

A package may include any combination of blocks, with the observance of the conditions mentioned in Section 5.4.3.

During the additional primary round, the bidders may bid irrespective of their existing eligibility at the time of completion of the primary rounds and without needing to observe the spectrum caps specified in Section 4.1.3.

5.4.5. Determining the winning bidders

After the completion of the additional primary round, the Commission will establish the winning combination.

The winning combination is the combination of packages included in the valid bids submitted during the additional primary round that, taken together, have the highest value among all possible combinations, if the following conditions are met:

a) in each category the number of granted blocks is equal with or lower than the number of available blocks in the respective category;
b) the combination contains no more than one package from each bidder;
c) the combination ensures the awarding of the largest number of blocks among those available in all categories.

In case there are two or several combinations of packages which meet the above conditions and have an equal value, the combination that includes packages from the largest number of bidders will be declared the winning combination. If this rule does not lead to identifying a single combination either, the Commission will toss for the winning combination from among the potential winning combinations.

The bids for the packages that are part of the winning combination will be declared winning bids and those who have submitted them will be designated as winning bidders.

After the completion of the auction stage, during the licence granting stage, the bidders declared winners in the additional primary round will be awarded the frequency usage rights corresponding to the blocks included in the packages that are part of the winning combination.

5.4.6. Determining the basic price

Each winning bid has an associated basic price. This basic price is the total price for the aggregate of abstract and specific frequency blocks included in the package that is part of the winning combination.

5.4.7. Closing of the additional round

After the completion of the additional primary round, the Commission informs each participating bidder on the results of the additional primary round, as follows:

a) each bidder will be informed on the number of abstract/specific blocks that it won in the additional primary round;
b) each winning bidder will be informed on:
    (i) the basic price corresponding to its bid declared as a winning bid in the additional primary round;
    (ii) the specific basic prices for each of the blocks included in its winning bid, for the purpose of applying the provisions of Section 4.8.2 herein, which are equal to the individual prices indicated by the bidder for the respective blocks within its package that is part of the winning combination, in accordance with the provisions of Section 5.4.5.

Information mentioned under letter b) above will not be communicated to other bidders.

As well, upon the closing of the additional primary round, the Commission will communicate each bidder the identity of the winning bidders after the closing of all the primary rounds and of the

additional primary round, as well as the number of blocks won by each of them in each category from A to D.

5.5. Rules for the assignment round

5.5.1. Scheduling the assignment round

The assignment round for each category is scheduled by the Commission, which sets the starting date and time of the round as well as its duration (closing date and time). In principle, the duration of the assignment round may not be shorter than one hour.

The assignment round for each category will be scheduled to take place between 9.00 and 18.00 hours, on a working day, while assignment rounds for several categories may take place on the same day. The bidders will be announced on the date and time of the assignment rounds with at least one working day in advance.

The assignment round for one category must begin and end on the same day, as round interruption by the end of the day and its resumption during the next morning are not accepted. If exceptional circumstances occur and justify the interruption of the auction for the rest of the day or for a longer period, the Commission will immediately announce the bidders thereon.

Regarding the 3400-3600 MHz band, the assignment round establishing the position in the band of the usage rights will take place only if necessary (according to the relevant provisions under Section 5.5.4).

5.5.2. Informing the bidders prior to the assignment round

When announcing the starting date and time of the assignment round, the Commission will also inform each bidder with respect to:

a) the duration of the respective round (hours, minutes), specifying its closing time; and
b) whether the bidder still has or not an extension right available after the primary and additional rounds.

5.5.3. Bid prices

There is no price limit as regards the assignment bids.

5.5.4. Bidding rules

The gaining of a certain number of blocks in one of the B and D categories, as the case may be, following the initial bid or the primary rounds and/or the additional primary round implies the winning bidder's right as well as obligation to acquire one of the frequency allotment options presented to that bidder by the Commission for each category during the assignment round.

The bidders are invited to submit bids for the specific frequency allotment options, as set out by the Commission, in accordance with the rules below.

For each of the frequency bands where there are two or more winning bidders, the Commission will establish a set of frequency allotment options, for each bidder. More specifically, for each bidder, for each block category, the Commission will identify an exhaustive list of adjacent frequency blocks that meet the following conditions:

a) the number of blocks in each option is equal to the number of blocks won by the bidder during the primary rounds and/or the additional primary round;

b) any option for the allotment of frequency blocks to a certain bidder is compatible with the options of all other winners in the same block category receiving adjacent spectrum; and
c) the frequency blocks not awarded in a certain band will be re-arranged in the respective band according to the rules under Section 5.5.6.

During the assignment round, the participating bidders will submit a bid form, in accordance with the rules described in Section 5.1.3.

For each bidder, the bid form for a frequency band will include a list of all the frequency allot options available to the respective bidder in that band, for which it has won abstract frequency blocks during the primary rounds and in the additional round.
A member of the Commission will make available the bid form to each bidder at the beginning of the assignment round.

Each bidder may submit one assignment bid for each option listed in its bid form, indicating the amount it is willing to pay to acquire the respective allotment option.

"Zero" bids will be automatically recorded for the frequency allotment options for which no bid is submitted. If a bidder does not submit a bid form during the allocated timeframe, it will be considered as submitting a "zero" bid for each of the frequency allotment options in the band for which the assignment round is carried on.

Each bid submitted during the assignment round represents a firm, definitive, irrevocable and unconditional commitment to pay the specified price for each allotment option, in order to obtain the respective specific frequency allotments, as an additional price to the basic price the bidder must pay as a result of the primary rounds and/or of the additional round.

A bid stays valid until:
a) it is cancelled as a result of the Commission's cancelling the round and the bids submitted during that round;
b) the winning bidders are granted the licences for the usage rights gained as a result of the selection procedure.

In the case of the 3400-3600 MHz band, the principle and the rules detailed below are additionally applicable.

As a rule, the contiguity of all the usage rights held in the 3400-3600 MHz band must be ensured at any time, including after the announcement on the winners of the specific spectrum blocks.

Depending on the abstract spectrum blocks to be won, within the available 90 MHz, by the operators that already hold a licence in force in the 3400-3600 MHz band, a new refarming in the band in question may become necessary (case in which it will be mandatory), in the new context resulted after the awarding of the rights before the assignment round.

Practically, the additional refarming (if this will be necessary) will begin after the completion of the selection procedure and will have to end by 30 June 2022.

If there is only one operator, new entrant in the 3400-3600 MHz band, which has won abstract spectrum blocks, its specific blocks will automatically result, by implementing the aforementioned principle, taking into account, on one hand, the results of the additional refarming detailed above (i.e. the specific blocks remaining not occupied following this refarming) and, on the other hand, the rules on the positioning of the frequency blocks which remained not awarded in the 3400-3600 MHz band following the selection procedure (described in Section 5.5.6), if applicable.

If there are at least two operators, new-entrants in the 3400-3600 MHz band, which have won abstract spectrum blocks, an assignment round for their usage rights will be held.

Furthermore, the bidders must take into account the fact that, in the selection procedure that will concern awarding usage rights in the 3400-3800 MHz band, for usage rights that will become effective on 01.01.2026, the contiguity requirement will be ensured for the spectrum to be won following the mentioned selection procedure, irrespective of whether this is in the 3400-3600 MHz band and/or in the 3600-3800 MHz band.

5.5.5. Determining the winning bids

After the completion of the assignment round for each block category, the Commission will assess the bids and will establish the winning combination, representing the combination of submitted valid assignment bids that has the highest total value among all possible combinations, if the following conditions are met:

a) the combination includes only one bid from each bidder;
b) each bidder will be allotted in the respective category the amount of spectrum that it won during the primary rounds and/or the additional round;
c) each bidder is assigned adjacent frequency blocks in the respective category;
d) the frequency sub-bands allotted to a bidder do not overlap with those allotted to another bidder; and
e) any unawarded blocks must be positioned in accordance with the rules under Section 5.5.6.

If there are several combinations of assignment bids which meet the above conditions and have the same highest value, the Commission will toss for the winning combination among the aforementioned combinations.

Each bidder shall have a winning assignment bid in each band where it has won abstract blocks during the primary rounds and/or the additional round. The winning assignment bid may be a "zero" bid, automatically recorded on behalf of the bidder for an allotment option for which the respective bidder has not submitted an assignment bid.

After each assignment round, the Commission will inform the bidder on:

(i) the price of its winning assignment bid;
(ii) the specific blocks resulted following the assignment round.

5.5.6. Positioning the unawarded frequencies

It is possible that some blocks from certain bands remain not awarded following the primary rounds and the additional round. Any unawarded blocks will be positioned according to the rules in the table below.

Table 38 – Positioning the unawarded frequencies

Category	Number of blocks	Band	Block size	Positioning unassigned blocks
A	1	791-821/832-862 MHz FDD	2 x 5 MHz	791-796/832-837 MHz
B	8	2530-2570 /2650-2690 MHz FDD	2 x 5 MHz	Any blocks not awarded will be adjacent and positioned immediately below 2570 MHz and respectively below 2690 MHz
C	1	2300-2615 MHz TDD	1 x 15 MHz	2300-2615 MHz

D	18	3400-3490 MHz TDD	1 x 5 MHz	Any blocks not awarded will be adjacent and positioned immediately above 3400 MHz.

5.5.7. Determining the additional price

Each winning bid, in each band, has an associated additional price. This price corresponds to the allotment option belonging to the winning assignment bid of each bidder in the respective band and represents the amount to be paid by the bidder who submitted the respective assignment bid, in addition to the basic price determined as a result of the primary rounds and of the additional round (if the case), in order to obtain the said allotment.

5.5.8. Completion of the assignment round

After the completion of the assignment round for each category, the Commission informs each participating bidder on the results of the round, as follows:

a) each bidder will be informed on the allotment obtained within the respective category;
b) each bidder will be informed on the additional price for the allotment obtained within the respective category.

Information under letters a) and b) above will not be communicated to other bidders.

5.6. Completion of the auction stage

At the completion of the auction stage, the Commission:

a) will establish the final price each winning bidder must pay to gain the rights to use the frequency blocks awarded to the respective bidder, representing the sum between the basic price determined based upon either the initial bid or the primary rounds or the additional round (and which cannot be lower than the reserve price for each category) and the additional price determined after the assignment round; this final price will be announced at the same time with the results of the procedure, in the licence granting stage;

b) will inform the bidders that did not gain usage rights during the procedure on the term within which the participation bond is to be returned to them, in accordance with the provisions of Section 4.4.5, letter b).

Chapter 6 – MISCELLANEOUS

6.1. Advertising the selection procedure

ANCOM may issue any public communication related to the selection procedure, as it deems necessary, without prior notification to the participants in the procedure. ANCOM may use any communication means, as it considers necessary, including written and online mass-media, its webpage (**www.ancom.ro**) etc.

Information publicly communicated by ANCOM may relate, *inter alia*, to:

a) the identity of the participants (candidates) in the selection procedure, of the bidders in the auction stage and/or of the winning bidders upon the completion of the selection procedure;
b) the frequency band/bands within which the winning bidders have gained usage rights following the procedure;
c) the licence fees owed by the winning bidders;
d) the licences that will be granted as a result of the selection procedure.

The candidates/bidders have the obligation to refrain from any communication concerning the selection procedure throughout its progress.

6.2. Suspension of the selection procedure

In the event of occurrence of exceptional circumstances that may affect the procedure, ANCOM has the right to suspend the selection procedure at any time during its progress. The occurrence of an exceptional circumstance is ascertained by the Commission. Such circumstances may include, for example, the occurrence of natural catastrophes, demonstrations, strikes, violent conflicts or incidents of any kind, technical faults or any other exceptional events that may disturb or hinder the holding of the selection procedure, the existence of indications or the acknowledgement of breaches of the auction rules by one or several bidders, as well as any other exceptional circumstances that may in any way endanger the carrying out of the auction.

In case of suspending the procedure, ANCOM has the obligation to request the candidates/bidders to extend the validity of their bids, as well as of their participation bond, if necessary.

6.3. Cancellation of the selection procedure

According to the provisions under art. 26 paragraph 6) of the Framework-Ordinance, ANCOM may cancel the already started selection procedure, before the deadline for the submission of the last bid during the main stage (auction). The decision to cancel the selection procedure must be objectively justified or must be the consequence of certain conditions that could not have been known at the time when the selection procedure had been initiated. ANCOM will communicate publicly the reasons for cancelling the selection procedure, within a 30-day timeframe.

Annexes

Annex 1 – List of localities to be covered with mobile communications services according to Section 3.3.1.1 of the Terms of Reference

Annex 2 – Statement on the capacity as a participant in the selection procedure

Annex 3 – Application form

Annex 4 – Model of a licence for the use of radio frequencies

Annex 5 – Model of a bank guarantee letter/guarantee tool

Annex 1

List of localities to be covered with mobile communications services according to Section 3.3.1.1 of the Terms of Reference

No.	Locality (village)	Code Siruta	Category of UAT	Name of locality (UAT)	Code of UAT	County (code)
1	Gârbova de Sus	1295	municipality	Aiud	1213	AB
2	Simulești	2979	town	Baia de Arieș	2915	AB
3	Mugești	1767	town	Cugir	1696	AB
4	Medveș	4339	commune	Fărău	4302	AB
5	Sânbenedic	4348	commune	Fărău	4302	AB
6	Cicău	5773	commune	Mirăslău	5755	AB
7	Negești	7286	commune	Scărișoara	7197	AB
8	Secaci	9985	commune	Beliu	9930	AR
9	Ciuntești	10569	commune	Craiva	10532	AR
10	Pârnești	11897	commune	Săvârșin	11842	AR
11	Lupești	12616	commune	Vărădia de Mureș	12572	AR
12	Ciolcești	16819	commune	Leordeni	16757	AG
13	Țepoaia	23635	commune	Motoșeni	23494	BC
14	Năstăseni	24141	commune	Parincea	24089	BC
15	Câmp	27025	town	Vașcău	27007	BH
16	Colești	27043	town	Vașcău	27007	BH
17	Dijir	27105	commune	Abram	27070	BH
18	Sânnicoară	33097	commune	Chiochiș	33015	BN
19	Țentea	33113	commune	Chiochiș	33015	BN
20	Enciu	33694	commune	Matei	33658	BN
21	Comlod	33907	commune	Milaș	33881	BN
22	Valea Vinului	34351	commune	Rodna	34333	BN
23	Alunișul	35447	commune	Zagra	35429	BN
24	Cuzlău	38517	commune	Păltiniș	38492	BT
25	Jitin	52053	commune	Ciudanovița	52035	CS
26	Bogodinț	53817	commune	Sasca Montană	53791	CS
27	Pietroasa	58758	commune	Moldovenești	58721	CJ
28	Elciu	59185	commune	Recea-Cristur	59130	CJ
29	Făureni	60142	commune	Vultureni	60099	CJ
30	Gârlița	62592	commune	Ostrov	62538	CT
31	Malurile	65976	town	Pucioasa	65921	DB
32	Valea Mare	66571	commune	Cândești	66526	DB
33	Urda de Jos	80025	commune	Crușeț	79932	GJ
34	Plopu	80542	commune	Hurezani	80506	GJ
35	Seuca	81255	commune	Peștișani	81184	GJ
36	Andreeni	83865	commune	Avrămești	83847	HR

No.	Locality (village)	Code Siruta	Category of UAT	Name of locality (UAT)	Code of UAT	County (code)
37	Ruda-Brad	87335	municipality	Brad	87291	HD
38	Dealu Babii	87193	municipality	Vulcan	87175	HD
39	Barbura	88118	commune	Băița	88092	HD
40	Rovina	88902	commune	Bucureșci	88868	HD
41	Runcu Mare	90093	commune	Lelese	90066	HD
42	Ulmoasa	106531	town	Tăuții-Măgherăuș	106461	MM
43	Curtuiușu Mare	109372	commune	Valea Chioarului	109354	MM
44	Cosovăț	110768	commune	Brezniţa-Motru	110740	MH
45	Cerveniţa	113288	commune	Prunișor	113233	MH
46	Lumnic	113359	commune	Prunișor	113233	MH
47	Colareț	113769	commune	Tâmna	113732	MH
48	Ștircovița	113965	commune	Vlădaia	113929	MH
49	Ozd	115815	commune	Bichiș	115771	MS
50	Săcalu de Pădure	115931	commune	Brâncovenești	115897	MS
51	Stejărenii	116536	commune	Daneș	116493	MS
52	Cibu	116830	commune	Fântânele	116796	MS
53	Bedeni	116901	commune	Gălești	116867	MS
54	Merișor	117131	commune	Glodeni	117113	MS
55	Moișa	117140	commune	Glodeni	117113	MS
56	Păcureni	117159	commune	Glodeni	117113	MS
57	Comori	117355	commune	Gurghiu	117319	MS
58	Veţca	120183	commune	Veţca	120174	MS
59	Jacodu	120192	commune	Veţca	120174	MS
60	Toldal	120334	commune	Voivodeni	120316	MS
61	Seleuș	120361	commune	Zagăr	120343	MS
62	Moțoești	125828	commune	Bărăști	125757	OT
63	Mediș a	139429	commune	Viile Satu Mare	139394	SM
64	Mesteacănu	140039	commune	Almașu	139982	SJ
65	Gălășeni	140896	commune	Cuzăplac	140869	SJ
66	Adalin	141045	commune	Dragu	141027	SJ
67	Trestia	141526	commune	Hida	141447	SJ
68	Mineu	142596	commune	Sălățig	142550	SJ
69	Topârcea	143879	town	Ocna Sibiului	143851	SB
70	Zlagna	144296	commune	Bârghiș	144232	SB
71	Roandola	144786	commune	Laslea	144731	SB
72	Fofeldea	145168	commune	Nocrich	145140	SB
73	Ghijasa de Jos	145177	commune	Nocrich	145140	SB
74	Bunea Mare	156865	town	Făget	156801	TM
75	Buzad	156062	commune	Bogda	156035	TM
76	Ohaba Română	158001	commune	Ohaba Lungă	157969	TM
77	Alba	160582	commune	Izvoarele	160564	TL
78	Chilieni	163075	commune	Coroiești	163057	VS
79	Coroieștii de Sus	163084	commune	Coroiești	163057	VS

No.	Locality (village)	Code Siruta	Category of UAT	Name of locality (UAT)	Code of UAT	County (code)
80	Cireșul	169440	commune	Dănicei	169404	VL
81	Dobrești	169468	commune	Dănicei	169404	VL
82	Lăunele de Jos	169501	commune	Dănicei	169404	VL
83	Găgeni	170747	commune	Lădești	170685	VL

Annex 2

[*heading of the individual candidate/associate candidate*]

STATEMENT
ON THE CAPACITY AS A PARTICIPANT IN THE SELECTION PROCEDURE

TO:

National Authority for Management and Regulation in Communications
2 Delea Nouă Street, Sector 3, Bucharest

With reference to:

Participation in the competitive selection procedure held in view of awarding rights to use the radio frequencies in the 800 MHz, 2600 MHz and 3400-3600 MHz bands

After examining the provisions of the *Terms of Reference for the competitive selection procedure held in view of awarding some rights to use the radio frequencies in the 800 MHz, 2600 MHz and 3400-3600 MHz bands*, as well as the provisions of the Decision of the president of the National Authority for Management and Regulation in Communications no. ___/2021 on the selection procedure for awarding rights to use the radio frequencies, the undersigned, [*name and first name*], legal representative of [*name and headquarters of the individual candidate/associate candidate*], under the sanction of being disqualified from the selection procedure and being aware of the sanctions applicable in case of false statements, declare on my own responsibility the following:

1. In the selection procedure, I participate and submit a bid in my capacity as (tick the corresponding option):

☐ individual candidate;

☐ associate candidate in the association led by [*name and address of the association leader*].

2. I do not submit more than one application, individually and/or in association with other legal person, being aware that breaching this rule triggers the rejection of all applications thus submitted.

3. The candidate on whose behalf I act (tick the corresponding option):

☐ is not a member of a group of undertakings;

☐ is a member of a group of undertakings whose names, addresses and links are presented in the document [*name of the document comprising the structure of the candidate's group*], which I submit as part of the application file.

4. All documents and information presented and provided as part of the application file are complete, accurate in every detail and concordant with the reality, and the auction commission appointed by

decision of the president of ANCOM has the right to request any other justifying documents for verifying and confirming my statement.

5. I will immediately inform the auction commission appointed by decision of the president of ANCOM if any changes occur to the present declaration at any time during the selection procedure.

I, the undersigned, hereby authorise any institution, commercial company, bank, other legal persons to provide information to the authorised representatives of ANCOM on any commercial, technical and financial aspect related to the activity of the candidate I represent.

I also declare that I acknowledged the provisions of art.326 "False statements" of the Penal Code of Romania, stating that, *"A statement which does not correspond to the truth, delivered to a person from those provided for in article 175 or to an entity within which these carry out their activity, for the purpose of producing legal effects, on the own behalf or on somebody else's behalf, in such a case when, in accordance with the law or the circumstances, the delivered statement serves for generating the respective consequence, shall be sanctioned by 3 months to 2 years imprisonment or by fine"*.

The present statement is valid until [*the date when the bid validity expires*].

Filled in as of

[*name of the individual candidate/associate candidate*]

(authorised signature)

Annex 3

[*candidate's heading*]

APPLICATION FORM

TO:

National Authority for Management and Regulation in Communications
2 Delea Nouă Street, Sector 3, Bucharest

With reference to:

Participation in the competitive selection procedure held in view of awarding rights to use the radio frequencies in the 800 MHz, 2600 MHz and 3400-3600 MHz bands

After examining the provisions of the *Terms of Reference for the competitive selection procedure held in view of awarding rights to use the radio frequencies in the 800 MHz, 2600 MHz and 3400-3600 MHz bands (*hereinafter referred to as the "*Terms of Reference")*, as well as the provisions of the Decision of the president of the National Authority for Management and Regulation in Communications no. ___/2021 on the selection procedure for awarding rights to use the radio frequencies (hereinafter referred to as the "ANCOM Decision"), I, the undersigned, [*name and first name*], legal/mandated representative of [*name and headquarters of the candidate*]*,* hereby firmly, definitely, irrevocably and unconditionally undertake:

1. To participate in the selection procedure and observe its rules (including the sanctions applicable in case of breaching the said rules), as these have been established by the Terms of Reference and the ANCOM Decision, during the entire duration of the procedure, until the licences are awarded, without causing any prejudice to the right of ANCOM to enforce certain sanctions after the licence award also (e.g. licence revoking);

2. To maintain valid the bid for the usage rights over the amounts of radio spectrum in each of the bands indicated in the table below, at the basic price specified therein (to which the possible additional price communicated by ANCOM by the closing of the primary round/rounds or assignment round may be added) until [*the date when the bid validity expires*] or until the date of the bid validity advance termination[15]; I thereby acknowledge that the submission of this bid does not bring prejudice to my right to subsequently submit a bid for any other package of frequency blocks in the primary and/or assignment rounds of the auction stage, provided that the activity and eligibility rules, as well as the rules on the limitations as to the gaining of frequency usage rights established in the Terms of Reference and in the ANCOM Decision are observed.

3. In case the candidate I represent is designated winner in the selection procedure, I will pay within the term and under the conditions established by ANCOM the basic price and, as the case may be, the additional price resulted from the procedure for the usage rights gained, and I will observe the provisions under Chapter 3 of the Terms of Reference and the ANCOM Decision.

(Note: The candidate will fill in the following table and will indicate the number of blocks in each frequency band for which it submits the initial bid. If the candidate does not submit a bid for any of the blocks within a certain band, it will cross the respective sections. Pay attention! The candidate must observe the caps referring to the gaining of the usage rights imposed in Section 4.1.3, as well

[15] The date of the bid validity advance termination is the date when:

a) the bid is replaced by a higher bid for the same package of frequency blocks, submitted by the same bidder during the primary round/rounds and/or the assignment rounds; or
b) the bid is cancelled as effect of the Commission's cancelling one round or several rounds, as well as the bids submitted therein; or
c) the winning bidders are granted the licences for the usage rights gained as a result of the selection procedure.

as the conditions specified at Section 4.7.1 under the Terms of Reference; its application will otherwise be rejected.)

Category	**No. of available blocks**	**Frequency band (MHz)**	**Use (period)**	**Reserve price/block (euro)**	**Initial bid (no. of frequency blocks)**	**Total (euro)**
A	1	800 (FDD)	01.01.2022-05.04.2029			
B	8	2600 (FDD)	01.01.2022-05.04.2029			
C	1	2600 (TDD)	01.01.2022-05.04.2029			
D	18	3400-3600 (TDD)	01.01.2022-31.12.2025			
Total price of the initial bid						

5. I hereby expressly, unequivocally, irrevocably and unconditionally declare that, in case of any dispute/issue arising in relation with the present selection procedure and the granting of the radio frequency usage rights as a result of the said procedure, I understand to accept that the substantive and procedural rules under the Romanian law and the Romanian Court of Law jurisdiction are to be applied and I waive the applicability of any foreign jurisdiction that may be competent in solving the respective dispute/issue.

Filled in as of

[*name of the candidate*]
(authorised signature)

Annex 4

ANCOM
National Authority for Management and Regulation in Communications of Romania

2 Delea Noua Street, Bucharest 3, 030925,Romania
Phone: +40 372 845 400 / +40 372 845 454. Fax: +40 372 845 402
E-mail: ancom@ancom.ro. Website: www.ancom.ro

On grounds of the Decree of the President of Romania no. 28/2020 on the appointment of the president of the National Authority for Management and Regulation in Communications,

On grounds of the provisions of art. 10 paragraph (2) points 12 and 13, art. 11 paragraph (1), art. 12 paragraph (1) of the Government Emergency Ordinance no. 22/2009 setting up the National Authority for Management and Regulation in Communications, approved by Law no. 113/2010, with the subsequent amendments and completions,

On grounds of the provisions of art. 14 paragraph (1), of art. 17 paragraph (1), letter a), of art. 23 paragraphs (1) and (2), of art. 24, as well as of art. 31 of the Government Emergency Ordinance no. 111/2011 on electronic communications, approved, with amendments and completions, by Law no. 140/2012, with the subsequent amendments and completions,

Having regard to the provisions of the Decision of the president of the National Authority for Management and Regulation in Communications no. /2021 on the selection procedure for awarding rights to use the radio frequencies,

the president of the National Authority for Management and Regulation in Communications

issues this

LICENCE[16]

FOR THE USE OF RADIO FREQUENCIES

FOR THE PROVISION OF PUBLIC ELECTRONIC COMMUNICATIONS NETWORKS AND ELECTRONIC COMMUNICATIONS SERVICES

no. _____

Holder: _____

With headquarters in: _____

registered with the Trade Registry Office under no. _____,

unique registration code: _____,

is authorised to exercise the right to use the radio frequencies specified in this licence to provide public electronic communications networks and mobile electronic communications services, in the following allotted frequency sub-bands:

1. in the frequency bands _____:

[16] The Licence for the use of radio frequencies to be granted to the winners of the usage rights will be drawn up by taking into consideration the requirements set under the Terms of Reference. The document "Licence" presented as an annex to these Terms of Reference has a guiding character, as regards the form and content, and is only drawn up for its presentation within the selection procedure, whereas the authorisation act is to contain specific conditions for each radio frequency band.

2. in the frequency bands _____;

I. Definitions

1. For the purposes of the present Licence, the relevant definitions provided for in the Radio Regulations adopted by the International Telecommunication Union (ITU) or in the national legislation in the electronic communications field apply.

II. Technical and operational conditions[17]

1. The licence holder may use any available technology for each type of application established in the National Table for Frequency Band Allocation (NTFA) and in accordance with the provisions of the European Union and national legislation, as the case may be.

2. The licence holder has the obligation to exercise its rights deriving from the present Licence under conditions that would ensure the effective, rational and efficient use of the radio frequencies and the prevention of harmful interferences.

3. The licence holder has the right to install, operate, control and make available to third parties a public electronic communications network, as well as the corresponding infrastructure, in view of providing publicly available mobile electronic communications services.

4. The frequency assignments for the network provision, the identification characteristics of the radiocommunication stations, the technical parameters that define the service area associated to the assigned frequencies and the characteristics of the radio signals transmitted within the network are comprised in the assignment authorisations which are an integral part of the present Licence.

5. The licence holder has the obligation to comply with the requirements deriving from the observance of all international agreements to which Romania is a party concerning the use of radio frequencies, including in the border areas.

6. In the border areas, the licence holder will use the allocated frequency blocks only based on coordination with the communications administrations from the neighbouring countries, in compliance with the requirements deriving from the enforcement of the international agreements to which Romania is a party or from the international regulations on frequency coordination applicable to the allocated spectrum. The technical conditions for the use of radio frequencies in border areas are provided for in Section 3.3.3.5 of the Terms of Reference.

7. The licence holder has the obligation to comply with the requirements deriving from the achievement of the objectives of European harmonisation and international cooperation in the electronic communications field and which may consist of the modification of the assigned radio frequencies or of the corresponding technical parameters set under the present Licence. The modifications specified at this point will be implemented within a reasonable term fixed by ANCOM, upon consulting the holder, in accordance with the provisions of art. 24 paragraphs (3) and (4) of the Government Emergency Ordinance no. 111/2011.

8. The licence holder has the obligation to notify to ANCOM the location of the base stations, at least 30 days before starting the execution works. ANCOM may request the holder to change the location, in view of ensuring the electromagnetic compatibility. The licence holder has the obligation to notify to ANCOM the values of the technical parameters of the base stations (locations, proposed frequencies, emission power, antennae/equipment used etc.) at least 15 calendar days prior to the putting into operation.

[17] The reference technical and operational conditions are provided in the Terms of Reference and will be practically specified depending on the outcomes of the selection procedure (the radio frequency sub-bands to be gained by the interested parties).

9. The change of the notified base station locations in accordance with item 8 or the decommissioning of a notified location entails the obligation to notify the situation within 30 days.

10. The licence holder has the obligation to abide by the standards adopted by the European Telecommunications Standards Institute (ETSI), as well as by the regulations adopted by ANCOM.

11. With a view to prevent or remove the harmful interferences, the licence holder has the obligation to observe the technical and operational conditions for the use of radio frequencies established by ANCOM.

12. The licence holder will take the necessary actions, on its own expense, to remove the harmful interferences that are caused by or may be imputable to the holder, including but not limited to repairs, insertion of certain additional filters, the correction of errors owed to the improper or faulty installation of the network or to the improper operation of the equipment.

13. The equipment within the network will observe the essential requirements and the harmonised European standards applicable in Romania. The licence holder will not pretend – directly or indirectly – for the terminal equipment other requirements than those defined by the applicable standards adopted by ETSI.

III. Coverage and quality obligations[18]

_____.

IV. Monitoring and verification of the compliance with the obligations

1. The verification and evaluation methodology to be used to verify the compliance with the coverage obligations is laid down in Section 3.6 of the Terms of Reference.

V. Modification of the radio frequency usage rights

1. The radio frequency usage right may be amended, upon the ANCOM initiative, in accordance with the procedure established under the law, in the following situations:

a) observance of the conditions on the effective, rational and efficient use of the radio frequencies;
b) prevention of harmful interferences;
c) implementation of the objectives of European harmonisation and international cooperation regarding the use of the radio frequencies;
d) compliance with the international agreements to which Romania is a party relating to the use of the radio frequencies;
e) resolution of the limited availability of the radio frequencies, in certain geographic areas and under specified technical conditions, in the radio frequency bands designated for the type of application intended for the provision of the network making the object of the licence;
f) implementation of the strategy for the development of the electronic communications and management of the radio frequency spectrum;
g) modification of the NTFA.

2. In the situation mentioned under item 1, ANCOM will inform the licence holder regarding the modifications which must be operated and grants the licence holder a suitable term in view of implementing these modifications, proportionate to their qualitative or quantitative nature.

[18] The obligations set in the Terms of Reference will be specified.

3. ANCOM will also modify the licences for the use of radio frequencies as a result of the occurrence of one of the following situations:

a) transfer of the usage rights;
b) partial waiver of the usage rights;
c) partial withdrawal of the usage rights, if applicable, under the law.

VI. Transfer of the radio frequency usage rights[19]

1. The radio frequency usage rights may be totally or partially transferred to a third party, under the law, only with the prior approval of ANCOM, with the observance of all the deriving obligations, as well as with the compliance with the conditions and/or objectives set or considered at the award of the right.

2. If the radio frequency usage rights conferred under the Licence are partially transferred, the holder of this Licence will be able to transfer only blocks of at least 5 MHz.

3. The transfer of the radio frequency usage rights must not result in the restriction, deterrence or distortion of competition and, where the use of the radio frequencies is harmonised at European level, must not lead to changing the usage destination of the frequencies that make the object of this Licence in a way that would contravene to this harmonised use.

4. If the usage rights are transferred, the change of the usage destination of the frequencies for which the Licence was awarded is not allowed.

VII. The spectrum usage tariff

The licence holder has the obligation to pay, for the entire validity period of the usage rights, the spectrum usage tariff, in the amount and within the terms set according to the normative acts in force.

VII. Validity period

_____.

XI. Revoking of the radio frequency usage rights

The radio frequency usage right may be revoked, totally or partially, in accordance with the procedure established under the law, in the following situations:

1. total withdrawal of the radio frequency usage rights, under the terms of art. 27, art. 147 letter b) in conjunction with art. 141 paragraph (1) or of art. 148 of the Government Emergency Ordinance no. 111/2011 on electronic communications;
2. revoking of the right to use radio frequencies, under the terms of art. 6 paragraph (6) of the Government Emergency Ordinance no. 111/2011 on electronic communications.

XI. Final provisions

1. ANCOM may forbid for a limited period, at the reasoned request of the competent institutions within the system of national defence, public order and national safety, the partial or total use of the usage rights awarded under this Licence where the national safety, public order or national defence impose this measure, as well as where certain engagements assumed under international agreements must be observed.

[19] The transfer of the usage rights will also comply with art. 35 of the Government Emergency Ordinance no. 111/2011 on electronic communications.

2. The licence holder has the obligation to provide ANCOM with all the information and materials the latter requests in view of fulfilling the incumbent duties on the supervision and control of the compliance with the obligations under the present Licence or in the legislation in the electronic communications field.

3. The licence holder has the obligation to allow the access of the ANCOM control personnel in any location where equipment, apparatus and electronic communications installations are found, in view of their inspection for verifying the compliance with the conditions and obligations set under the Licence or in the legislation in the electronic communications field.

4. The non-compliance with the technical and/or operational conditions, as well as with the obligations provided in this Licence, including in its annexes, or the non-observance of any other legal provisions and/or technical regulations applicable to this Licence lead to the enforcement of the sanctions provided for in the legislation in force, which consist of the application of contravention fines, suspension of the right to use the radio spectrum, for a specified term, or the revoking of the usage right, as applicable.

5. The failure to pay in due term the spectrum usage tariff, according to the law, entails the enforcement of delay penalties, and, for exceeding the legal due date determined under the terms of the normative acts in force, ANCOM may dispose the suspension and/or revoking of the Licence.

6. The present Licence does not replace other agreements or approvals that are necessary, according to the national legislation in force in other fields than electronic communications, for the carrying out of the holder's activity in Romania during the validity period of the usage rights.

7. The provisions of the present Licence are rightfully completed by the legal provisions in force in the field of electronic communications.

Annex 5

[*heading of the issuer*]

GUARANTEE LETTER
for the participation with a bid in the competitive selection procedure held for awarding rights to use the radio frequencies

To:

National Authority for Management and Regulation in Communications
2 Delea Nouă Street, Sector 3, Bucharest

Regarding the competitive selection procedure held for awarding rights to use the radio frequencies, we [*name and headquarters of the bank*], unconditionally and irrevocably commit hereby toward the National Authority for Management and Regulation in Communications (ANCOM) to pay the amount of

[*amount in letters*] ([*amount in figures*]) euro,

payable in lei, at the exchange rate valid on the date of payment, set by the National Bank of Romania, upon the first and simple written request of ANCOM, which does not have the obligation to justify the respective request provided that it specifies therein that the amount owed to, and requested by, ANCOM is thereby requested because of the existence of one of the situations described below:

1) *[name of the candidate],* being declared winner in the selection procedure, does not pay in due time the owed final price representing the licence fee;
2) *[name of the candidate]*, being declared winner in the selection procedure, waives the right to be awarded the licence for the use of radio frequencies;
3) *[name of the candidate]* breaches the rules concerning the participation in the selection procedure, set out by ANCOM.

This guarantee is valid until *[day/month/year].*

This guarantee tool/guarantee letter is governed by the Romanian law.

The Romanian Courts of Law are competent to settle any disputes arising in relation to the present guarantee tool/guarantee letter.

Endorsed by the Issuer _____ on *[day/month/year].*
(authorised signature)