

*Disclaimer: This is a Romanian to English translation meant to facilitate the understanding of these Terms of Reference. Should differences appear between the Romanian version and the English version, following translation, the Romanian version shall prevail.*

Terms of Reference for the organisation of the competitive selection procedure in view of awarding the rights to use the radio frequencies in the 800 MHz, 900 MHz, 1800 MHz and 2600 MHz bands

2012

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## Chapter 1 – Introduction

### 1.1. Legal framework applicable to the selection procedure

The grounds for the award of the radio frequency usage rights reside in the Government Emergency Ordinance no. 111/2011 on electronic communications<sup>1</sup> (hereinafter referred to as the Framework-Ordinance).

In line with the provisions of art. 26 paragraph (1) of the Framework-Ordinance, the licences will be awarded by means of an open, objective, transparent, non-discriminatory and proportionate procedure.

Pursuant to art. 25 of the Framework-Ordinance, ANCOM may decide to limit the amount of licences that are to be granted in a radio frequency band, when it comes to ensuring the efficient use of the radio frequencies or avoiding the occurrence of harmful interferences. The aforementioned measure can be adopted provided that three conditions are observed: ANCOM must take into consideration the need that the measure brings a maximum of benefits for the users and facilitates the enhancement of competition; ANCOM must grant all interested parties, including the users and the consumers, the possibility to express their views on this measure; any decision limiting the amount of licences must be published together with the justification thereof.

In the case of the licences whose amount was limited, ANCOM awards the usage right by way of a procedure which must fulfil, on turn, a series of conditions, established by art. 26 paragraph (2) under the Framework-Ordinance. Thus:

- a) the type of the procedure must be competitive or comparative selection;
- b) the procedure must be objective, transparent, non-discriminatory and proportionate;
- c) the procedure must not restrict, prevent or distort competition;
- d) the usage rights must be granted, in general, within 8 months from the receipt of a request therefor. If necessary, this term may be changed in order to observe an international agreement to which Romania is a party relating to the use of the radio frequency spectrum or of the orbital positions.

According to art. 26 paragraph (4) of the Framework-Ordinance, during a procedure for awarding the licence for the use of radio frequencies, ANCOM may decide to exclude certain persons from the selection procedure, out of reasons related to the fostering of competition in the electronic communications field, upon the prior consultation of the Competition Council and after undergoing the public consultation procedure referred to in art. 135 under the ordinance.

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<sup>1</sup> Published in the Romanian Official Journal no. 925/27.12.2011.

Paragraphs (2) and (3) of art. 28 in the Framework-Ordinance define the types of selection procedures which may be used, respectively:

- the competitive selection, the procedure by which the radio frequency usage rights are awarded to the winner of an auction, due to the bidding of a maximum value for the licence fee, having as a start point a minimal value set by Government Decision, while ensuring the fulfilment of certain pre-qualification criteria of a technical, administrative or financial nature, as the case may be;
- the comparative selection, the procedure by which the radio frequency usage rights are awarded to the first ranked, after an assessment of the tenders presented by the participants, based on a set of pre-established criteria of a technical, administrative or financial nature, as the case may be.

According to art. 28 paragraph (4), the detailed regulations for conducting the competitive or comparative selection procedures are adopted by decision of the president of ANCOM.

The ANCOM President's Decision no. 1816/2011 on awarding the rights to use the radio frequencies in the 880-915 MHz/925-960 MHz and, respectively, the 1710-1747.5 MHz/1805-1842.5 MHz<sup>2</sup> frequency bands provides that the usage rights in the 880-915 MHz/925-960 MHz ("the 900 MHz band") and 1710-1785 MHz/1805-1880 MHz ("the 1800 MHz band") radio frequency bands are to be granted by means of a selection procedure conducted based on objective, transparent, non-discriminatory and proportionate criteria, during 2012.

The aforementioned Decision also established the duration or the commencement date of the validity of some of the licences for the use of radio frequencies to be awarded. Thus:

- a) for the 890-915 MHz/935-960 MHz and the 1722.7-1752.7 MHz/1817.7-1847.7 MHz bands, two categories of licences will be granted, respectively:
  - licences valid between 01.01.2013 and 05.04.2014;
  - licences valid starting 06.04.2014;
- b) for the 880.1-890.1 MHz/925.1-935.1 MHz and the 1710.1-1722.7 MHz/1805.1-1817.7 MHz bands, licences valid from 06.04.2014 will be granted.

The award of the licences for the use of radio frequencies by means of the competitive selection procedure is bound by the payment to the state budget of a licence fee. According to art. 28 paragraph (1) of the Framework-Ordinance, the minimum amount of the licence fee is fixed by a Government Decision initiated by the General Secretariat of the Government upon ANCOM proposal. In line with art. 29 paragraph (1), this fee may be also used to cover the costs determined by the change of destination or the refarming of some of the frequency bands envisaged by the selection procedure. The respective costs may however be borne from other financing sources, set by Government Decision.

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<sup>2</sup> Published in the Romanian Official Journal no.930/28.12.2011.

## 1.2. Stages to be completed until the selection procedure

Until the selection procedure is held, the following stages need to be completed:

- a) the adoption of the ANCOM President's decision on the organisation of the selection procedure for awarding the radio frequency usage rights and of the present Terms of Reference, their publication and the entry into force of the decision, which entails:
  - the period of public consultation on the draft decision and on the draft Terms of Reference;
  - the analysis of the comments received during the public consultation procedure and the amendment, if required, of the draft decision and of the draft Terms of Reference, in order to take due account of these comments;
  - the adoption of the final versions of the decision and of the Terms of Reference.
  
- b) in parallel with the stage under letter a), but before the adoption of the final versions of the decision and of the Terms of Reference:
  - the adoption of the Government Emergency Ordinance on the release of the 830-862 MHz, 1747.5-1785 MHz, 1842.5-1880 MHz and 2500-2690 MHz radio frequency bands, the draft of which is submitted to public consultation, the publication and the entry into force of the ordinance;
  - the initiation by the General Secretariat of the Government, upon ANCOM proposal, of the draft Government Decision establishing the minimum amounts of the licence fees for the usage rights to be awarded under the selection procedure, its adoption by the Government, publication and entry into force.

## 1.3. Meaning of certain terms and terminological clarifications

Within the present document:

- *the "Commission"* is the auction commission designated by decision of the ANCOM president;
- *"participant"* is the candidate or the bidder in the selection procedure;
- *"national roaming"* means the facility granted to a subscriber to use a handset or another device in order 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 subscribed, by way of certain agreements concluded between the operator of the network to which he/she is subscribed and the other mobile network operators from Romania;
- *"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 in view of 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 locations in geographic areas where the respective third party has no coverage;

- the *"mobile virtual network operator (MVNO)"* is defined as the entity that provides electronic communications services at mobile locations, but does not hold a licence for the use of radio frequencies and does not necessarily hold the core network and/or the infrastructure required to provide mobile communications services; a MVNO operator may be:
  - (i) *"full mobile virtual network operator (full MVNO)"*, which totally holds the control over the services it provides on the retail market and operates its own core network for the provision of services to customers; a full MVNO may grant its own SIM cards, but may not hold frequency usage rights and, consequently, nor radio access core network (for instance, base stations, transceivers, radio network controllers);
  - (ii) *"thin mobile virtual network operator (thin MVNO)"*, which does not hold core network and however ensures the means that allow for controlling the relation with the customer; a thin MVNO may not grant its own SIM cards, but the brand name of the SIM cards of the host mobile network operator may be modified;
- *"MVNO access"* is the ensemble of services provided to the mobile virtual network operators by the host mobile network operator, services which enable the mobile virtual network operator to provide electronic communications services at mobile locations, being a form of access in the meaning of art.4 paragraph (1) point 28 of the Framework Ordinance;
- the syntagm *"to gain/obtain/acquire/win/award frequency blocks/frequencies"* are exclusively used for the easiness of expression, with reference to the gaining of the usage rights of those radio frequency which are part of the frequency blocks submitted to the selection procedure, and represent a simple language convention, without considering other legal operations related to the respective radio frequencies;
- *"The 800 MHz band"* designates the paired frequency bands 791-821 MHz and 832-862 MHz;
- *"The 900 MHz band"* designates the paired frequency bands 880-915 MHz and 925-960 MHz;
- *"The 1800 MHz band"* designates the paired frequency bands 1710-1785 MHz and 1805-1880 MHz;
- *"The 2600 MHz band"* designates the paired frequency bands 2500-2570 MHz and 2620-2690 MHz and the unpaired frequency band 2570-2620 MHz;
- *"GSM network"* means an electronic communications network complying with GSM Standards, as published by ETSI, in particular EN 301 502 and EN 301 511;
- *"UMTS network"* means an electronic communications network 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;
- *"LTE network"* means an electronic communications network 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;

- "*WiMAX network*" means an electronic communications network complying with WiMAX Standards, as published by ETSI, in particular EN 301 908-1, EN 301 908-21 and EN 301 908-22;
- "*other terrestrial systems*" means an electronic communications network other than those defined above, in accordance with 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 and/or with Commission Decision 2009/766/EC on the harmonisation of the 900 MHz and 1800 MHz frequency bands for terrestrial systems capable of providing pan-European electronic communications services in the Community, as well as with Commission Decision 2011/251/EU.



## Chapter 2 – The frequency bands subject to the selection procedure

### 2.1. The 800 MHz band

On 20 September 2010, the European Commission adopted a proposal of *Decision of the European Parliament and of the Council establishing the first radio spectrum policy programme (RSPP)*, which comprises a five-year policy programme with regard to the planning and harmonisation of the use of the radio frequency spectrum across the European Union.

During its plenary meeting of 15 February 2012, the European Parliament adopted this draft decision.

The programme sets out policy orientations and objectives for the strategic planning and harmonisation of the use of spectrum in accordance with the directives applicable to electronic communications networks and services. RSPP supports the goals and key actions outlined in the Commission Communication on the Europe 2020 Strategy and the Commission Communication on "A Digital Agenda for Europe", and is included among the 50 priority actions of the Commission Communication "Towards a Single Market Act".

According to the Programme, by 1 January 2013, Member States will take all actions in order to allow the use of the 800 MHz band for wireless broadband services. The Commission will grant specific derogations until 31 December 2015 for Member States in which exceptional circumstances or cross-border frequency coordination problems would prevent the use of the band according to the RSPP, acting upon a duly substantiated application from the Member State concerned. If a Member State's substantiated cross-border frequency coordination problems with one or more countries, including candidate or acceding countries, persist after 2015 and prevent the availability of the 800 MHz band according to the RSPP, the Commission will grant exceptional derogations on an annual basis until such problems are overcome.

ANCOM has already initiated the main radio spectrum management activities which will enable Romania to observe the timelines set under the RSPP.

Thus, the amount of spectrum in the 800 MHz band is 2x30 MHz, and hence 6 blocks of 2x5 MHz (pair) may be allotted in this band. The upper part of the 800 MHz band is currently used in Romania by the Ministry of National Defence and is to be released within six months from the payment, according to the law, of the amounts required for covering the costs incurred by the change of destination or re-farming of the radio frequency bands. The lower part of the band is not presently in use (there are no analogue TV transmissions in this part of the band). Nevertheless, considering that the use for mobile communications services requires paired frequencies, the implementation of networks in this part of the band is not feasible until the upper part is released.

According to the RSP, the spectrum needs to be managed based on certain principles such as the spectrum efficiency and flexibility, technology and service neutrality and competition. Member States are thus required to maintain and promote efficient competition between the economic operators and avoid spectrum hoarding.

The harmonised technical conditions of the 800 MHz frequency band use were adopted by way of European Commission Decision 2010/267/EU of 6 May 2010 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.

In Romania, according to the NTFA (National Table for Frequency Band Allocation), the 800 MHz frequency band is currently used as follows:

- 790-830 MHz – NG (non-governmental) use;
- 830-862 MHz – G(A)/NG(military/non-governmental) shared use, to be however released for exclusively commercial use within six month from the payment, according to the law, of the amounts required for covering the costs incurred by the change of destination or refarming of the radio frequency bands.

According to the Commission Decision 2010/267/EU, the frequency arrangement within the 800 MHz band is as follows:

- the assigned block sizes are multiples of 5 MHz;
- the duplex mode of operation is FDD with the following arrangements:
  - the duplex spacing is 41 MHz;
  - the frequencies for the base station transmission (downlink) are located in the lower part of the 800 MHz band, in the 791 MHz - 821 MHz sub-band;
  - the frequencies for the terminal station transmission (uplink) are located in the upper part of the 800 MHz band, in the 832 MHz - 862 MHz sub-band.

An overall picture of the 800 MHz band leads to the representation of the European harmonised arrangement exposed in the table below.

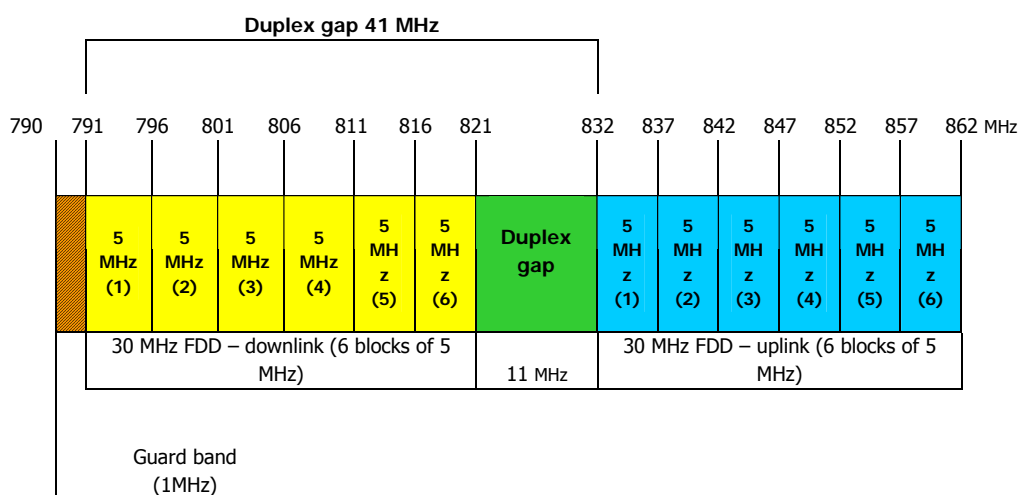
**Table no.1 – European harmonised channelling arrangement for the 800 MHz band**

Spectrum (MHz)	Destination	Overall picture
790 – 791	Guard band – 1 MHz	Guard band
791 – 796	Downlink (block 1) – 5 MHz	(30 MHz) FDD downlink
796 – 801	Downlink (channel 2) – 5 MHz	
801 – 806	Downlink (block 3) – 5 MHz	
806 – 811	Downlink (block 4) – 5 MHz	
811 – 816	Downlink (block 5) – 5 MHz	
816 – 821	Downlink (block 6) – 5 MHz	
821 – 832	Duplex gap – 11 MHz	Duplex gap
832 – 837	Uplink (block 1) – 5 MHz	(30 MHz) FDD uplink
837 – 842	Uplink (block 2) – 5 MHz	
842 – 847	Uplink (block 3) – 5 MHz	

Spectrum (MHz)	Destination	Overall picture
847 – 852	Uplink (block 4) – 5 MHz	
852 – 857	Uplink (block 5) – 5 MHz	
857 – 862	Uplink (block 6) – 5 MHz	

The harmonised frequency arrangement within the 800 MHz band is the one under Annex 1 to Decision ECC/DEC/(09)03 on harmonised technical conditions for systems operating in the band 790-862 MHz and is presented below:

**Figure no.1 - Harmonised arrangement of 5 MHz frequency blocks in the 790-862 MHz band**



In Romania, the usage right in the 800 MHz band is awarded for two compact blocks of 30 MHz (2x30 MHz), in the paired frequency bands 791-821 MHz/832-862 MHz, representing 6 duplex blocks (FDD) of 2 x 5 MHz each.

The operation mode will exclusively be FDD (Frequency Division Duplex) in the paired frequency bands 791-821 MHz/832-862 MHz. The duplex gap (the frequency separation between the transmission frequency and the reception frequency) is 41 MHz.

The usage mode is:

- the 791-821 MHz band for base station transmission;
- the 832-862 MHz band for base station reception.

## 2.2. The 900 MHz band

The licences for the use of radio frequencies in view of providing GSM digital mobile communications in the 900 MHz band were first awarded in Romania, at the end of 1996, to the operators S.C. MOBIFON S.A. (currently S.C. VODAFONE ROMANIA S.A. - VODAFONE) and S.C. MOBIL ROM S.A. (currently S.C. ORANGE ROMANIA S.A. - ORANGE).

Each licence holder was thus awarded the national usage right for 22 GSM radio channels in the 890-915 MHz/935-960 MHz frequency bands, for the purpose of operating and installing public GSM mobile communications networks, with the possibility of supplementing the number of assigned channels at the moment when the GSM frequency bands were to become available as a result of their release from the military systems existing in these bands at that time.

The licences were awarded by means of a comparative selection procedure, the holders paying upon licence issuance, in accordance with the provisions of the legal framework in force at that time<sup>3</sup>, a licence fee amounting to 50 million USD, for a 10-year validity period, and subsequently an additional licence fee amounting to 25 million USD, for the additional 5-year extension of the licence validity.

Starting from July 2003, upon the review of the GSM licences, VODAFONE and ORANGE benefited from the right to use, each, 62 GSM channels, allotted at a national level, in the 900 GSM band (890-915 MHz/935-960 MHz), in view of providing public electronic communications networks and of electronic communications services for the GSM technology. Furthermore, upon the review in 2003 of the GSM licence of S.C. COSMOTE ROMANIAN MOBILE TELECOMMUNICATIONS S.A. (COSMOTE), this operator was also awarded the right to use frequencies in the GSM 900 band for the operation of its GSM network.

From September 2005, COSMOTE was allotted the first 20 channels in the GSM 900 extension band (880-890 MHz/925-935 MHz). As well, in 2006, this operator was allotted the other 30 GSM channels in the GSM 900 extension band. The licence fee due for the award of the rights to use the GSM 900 extension band amounted to 28 million USD.

According to Directive 2009/114/EC of the European Parliament and of the Council amending Council Directive 87/372/EEC on the frequency bands to be reserved for the coordinated introduction of public pan-European cellular digital land-based mobile communications in the Community, there were adopted measures that would lead to the liberalisation of the use of the 900 MHz bands for third generation mobile communications services (3G), bands reserved at that time exclusively for second generation mobile communications services, specific to GSM systems.

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<sup>3</sup> The Government Emergency Ordinance no.4/1996 on the award of licences for the installation and operation of the GSM networks and the establishment of the licence fee, published in the Romanian Official Journal no.207/02.09.1996, and the Law no.74/1996 on telecommunications, published in the Romanian Official Journal no.156/22.07.1996.

As a result of the provisions of Directive 2009/114/EC, ANCOM adopted a decision<sup>4</sup> which enables the operators holding spectrum in the 900 MHz radio frequency bands to use the radio spectrum held for the provision of third generation electronic communications services, by means of the UMTS systems, as well.

The current situation of the radio spectrum licensing in the 900 MHz band is presented in the table below.

**Table 2 – Current situation of the spectrum licensing in the 900 MHz band**

Licence	Technology	Spectrum allotted under the licence	Validity period of the licence <sup>5</sup>
VODAFONE	GSM 900	2 x 12.4 MHz	29.11.1996 – 31.12.2012
	UMTS 900		14.04.2010 – 31.12.2012
ORANGE	GSM 900	2 x 12.4 MHz	05.12.1996 – 31.12.2012
	UMTS 900		07.06.2010 – 31.12.2012
COSMOTE	GSM 900	2 x 10 MHz	16.12.1998 – 05.04.2014
	UMTS 900		28.07.2010 – 05.04.2014

The comparative situation of the current allotments in the 900 MHz frequency spectrum is presented in the table below.

**Table 3 – Comparative situation of the current allotments in the 900 MHz band**

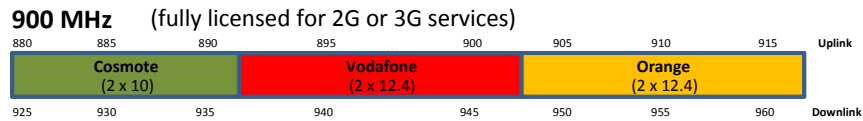
VODAFONE	ORANGE	COSMOTE
2 x 12.4 MHz	2 x 12.4 MHz	2 x 10 MHz

The positioning of the operators' allotments within the spectrum is depicted in the figure below.

**Figure 2 – Positioning of the current allotments in the 900 MHz band**

<sup>4</sup> Decision no.168/2010 on the harmonisation of the use of the pairs of radio frequency bands 880-915 MHz, 925-960 MHz, 1710-1747.5 MHz and 1805-1842.5 MHz, published in the Romanian Official Journal no.163/15.03.2010

<sup>5</sup> The Vodafone and Orange licences, which were due to expire as of 31.12.2011, have been extended until 31.12.2012 through the ANCOM President's Decision no.1816/2011 on awarding the rights to use the radio frequencies in the 880-915 MHz/925-960 MHz, respectively 1710-1747.5 MHz/1805-1842.5 MHz bands, published in the Romanian Official Journal no.930/28.12.2011



Considering that the commercially usable frequency spectrum in the 900 MHz band is currently assigned to operators which have the right to use it for different time periods, i.e. 24.8 MHz duplex until 31.12.2012 and 10 MHz duplex until 05.04.2014, the usage rights in this band will be awarded in two temporal segments, starting with the aforementioned dates.

Thus, in Romania, for the 01.01.2013 – 05.04.2014 period, the usage right in the 900 MHz band is awarded for two compact blocks of 24.8 MHz (2 x 24.8 MHz) each, in the paired frequency bands 890.1-914.9 MHz/935.1-959.9 MHz, representing 4 duplex blocks (FDD) of 2 x 5 MHz width and one duplex block (FDD) of 2 x 4.8 MHz width.

The mode of operation will exclusively be FDD (Frequency Division Duplex) in the paired frequency bands 890.1-914.9 MHz/935.1-959.9 MHz. The duplex gap (the frequency separation between the transmission frequency and the reception frequency) is 45 MHz.

The usage mode is as follows:

- the 890.1-914.9 MHz band for base station reception;
- the 935.1-959.9 MHz band for base station transmission.

An overall picture on the 900 MHz band, for the 01.01.2013 – 05.04.2014 period, leads to the frequency arrangement represented in the table below:

**Table 4 – Frequency arrangement for the 900 MHz band, 01.01.2013 – 05.04.2014 period**

Spectrum (MHz)	Destination	Overall picture
890.1 – 895.1	Uplink (block 1) – 5 MHz	(24.8 MHz) FDD uplink
895.1 – 900.1	Uplink (block 2) – 5 MHz	
900.1 – 904.9	Uplink (block 3) – 4.8 MHz	
904.9 – 909.9	Uplink (block 4) – 5 MHz	
909.9 – 914.9	Uplink (block 5) – 5 MHz	
914.9 – 935.1	other communications systems & another GSM operator – 20 MHz	Other communications systems & another GSM operator
935.1 – 940.1	Downlink (block 1) – 5 MHz	(24.8 MHz) FDD downlink
940.1 – 945.1	Downlink (block 2) – 5 MHz	
945.1 – 949.9	Downlink (block 3) – 4.8 MHz	
949.9 – 954.9	Downlink (block 4) – 5 MHz	

Spectrum (MHz)	Destination	Overall picture
954.9 – 959.9	Downlink (block 5) – 5 MHz	

For the 06.04.2014 – 05.04.2029 period, two compact blocks of 2 x 34.8 MHz each, in the paired frequency bands 880.1-914.9 MHz/925.1-959.9 MHz, representing 6 duplex channels (FDD) of 2 x 5 MHz width and one duplex channel (FDD) of 2 x 4.8 MHz width, are awarded in the 900 MHz band.

The usage mode is as follows:

- the 880.1-914.9 MHz band for base station reception;
- the 925.1-959.9 MHz band for base station transmission.

The mode of operation will exclusively be FDD (Frequency Division Duplex). The duplex gap (the frequency separation between the transmission frequency and the reception frequency) is 45 MHz.

An overall picture on the 900 MHz band, for the 06.04.2014 – 05.04.2029 period, leads to the frequency arrangement represented in the table below.

**Table 5 – Frequency arrangement in the 900 MHz band, 06.04.2014 – 05.04.2029 period**

Spectrum (MHz)	Destination	Overall picture
880.1 – 885.1	Uplink (block 1) – 5 MHz	(34.8 MHz) FDD uplink
885.1 – 890.1	Uplink (block 2) – 5 MHz	
890.1 – 895.1	Uplink (block 3) – 5 MHz	
895.1 – 900.1	Uplink (block 4) – 5 MHz	
900.1 – 905.1	Uplink (block 5) – 5 MHz	
905.1 – 910.1	Uplink (block 6) – 5 MHz	
910.1 – 914.9	Uplink (block 7) – 4.8 MHz	
914.9 – 925.1	Other radiocommunication systems – 10 MHz	Other radiocommunication systems
925.1 – 930.1	Downlink (block 1) – 5 MHz	(34.8 MHz) FDD downlink
930.1 – 935.1	Downlink (block 2) – 5 MHz	
935.1 – 940.1	Downlink (block 3) – 5 MHz	
940.1 – 945.1	Downlink (block 4) – 5 MHz	
945.1 – 950.1	Downlink (block 5) – 5 MHz	

Spectrum (MHz)	Destination	Overall picture
950.1 – 955.1	Downlink (block 6) – 5 MHz	
955.1 – 959.9	Downlink (block 7) – 4.8 MHz	

### 2.3. The 1800 MHz band

At the end of 1998, a new licence for the installation and operation of a public GSM mobile communications network<sup>6</sup>, in the GSM 1800 band (1805-1880 MHz/1710-1785 MHz), was awarded to S.C. COSMOROM S.A. (currently S.C. COSMOTE ROMANIAN MOBILE TELECOMMUNICATIONS S.A. - COSMOTE). The licence holder was initially granted 22 GSM 1800 channels, 15 of which were allotted at a national level and 7 were allotted only in Bucharest, with the possibility of allotting additional channels in keeping with the market demand and the availability of the GSM bands. The usage rights became effective in 1999, upon the payment of a licence fee of 25 million USD.

Starting from July 2003, upon the review of the GSM licences, VODAFONE and ORANGE also benefited from the rights to use the frequencies in the GSM 1800 band (1805-1880 MHz/1710-1785 MHz), in view of providing public electronic communications networks and electronic communications services for the GSM technology.

Beginning with January 2005, COSMOTE exercised its usage right for 40 GSM 1800 channels allotted at a national level, and from 2007 for the last 23 channels in the GSM 1800 band.

Following the introduction of the possibility to use UMTS systems in the 1800 MHz frequency band and the creation of the premises for the liberalisation of the GSM 1800 frequency band and for its use by the UMTS systems, all the three GSM 1800 operators were awarded during 2010 the right to use the GSM 1800 frequency bands allotted under licence for the provision, as well, of third generation electronic communications public networks and third generation electronic communications services, by means of the UMTS technology, while the held GSM 1800 licences were reviewed therefor.

The current situation of the radio spectrum licensing in the 1800 MHz band is available in the table below.

**Table 6 – Current situation of the radio spectrum licensing in the 1800 MHz band**

Licence	Technology	Spectrum allotted under the licence	Validity period of the licence
VODAFONE	GSM 1800	2 x 12.4 MHz	29.11.1996 – 31.12.2012

<sup>6</sup> On the basis of the Government Emergency Ordinance no.24/1997 completing the Government Emergency Ordinance no.4/1996 on the award of licences for the installation and operation of the GSM networks and the establishment of the licence fee, published in the Romanian Official Journal no.114/06.06.1997, and the Law no.163/1997 approving the Government Emergency Ordinance no.4/1996 and of the Government Emergency Ordinance no.24/1997, published in the Romanian Official Journal no.290/27.10.1997



Licence	Technology	Spectrum allotted under the licence	Validity period of the licence
	UMTS 1800		14.04.2010 – 31.12.2012
ORANGE	GSM 1800	2 x 12.4 MHz	05.12.1996 – 31.12.2012
	UMTS 1800		07.06.2010 – 31.12.2012
COSMOTE	GSM 1800	2 x 12.6 MHz	16.12.1998 – 05.04.2014
	UMTS 1800		28.07.2010 – 05.04.2014

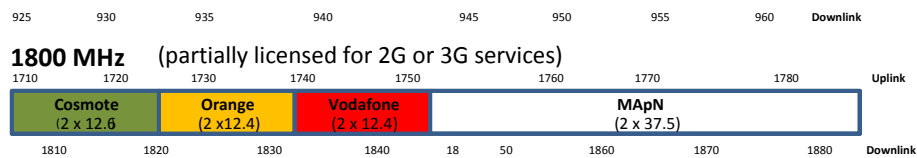
The comparative situation of the current spectrum allotments in the 1800 MHz frequency band is presented in the table below.

**Table 7 – Comparative situation of the current allotments in the 1800 MHz band**

VODAFONE	ORANGE	COSMOTE
2 x 12.4 MHz	2 x 12.4 MHz	2 x 12.6 MHz

The positioning of the operators' allotments within the spectrum is depicted in the figure below.

**Figure 3 – Positioning of the operators' current allotments within the 1800 MHz band**



The 1800 MHz band, as the 900 MHz band, will be assigned in two temporal segments. This structure of the procedure is due:

- firstly, to the fact that the spectrum in the 1800 MHz band, currently available for commercial use, is allotted to operators which have the right to use it for different time intervals, i.e. 24.8 MHz duplex until 31.12.2012 and 12.6 MHz duplex until 05.04.2014, as one may notice in the previous tables, as well as
- to the fact that, after 06.04.2014, a 75 MHz duplex amount of spectrum will be available in the 1800 MHz band for commercial use, following the release of the entire band from the applications with governmental use.

Furthermore, the differentiation per time periods is relevant for the channelling as well, since the blocks to be allotted previously and subsequently to 06.04.2014 will be different, as presented further on.

Thus, in Romania, for the 01.01.2013 – 05.04.2014 period, the usage right in the 1800 MHz band is awarded for two compact blocks of 2 x 30 MHz each, in the paired frequency bands 1722.7-1752.7 MHz/1817.7-1847.7, divided in 6 duplex channels (FDD) of 5 MHz width each.

The usage mode is as follows:

- the 1722.7-1752.7 MHz band for base station reception;
- the 1817.7-1847.7 MHz band for base station transmission.

The mode of operation will exclusively be FDD (Frequency Division Duplex) in the paired frequency bands 1722.7-1752.7/1817.7-1847.7 MHz. The duplex gap (the frequency separation between the transmission frequency and the reception frequency) is 95 MHz.

An overall picture on the 1800 MHz band, for the 01.01.2013 – 05.04.2014 period, leads to the frequency arrangement represented in the table below.

**Table 8 – Frequency arrangement in the 1800 MHz band, 01.01.2013 – 05.04.2014 period**

Spectrum (MHz)	Destination	Overall picture
1722.7 – 1727.7	Uplink (block 1) – 5 MHz	(30 MHz) FDD uplink
1727.7 – 1732.7	Uplink (block 2) – 5 MHz	
1732.7 – 1737.7	Uplink (block 3) – 5 MHz	
1737.7 – 1742.7	Uplink (block 4) – 5 MHz	
1742.7 – 1747.7	Uplink (block 5) – 5 MHz	
1747.7 – 1752.7	Uplink (block 6) – 5 MHz	
1747.5 – 1817.7	Other radiocommunication systems & another GSM 1800 operator – 70.2 MHz	Other radiocommunication systems & another GSM 1800 operator
1817.7 – 1822.7	Downlink (block 1) – 5 MHz	(30 MHz) FDD downlink
1822.7 – 1827.7	Downlink (block 2) – 5 MHz	
1827.7 – 1832.7	Downlink (block 3) – 5 MHz	
1832.7 – 1837.7	Downlink (block 4) – 5 MHz	
1837.7 – 1842.7	Downlink (block 5) – 5 MHz	
1842.7 – 1847.7	Downlink (block 6) – 5 MHz	

For the 06.04.2014 – 05.04.2029 period, the usage right in the 1800 MHz band is awarded for two compact blocks of 74.8 MHz (2 x 74.8 MHz) each, in the paired frequency bands 1710.1-1784.9/1805.1-1879.9 MHz, divided into 14 duplex blocks (FDD) of 2 x 5 MHz width each, and one duplex block (FDD) of 2 x 4.8 MHz width.

The usage mode is as follows:

- the 1710.1-1784.9 MHz band for base station reception;

- the 1805.1-1879.9 MHz band for base station transmission.

The mode of operation will exclusively be FDD (Frequency Division Duplex) in the paired frequency bands 1710.1-1784.9 MHz / 1805.1-1879.9 MHz. The duplex gap (the frequency separation between the transmission frequency and the reception frequency) is 95 MHz.

An overall picture on the 1800 MHz band, for the 06.04.2014 – 05.04.2029 period, leads to the frequency arrangement represented in the table below.

**Table 9 – Frequency arrangement in the 1800 MHz band, 06.04.2014 – 05.04.2029 period**

Spectrum (MHz)	Destination	Overall picture
1710.1 – 1715.1	Uplink (block 1) – 5 MHz	(74.8 MHz) FDD uplink
1715.1 – 1720.1	Uplink (block 2) – 5 MHz	
1720.1 – 1725.1	Uplink (block 3) – 5 MHz	
1725.1 – 1730.1	Uplink (block 4) – 5 MHz	
1730.1 – 1735.1	Uplink (block 5) – 5 MHz	
1735.1 – 1740.1	Uplink (block 6) – 5 MHz	
1740.1 – 1745.1	Uplink (block 7) – 5 MHz	
1745.1 – 1750.1	Uplink (block 8) – 5 MHz	
1750.1 – 1755.1	Uplink (block 9) – 5 MHz	
1755.1 – 1760.1	Uplink (block 10) – 5 MHz	
1760.1 – 1765.1	Uplink (block 11) – 5 MHz	
1765.1 – 1770.1	Uplink (block 12) – 5 MHz	
1770.1 – 1775.1	Uplink (block 13) – 5 MHz	
1775.1 – 1780.1	Uplink (block 14) – 5 MHz	
1780.1 – 1784.9	Uplink (block 15) – 4.8 MHz	
1784.9 – 1805.1	Other radiocommunication systems – 20 MHz	Other radiocommunication systems
1805.1 – 1810.1	Downlink (block 1) – 5 MHz	(74.8 MHz) FDD downlink
1810.1 – 1815.1	Downlink (block 2) – 5 MHz	
1815.1 – 1820.1	Downlink (block 3) – 5 MHz	
1820.1 – 1825.1	Downlink (block 4) – 5 MHz	
1825.1 – 1830.1	Downlink (block 5) – 5 MHz	
1830.1 – 1835.1	Downlink (block 6) – 5 MHz	
1835.1 – 1840.1	Downlink (block 7) – 5 MHz	
1840.1 – 1845.1	Downlink (block 8) – 5 MHz	
1845.1 – 1850.1	Downlink (block 9) – 5 MHz	
1850.1 – 1855.1	Downlink (block 10) – 5 MHz	
1855.1 – 1860.1	Downlink (block 11) – 5 MHz	
1860.1 – 1865.1	Downlink (block 12) – 5 MHz	
1865.1 – 1870.1	Downlink (block 13) – 5 MHz	
1870.1 – 1875.1	Downlink (block 14) – 5 MHz	
1875.1 – 1879.9	Downlink (block 15) – 4.8 MHz	

## 2.4. The 2600 MHz band

By means of the RSPP, the European Commission proposes that the EU Member States complete the actions of authorisation and awarding of the frequency bands in the radio spectrum which have already been technically harmonised in the EU for wireless broadband services (the 900/1800 MHz bands, the 2600 MHz band and the 3400-3800 MHz band). In this regard, it is specified that, by 1 January 2013, Member States authorise the use of the entire spectrum designated by Commission Decisions 2008/477/EC (2500-2690 MHz), 2008/411/EC (3400-3800 MHz) and 2009/766/EC (900/1800 MHz), under terms ensuring the facile consumers' access to wireless broadband services.

The harmonised technical conditions for the use of the 2600 MHz frequency band were adopted by way of European Commission Decision 2008/477/EC of 13 June 2008 on the harmonisation of the 2500-2690 MHz frequency band for terrestrial systems capable of providing electronic communications services in the Community.

Moreover, according to the NTFA, the 2600 MHz band is currently used as follows:

- 2500-2520 MHz – NG (non-governmental) use;
- 2520-2655 MHz – G(A)/NG (military/non-governmental) shared use;
- 2655-2690 – NG (non-governmental) use.

The spectrum amount in the 2600 MHz band is 2x70 MHz (2500-2570 MHz/2620-2690 MHz) and another 50 MHz (2570-2620 MHz), which allows for allotting 14 blocks of 2x5 MHz (paired), respectively 10 blocks of 5 MHz (unpaired). A share of the 2600 MHz band is currently used by the Ministry of National Defence, following to be released within six month from the payment, according to the law, of the amounts required for covering the costs incurred by the change of destination or refarming of the radio frequency bands.

According to the European Commission Decision 2008/477/EC, the frequency arrangement in the 2600 MHz band is as follows:

- the assigned block sizes are multiples of 5 MHz.
- the duplex gap for the FDD mode of operation must be 120 MHz, with the following arrangements:
  - the frequencies for the terminal (uplink) are located in the lower part of the band (starting at 2500 MHz and finishing at 2570 MHz);
  - the frequencies for the base station transmission (downlink) are located in the upper part of the band, which starts at 2620 MHz and finishes at 2690 MHz.
- the 2570-2620 MHz sub-band may be used in the TDD mode or in other usage modes according to the BEM masks in order to avoid the harmful interferences.

An overall picture on the 2600 MHz band leads to the representation of the European harmonised arrangement in the table below.

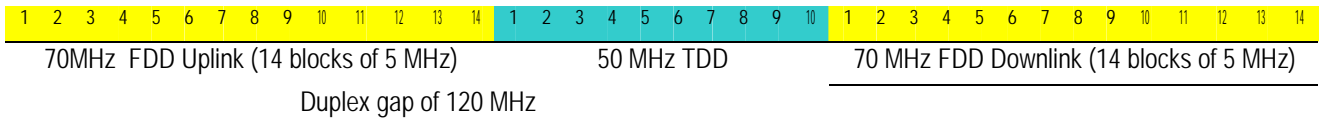
**Table 10 – European harmonised frequency arrangement for the 2600 MHz band**

Spectrum (MHz)	Destination	Overall picture
2500 – 2505	Uplink (block 1) – 5 MHz	(70 MHz) FDD uplink
2505 – 2510	Uplink (block 2) – 5 MHz	
2510 – 2515	Uplink (block 3) – 5 MHz	
2515 – 2520	Uplink (block 4) – 5 MHz	
2520 – 2525	Uplink (block 5) – 5 MHz	
2525 – 2530	Uplink (block 6) – 5 MHz	
2530 – 2535	Uplink (block 7) – 5 MHz	
2535 – 2540	Uplink (block 8) – 5 MHz	
2540 – 2545	Uplink (block 9) – 5 MHz	
2545 – 2550	Uplink (block 10) – 5 MHz	
2550 – 2555	Uplink (block 11) – 5 MHz	
2555 – 2560	Uplink (block 12) – 5 MHz	
2560 – 2565	Uplink (block 13) – 5 MHz	
2565 – 2570	Uplink (block 14) – 5 MHz	
2570 – 2585	Block 1 TDD – 15 MHz	(45 MHz) TDD
2585 – 2600	Block 2 TDD – 15 MHz	
2600 – 2615	Block 3 TDD – 15 MHz	
2615 – 2620	Guard band – 5 MHz	Guard band
2620 – 2625	Downlink (block 1) – 5 MHz	(70 MHz) FDD downlink
2625 – 2630	Downlink (block 2) – 5 MHz	
2630 – 2635	Downlink (block 3) – 5 MHz	
2635 – 2640	Downlink (block 4) – 5 MHz	
2640 – 2645	Downlink (block 5) – 5 MHz	
2645 – 2650	Downlink (block 6) – 5 MHz	
2650 – 2655	Downlink (block 7) – 5 MHz	
2655 – 2660	Downlink (block 8) – 5 MHz	
2660 – 2665	Downlink (block 9) – 5 MHz	
2665 – 2670	Downlink (block 10) – 5 MHz	
2670 – 2675	Downlink (block 11) – 5 MHz	
2675 – 2680	Downlink (block 12) – 5 MHz	
2680 – 2685	Downlink (block 13) – 5 MHz	
2685 – 2690	Downlink (block 14) – 5 MHz	

The European harmonised channel arrangement in the 2500-2690 MHz band, in line with Decision ECC (05)05, is represented in the figure below:

**Figure 4 - Harmonised arrangement of 5 MHz frequency blocks in the 2500-2690 MHz band**





In Romania, the usage right in the 2600 MHz band is awarded for the following frequency spectrum:

- two compact blocks of 70 MHz (2 x 70 MHz) each, in the paired frequency bands 2500-2570/2620-2690 MHz, representing 14 duplex channels (FDD) of 2 x 5 MHz width;
- one compact block of 45 MHz in the unpaired frequency band 2570-2615 MHz, representing 3 simplex channels (TDD) of 15 MHz width each.

The mode of operation will be:

- FDD (Frequency Division Duplex) in the paired frequency bands 2500-2570/2620-2690 MHz, with a duplex gap of 120 MHz;
- TDD (Time Division Duplex) in the unpaired frequency band 2570-2615 MHz.

The usage mode of the FDD paired bands is as follows:

- the 2500-2570 MHz band for base station reception;
- the 2620-2690 MHz band for base station transmission.

## **Chapter 3 – Licences to be awarded under the selection procedure**

### **3.1. Duration of the licences**

On grounds of ANCOM's President Decision no. 1816/2011, the rights to use the radio frequencies will be granted for different time periods, depending on the availability of the spectrum resources for assignment, as follows:

- a) for the period between 1 January 2013 and 5 April 2014, inclusively, in case of the rights of use for the 890-915 MHz/935-960 MHz bands and, respectively, the 1722.7-1752.7 MHz/1817.7-1847.7 MHz bands;
- b) for a 15-year period, respectively starting on 6 April 2014 until 5 April 2029, inclusively, in case of the rights to use the 800 MHz, 900 MHz, 1800 MHz bands and, respectively, the 2600 MHz band, in their entirety.

In accordance with the provision under art. 31 paragraph (1) of the Framework-Ordinance, the usage rights for the radio frequencies, granted by means of selection procedures, are awarded for a maximum 10-year period. By means of exemption, under the conditions set out in art. 31 paragraph (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 by means of those frequencies, considering the pursued goal, and takes into account the duration necessary for the investment amortization.

The legal ground for granting the usage rights in the 800 MHz, 900 MHz, 1800 MHz bands and, respectively, in the 2600 MHz band, in their entirety, for a 15-year period, according to letter b) above, is art. 31 paragraph (2). The Authority considers that the 15-year term is adequate due to reasons related to the nature of the service provided (the necessity to ensure the continuity of the electronic communications services provision at mobile locations during a period meant to confer certain stability to business plans) as well as to the necessity for investment amortization to be considered by each winning bidder following the selection procedure. Taking all these into account, granting usage rights for the 1 January 2013 – 5 April 2014 period represents an exceptional circumstance, mainly triggered, as shown in the Sections 2.2 and 2.3 above, by the asymmetry of the validity terms of the licences currently in force in the 900 MHz and 1800 MHz spectrum, now available for commercial use.

### **3.2. Rights conferred by the licences**

The holders of the licences to be awarded through the selection procedure will have the right to install, operate, control and make available to third parties a public electronic communications network and the associated infrastructure, in view of providing publicly available mobile electronic communications services, by using the radio frequencies over which they will gain usage rights as a result of the procedure.

For this purpose, the licence holders will have the right to use any available technology, if such usage will not breach the obligations regarding the observance of certain technical and operational conditions set out under Section 3.3.4 herein.

Also, a holder of licences in the categories A, C, E, F or G will have the right to conclude an national roaming agreement with any other holder of a licence for the use of radio frequencies for the purpose of providing public electronic communications networks and publicly available mobile electronic communications services, if the radio coverage of the access network of the requester has reached 30% of the population.

Additionally, a licence holder will have the right to conclude an national roaming agreement with any other holder of a licence for the use of radio frequencies for the purpose of providing public electronic communications networks and publicly available mobile electronic communications services, for the localities the latter has the exclusive obligation to cover according to the licence.

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 in order to avoid harmful interferences.

### **3.3. Obligations imposed under the licences**

#### *3.3.1. Coverage obligations*

##### **3.3.1.1 Coverage obligations for the licences in the 800 MHz and 900 MHz bands with the validity period between 06.04.2014 – 05.04.2029**

The holders of the rights to use the frequencies below 1 GHz (800 MHz and/or 900 MHz) have the obligation to ensure:

i). Priority coverage of a 90% percent of the population from certain pre-established areas, specified in Annex 7, with mobile communications services in UMTS technology, improved technologies in the IMT family (HSPA, HSPA+) or LTE or equivalent, by way of own infrastructure, until 05.04.2015. Each block in categories A or C that is to be assigned as a result of the selection procedure has associated the obligation to cover a number of 107 localities from those enlisted in Annex 7. After the closing of the selection procedure, before the award of the licences for the use of radio frequencies, ANCOM will establish a nominal list of localities which must be covered by each winner of the rights of use in the 800 MHz or 900 MHz bands. The lists will be prepared as follows:

- the winners of blocks in the 800 MHz or 900 MHz bands will have 30 days at their disposal to conclude a unanimously agreed agreement on the nominal share of the localities in Annex 7 in keeping with the principle that each winner will have to cover a number of localities equal to the cumulated number of blocks won in the 800 MHz or 900 MHz bands multiplied by 107;
- ANCOM will divide between the winners of blocks in the 800 MHz or 900 MHz bands, by draw, all the localities that will not make the object of the agreement specified at the previous point, in compliance with the principle stated in the previous paragraph.



ii). Coverage with mobile communications services of certain areas inhabited by at least 60% of Romania's population, by means of the own infrastructure, by 5 April 2019 at the latest.

### 3.3.1.2 Coverage obligations for the licences in the 1800 MHz and 2600 MHz bands with a validity period between 06.04.2014 – 05.04.2029

The holders of the rights to use the frequencies only in the frequency bands over 1 GHz (1800 MHz and/or 2600 MHz FDD) have the obligation to ensure coverage with mobile communications services of certain areas inhabited by at least 30% of Romania's population, by means of the own infrastructure, until 5 April 2019 at the latest.

In the cases under both points 3.3.1.1 and 3.3.1.2, the population is considered evenly distributed on the entire administrative surface of a locality.

### 3.3.1.3 Coverage definition

An area will be considered as being covered with mobile communications services if the following conditions are cumulatively met:

- a) the mobile communications services are provided with a downlink transfer speed of data towards the user of at least 10% of the highest average data transfer speed (the highest value of the parameter "Average Cell Throughput") allowed by the reference technology ensured constantly and consistently throughout the covered area (the minimum guarantee period towards the user at the cell edge. The speed will be ensured in the following hypotheses:
  - 85% of the cell resources are dedicated to the user;
  - the average cell load of the surrounding cells is 50%.
- b) the mean level of the field generated by the pilot signal, expressed in dB $\mu$ V/m/bandwidth of the channel used, measured outside the buildings, at a 1.5 m height, referring to an antenna with the gain of 0 dBd, at least equal to the level deriving from the sensitivity of the receiver according to the relevant standards (in accordance with the frequency band and the data transfer speed) to which an edge of 20 dB is added and a correction factor relating to the indoor propagation mitigation; the value of the correction factor relating to the indoor propagation mitigation is 15 dB for the 800 MHz and 900 MHz bands, respectively 19 dB for the 1800 MHz and 2600 MHz bands;
- c) block error rate BLER  $\leq 10^{-2}$ ;
- d) the services defined at point a) are provided with 90% probability of indoor reception;
- e) the services defined at point a) are provided with at least 95% probability outdoor;
- f) the following parameters referring to the quality of the IMT signal are observed (parameters defined in particular to verify the coverage by measurements):
  - for GSM:  $Rx_{qual} \geq 5$ ;
  - for UMTS:  $E_c/I_0 \geq -8$  dB;
  - for LTE:  $SINR \geq -4$ ;
  - any other technology, the parameter and its threshold value will be defined by the Authority after this new technology becomes available.

### 3.3.2. Obligations regarding quality of service

#### 3.3.2.1 Minimum network availability standard

"Network availability" will be defined as the average number of minutes per terminal during a 6-month period for which the services provided through the network are not available due to network disturbance, network fault or scheduled unavailability.

Network availability will be expressed in terms of service unavailability through the network ("network unavailability").

The licence holder has the obligation to ensure that the network unavailability is less than 35 minutes (based on the weighting factors specified in the table below) during a 6 months period.

**Table 11 Weighting factors for network unavailability during all the network unavailability periods**

Service unavailability, weighting factors (the duration of each network event is divided by the weighting factor)			
	Monday to Friday	Saturday	Sunday
For periods between 07.00 and 24.00 hours	1	2	4
For periods between 00.00 and 07.00 hours	4	8	16

The holder has the obligation to keep the network logs in such a way as to be able to prove to the Authority that such logs are an adequate means for evaluating whether the holder observes the network availability obligation provided for under the licence.

The network logs or parts of these, as the case may be, will be made available to the Authority upon its request.

The holder has the obligation to calculate the network unavailability for any period specified by ANCOM, based on the information recorded in the network logs, as well as to provide the results of the calculations, upon the request of and within the timeframe specified by ANCOM.

#### 3.3.2.2 Minimum standard for "voice call"

When providing the voice service through its terrestrial systems in the 800 MHz, 900 MHz, 1800 MHz and/or 2600 MHz bands, the holder will observe the minimum standard for "voice call" established in the Table below.

**Table 12 Minimum standard for "voice call" for each 6-month period**

	Average	The most favourable case
<p><b>Maximum admissible call blocking rates</b></p> <p>This parameter refers to the maximum percentage of unsuccessful calls, from the total number of attempted calls, during the most time consistently busy hour *</p>	2%	4%
<p><b>Maximum admissible call interruption rates</b></p> <p>This parameter refers to the maximum percentage of the total initiated calls which are prematurely interrupted by the network within 3 minutes after call initiation</p>	2%	4%
<p><b>End to end blocking rate for a network point</b></p> <p>This parameter is defined as the number of blocked calls in relation to the total number of initiated calls in any point within the network coverage area</p>	3%	5%
<p><b>End to end interruption rate for a network point</b></p> <p>This parameter is defined as the number of calls interrupted by the network within 3 minutes after call initiation in relation to the total number of initiated calls in any point within the network coverage area</p>	3%	5%
<p><b>Transmission quality</b></p> <p>The licence holder will ensure a voice transmission quality as good as, or better than, the vocal transmission quality associated with the GSM standard and the GSM technical specifications elaborated by ETSI. The holder will ensure the use of adequate equipment in order to compensate the echo and their proper configuration.</p>		

\* The "most time consistently busy hour" is defined as the 1-hour period during the same daily hour interval when the average network traffic is at the highest level during the considered time interval. The most time consistently busy hour will be determined by means of analysing the service traffic data and will be subject to ANCOM approval.

The "most time consistently busy hour" is to be determined based on the operator's voice traffic and represents the 1-hour time interval when the traffic is at the highest level. The call blocking rates are measured over the same 1-hour period during each day of the assessed period (e.g. 6 months). This hour will be determined by the operator and will be submitted to the ANCOM approval.

### *3.3.3. Access obligations*

#### 3.3.3.1. Obligations on the national roaming

The holders of the licences to be awarded through the selection procedure will have the obligation to negotiate in good faith and conclude, with the other holders of licences for the use of radio frequencies for the provision of public electronic communications networks and publicly available electronic communications services, national roaming agreements for the provision of access to the unique 112 emergency call number. These agreements will be concluded within maximum 2 months from the entry into force of the licences and will be valid during the entire validity period of these licences.

Also, the holders of licences in the categories A, C, E, F or G will have the obligation to negotiate in good faith and conclude:

- a) a national roaming agreement with any other holder of a licence for the use of radio frequencies for the purpose of providing public electronic communications networks and publicly available mobile electronic communications services, the access network of which has reached 30% of the population, in view of providing national roaming services, and who requires the conclusion of such an agreement;
- b) a national roaming agreement, in view of providing regional roaming services in the localities it has the exclusive obligation to cover according to the licence provisions, during the entire validity period of these licence, with any other holder of a licence for the use of radio frequencies for the purpose of providing public electronic communications networks and publicly available mobile electronic communications services, the access network of which has reached 30% of the population, in view of providing regional roaming services in the localities the requester must cover according to the licence provisions, and who requires the conclusion of such an agreement.

The licences will provide maximum terms for negotiation and implementation of the roaming agreements under letters a) and b) above. Thus, the maximum term for negotiation in view of concluding such a roaming agreement will be of 2 months after the date when the licence holder receives a request therefor. Also, the licence holder will ensure the implementation of the provisions under the roaming agreement in such a way as the electronic communications services provision starts within 3 months after the agreement conclusion date.

The duration of the roaming agreements provided in letter a) will be established by means of negotiation between the parties. In case the beneficiary holds a licence in the 800 MHz or 900 MHz band, the agreement may not be concluded for a period of less than 3 years, if the beneficiary requires such conclusion for a period of at least 3 years. In case the beneficiary holds a licence only in the 1800 MHz, 2000 MHz or 2600 MHz band, the agreement may not be concluded for a period of less than 5 years, if the beneficiary requires such conclusion for a period of at least 5 years.

The licence holder must allow access to its network under objective, transparent and non-discriminating conditions. To this end, the roaming agreements must provide for:

- a) non-discriminating treatment of the subscribers of the two networks when initiating and receiving calls;
- b) providing the subscribers of the roaming agreement beneficiary with of all the services available to the holders' subscribers;
- c) service continuity when passing from one network to the other.

The licence holder will have the obligation to provide ANCOM with a copy of each concluded roaming agreement, within 10 days after their conclusion. As well, the holder will have the obligation to provide ANCOM with all information regarding the amendment or termination of these agreements, together with the supporting documents, as the case may be, within 10 days after the date of the amendment or termination.

### 3.3.3.2. Obligations on the access of mobile virtual network operators

The holders of the licences awarded through the selection procedure will provide access to their network for the mobile virtual network operators (MVNO) while observing the obligations stipulated in this section.

Each licence holder will have the obligation to publish an offer for MVNO access to its network when the radio coverage of the network has reached 30% of the population. The access offer will stipulate the provision of access to the holder's radio network for the MVNO, under non-discriminatory conditions as regards the quality of service as compared with the conditions the holder benefits from for its own services. Also, the holder will allow the MVNO to exploit, in its own name, upon request, its own core network and interconnection links.

As soon as it has published an offer for MVNO access to its network, the holder will have the obligation to answer any reasonable access request from an MVNO and will suggest to that MVNO an agreement, according to the terms in its public access offer.

The licences will provide for maximum terms for negotiation and implementation of MVNO access agreements. Thus, the maximum negotiation term for concluding an MVNO access agreement will be of 6 months after the reception by the holder of a request therefor. As well, the holder will ensure the implementation of the provisions under the MVNO access agreement in such a way as

the provision of the electronic communication services starts within 4 months after the agreement conclusion date.

The licence holders will offer access conditions that will not restrict, without an objective justification, the competition on the wholesale MVNO access market and the commercial autonomy of the MVNO in the retail market. Thus, the holder will suggest to the MVNO an access agreement that does not include an option or pre-emption right in case the legal situation of the MVNO changes (e.g. in case of a merger) or an agreement transfer, except for the specific and mutually agreed request of the MVNO. Also, the agreement will not include clauses that might prevent the MVNO from concluding MVNO access agreements with several network operators, simultaneously.

The holder will offer access to its network to maximum four *full MVNO* operators. Those MVNO operators upon whom the host operator directly or indirectly exerts a significant influence in decision-making (who are part of the same group as the host operator) will not be taken into account.

The holder will suggest, to both the *full* and the *thin* MVNOs, tariffs that are reasonable and proportionate with the provided services.

As soon as the MVNO will make available to the holder its aggregated traffic forecast, while such forecasts allow for the network load dimensioning, the holder will not impose on the MVNO the obligation for the latter to make available its business plan and will not impose a commercial offer reconciling process.

In case of misunderstandings or disputes regarding the provision of MVNO access, the operators may address ANCOM for dispute mediation and/or solving.

#### *3.3.4. Obligations concerning the observance of certain technical and operational conditions for the use of the radio frequencies*

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##### 3.3.4.1 Technical conditions for the use 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 in the 800 MHz band:

- 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;

- 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.

The aforementioned documents may be subject to amendments or new versions. As well, it is possible the adoption of other similar documents that would influence the technical conditions of use.

b) The mode of operation 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 gap in the 800 MHz band is 41 MHz.

d) The terrestrial systems which may be developed in the 800 MHz band are those compliant with Decision 2010/267/EU.

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

f) Within a frequency block for which the holder has a licence, the in-block effective isotropic radiated power (EIRP) from a base station transmitter (downlink) will not exceed 59 dBm/5 MHz in urban areas and 64 dBm/5 MHz in sub-urban and rural areas.

g) Outside a frequency block for which the holder has a licence, the holder must comply with the out-of-block spectrum edge mask (out-of-block BEM) specified in Tables 13 to 16.

**Table 13 – Basic requirements – Base station block edge mask (BEM) out-of-block effective isotropic radiated power (EIRP) limits (Base station out-of-block BEM)**

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 14 - Transition requirements – Out-of-block effective isotropic radiated power (EIRP) limits per antenna in the FDD frequency band for the 791-821 MHz downlink (Base station out-of-block BEM, in the 791-862 MHz frequency 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 lower block edge	22 dBm	5 MHz
+5 to +10 MHz from lower block edge	18 dBm	5 MHz
remaining FDD downlink frequencies	11 dBm	1 MHz

**Table 15** – Transition requirements – Out-of-block effective isotropic radiated power (EIRP) limits per antenna (for one to four antennas), over frequencies used as guard bands (Base station out-of-block BEM, over the 790-791 MHz and 821-832 MHz frequency 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 bands 821-832 MHz	15 dBm	1 MHz

**Table 16** – Basic requirements – Base station out-of-block effective isotropic radiated power (EIRP) limits, over frequencies below 790 MHz

Frequency range of out-of-block emissions	Condition on base station in-block EIRP, P (dBm/10 MHz)	Maximum mean out-of-block EIRP	Measurement bandwidth
470-790 MHz	$P \geq 59$	0 dBm	8 MHz
	$36 \leq P < 59$	(P-59) dBm	8 MHz
	$P < 36$	-23 dBm	8 MHz

#### 3.3.4.2 Technical conditions for the use of the 900 MHz and 1800 MHz bands

- a) The provisions under the following EC decisions, CEPT/ECC decisions, recommendations and reports apply to the use of the 900 MHz and 1800 MHz bands:



- Commission Decision 2009/766/EC on the harmonisation of the 900 MHz and 1800 MHz frequency bands for terrestrial systems capable of providing pan-European electronic communications services in the Community, amended by the Commission Decision 2011/251/UE
- ECC/DEC/(06)13: Designation of the GSM 900/1800 bands for terrestrial IMT-2000/UMTS systems
- ECC/REC/(08)02: Frequency planning and frequency coordination for the GSM 900 (including E-GSM)/UMTS 900, GSM 1800/UMTS 1800 Land Mobile Systems
- ECC Report 082: Compatibility study for UMTS operating within the GSM 900/1800 frequency bands
- ECC Report 096: Compatibility between UMTS 900/1800 systems and systems operating in adjacent bands
- CEPT Report 040: Compatibility study for LTE and WiMAX operating within the bands 880-915 MHz / 925-960 MHz and 1710-1785 MHz / 1805-1880 MHz (900/1800 MHz bands)
- CEPT Report 041: Compatibility between LTE and WiMAX operating within the bands 880-915 MHz / 925-960 MHz and 1710-1785 MHz / 1805-1880 MHz (900/1800 MHz bands) and systems operating in adjacent bands
- CEPT Report 042: Compatibility between UMTS and existing and planned aeronautical systems above 960 MHz
- ECC Report 146: Compatibility between GSM MCBTS and other services (TRR, RSNB/PRMG, HC-SDMA, GSM-R, DME, MIDS, DECT) operating in the 900 MHz and 1800 MHz frequency bands
- ECC/DEC/(06)07 amended: GSM on board aircraft
- ECC/DEC/(08)08: GSM on board vessels
- ECC Report 082: Compatibility study for UMTS operating within the GSM 900/1800 MHz bands
- ECC Report 096: Compatibility between UMTS 900/1800 and systems operating in adjacent bands
- CEPT Report 019: Least restrictive technical conditions for WAPECS frequency bands
- ERC Report 100: Compatibility between certain radiocommunication systems operating in adjacent bands. Evaluation of DECT/GSM 1800 compatibility

The aforementioned documents may be subject to amendments or new versions. As well, it is possible the adoption of other similar documents that would influence the technical conditions of use.

- b) The mode of operation in the 900 MHz band will be Frequency Division Duplex (FDD)
- c) The 925-960 MHz band will be used for the base station transmission (downlink), and the 880-915 MHz band will be used for the terminal station transmission (uplink).
- d) The terrestrial systems which may be developed in the 900 MHz band are those compliant with Decision 2009/766/EC amended by Decision 2011/251/EU. No block spectrum edge masks (BEM) are defined for the 900 MHz band.
- e) The 880-880.1/925-925.1 MHz and 914.9-915/959.9-960 MHz sub-bands will be considered guard bands and will not be used.
- f) The terrestrial systems will operate in the 900 MHz band in the following frequencies: 880.1-914.9/925.1-959.9 MHz.
- g) The duplex gap in the 900 MHz band is 45 MHz.
- h) The nominal gap of the channel:
  - for the GSM systems: 200 kHz;
  - for the UMTS and WiMAX systems: 5 MHz;
  - for the LTE systems: 1.4 MHz, 3 MHz, 5 MHz, 10 MHz, 15 MHz or 20 MHz.

Within the frequency block of a licence holder, the use of a lower gap between the channels than the aforementioned one is allowed; nevertheless, the value of the central frequency of the channels close to the block edge must be so selected as to allow that the channel of the central frequency entirely falls inside the frequency block of the holder, even when the nominal gap of the channel is used according to letter h) of this Section and when there is separation between channels positioned at the edge of the adjacent blocks in accordance with letter t) of this Section, if not otherwise agreed by the holders of the licences for the adjacent frequency blocks. Such agreement of the licence holders may not imply the use of the guard bands mentioned under letter e) of Section 3.3.4.2.

- i) The transmission frequencies corresponding to the GSM 900 channels are defined by the formulas below:
  - i) transmission frequencies of the terminal stations:
    - for  $880 < F_u(n) \leq 890$  MHz:  $F_u(n) = 890 + 0.2 \cdot (n - 1024)$ ,  $975 \leq n \leq 1024$
    - for  $890 < F_u(n) < 915$  MHz:  $F_u(n) = 890 + 0.2 \cdot n$ ,  $1 \leq n \leq 124$
  - ii) transmission frequencies of the base stations:
    - for  $925 < F_d(n) < 935$  MHz:  $F_d(n) = F_u(n) + 45$ ,  $975 \leq n \leq 1024$
    - for  $935 < F_d(n) < 960$  MHz:  $F_d(n) = F_u(n) + 45$ ,  $1 \leq n \leq 124$
- j) The mode of operation in the 1800 MHz band will be Frequency Division Duplex (FDD).

- k) The 1805-1880 MHz band will be used for the base station transmission (downlink), and the 1710-1785 MHz band will be used for the terminal station transmission (uplink).
- l) The terrestrial systems which may be developed in the 1800 MHz band are those compliant with Decision 2009/766/EC, as well as with Decision 2011/251/EU.
- m) The 1710-1710.1/1805-1805.1 MHz and 1784.9-1785/1879.9–1880 MHz sub-bands will be kept as guard bands and will not be used.
- n) The terrestrial systems will operate in the 1800 MHz band in the following frequencies: 1710.1–1784.9/1805.1–1879.9 MHz.
- o) The duplex gap in the 1800 MHz band is 95 MHz.
- p) The nominal gap between the adjacent channels in the 1800 MHz band:
  - i) for the GSM systems: 200 kHz;
  - ii) for the UMTS and WiMAX systems: 5 MHz
  - iii) for the LTE systems: 1.4 MHz, 3 MHz, 5 MHz, 10 MHz, 15 MHz or 20 MHz.

Within the frequency block of a licence holder, the use of a lower gap between the channels than the aforementioned one is allowed; nevertheless, the value of the central frequency of the channels close to the block edge must be so selected as to allow that the channel of the central frequency entirely falls inside the frequency block of the holder, even when the nominal gap between the adjacent channels is used according to letter p) of this Section and when there is separation between channels positioned at the edge of the adjacent blocks defined under letter t) of this Section, if not otherwise agreed by the holders of the licences for the adjacent frequency blocks. Such agreement of the licence holders may not imply the use of the guard bands mentioned under letter m) of Section 3.3.4.2.

- q) The transmission frequencies corresponding to the GSM 1800 channels are defined by the formulas:
  - i) transmission frequencies of the terminal stations:  $F_u(n) = 1710.2 + 0.2 \times (n - 512)$ ,  $512 \leq n \leq 885$
  - ii) transmission frequencies of the base stations:  $F_d(n) = F_u(n) + 95$
- r) Conditions for the use of GSM systems in the 900 MHz band:
  - i) Guard bands may not be kept between two frequency blocks used by two different operators for GSM 900 systems.
  - ii) Within the B1 frequency block (880.1–885.1/925.1-930.1 MHz), the extension and operation of the mobile radio systems in the 900 MHz band up to a 4 km distance from the railway must be coordinated with the GSM-R operators and/or interference prevention techniques

will be applied, for the purpose of protecting the development of the GSM-R systems.

- s) Conditions for the use of GSM systems in the 1800 MHz band:
- i) Guard bands may not be kept between two frequency blocks used by two different operators for GSM 1800 systems.
  - ii) In the 1878 - 1880 MHz range, interferences due to DECT systems may appear (see ERC Report 100). It is recommended that the 2 MHz in the upper 1800 MHz band (1878-1880 MHz) are not to be used for the transmission of the pilot channels (BCCH); thus, adequate measures are required (see ERC Report 100).
- t) Conditions for the use of UMTS/LTE/WiMAX in the 900 MHz and 1800 MHz bands:
- The GSM channels/carriers close to the edges of the assigned blocks are to be used, if not otherwise agreed between the operators. The UMTS channels/carriers are to be used between the carriers of the GSM channels in the assigned frequency sub-bands.
  - Separation between the UMTS carrier of a certain operator and the GSM carrier of another operator will be as wide as possible, and
    - a) it will be at least 2.8 MHz in case of uncoordinated usage, or
    - b) it will be at least 2.6 MHz in case of coordinated usage.
  - Separation between the UMTS carrier of a certain operator and the UMTS carrier of another operator will be:
    - a) at least 5 MHz in case of uncoordinated usage, or
    - b) 5 MHz or less, in case of coordinated usage.
  - Separation between the channels positioned close to the edge of adjacent blocks used by the two networks ("A" and "B") held by different operators, depending on the technology used, will be ensured as follows:
    - a) Separation between the limits of the block edge channels:

<b>"A" network</b>					
<b>GSM</b>	<b>UMTS</b>	<b>LTE</b>	<b>WiMAX</b>	<b>GSM</b>	
0 kHz	200 kHz*	200 kHz*	200 kHz*		
	0 kHz	0 kHz	0 kHz	<b>UMTS</b>	<b>"B"</b>
		0 kHz	0 kHz	<b>LTE</b>	<b>network</b>
			0 kHz	<b>WiMAX</b>	

\* The decrease of the value of the separation between the limits of channels at the adjacent blocks edge is conditioned by the existence of bilateral agreements between the operators involved.

b) The following technology categories are defined:

Category 1: GSM (including GSM-R)

Category 2: UMTS, LTE and WiMAX.

c) In case the networks owned by two different operators use adjacent frequencies for different categories of technology, when assigning the channels at the edge of the adjacent frequency blocks, the necessary band for the separation of the channels positioned at the block edge, in accordance with the values under point a) of this Sub-section, is to be ensured within the category 2 (as defined under point b) frequency block within of the network owner, if not otherwise agreed by the holders of the licences using the respective adjacent frequency blocks.

d) In case of two different holders using adjacent frequencies for category 2 of technologies (defined under point b), the separation between the limits of the edge channels is 0 kHz when the channels positioned at the edge of the adjacent frequency blocks are assigned.

- When defining the frequency band necessary for the separation of the channels positioned at the adjacent block edge, the values of the nominal gap between the adjacent channels mentioned under letters h) and p) of Section 3.3.4.2 will be applied, if not otherwise agreed by the holders of the licences using adjacent frequency blocks.
- In case of a harmful interference occurrence, network configuration will be coordinated between the operators and/or interference prevention and solving techniques will be applied.
- In order to eliminate/solve and prevent interferences, in addition to the provisions under letter t) of this Section, the affected holders have the obligation to consult the involved parties in view of amending the characteristics of the stations, irrespective of which party has first installed the station.

#### 3.3.4.3. Technical conditions for the use of the 2600 MHz band

1. The provisions under the following EC decisions, CEPT/ECC decisions, recommendations and reports apply to the use of the 2600 MHz band:

- Commission Decision 2008/477/EC on the harmonisation of the 2500-2690 MHz frequency band for terrestrial systems capable of providing electronic communications services in the Community
- ECC/DEC/(05)05: ECC Decision on harmonised utilisation of spectrum for IMT-2000/UMTS systems operating within the band 2500-2690 MHz
- ECC/DEC/(02)06: ECC Decision of 15 November 2002 on the designation of frequency band 2500-2690 MHz for UMTS/IMT-2000

- ECC Report 045: Sharing and adjacent band compatibility between UMTS/IMT-2000 in the band 2500-2690 MHz and other services
- ECC Report 119: Coexistence between mobile systems in the 2600 MHz frequency band at the FDD/TDD boundary
- CEPT Report 019: Least restrictive conditions for frequency bands addressed in the context of WAPECS
- ECC/REC/(11)05: Frequency planning and frequency coordination for terrestrial systems for Mobile/Fixed Communication Networks (MFCN) capable of providing electronic communications services in the frequency band 2500-2690 MHz

The aforementioned documents may be subject to amendments or new versions. As well, it is possible the adoption of other similar documents that would influence the technical conditions of use.

2. The mode of operation in the 2600 MHz will be:
  - a) Frequency Division Duplex (FDD) in the paired sub-bands 2500-2570/2620-2690 MHz. The 2620-2690 MHz sub-band will be used for the base station transmission (downlink), while the 2500-2570 MHz sub-band will be used for the terminal station transmission (uplink).
  - b) Time Division Duplex (TDD) in the 2570-2620 MHz sub-band.
3. The duplex gap for the FDD mode of operation: 120 MHz.
4. The nominal gap of the channel:
  - a) for the UMTS and WiMAX systems: 5 MHz
  - b) for the LTE systems: 1.4 MHz, 3 MHz, 5 MHz, 10 MHz, 15 MHz or 20 MHz.
5. The terrestrial systems that may be developed in the 2600 MHz band must observe the block spectrum edge masks (BEM) established by the Annex to the Decision 2008/477/EC, in the absence of bilateral or multilateral agreements between the licence holders of adjacent/neighbour blocks, without hindering the use of certain less restrictive technical parameters if so agreed between the licence holders owning the respective blocks.
6. The 5 MHz block spectrum edge mask in the 2500-2690 MHz band is distinctively defined for two types of usage conditions:
  - a) for unrestricted blocks: maximum EIRP = 61 dBm/5MHz
  - b) for restricted blocks: maximum EIRP = 25 dBm/5MHz
7. For the use of the FDD 2620 – 2690 MHz band (downlink), the conditions applicable to the unrestricted blocks will apply to all FDD (F1 – F14) blocks.
8. The following conditions will apply for the use of the TDD 2570-2620 MHz band:
  - The conditions for restricted blocks will be applied to the 5 MHz blocks positioned at the lower end of the TDD G1, G2 and G3 blocks.

- If the F1 and G3 blocks are awarded to different operators, the 2615-2620 MHz sub-band will be designated as guard band. Otherwise, the provisions for the unrestricted use will apply.
- The conditions applicable to the unrestricted blocks will apply to the remaining 5 MHz blocks from within the TDD G1, G2 and G3 blocks.

#### 3.3.4.4. Technical conditions for the use of frequencies in the border areas

In border areas, the licence holders will use the assigned frequency blocks only on the basis of coordination with the communications administrations of 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.

The future agreements or the subsequent amendments of the existing agreements may complete or replace some of the regulations specified within Section 3.3.4.4 and its sub-sections.

Where there are the so-called "arrangements" concluded between operators and approved by the Authorities of the neighbouring countries involved, the frequency usage under other conditions than those specified in the following sub-sections may be allowed. Under an arrangement concluded between operators, the frequency usage in shared bands may deviate from the provisions stipulated in the agreements concluded between the Authorities.

If necessary, the Authority will make available to the participants in the auction, upon their written request therefor, the relevant bilateral or multilateral agreements for the spectrum subjected to auction, in English, as PDF files.

##### 3.3.4.4.1. Technical conditions of use in the 800 MHz band in the border areas

###### A. General rules:

In the case of the IMT/LTE systems, the preferential cell identities need to be shared at the level of the Physical Cell Identifier (PCI) in accordance with Recommendation ECC/REC/(11)04. The allocation of codes is the one provided for in Annex 5 of Recommendation ECC/REC/(11)04.

In addition, it is desirable that operators coordinate the radio parameters of their own systems in order to minimise deteriorating effects of uplink interference in accordance with the aforementioned ECC Recommendation.

The field strength levels or the threshold levels specified in Sub-section B, letters a), b) are related to a reference frequency block of 5 MHz width. The threshold levels of the field strength will modify in keeping with the bandwidth, according to the formula below. The modified values of the field strength threshold levels will be applied individually to each base station.

###### *a) The correction factor in keeping with the bandwidth*

If the channel nominal gap used by the system is different from 5 MHz, the correction factor in keeping with the bandwidth will be added to the field strength threshold level, calculated as follows:

$$10 \times \log (C_s/5 \text{ MHz}) \quad (\text{dB})$$

where "Cs" = the channel nominal gap (MHz)

###### B. Use of the paired frequency bands 791-821 MHz / 832-862 MHz

#### a) General case

This is the case where the examination of the technology used in the neighbouring country is not necessary.

The base stations of the FDD systems can use the paired frequency bands 791-821 MHz / 832-862 MHz without the coordination with the neighbouring countries, if the mean field strength produced by the base station transmitters in a cell (antenna sector) does not exceed 55 dB $\mu$ V/m/5 MHz at a height of 3 m above ground at the borderline between two countries and, respectively, 29 dB $\mu$ V/m/5 MHz at a height of 3 m above ground at a distance of 9 km inside the neighbouring country.

#### b) The case of the deployment of LTE systems both sides of the border

In the case that LTE systems are deployed both sides of the border, the field strength level can be increased to 59 dB $\mu$ V/m/5 MHz at the borderline and 41 dB $\mu$ V/m/5 MHz at a distance of 6 km inside the neighbouring country, in accordance with the provisions of Annex 1 of Recommendation ECC/REC/(11)04. These field strength threshold levels may be applied only if there is concluded an agreement between the operators involved in the use of these common FDD bands or sub-bands to this end.

To calculate the field strength in the cases presented at points a) and b), the method set under the HCM Agreement (based on the ITU Recommendation P.1546 – Method for point-to-area predictions for terrestrial services in the frequency range 30 MHz to 3 000 MHz) will be applied. A probability of 50% of locations and a probability of 10% of time will be taken into consideration.

#### c) Harmful interferences

If harmful interferences occur, the field level in borderline points will be calculated, of the line located at a distance of 6 km from the borderline or of that located at a distance of 9 km from the borderline, in relation to the threshold levels specified at points a) and b) above, and, depending on the radiowave propagation ways, the HCM model will be applied. The probability of 10% of time will be taken into consideration.

If the made calculations show that the field strength threshold levels have been exceeded, the characteristics of the base stations will be adjusted based on the results of the interference calculations. If the taken measures did not effect in the operation free from harmful interferences, then a new phase of interference assessment will be conducted, according to the method described below.

The operators will apply the calculation of the field strength levels in a geographic area, based on certain commonly agreed propagation models, commonly agreed field strength threshold levels and on the commonly agreed method used for the interference, in line with the relevant section ("Area calculations") in Annex 3 to Recommendation ECC/REC/(11)04, before measuring the interference field level.

The calculation method including the elements specified in the paragraph above will be agreed at the respective moment between the involved operators.

If the second assessment phase reveals the existence of harmful interferences, the characteristics of the base stations will be adjusted based on the results of the interference calculation in this phase. If neither the measures taken in the second phase result in the operation free from harmful interference, measurements based on the area calculation method are to be made.



d) Protection of the analogue and digital TV systems

In the neighbouring countries, analogue and digital television transmitters still operate in the 790-862 MHz frequency band (according to the Geneva Plan 06). The trigger field strength levels necessary to protect the reception of these TV signals are those specified in CEPT Report 29 and given in the table below:

**Table 17 – Coordination trigger field strength for the protection of the broadcasting service**

Coordination trigger field strength for the protection of the broadcasting service (at 10 m above ground)	
Protection of the analogue TV	22 dB $\mu$ V/m/8 MHz at the border
Protection of the digital TV	25 dB $\mu$ V/m/8 MHz at the border

These limits of the field strength will be observed in the border area, in relation to the neighbouring countries that use analogue and digital TV transmitters in the 790-862 MHz band. The channel allocations/assignments for the analogue and digital TV in the neighbouring countries whose protection must be ensured are enlisted in Annex 8.

The method established under the HCM Agreement will be used to calculate the field strength. The time probability to be considered is 1%.

e) Protection of the aeronautical radionavigation systems

In Ukraine, the 790-862 MHz band is assigned to the aeronautical radionavigation services and has a primary status, in accordance with art. 5 of the ITU Radio Regulations (Footnote 5.312) and, consequently, the aeronautical radionavigation services benefits from radio protection in relation to the land mobile service, which was subsequently introduced in this band. In accordance with footnote 5.316A of art. 5 of the ITU Radio Regulations reviewed by the Final Acts of the World Radiocommunication Conference in Geneva, 23 January – 17 February 2012, the land mobile service may be used in Romania on a primary basis under the condition to not cause harmful interferences to the aeronautical radionavigation service operating on the territory of Ukraine and to the broadcasting service operating in the neighbouring countries in line with the Geneva Agreement 2006. (see Resolutions 224 (Rev. WRC-12) and 749 (Rev. WRC-12) in the aforementioned Regulation).

In order to ensure the protection from harmful interferences of the systems in the aeronautical radionavigation service of Ukraine, the base stations in the land mobile service are allowed to operate in Romania under the terms set by the *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 radiocommunication networks with the radionavigation and the fixed services, concluded in Geneva in February 2012* and further detailed:

The base stations operating in the land mobile service on the territory of Romania are allowed to use the 791-821 MHz frequency band without coordination with Ukraine if the following conditions are met:

a) if the calculated value of the mean field strength level generated by a base station does not exceed 46 dB $\mu$ V/m/1 MHz and 53 dB $\mu$ V/m/5 MHz at a height of 10 m above ground at the borderline;

b) if the base stations are located at a distance higher than 10 km from the border and if the operating area of the base station does not cover areas which are located closer than 2 km away from the border;

c) if the base stations are located beyond the 20 km area around the point of the geographical coordinates: 28°E48'00"; 45°N23'00"

The terminal stations in the land mobile service may use the 832-862 MHz frequency band on the territory of Romania, without the coordination with Ukraine, if the observance of the conditions specified in the paragraph above is ensured.

#### 3.3.4.4.2. Technical conditions of use in the 900 MHz band in the border areas

##### A. The GSM systems in the 900 MHz band

a) When planning the use of the frequencies in the 900 MHz band in areas close to Romania's border, the operators will keep in mind the bilateral or multilateral agreements on the distribution of preferential frequencies, concluded with the communications administrations of the neighbouring countries, mentioned in the table below.

**Table 18 Bilateral or multilateral agreements on the distribution of preferential frequencies**

Frequency band	Agreements / Protocols	Neighbouring countries with which agreements have been concluded				
		HNG	UKR	MDA	BUL	SRB
880-889.9/925-934.9 MHz	1) Technical Agreement between AUT-HNG-HRV-ROU-SRB-SVK-SVN-UKR, Budapest, 28 October 2010	X	X			X
	2) Technical Procedure on the E-GSM coordination between HNG-HRV-ROU-SRB-UKR	X	X			X
890-915/935-960 MHz	1) Protocol between ROU-SVK-UKR-HNG, Budapest, 18-22 October 1999	X	X			
	2) Protocol between HNG-ROU-SRB, Szeged, 13-16 November 2000	X				X
	3) Technical Agreement between AUT-HNG-HRV-ROU-SRB-SVK-SVN-UKR, Budapest, 28 October 2010	X	X			X
	4) Bilateral Agreement ROU-MDA, Iasi, 1997			X		

	5) Bilateral Protocol ROU-MDA, Iasi, November 2010			X		
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Note: ROU – Romania; HNG – Hungary, MDA – R. of Moldova, BUL – Bulgaria, SRB – Serbia

b) As for the use of the preferential GSM channels, the field strength produced by each carrier generated by a base station may not exceed the value of 19 dB $\mu$ V/m/200 kHz inside the neighbouring country, at the line found at a distance of 15 km away from the border, at a height of 3 m above ground, in 50% of the locations 10% of the time.

c) As for the use of the non-preferential channels, the field strength level produced by each carrier generated by a base station may not exceed the value of 19 dB $\mu$ V/m/200 kHz at the borderline, at a height of 3 m above ground, in 50% of the locations 10% of the time.

d) The use of the preferential and non-preferential channels does not require coordination between the administrations of the neighbouring countries.

e) Where (in the bands/sub-bands and the border areas) there are no distributions of preferential channels set by bi-/multilateral agreements between Romania and the neighbouring countries, the conditions set for non-preferential channels will be observed.

h) The operation of the GSM systems in the 900 MHz band has priority in front of the IMT/UMTS, LTE, WiMAX etc systems.

#### B) The UMTS systems in the 900 MHz band

a) When planning the use of the frequencies in areas close to Romania's border for IMT/UMTS systems, the provisions of the Agreement concluded in Budapest, on 28 October 2010, Recommendation ECC (08)02, with the specifications below, will apply.

##### b) The uncoordinated case

This is the case when the assessment of the technology used on the territory of the neighbouring country is not required.

The IMT/UMTS base stations may use the 925-960 MHz frequency band if the mean field strength level produced by each carrier generated by a base station does not exceed the value of 33 dB $\mu$ V/m/5 MHz at the borderline, at a height of 3 m above ground.

##### c) The coordinated case

If the operators from two neighbouring countries intend to use the UMTS systems in the common frequency blocks or in parts thereof, they may conclude the so-called arrangements between operators, while observing a minimum separation of 2.8 MHz between the centre frequency of a UMTS channel and the centre frequencies of the GSM channels used in the neighbouring countries.

If preferential codes are used or if the centre frequencies are not aligned, the mean field strength level produced by each carrier generated by a base station operating in the 925-960 MHz band may not exceed:

- 59 dB $\mu$ V/m/5 MHz along the borderline between the two neighbouring countries, at a height of 3 m above ground;

- 31 dB $\mu$ V/m/5 MHz inside the neighbouring country, at the line located at a distance of 6 km away from the borderline, at a height of 3 m above ground.

If non-preferential codes are used and if the centre frequencies are aligned the mean field strength level produced by each carrier generated by a base station may not exceed:

- 31 dB $\mu$ V/m/5 MHz at the borderline between the two neighbouring countries, at a height of 3 m above ground.

d) In both b) and c) cases, the use of the frequencies does not require the coordination between the neighbouring administrations.

e) With a view to avoid harmful interferences and correspondingly adjust and verify the emission parameters of the base stations, the following propagation models, depending on the radiowave propagation way, will be applied to calculate the field strength level at the borderline:

- if the distance between the base station and the border is below 2 km or if the distance between the base station and the border exceeds 2 km and inside the first Fresnel area there is no obstacle, the propagation model based on the free space mitigation will be applied; the calculations will be made between the base station and the reception points along the borderline in the direction and in the area of the interference, for an antenna height at reception of 3 m above the ground.
- for any other situations than those described above, the propagation model under the "HCM Agreement" (ITU Recommendation P.1546 – Method for point-to-area predictions for terrestrial services in the frequency range 30 MHz to 3 000 MHz) will be applied, used for 10% of the time and 50% of the locations.

As for the harmful interferences, in a first stage, the technical parameters of the base stations need to be adjusted, in line with the calculation methods detailed above.

If, following this adjustment, the harmful interferences persist, the emission parameters of the interfering base station will be adjusted following measurements so as to observe the values specified for the maximum admissible interference field, a solution commonly agreed between the parties involved will be adopted to remove the harmful interference.

f) The operation of the UMTS systems in the 900 MHz band must ensure the interference protection of the GSM systems.

C) The LTE and WiMAX systems in the 900 MHz band

a) Uncoordinated case

In the uncoordinated case the assessment of the technology used on the territory of the neighbouring country is not required. The field strength level produced by each carrier generated by a base station may not exceed 33 dB $\mu$ V/m/5 MHz at the borderline, at a height of 3 m above ground.

If the system is using a nominal channel gap (B, in MHz) different from 5 MHz, the field threshold level will be defined by the relation:  $33 + 10\lg(B/5)$  (dB $\mu$ V/m).

If, in a given location, multiple transmitters are used, the calculation will be made for the cumulated effect of the interferences.

b) With a view to avoid harmful interferences and verify the emission parameters of the base stations, the procedure specified in Section 3.3.4.4.2 B) point e) will be applied.

c) The operation of the LTE and WiMAX systems in the 900 MHz band must ensure the interference protection of the GSM systems.

### 3.3.4.4.3. Technical conditions of use in the 1800 MHz band in the border areas

#### A) The GSM systems in the 1800 MHz band

a) When planning the use of the frequencies in the 1800 MHz band in areas close to Romania's border, the operators will keep in mind the bilateral or multilateral agreements on the distribution of preferential frequencies, concluded with the communications administrations of the neighbouring countries, mentioned in the table below.

**Table 19 Bilateral or multilateral agreements on the distribution of preferential frequencies**

Frequency band	Agreements / Protocols	Neighbouring countries with which agreements have been concluded				
		HNG	UKR	MDA	BUL	SRB
1710-1785 / 1805-1880 MHz	1) Protocol between ROU-SVK-UKR-HNG, Budapest, 18-22 October 1999	X	X			
	1) Protocol between HNG-ROU-SRB, Szeged, 13-16 November 2000	X				X
	2) Technical agreement between AUT-HNG-HRV-ROU-SRB-SVK-SVN-UKR, Budapest, 28 October 2010	X	X			X

b) When GSM preferential channels in the 1800 MHz band are used, the field strength level produced by each carrier of a base station may not exceed the value of 25 dB $\mu$ V/m/200 kHz inside the neighbouring country, at the line found at a distance of 15 km away from the borderline, at a height of 3 m above ground, in 50% of the locations and 10% of the time.

c) When GSM non-preferential channels in the 1800 MHz band are used, the field strength level produced by each carrier of a base station may not exceed the value of 25 dB $\mu$ V/m/200 kHz at the borderline, at a height of 3 m above ground, in 50% of the locations and 10% of the time.

d) The use of both preferential and non-preferential channels does not require coordination between the administrations of the neighbouring countries.

e) In the absence of bi-/multilateral agreements establishing the preferential channels for Romania, the conditions set for the use of the non-preferential channels will be observed.

f) The operation of the GSM systems in the 1800 MHz band has priority in front of the IMT/UMTS, LTE, WiMAX etc. systems.

#### B) The UMTS systems in the 1800 MHz band

a) When planning the use of the frequencies in areas close to Romania's border for IMT/UMTS systems in the 1800 MHz band, the provisions of the Agreement concluded in Budapest, on 28 October 2010, Recommendation ECC (08)02, with the specifications below, will apply:

b) Uncoordinated case

In the uncoordinated case, the assessment of the technology used on the territory of the neighbouring country is not required. The mean field strength level produced by each carrier generated by a base station may not exceed the value of 39 dB $\mu$ V/m/5 MHz along the borderline, at a height of 3 m above ground.

c) Coordinated case

If the operators from two neighbouring countries intend to use the UMTS systems in the common frequency blocks or in parts thereof, they may conclude the so-called arrangements between operators, while observing a minimum separation of 2.8 MHz between the centre frequency of a UMTS channel and the centre frequencies of the GSM channels used in the neighbouring countries.

If preferential codes are used or if the centre frequencies of the channels are not aligned, the mean field strength level produced by each carrier generated by a base station operating in this band may not exceed:

- 65 dB $\mu$ V/m/5 MHz along the borderline between the two neighbouring countries, at a height of 3 m above ground;
- 37 dB $\mu$ V/m/5 MHz inside the neighbouring country, at the line located at a distance of 6 km away from the borderline, at a height of 3 m above ground.

If non-preferential codes are used and if the centre frequencies of the channels are aligned, the mean field strength level produced by each carrier generated by a base station operating in the 1805 – 1880 MHz band may not exceed:

- 37 dB $\mu$ V/m/5 MHz along the borderline between the two neighbouring countries, at a height of 3 m above ground.

d) In both b) and c) cases, the use of the frequencies does not require the coordination between the neighbouring administrations.

e) With a view to avoid harmful interferences and verify the emission parameters of the base stations, the procedure specified in Section 3.3.4.4.2 B) letter e) will be applied.

f) The operation of the UMTS systems in the 1800 MHz band must ensure the protection of the GSM systems from interference.

C) The LTE and WiMAX systems in the 1800 MHz band

a) Uncoordinated case

In the uncoordinated case, the assessment of the technology used on the territory of the neighbouring country is not required. The field strength level produced by each carrier generated by a base station may not exceed 39 dB $\mu$ V/m/5 MHz along the borderline, at a height of 3 m above ground.

If the system is using a nominal channel gap (B, in MHz) different from 5 MHz, the field threshold level will be defined by the relation:  $39 + 10\lg(B/5)$  (dB $\mu$ V/m).

If, in a given location, multiple transmitters are used, the calculation will be made for the cumulated effect of the interferences.

b) With a view to avoid harmful interferences and verify the emission parameters of the base stations, the procedure specified in Section 3.3.4.4.2 B) point e) will be applied.

c) The operation of the LTE and WiMAX systems in the 900 MHz band must ensure the protection of the GSM systems from interference.

#### 3.3.4.4.4. Technical conditions of use in the 2600 MHz band in the border areas

##### A. General rules

In the case of the IMT/LTE systems, the preferential cell identities need to be shared at the level of the Physical Cell Identifier (PCI) in accordance with Recommendation ECC/REC/(11)05. The allocation of codes is the one provided for in Annex 5 of Recommendation ECC/REC/(11)05.

In addition, it is desirable that operators coordinate the radio parameters of their own systems in order to minimise deteriorating effects of uplink interference in accordance with the aforementioned ECC Recommendation.

The field strength levels or the threshold levels specified in Sub-section B, letters a) and b) are related to a reference frequency block of 5 MHz width. The field strength threshold levels will modify in keeping with the bandwidth and correction factor of the aggregated strength, according to the formulae below. The modified values of the field strength threshold levels will be applied individually to each base station.

a) The correction factor in keeping with the bandwidth

If the channel nominal gap used by the system is different from 5 MHz, the correction factor in keeping with the bandwidth will be added to the field strength threshold level specified in section B letters a) and b), calculated as follows:

$$10 \times \log(Cs/5 \text{ MHz}) \text{ (dB)}$$

where "Cs" = the nominal gap between adjacent channels (MHz)

##### B. Use by FDD systems of the paired frequency bands 2500-2570 MHz / 2620-2670 MHz

###### a) General case

This is the case which does not require the examination of whether TDD/FDD systems are used in the neighbouring countries or of what any other technologies are used in these countries.

The base stations of the FDD systems may use the paired frequency bands 2500-2570 / 2620-2690 MHz without the coordination with the neighbouring countries, if the mean field strength produced by the base station transmitters in a cell (antenna sector) does not exceed 65 dB $\mu$ V/m/5 MHz at the borderline and, respectively, 37 dB $\mu$ V/m/5 MHz at a height of 3 m above ground, at a distance of 6 km away from the borderline, inside the neighbouring country.

b) The case of the deployment of LTE systems both sides of the border

In the case that LTE systems are deployed both sides of the border, the field strength level can be increased to 49 dB $\mu$ V/m/5 MHz at a distance of 6 km inside the neighbouring country, in

accordance with the provisions of Annex 1 of Recommendation ECC/REC/(11)05. These field strength threshold levels may be applied only if the operators involved in the use of these common FDD bands or sub-bands conclude an agreement to this end.

To calculate the field strength in the cases presented at points a) and b), the method set under the HCM Agreement (based on the ITU Recommendation P.1546 – Method for point-to-area predictions for terrestrial services in the frequency range 30 MHz to 3000 MHz) will be applied. A probability of 50% of locations and a probability of 10% of time will be taken into consideration.

#### c) Harmful interferences

If harmful interferences occur, the field level between the base stations/mobile stations and the reception points located on the borderline or at a distance of 6 km away from the borderline will be calculated in relation to the threshold levels specified at points a) and b) above and, depending on the radiowave propagation ways, the HCM model will be applied. A probability of time of 10% will be taken into consideration.

If the made calculations show that the field strength threshold levels have been exceeded, the characteristics of the base stations, including the necessary geographic separation, will be adjusted based on the results of the interference calculations.

If, following the adjustment of the base station characteristics, the harmful interferences persist, measurements will be made in accordance with the procedures agreed at the international level or on a bilateral basis.

#### C. Use of the unpaired frequency band 2570-2620 MHz for TDD systems in operation in both sides of the border

##### a) Case of the unsynchronized TDD networks

This is the case where the examination of the technology used in the neighbouring country is not necessary.

The base stations of the unsynchronized TDD systems are allowed to use the 2570-2620 MHz band without coordination with the neighbouring countries, if the mean field strength level produced by the base station transmitters in a cell (antenna sector) does not exceed 21 dB $\mu$ V/m/5 MHz at the borderline, at a height of 3 m above ground, for 50% of locations and 10% of time.

This threshold level will be applied if the operators do not agree otherwise upon the conclusion of an arrangement on the use synchronized TDD systems.

##### b) Case of the synchronized TDD networks

The base stations of the synchronized TDD systems are allowed to use the 2570-2620 MHz band without coordination with the neighbouring countries, if the mean field strength level produced by the base station transmitters in a cell (antenna sector) does not exceed 65 dB $\mu$ V/m/5 MHz at the borderline, and does not exceed 37 dB $\mu$ V/m/5 MHz at a distance of 6 km inside the neighbouring country, at a height of 3 m above ground, for 50% of locations and 10% of time.

In the case that LTE systems are used both sides of the border, the field strength level at 6 km from borderline can be increased to 49 dB $\mu$ V/m/5 MHz.

These field strength threshold levels may be applied only if the operators involved in the use of the TDD systems in the 2570-2620 MHz band conclude an arrangement to this end.



### **3.4. Licence transfer**

The usage rights to be granted may be transferred in accordance with art. 35 of the Framework-Ordinance. Nevertheless, in case of a possible transfer of rights, the Authority will watch the observance of the objectives taken into account upon granting those rights. A series of limitations are to be therefore considered, as follows:

- the usage rights may be transferred to a third party, in total or in part, only based on the prior ANCOM approval, upon commitment towards all the obligations therefrom, as well as upon the observance of the conditions and objectives established or considered when the right had been granted;
- in case of a partial transfer of the rights, the licence holder may only transfer 5 MHz blocks;
- 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 imposed during the selection procedure;
- in cases 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 frequencies that are subject to the licence in such a way as to breach this harmonised usage.

### **3.5. Fees due by the licence holders**

The persons participating in the selection procedure organised in view of awarding the usage rights for the radio frequencies in the 800 MHz, 900 MHz, 1800 MHz bands and, respectively, the 2600 MHz band, will take into consideration the following:

- the payment of the licence fee established during the competitive selection procedure under the conditions stipulated at art. 28 paragraph (2) of the Framework-Ordinance;
- the payment of the spectrum usage tariff, collected annually in accordance with art. 30 of the Framework-Ordinance and with Decision no. 686/2005 of the President of the Inspectorate General for Communications and Information Technology, with the subsequent amendments and completions.

### **3.6. Monitoring and control of the observance of the obligations under the licences.**

#### **Sanctions**

In principle, the coverage will be measured by two methods:

- the coverage of the territory and of the population, by calculation (simulation);
- the coverage of the main roads and localities, by measurement sessions.

These two methods are justified, on the one hand, by the impossibility to measure the entire territory of the country and, on the other hand, by the practical impossibility to simulate the coverage in the case of localities (case in which the buildings have a significant importance in the propagation of the IMT signal). For the coverage of the main roads, although the simulated

calculation of this coverage is also possible, the coverage measurement is more appropriate because it highlights the network quality parameter, as well.

Therefore, two types of instruments will be used to evaluate the IMT mobile networks:

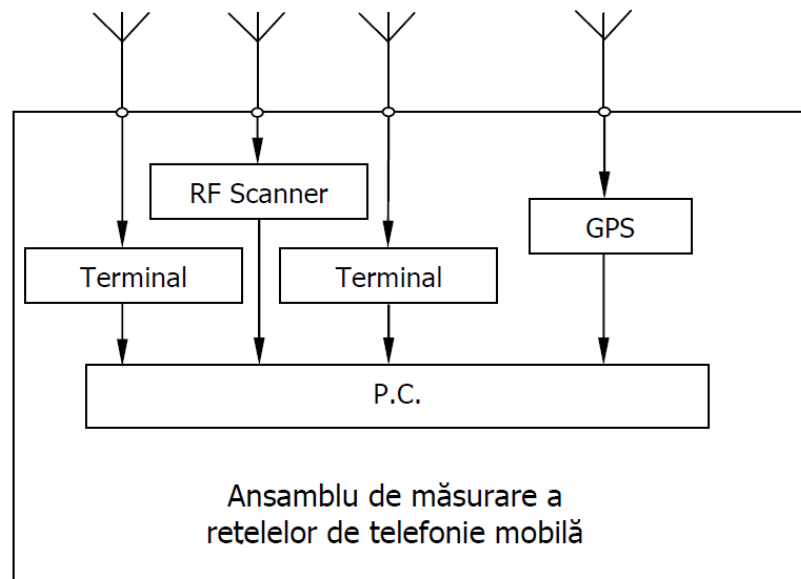
- equipment for measurements on the spot and
- software applications for analysis and evaluation

#### **Equipment for measurements on the spot**

This type of equipment is used for collecting data during the measurements made on the spot.

The figure below offers (for exemplification) a configuration of the **measuring ensemble**:

**Figure 5 – Measuring ensemble (for mobile telephone networks)**



**The simulation of the coverage of the territory and of the population** will be performed by using the data comprised in the operators' notifications corrected according to the situation found on the spot. The simulation will be performed by making use of a map with a 50 metre cluster and the propagation model described in Recommendation ITU-P 1546 for a probability of 50% of time and 50% of the territory for the propagation conditions specific to our country.

### **3.7. Licence amendment and revoking**

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

- the conditions regarding the effective, rational and efficient use of the radio frequencies are met;
- harmful interferences are avoided;

- the harmonised objectives at the European level and the international cooperation objectives related to the use of radio frequencies are implemented;
- the international agreements regarding the use of radio frequencies, to which Romania is a party, are observed;
- the situations of 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 destined to the provision of the network subject to the licence, are solved;
- the strategy on the development of electronic communications and management of the radio frequency spectrum are implemented;
- the NTFA is amended.

In case 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 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 as a result of the occurrence of any of the below circumstances:

- usage rights transfer;
- partial waiver of the usage rights;
- partial waiver of the usage rights, if such is the case, in accordance with art. 27, art. 147 letter b) in conjunction with art. 141 paragraph (1) or in accordance with art. 148 of the Framework-Ordinance.

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

- the total withdrawal of the radio frequencies usage rights, in accordance with art. 27, art. 147 letter b) in conjunction with art. 141 paragraph (1) or in accordance with art. 148 of the Framework-Ordinance;
- revoking of the right to use radio frequencies, in accordance with art. 6 paragraph (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 amount of radio spectrum and the position within the band corresponding to each licence are not fixed in advance but are the result of a two-stage competitive allocation mechanism:

- a first stage in which the participants compete for obtaining abstract frequency blocks, in one or in a number of bands, following which the amount of radio spectrum to be awarded to the individual participants will be determined (the primary rounds and, if applicable, the additional rounds of the auction stage, see Sections 4.7.1 and 4.7.2); and
- a second stage, at the end of which the allocation of concrete frequency blocks to the individual participants will take place, by individually positioning the abstract blocks, obtained in the previous phase, within the band (the assignment round of the auction stage, see Section 4.7.3).

The abstract and concrete frequency blocks are explained in greater detail below.

A total of 56 abstract frequency blocks (generic blocks), sub-divided into 7 categories (A-G), are put out to auction. A description of these categories, the corresponding frequency bands and the block sizes are given in the table below.

**Table 20 Description of the abstract frequency blocks available within the selection procedure**

Category	Number of blocks	Band	Block size	Use
A	6	791-821 / 832-862 MHz	2 x 5 MHz	06.04.2014 – 05.04.2029
B	5	890-915 / 935-960 MHz	2 x 5 MHz	01.01.2013 – 05.04.2014
C	7	880-915 / 925-960 MHz	2 x 5 MHz	06.04.2014 – 05.04.2029
D	6	1722.7-1752.7 MHz/1817.7-1847.7 MHz	2 x 5 MHz	01.01.2013 – 05.04.2014
E	15	1710-1785 / 1805-1880 MHz	2 x 5 MHz	06.04.2014 – 05.04.2029
F	14	2500-2570 / 2620-2690 MHz	2 x 5 MHz	06.04.2014 – 05.04.2029
G	3	2570-2615 MHz	1 x 15 MHz	06.04.2014 – 05.04.2029

The precise bandwidths and band limits of the assigned blocks will be determined exactly in the assignment round. The concrete frequency blocks (A1-A6, B1-B5, C1-C7, D1-D2, E1-E15, F1-F14, G1-G3, according to the table below) whose abstract allocation took place in the primary and/or additional rounds, will be assigned to each successful bidder in the assignment round.

**Table 21 Description of the concrete frequency blocks available within the selection procedure**

Frequency band	Band code	Frequency block code	Bandwidth	Channel type (FDD/TDD)	Frequency range (uplink/downlink, in MHz)
<b>800 MHz</b>  (licensing for the period 06.04.2014 – 05.04.2029)	A	A1	2x5MHz	FDD	791 – 796/ 832 – 837
		A2	2x5MHz	FDD	796 – 801/ 837 – 842
		A3	2x5MHz	FDD	801 – 806/ 842 – 847
		A4	2x5MHz	FDD	806 – 811/ 847 – 852
		A5	2x5MHz	FDD	811 – 816/ 852 – 857
		A6	2x5MHz	FDD	816 – 821/ 857 – 862
<b>900 MHz</b>  (licensing for the period 01.01.2013 – 05.04.2014)	B	B1	2x5MHz	FDD	890.1 – 895.1/ 935.1 – 940.1
		B2	2x5MHz	FDD	895.1 – 900.1/ 940.1 – 945.1
		B3	2x4.8MHz	FDD	900.1 – 904.9/ 945.1 – 949.9
		B4	2x5MHz	FDD	904.9 – 909.9/ 949.9 – 954.9
		B5	2x5MHz	FDD	909.9 – 914.9/ 954.9 – 959.9
<b>900 MHz</b>  (licensing for the period 06.04.2014 – 05.04.2029)	C	C1	2x5MHz	FDD	880.1 – 885.1/ 925.1 – 930.1
		C2	2x5MHz	FDD	885.1 – 890.1/ 930.1 – 935.1
		C3	2x5MHz	FDD	890.1 – 895.1/ 935.1 – 940.1
		C4	2x5MHz	FDD	895.1 – 900.1/ 940.1 – 945.1
		C5	2x5MHz	FDD	900.1 – 905.1/ 945.1 – 950.1
		C6	2x5MHz	FDD	905.1 – 910.1/ 950.1 – 955.1
		C7	2x4.8MHz	FDD	910.1 – 914.9/ 955.1 – 959.9
<b>1800 MHz</b>  (licensing for the period 01.01.2013 –	D	D1	2x5MHz	FDD	1722.7 – 1727.7/ 1817.7 – 1822.7
		D2	2x5MHz	FDD	1727.7 – 1732.7/ 1822.7 – 1827.7

Frequency band	Band code	Frequency block code	Bandwidth	Channel type (FDD/TDD)	Frequency range (uplink/downlink, in MHz)
05.04.2014)		D3	2x5MHz	FDD	1732.7 – 1737.7/ 1827.7 – 1832.7
		D4	2x5MHz	FDD	1737.7 – 1742.7/ 1832.7 – 1837.7
		D5	2x5MHz	FDD	1742.7 – 1747.7/ 1837.7 – 1842,7
		D6	2x5MHz	FDD	1747.7 – 1752.7/ 1842.7 – 1847.7
<b>1800 MHz</b> (licensing for the period 06.04.2014 – 05.04.2029)	E	E1	2x5MHz	FDD	1710.1-1715.1/1805.1-1810.1
		E2	2x5MHz	FDD	1715.1-1720.1/1810.1-1815.1
		E3	2x5MHz	FDD	1720.1-1725.1/1815.1-1820.1
		E4	2x5MHz	FDD	1725.1-1730.1/1820.1-1825.1
		E5	2x5MHz	FDD	1730.1-1735.1/1825.1-1830.1
		E6	2x5MHz	FDD	1735.1-1740.1/1830.1-1835.1
		E7	2x5MHz	FDD	1740.1-1745.1/1835.1-1840.1
		E8	2x5MHz	FDD	1745.1-1750.1/1840.1-1845.1
		E9	2x5MHz	FDD	1750.1-1755.1/1845.1-1850.1
		E10	2x5MHz	FDD	1755.1-1760.1/1850.1-1855.1
		E11	2x5MHz	FDD	1760.11765.1/1855.1-1860.1
		E12	2x5MHz	FDD	1765.1-1770.1/1860.1-1865.1
		E13	2x5MHz	FDD	1770.1-1775.1/1865.1-1870.1
		E14	2x5MHz	FDD	1775.1-1780.1/1870.1-1875.1
		E15	2x4.8 MHz	FDD	1780.1-1784.9/1875.1-1879.9
<b>2600 MHz</b> for the paired spectrum (FDD)	F	F1	2x5MHz	FDD	2500 – 2505/ 2620 – 2625
		F2	2x5MHz	FDD	2505 – 2510/ 2625 – 2630
		F3	2x5MHz	FDD	2510 – 2515/ 2630 – 2635

Frequency band	Band code	Frequency block code	Bandwidth	Channel type (FDD/TDD)	Frequency range (uplink/downlink, in MHz)
(licensing for the period 06.04.2014 – 05.04.2029)		F4	2x5MHz	FDD	2515 – 2520/ 2635 – 2640
		F5	2x5MHz	FDD	2520 – 2525/ 2640 – 2645
		F6	2x5MHz	FDD	2525 – 2530/ 2645 – 2650
		F7	2x5MHz	FDD	2530 – 2535/ 2650 – 2655
		F8	2x5MHz	FDD	2535 – 2540/ 2655 – 2660
		F9	2x5MHz	FDD	2540 – 2545/ 2660 – 2665
		F10	2x5MHz	FDD	2545 – 2550/ 2665 – 2670
		F11	2x5MHz	FDD	2550 – 2555/ 2670 – 2675
		F12	2x5MHz	FDD	2555 – 2560/ 2675 – 2680
		F13	2x5MHz	FDD	2560 – 2565/ 2680 – 2685
		F14	2x5MHz	FDD	2565 – 2570/ 2685 – 2690
<b>2600 MHz</b> for the unpaired spectrum (TDD)  (licensing for the period 06.04.2014 – 05.04.2029)	G	G1	1x15MHz	TDD	2570 – 2585
		G2	1x15MHz	TDD	2585 – 2600
		G3	1x15MHz	TDD	2600 – 2615



#### 4.1.2. Reserve price for the blocks (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 subjected to the procedure, fulfilling the role of "circulating medium" at the time of 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 budget of eligibility points, which corresponds to a maximum amount of abstract (non-individualised) frequencies, in any band, for which a bidder may submit a bid during the auction. The eligibility is therefore a vocation for the gaining of the usage rights over an amount of frequencies and may be amended in the course of 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 frequencies corresponding to that number of points, should the auction end in the respective round.

The table below summarizes the reserve prices and the eligibility points for the A to G categories.

**Table 22 Reserve prices and eligibility points for the frequency blocks available within the selection procedure**

Category	Band	Block size	Validity	Reserve price/block (minimum licence fee) (euro)	Eligibility points/block
A	800 MHz	2 x 5 MHz	06.04.2014 – 05.04.2029	35,000,000	175
B*	900 MHz	2 x 5 MHz	01.01.2013 – 05.04.2014	3,400,000	17
C*	900 MHz	2 x 5 MHz	06.04.2014 – 05.04.2029	40,000,000	200
D	1800 MHz	2 x 5 MHz	01.01.2013 – 05.04.2014	800,000	4
E*	1800 MHz	2 x 5 MHz	06.04.2014 – 05.04.2029	10,000,000	50

F	2600 MHz	2 x 5 MHz	06.04.2014 – 05.04.2029	4,000,000	20
G	2600 MHz	1 x 15 MHz	06.04.2014 – 05.04.2029	3,000,000	15

The reserve prices and the eligibility points in the table for the categories B< C and E are also valid for the block of 2 x 4.8 MHz

#### *4.1.3. Limitations as to the acquirement of the usage rights*

The usage rights a bidder will be able to gain following the selection procedure are limited as follows:

- a) The total maximum amount of radio frequencies in the 900 MHz band for which a bidder may acquire usage rights following the selection procedure for the period 01.01.2013 – 05.04.2014, in Romania, is 2x15 MHz;
- b) The total maximum amount of radio frequencies in the 800 MHz and 900 MHz bands (cumulated) for which a bidder may acquire usage rights following the selection procedure for the period 06.04.2014 – 05.04.2029, in Romania, is 2x20 MHz;
- c) The total maximum amount of radio frequencies in the 800 MHz band for which a bidder may acquire usage rights following the selection procedure for the period 06.04.2014 – 05.04.2029, in Romania, is 2x15 MHz; and
- d) The total maximum amount of radio frequencies in the 900 MHz band for which a bidder may acquire usage rights following the selection procedure for the period 06.04.2014 – 05.04.2029, in Romania, is 2x15 MHz.

In the calculation of the aforementioned maximum radio spectrum amounts, the radio frequencies for which the bidders hold a usage right valid on the date forecasted for the entry into force of the licences awarded following this selection procedure, regardless of how these were obtained (previous licensing procedures or licence transfer), are included.

In view of the verification of the compliance with the caps imposed under this Section, the usage rights held by other persons in the same group with the bidder's are also considered; the notion of group has the meaning specified in Section 4.3.1.

## 4.2. Overview of the procedure

### 4.2.1. Procedure launch

The selection procedure will be launched upon the publication of an auction notice on the ANCOM website ([www.ancom.org.ro](http://www.ancom.org.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 awarding stage.

### 4.2.3. Calendar of the procedure

A guiding calendar of the selection procedure is provided for in Table 23 below.

**Table 23 Guiding calendar of the selection procedure**

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

Activity	Term
Publication 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+2 weeks
Publication of the answers to the clarification requests	7 days from each request
Deadline for receiving the applications (including the participation bond)	X+4 weeks
Presentation of the qualified/not-qualified applications	X+5 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	X+6 weeks

Activity	Term
stage, as well as the starting dates of the primary rounds <u>or</u> Announcement of the fact that the primary rounds of the auction are not required, as well as announcement of the successful bidders of the abstract blocks and of the starting dates of the additional rounds <u>or</u> Announcement of the fact that the primary and/or additional rounds of the auction 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 and functioning of the support electronic system, dedicated to bidders	X+7 weeks
Auction launch	X+8 weeks
Closing of the primary and/or additional rounds	Y ( $\geq$ X+8 weeks)
Assignment round	Y+3 days
Presentation of the outcomes of the procedure	Y+1 week
Deadline for awarding the licences: - The blocks in the B and D categories - The blocks in the A, C, E, F and G categories	30.11.2012 31.07.2013

" $\leq$ " – "smaller or equal"

" $\geq$ " – "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 4500 lei. The Terms of Reference may be obtained from the ANCOM headquarters at 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 a non-reimbursable amount of 4500 lei, representing the countervalue for the Terms of Reference, either at the ANCOM pay desk at 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 take the Terms of Reference.

By submitting the frequency allocation application, 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 take part 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 on the concepts of economic concentration, involved company, full operation and turnover issued by the Competition Council, implemented 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:

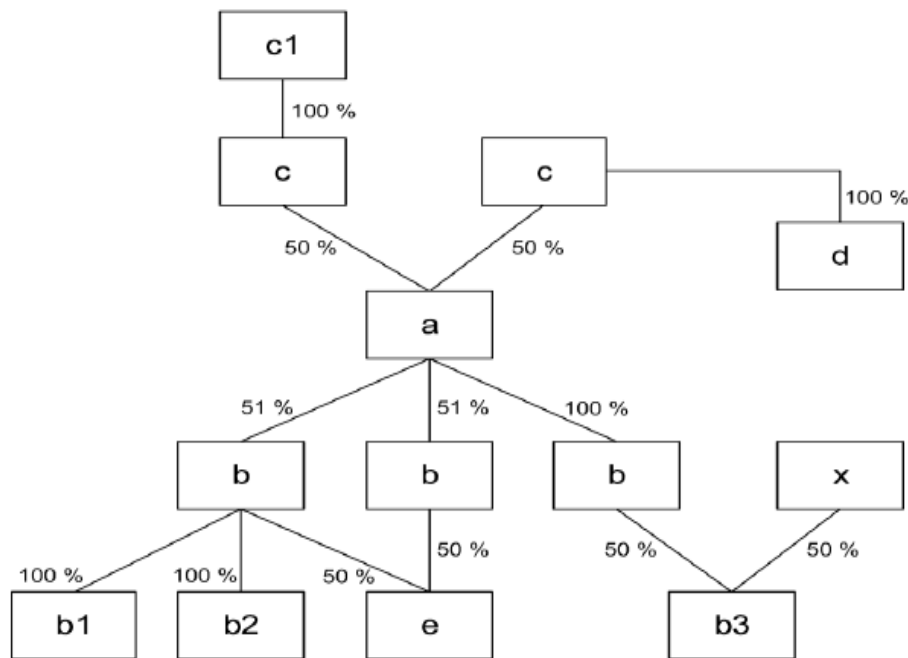
- a) the candidate/bidder;
- b) the companies in which the candidate/bidder, directly or indirectly:
  - (i) holds more than half of the social capital or of the operating capital; or
  - (ii) has the competence to exercise more than half of the voting rights; or
  - (iii) has the competence to name 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 within which a company of the ones provided for under letter c) holds the rights or competences specified at letter b);
- e) the companies within which two or more of the companies provided for under letters a)-d) hold together the rights or competences specified at letter b).

The competences specified under letter b) 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 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 manage the activity of a joint company.

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

**Figure 6 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 the disclosure of confidential information by, respectively to, the candidates/bidders themselves and by, respectively to, members of the group of a candidate/bidder.

For the purpose of 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 procedure holding 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 5.1.4, 5.1.5 and 5.1.7, from the moment

- when the envelopes containing the application files are opened and until the moment of awarding the licences;
- 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 perturbation of the holding 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, in order to allow maintaining or rapidly re-establishing the normal course of the procedure and/or to prevent the destruction of certain evidence.

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 right 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.

#### *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 submitted, as applicable.

#### **4.4. Participation bond**

##### *4.4.1. Form of the bond*

The participation bond is set up as a letter of bank guarantee issued by a banking company or as a guarantee tool issued by an insurance 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.

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

The participation bond will be set up in the format available under Annex no.4.

##### *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 and included in the frequency allocation application submitted as part of the application file.

##### *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:

- a) 31.12.2012, if the initial bid contains exclusively blocks from the B or D categories;
- b) 31.08.2013, if the initial bid contains at least one block in the A, C, E, F or G categories.

#### *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 final price representing the licence fee;
- 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 failed to qualify to the superior 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 when 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; in such case, the provisions under letter d) below will apply with regard to the participation bond thus reduced;
- d) to the bidders that gained radio frequency usage rights following the procedure, within 30 days from the payment of the licence fees, as follows:
  - (i) in the case of the bidders that gained radio frequency usage rights only for blocks from the B and D categories, the participation bond will be returned in its entirety within 30 days from the payment of the entire amount of the final price communicated according to Section 4.8.1 letter a);

- (ii) in the case of the bidders that gained radio frequency usage rights only for blocks from the A, C, E, F and G categories, the participation bond will be returned in its entirety within 30 days from the payment of the entire amount of the final price communicated according to Section 4.8.1 letter a);
- (iii) the bidders that gained radio frequency usage rights for both blocks in the B and D categories and blocks in the A, C, E, F and G categories will be able to obtain, upon request, after paying the licence fees for the blocks gained in the B and D categories, calculated according to Section 4.8.2 letter c) point (i), the reduction of the participation bond to 50% of the reserve price for the blocks won in the A, C, E, F and G categories; the bond thus reduced is then returned within 30 days after the payment of the price difference calculated according to Section 4.8.2 letter c) point (ii).

In view of enforcing the provisions under letter c) and letter d) point (iii) above, the bidders will need to present, alongside the mentioned request, a letter of bank guarantee or a guarantee tool for the reduced value indicated at the specified point, and the initial bond will be returned within 30 days from the date when ANCOM receives the request.

## **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 superior 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 presenting the candidate's standing;
- b) the frequency allocation application (the initial bid);
- c) the candidate's project;
- d) the letter of bank guarantee.

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

#### *4.5.2. Documents presenting 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 the natural persons acting on behalf of the candidate, which is to certify that the respective person is authorised to engage the candidate during the selection procedure and is to show the limits of the respective power of attorney;
- b) the acknowledging certificate (in original) issued by the National Trade Register Office (or other similar body from abroad) at most 30 days before the date of submitting the bid, 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 value and structure of the social capital;
  - (v) the administrators/managers/representatives/mandated persons, clearly mentioning the duration of the mandate of the company's representative;
  - (vi) the non-existence of a dissolution procedure either voluntary, juridical or following the enforcement of the insolvency procedures;
  - (vii) the status of the company;
- c) the registration certificate issued by the National Trade Register Office or other similar body from abroad;
- d) the candidate's constitutive act (company contract and/or statutes), in a consolidated updated form (including all changes to date);
- e) the structure of the candidate's group, 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, graphically represented according to the scheme depicted in Figure 3;
- f) the certificate of fiscal acknowledgement of the compliance with the exigible payment obligations to the state budget, the social insurance budgets and special tax funds, contributions and other revenues, issued according to the legal regulations in force (in original);
- g) the financial statements for the last 3 years, approved under the law, according to the accounting standard applied;
- h) the authenticated statement of the candidate's legal representative regarding the capacity as a participant in the selection procedure (in original) (Annex 1).

For the foreign legal persons the above documents will be legalised and authenticated according to the provisions of the Hague Convention of 5 October 1961 abolishing the requirement of legalisation for foreign public documents for the signatory states, or

according to the international law rules applicable to the other states, in a legalised translation into Romanian.

Special conditions for foreign legal persons:

- if the national legislation and the institutional system in the bidder's native country allow the precise fulfilment of the requirement, the bidder will provide the requested information in the imposed form;
- if the national legislation and the institutional system in the bidder's native country allow for obtaining this information from one or several relevant authorities, without the possibility to present it in a single document, the requirement will be deemed fulfilled upon the submission of several documents;
- if the national legislation and the institutional system in the bidder's native country do not allow for obtaining certain information from a relevant authority, this information will be presented in the constitutive act, where such information is comprised within this act, or by means of equivalent documents to those requested, upheld by a legal opinion elaborated by a form of exertion of the lawyer profession in the native country, which would have a professional liability insurance worth more than 20,000,000 euros, addressed to ANCOM, to certify that the submitted document is equivalent to the one requested in the present Section. In this situation, if the national legislation and the institutional system in the bidder's native country do not allow for obtaining certain information from a relevant authority, a statement on own liability concerning the legal impossibility to submit the information requested in the Terms of Reference is required.

As for associations, each of the members 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 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 engagement of all the association's members in view of submitting a joint bid during the selection procedure and in view of granting unconditional financial and/or technical support to the legal person that will be issued the licence;
- d) the validity period of the association agreement; this is not to cease before 06.04.2014.

In 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.

#### *4.5.3. The frequency allocation application (the initial bid)*

The frequency allocation application will be completed in the form provided for in Annex 2 hereto and represents the initial bid of the candidate, should the latter be admitted to the superior stages of the selection procedure, following the qualification stage.

In view of completing the frequency allocation application, the candidate will select the number of blocks it wishes to acquire in each of the A to G categories, using the multiple answer boxes available in the table included in the frequency allocation application. The candidate must select minimum one block in at least one of the A to G categories and must observe the limitations as to the acquirement of the usage rights mentioned in Section 4.1.3; its candidature is otherwise 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 determined according to letter a) will be summed up for all the block categories.

**The initial bid must be firm, definitive, irrevocable, unconditional and valid at least until:**

- a) 30.11.2012, if the initial bid contains exclusively blocks in the B or D categories;**
- b) 31.07.2013, if the initial bid contains at least one block in the A, C, E, F or G categories.**

Alternative bids are not accepted.

#### *4.5.4. The candidate's project*

The application file will contain the description of the project of network development and electronic communications service provision that the candidate plans to implement based on the rights to use the frequencies indicated in the initial bid. This description will follow the structure below:

## Calendar for the network development

The candidate will provide a general description of the network development plan, which will be grounded on the frequency demand indicated in the initial bid and will reflect the way in which the development obligations are to be observed, in the case of those frequencies for which such obligations are to be imposed under the licence (according to Chapter 3).

The candidate will indicate all the premises and calculation bases (including the budget of the link between the base station and the mobile terminal for uplink and downlink) which were applied for fulfilling the coverage obligations.

The candidate will provide maps on physical support and in electronic format (.jpeg), to show the requested coverage.

Furthermore, the candidate will describe the way of calculation of the corresponding coverage.

### *4.5.5. Letter of bank guarantee*

The application file will contain the letter of bank guarantee, in original, in the form and amount provided for in Section 4.4, according to the model in Annex 4.

### *4.5.6. Elaboration and submission of the application file*

#### 4.5.6.1. Language of the documents

All the application documents will be elaborated in Romanian, including the annexes. Nevertheless, in the case of the annual reports of the companies or of the technical documentations, although the provision of a version in Romanian is preferable, the candidates may present only a version in English, if available.

#### 4.5.6.2. Form of the documents

The representative authorised to engage the candidate has the obligation to number and sign each page of the application file (original and copies), as well as to attach a contents 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.

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

If the application file contains confidential information, the contents will be provided in a separate annex, the candidate explicitly signalling that the respective information is confidential. ANCOM will keep confidential this information to the extent the information is not considered public under the law.

The application file must not contain more than 100 pages written with fonts of 12, the copies of the requested documents not being included. The tables are included in the 100 pages.

#### 4.5.6.3. Envelope sealing and marking

The candidate must seal the original and the copies 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 be marked with the inscription "**Application file for the participation in the selection procedure for the award of the LICENCE for electronic communications networks and services in the 800, 900, 1800 and 2600 MHz bands**", the ANCOM address, the name and address of the candidate and the wording "DO NOT OPEN BEFORE [...],[...] HOURS". 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 the costs incurred by the elaboration and submission of its application file, and ANCOM will not be in any way liable for the payment of these costs, irrespective of the development or outcome of the selection procedure.

#### 4.5.6.4. Transmission and reception of the application file

The application file will be transmitted by post with confirmation of receipt or will be submitted personally to the ANCOM headquarters at 2 Delea Noua Street, Sector 3, Bucharest, and must be received by ANCOM until [...], [...] hours ("deadline for receiving the applications"), Romania's time. The files received by ANCOM after the



deadline set for receiving the applications will not be taken into consideration and are to be returned unopened to the address mentioned on the envelope. The candidate must take all measures in order to make sure that its file is received by ANCOM no later than 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, correspondingly, 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.org.ro](http://www.ancom.org.ro)), at least 10 days before the initial deadline.

#### 4.5.6.5. 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 written request therefor, received by ANCOM before the deadline set for receiving the applications. While elaborating and submitting the modified documents, the candidate will need to observe the instructions provided for in Sections 4.5.6.1-4.5.6.4, with the amendment that the exterior envelope will necessarily be marked with the wording **“MODIFICATIONS”**. If the candidate withdraws its application file after the deadline set for reception, the participation bond will not be returned.

#### 4.5.6.6. Opening of the envelopes containing the application file

The envelopes containing the application files will be opened by the Commission, on [...], at the ANCOM headquarters in 2 Delea Noua Street, Sector 3, Bucharest.

#### 4.5.6.7. Clarification requests

The interested persons may address to ANCOM requests for clarifications, in writing, at ANCOM headquarters in 2 Delea Noua Street, Sector 3, Bucharest, for the attention of the **Auction Commission for 800-900-1800-2600 MHz bands**, 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 **licitatie2012@ancom.org.ro** until [...]. ANCOM is to answer the clarification requests until [...]. The questions received and the answers to these questions will be communicated to the persons that addressed them and will be

published on the ANCOM website, without revealing the identity of the person who requested the respective clarifications.

The candidates will indicate, within the application file, a fax number 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 upon sending the message.

Only the persons that purchased the Terms of Reference may send clarification requests.

#### **4.6. The qualification stage**

Within 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 superior stages of the selection procedure or the rejection of the application.

##### *4.6.1. Qualification criteria*

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

- a) the candidate must be a Romanian or foreign legal person (commercial company);
- 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 until 5 April 2029, at least;
- d) the average turnover of the candidate for the last 3 years or from its setting up, if shorter than 3 years, must be of minimum 10,000,000 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 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 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 exigible payment obligations to the state budget, the social insurance budgets and special tax funds, contributions and other revenues; the taxes, contributions and other revenues which benefited from payment facilitation (postponements, phasing etc.) granted by the competent bodies are not deemed exigible 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's project must prove the fulfilment of the minimum coverage requirements;
- k) the candidate must have purchased the Terms of Reference;
- l) the candidate must observe in the frequency allocation application the caps established at point 4.1.3.

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

- the criterion specified at 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 k), which are to be fulfilled by the designated representative of the association.

#### *4.6.2. Evaluation of the application files*

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

The Commission may request, at any time during the evaluation of the application files, 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 letter i), if the Commission 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 on the situation found, requesting them to express in writing, within a certain term, the option for only one of these applications, to be maintained within the procedure. The non-expression of an option or the expression of

several different options triggers the rejection of all envisaged 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 subsequently to the qualification stage, all the involved bidders will be excluded from the procedure.

#### *4.6.3. Determining and presenting the candidates qualified for participation in the superior stages of the selection procedure*

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.

Alongside the communication on the application admission, the candidate will be informed on the change of its status within the selection procedure into *bidder*.

Alongside the communication on the candidature rejection, the candidate will be informed that it is eliminated from the procedure and that the term within which the participation bond will be returned is to be communicated.

The Commission will not communicate to the qualified candidates the identity or the initial eligibility of the other qualified candidates or the identity of the candidates which did not qualify for participation in the superior stages of the selection procedure.

The participation bond will be returned to the candidates who did not qualify to the superior stages of the selection procedure within 30 working days from the candidature 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 G categories, based on the frequency allocation applications 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 the bidders that the auction stage is required, as well as the date of starting the primary rounds;
- b) to organise the auction stage starting with the additional round/rounds, 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:
- will communicate the bidders that the primary rounds of the auction stage are not required;
  - 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 won by the respective bidder in each of the A to G categories; and
  - will communicate each bidder: (i) the basic price of its winning bid, which is the total price for the ensemble of abstract 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 enforcing the provisions of Section 4.8.2 letter c) herein, which are equal to the reserve prices for the categories to which these blocks belong;
  - will communicate each bidder the commencement date of the additional rounds;
- 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 for which there is no demand; in this case, the Commission:
- will communicate the bidders that the primary and/or additional rounds of the auction stage are not required;
  - 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 won by the respective bidder in each of the A to G categories; and
  - will communicate each bidder: (i) the basic price of its winning bid, which is the total price for the ensemble of abstract 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 enforcing the provisions of Section 4.8.2 letter c) herein, which are equal to the reserve prices for the categories to which these blocks belong;
  - will communicate each bidder the commencement date of the assignment round.

It is worth mentioning that the auction stage will be held in all cases, even if only the assignment round will take place. Given the limits as to the acquirement of the usage rights, most likely that there will be at least 2 or more winners in each category 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 for which there is no demand.

#### *4.6.5. Complaints*

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 the receipt.

Within 3 days from the lodging of the complaints, a commission designated by decision of the ANCOM president (the "Commission for settling the complaints"), comprising other persons than those which 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 a minute, approved by the president of ANCOM, and will communicate each complainant the outcome of the lodged complaint, as comprised in the minute.

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 minute on the settlement of complaints, in accordance with the provisions of this section.

#### **4.7. Auction stage (principal stage)**

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

All bids submitted during the principal stage are package bids. This means that a bid may only be a winner in its entirety and bidders cannot win a combination of blocks for which they did not place a package bid.

The maximum amount of spectrum which a bidder may acquire by auction is limited on the one hand by the total number of eligibility points (Section 4.1.2) and on the other hand by the established spectrum caps (Section 4.1.3).

#### *4.7.1. Primary bid rounds*

At the beginning of each primary round, the Commission communicates the bidders the price for a block of frequencies in each of the A to G categories. In the first primary round, the initial price for each of the A to G categories will be set equal to the reserve price (minimum licence fee) for that category, except for the categories for which the demand exceeded the supply, following the analysis of the frequency allocation applications. For these categories, the Commission will set in the first primary round prices higher than the reserve prices by a percent (bid increment) ranging between 5% and 20%.

Each bidder is invited to submit one bid stating the number of blocks in each category it wishes to bid at the given price, subject to the activity rule described below and to the overall spectrum caps. When the 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 subsequent primary round, the Commission will increase the price for blocks in particular category or categories if demand for blocks in that category or in those categories exceeded supply 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 percentage (Section 5.2.2).

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

During the primary rounds, bidders are subject to an activity rule whose purpose is to prevent the pointless 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 measured as the sum of eligibility points over all 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 in all the blocks included in its frequency allocation application. 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 eligibility in the previous round. This means that a bidder's eligibility may remain constant or decrease throughout the primary rounds; 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 their acquiring.

The winning bids, respectively the winning bidders (see Section 5.2.6) and the basic prices they must pay (see Section 5.2.7) are determined following the primary rounds.

#### *4.7.2. Additional bid round/rounds*

If, following the aggregation of the initial bids or following the primary rounds, there will be unawarded (abstract) frequency blocks, ANCOM may decide to organise an additional bid round, and if, further to this round, there will still be unawarded blocks, a second additional round will be scheduled. In each of these rounds, each bidder will be able to submit a bid stating one or several packages comprising one or several blocks, as well as the sum it is willing to pay for acquiring each of these packages. There are no maximum limits as to the bid amount; however, minimum limits are applicable, according to the specific rules provided for in Section 5.3.3.

All bidders are allowed to participate in the additional round/rounds, 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. The limitations on acquiring the usage rights mentioned in Section 4.1.3 will apply.

The winning bids for the blocks remained unawarded after the primary rounds, respectively the winning bidders (see Section 5.3.5) and the basic prices they must pay (see Section 5.3.6) will be determined following the additional round/rounds.

#### *4.7.3. Assignment round*



The initial bids, the primary rounds and the additional round/rounds allow for determining the number of generic blocks the winning bidders will receive in each category, as well as the basic prices for the respective frequency blocks, but not the specific frequencies these bidders are to be assigned. The purpose of the assignment round is to determine how the available frequencies in the A to G categories are to be distributed in the relevant frequency bands amongst the winners of the primary and additional rounds, and any additional prices to be paid by each winning bidder for obtaining a specific assignment.

All bidders that have won multiple blocks in the same category will receive adjacent frequency assignments within the respective frequency band.

The assignment round takes place simultaneously for all the categories of blocks. Each bidder that has won frequency blocks based on the initial bid or in the primary and additional rounds will express its options, based on a list of pre-defined options with regard to the specific assignments in each band of the obtained frequency blocks, 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 given specific assignment in each band, in addition to the overall basic price it has to pay, determined in the primary and/or additional rounds. Winners who are indifferent as regards the different assignment options do not have to make any assignment bids. The combination of bids with the highest total value for each category of blocks is the winning combination for the respective category, and the bids compounding it are declared winners 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 assigned the frequencies obtained according to the rules on the positioning of the unawarded blocks, described in Section 5.4.6. No additional price will be paid for the assignment of frequencies in a band which has only one winning bidder.

The additional prices will be established according to Section 5.4.7.

#### *4.7.4. Determining the winner and establishing the licence fees*

The bidders which submitted valid bids during the last primary round and/or those that compose the winning combination resulted from the additional round/rounds, if such is the case, are designated as the 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 5.2.7 and, as the case may be, 5.3.6, to which the additional price determined according to Section 5.4.7 will be added, if applicable.

#### **4.8. Licence awarding 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 standing for the licence fee that the winning bidder will have to 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 the primary and/or additional rounds and the additional price determined following the assignment round;
- b) the price payment conditions provided for 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 fees owed by the winning bidders will be paid as follows:

- a) until 31.10.2012, by the bidders that acquired usage rights only for the blocks in the B and D categories;
- b) until 30.06.2013, by the bidders that acquired usage rights only for the blocks in the A, C, E, F and G categories;
- c) the bidders that acquired usage rights both for blocks in the B and D categories, and for blocks in the A, C, E, F and G categories, will have the possibility to pay the corresponding licence fees as follows:
  - (i) until 31.10.2012, the licence fees for the blocks acquired in the B and D categories, calculated as the sum between the specific basic price communicated for these blocks, as applicable, at the closing of the qualification stage (in accordance with the provisions of Section 4.6.4 letter b) line 3 and letter c) line 3-a), of the primary rounds (in accordance with the provisions of Section 5.2.8 letter b) point (ii)) or of the additional round/rounds (in accordance with the provisions of Section 5.3.7 letter b) point (ii)), and the additional price communicated following the assignment round for the assignment obtained by the respective bidders in each of the

- B and D categories (in accordance with the provisions of Section 5.4.8 letter b)); furthermore, these bidders will have the possibility to recover the participation bond under the terms mentioned in Section 4.4.5;
- (ii) until 30.06.2013, the difference between the final price communicated according to Section 4.8.1 letter a) and the amount provided for at point (i) above.

#### *4.8.3. Award of the licences*

The licences are awarded to the winning bidders as follows:

- a) for the blocks in the B and D categories, until 30.11.2012 at the latest;
- b) for the blocks in the A, C, E, F and G categories, until 31.07.2013 at the latest.

The licences for all the blocks won by a bidder may be awarded prior to the deadlines specified at letters a) and b) above, under the condition of the respective bidder's integral payment of the due licence fee.

The licences will be awarded provided that the future licence holder is an authorised provider according to art.6 of the Framework-Ordinance.

#### *4.8.4. Transitory measures for the 900 MHz and 1800 MHz bands*

According to art.2 paragraph (4) of Decision no.1816/2011 on granting the usage rights for the 880-915 MHz/925-960 MHz and, respectively, the 1710-1747.5 MHz/1805-1842.5 MHz frequency bands, ANCOM may establish, if necessary, upon consent of the involved parties, transitory technical measures for the refarming of the frequency band generated by the outcome of the selection procedure.

## **Chapter 5 – Auction Rules**

### **5.1. General rules for the auction stage**

#### *5.1.1. Auction location*

The auction will take place at ANCOM headquarters in 2 Delea Noua Street, Sector 3, Bucharest, where each bidder will be provided a room endowed with telephone, fax and Internet access. Also, the bidders will have access, in accordance with the rules under Sections 5.1.4, 5.1.5 and 5.1.7, in the room where the Commission is to activate, located in the proximity of the rooms made available to the bidders.

The bid rounds may take place during one or several working days, as deemed necessary, between 9.00 hours and 16.00 hours.

#### *5.1.2. The electronic support system*

During the auction, the bidders as well as the Commission may use an electronic support system for the purpose of verifying the correctness of the bids from the viewpoint of eligibility and activity criteria observance and of the caps to gaining usage rights.

The electronic support system will be made available by ANCOM and it will consist of a computer application exclusively installed on the IT equipment located at the Authority's headquarters. Prior to the auction, ANCOM will organise, at a date to be announced after the completion of the qualification stage, a training session for the candidates on the usage of the electronic support system during the auction.

#### *5.1.3. Informing the bidders*

The Commission will provide the bidders with several pieces of information prior to each bid round, by the end of each type of round, as well as at any time deemed necessary by the auction process. The general rules for providing such information are depicted under this section, while specific rules are provided under Sections 5.2.2, 5.3.2 and 5.4.2.

Information is to be made by a representative of the Commission who will go therefor in the room reserved for each of the bidder at ANCOM headquarters. The proof of such information will be the signature on the information form, where the signature of only

one representative of a bidder is necessary. In case no representative of a bidder is present in the room reserved for the respective bidder or the representatives of the bidder refuse to sign the information form, the respective bidder will be considered to have waived its participation in the auction and the rules under Section 4.4.4 will be applied.

#### *5.1.4. Bid submission*

In view of submitting a bid during a certain round, a representative of each bidder will fill in and sign a specific bid form and will hand it over to the chairman of the Commission (or to the member of the Commission replacing the chairman), within the timeframe established for the respective round, except if the bidder makes use of one of its extension rights (Section 5.2.6). The representative of the bidder will go therefor to the room reserved for the Commission. The chairman of the Commission (or the member of the Commission replacing the chairman) will note the receipt of the bid in the synoptic table of the respective round, to be also signed by the representative of the bidder, and will endorse the form submitted by the bidder for proof of non-alteration.

The form may be filled in either by hand or using the electronic support system. In the latter case, the form, which is available on the electronic support system, may be filled in and printed by using exclusively the IT equipment made available to the bidder in the room reserved to it. In all cases whatsoever, the form must bear the handwritten signature of a representative of the bidder in order to be valid.

The bid forms for each type of round (primary, additional, assignment) are to be elaborated by ANCOM and made available to the bidders prior to the launch of each type of round.

#### *5.1.5. Extension rights*

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

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

The extension rights may be exerted actively or passively.

In case of actively exerting its right, the bidder will announce the chairman of the Commission, during a certain round, on the occurrence of an unexpected situation that prevents it from submitting an offer during the respective round, and will require the granting of an extension period in order to submit the bid. A representative of the bidder will go therefor to the room reserved for the Commission. The extension period is of 30 minutes after the scheduled closing time of the round. The extension may be required only during a certain round, and not during the recess between rounds or at another time.

Passive exercise of the extension rights is possible only in case of primary rounds and only by the bidders owning eligibility points (with non-zero eligibility) as well by one or several extension rights. Thus, in case one such bidder does not submit a bid within the timeframe established for a primary round, the round will automatically be extended, for that bidder, with 30 minutes after the scheduled closing time of the round, and the bidder will have one of its available extension rights deducted.

The extension period has effects only towards the bidder exerting its extension right and not towards the other bidders. It closes either upon the expiry of a 30 minutes timeframe after the scheduled closing time of the round, or when the bidder exerting its extension right has submitted its bid, in case the latter event takes place before the expiry of the 30 minutes.

#### *5.1.6. Electronic surveillance of the auction*

During the auction, the activity of the bidders and of the Commission will be electronically surveyed by means of audio-video equipment. The records will be used in view of monitoring the observance of the auction rules and will be archived by ANCOM after the procedure is completed.

#### *5.1.7. Exceptional circumstances*

In case exceptional circumstances occur during the auction, the Commission may take one of the following decisions:

- a) postpone a certain round, conclude a certain ongoing round, or announce the results of a certain round;
- b) cancel a certain ongoing round the results of which have not yet been announced and reschedule the respective round;
- c) cancel one or several rounds and the bids submitted during these rounds and restart the auction stage from a previous round;

- d) suspend the auction stage, cancel the auction stage and/or restart the auction stage.

The occurrence of an exceptional circumstance is to be assessed 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 headquarters or the operation of the electronic support system, the occurrence of indications or acknowledgements 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, and a representative of the bidder that announced this situation will go therefor to the room reserved for the Commission.

## **5.2. Rules for the primary bid rounds**

### *5.2.1. 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. The Commission sets the beginning 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 less than 15 minutes and may not exceed two hours.

All primary rounds will be scheduled to take place between 9.00 and 16.00 hours, on working days. Each bidder must ensure the permanent presence of its representatives, on a daily basis, at the ANCOM headquarters, in the room reserved for the respective bidder, starting 9.00 hours and until 16.00 hours or until the receipt of the Commission notification regarding the completion of the rounds for that respective day. The bidders will be announced on the beginning time of a primary round with at least 15 minutes and at most 30 minutes in advance.

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 be completed during the same day, and 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 of time, the Commission will immediately announce the bidders thereon.

#### *5.2.2. Informing the bidders prior to the primary rounds*

One the beginning 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) its eligibility for submitting bids during the respective round (expressed as number of eligibility points); and
- d) the number of remaining extension rights.

#### *5.2.3. Bid prices*

In the first primary round, the price for each of the A to G categories will be equal to the minimum price (minimum licence fee) for that category, except for the categories for which an excess demand has been recorded after analysing the application forms. For these categories, the Commission will set prices applicable in the first primary round that are higher than the minimum prices with a percentage (bid increment) between 5% and 20%.

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

The price will remain unchanged during the next round in case of those rounds where no excess demand exists.

Excess demand exists during a certain round when the total number of blocks in that category indicated in the valid bids submitted during the respective round exceeds the number of blocks available in that category.

#### *5.2.4. Bid rules*



All blocks in the A to G 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 beginning of the round. A bid may include any combination of blocks, while observing the limitations regarding the gain of usage rights (Section 4.1.3).

In order to submit a bid, the bidders select the number of blocks they wish to acquire in each of the categories, using the dedicated bid form. The bidders may choose to submit a "zero" bid that does not include any block within the A to G categories. In such a case, the current amount of the eligibility points for the respective bidder will be considered "zero". In case a bidder does not submit a bid during the round or during the extension period granted to that bidder (see Section 5.1.5), 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 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 5.1.4.

**Each submitted bid will be considered valid and represents a firm, definitive, irrevocable and unconditional commitment to acquire 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 higher bid for the same package of frequency blocks, submitted by the same bidder during one of the subsequent rounds or during the additional round/rounds; or
- b) it is cancelled as a result of the Commission cancelling one or several rounds and 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.

### *5.2.5. 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 between A and G, 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 (affluent to the respective round) for the A to G categories, while observing the limitations regarding the gain of usage rights (Section 4.1.3).

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

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

For each of the following 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 package of blocks included in its bid, including by renouncing certain blocks in certain categories and selecting blocks from other categories; this way, to this end, it is possible that, from one round to another, the bidder's eligibility in one or several categories may increase, and in other categories it may decrease.

The bidders may use the electronic support system in order to verify whether the bid they wish to submit during a certain round observes its eligibility during the respective round and the limitations regarding the gain of usage rights (Section 4.1.3). In case such verification is carried out, the bidder must fill in the bid form available in the electronic support system and, after the form is filled in, the system will display a message:

- a) announcing the bidder that its bid is in accordance with the said eligibility rules and limitations; or
- b) warning the bidder that its bid is not in conformity with the said eligibility rules and limitations, and in such cases the bidders are provided with the possibility to return to the bid form in order to review it.

Also, the electronic support system will warn the bidder in case its bid would lead to a decrease in the bidder's eligibility for the next round. In such case as well, the bidder is provided with the possibility to return to the bid form in order to review it.

#### *5.2.6. Determining the winning bidders*

The valid bids submitted during the last primary rounds will be declared as winning bids, and their holders will be designated as winning bidders. After the completion of the additional round/rounds (should it be the case) and of the assignment round, the winning bidders will be granted the rights to use the frequencies afferent to the blocks included in the winning bids.

#### *5.2.7. Determining the basic price*

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

#### *5.2.8. Completion of the primary rounds*

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

Moreover, the Commission communicates to each bidder a series of pieces of information on the results of the primary rounds, as follows:

- a) each bidder will be informed on the number of abstract blocks won by the respective bidder in each of the categories from A la G;
- b) each winning bidder will be informed on:
  - i) the basic price afferent to its bid declared as a winning bid;
  - ii) the specific basic prices for each of the blocks included in its winning bid, for the purpose of enforcing the provisions of Section 4.8.2 letter c) herein,

which are equal to the prices for which the bidder gained the respective blocks by means of its winning bid.

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

### **5.3. Rules for the additional bid round/rounds**

#### *5.3.1. Scheduling the additional round/rounds*

Rules depicted in Section 5.2.1 will apply.

#### *5.3.2. Informing the bidders prior to the additional round/rounds*

At the same time with the announcement of the beginning of additional round/rounds, the Commission must inform each bidder with respect to:

- a) the number of frequency blocks remaining 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.

#### *5.3.3. The bid prices*

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

Thus, during the first additional round, the bid price may not be less than the sum of the minimum prices for the blocks included in the bid, which represents:

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

In case after the first additional round certain frequency blocks remain unassigned, the Commission may decide to hold a second additional round. During this second round,

the bid price may not be less than the sum of the reserve prices (minimum licence fee) for the blocks included in the bid.

The bid price in the additional round/rounds must be expressed in euro.

#### *5.3.4. Bid rules*

Rules depicted in Section 5.2.4 will apply, with the exemptions below.

The blocks in the A to G categories that remained unassigned following the initial bids or following the primary rounds will be the only ones available for the submission of bids during the first additional round. During the second additional round, the blocks in the A to G categories that remained unassigned during the first additional round will be the only ones available for submission of bids.

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 enforcing the provisions of Section 4.8.2 letter c).

A package may include any combination of blocks, with the observance of the limitations regarding the gain of usage rights (Section 4.1.3), and the usage rights gained based on the initial bids and in the primary rounds will be taken into consideration.

During the additional round/rounds, the bidders may bid irrespective of their eligibility at the time of the primary rounds' completion.

#### *5.3.5. Determining the winning bidders*

After the completion of each additional 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 round that, taken together, have the higher value among all possible combinations, if the following conditions are met:

- a) in each category have been granted less blocks 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 assignment of the largest number of blocks from among those available in all categories.

In case two or several combinations of packages meeting the above conditions have 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 choose the winning combination, from among the potential winning combinations, by means of draw.

The bids for the packages that are part of the winning combination will be declared winning bids and their holders will be declared winners.

After the completion of the auction stage, during the licence award stage, the bidders declared winners as a result of each of the additional rounds will be granted the rights to use the frequencies from the blocks included in the packages that are part of the winning combination.

#### *5.3.6. Determining the basic price*

Each winning bid has an associated basic price. This basic price is the total price for the aggregate of abstract frequency blocks that are part of the winning combination.

#### *5.3.7. Completion of the additional round/rounds*

After the completion of the additional round/rounds, the Commission will communicate to each participating bidder a series of pieces of information on the results of the additional round/rounds, as follows:

- a) each bidder will be informed on the number of abstract blocks won by the respective bidder in each of the categories;
- b) each winning bidder will be informed on:
  - i) the basic price afferent to its bid declared as a winning bid in each of the additional rounds held;
  - ii) the specific basic prices for each of the blocks included in its winning bid, for the purpose of enforcing the provisions of Section 4.8.2 letter c) herein, which are equal to the individual prices indicated by the bidder for the respective blocks in the package that was part of the winning combination, in accordance with the provisions of Section 5.3.4.

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

## **5.4. Rules for the assignment round**

### *5.4.1. Scheduling the assignment round*

The assignment round is scheduled by the Commission, which sets the beginning 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 less than one hour.

The assignment round will be scheduled to take place between 9.00 and 16.00 hours, on a working day. The bidders will be announced on the round date and time with at least one day in advance.

The assignment round must begin and be completed during the same day, and round interruption by the end of the day and resumption during the next morning are not accepted. In case exceptional circumstances occur and justify the interruption of the auction for the rest of the day or for a longer period of time, the Commission will immediately announce the bidders thereon.

### *5.4.2. Informing the bidders prior to the assignment round*

At the same time when the assignment round date and time are announced, the Commission will inform each bidder with respect to:

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

### *5.4.3. Bid prices*

There is no minimum or maximum price limitation as regards assignment bids. These bids must be expressed in Euro.

### *5.4.4. Bid rules*

The gaining of a certain number of blocks in one of the A to G categories following the initial bid or the primary and/or additional rounds implies the right as well as the obligation of the winning bidder to acquire one of the frequency assignment options presented to that bidder by the Commission for each of the categories during the assignment round.

The bidders are invited to submit bids for the specific options for frequency assignment, as these are 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 options for frequency assignment, for each bidder separately. 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 and additional rounds;
- b) any option for assigning frequencies to a certain bidder is compatible with the options of all the other winners in that category receiving adjacent spectrum; and
- c) the unassigned frequency blocks in a certain band will be rearranged in the respective band according to the rules under Section 5.4.6.

During the assignment round, the participating bidders will submit a bid form, in accordance with the rules under Section 5.1.4.

For each bidder, the bid form will include a list of all the frequency assignment options available to the respective bidder in each of the bands for which it has won frequency blocks during the primary and additional rounds. The bid form will be made available to the bidder by a member of the Commission 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 in order to acquire the respective assignment option.

Zero bids will be automatically recorded for those frequency assignment options for which no bid is submitted. In case a bidder does not submit a bid form during the allocated timeframe, it shall be considered as submitting a zero bid for each of the frequency assignment options in each band made available to the respective bidder.



**Each bid submitted during the assignment round represent a firm, definitive, irrevocable and unconditional commitment to pay the specified price for each assignment option, in view of obtaining the respective specific frequency assignments, as an additional price to the basic price the bidder must pay as a result of the primary and/or additional rounds.**

A bid remains valid until:

- a) it is cancelled as a result of the cancellation by the Commission of the round and of the bids submitted during that round;
- b) the winning bidders are awarded licences for the usage rights gained as the result of the selection procedure.

#### *5.4.5. Determining the winning bids*

After the completion of the assignment round, the Commission will assess the assignment bids, separately for each of the A to G categories.

To this end the Commission will establish the winning combination for each of the categories from A to G, representing the combination of submitted valid assignment bids that has the higher 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 assigned in each category the quantity of spectrum won by the respective bidder during the primary and/or additional rounds;
- c) each bidder will be assigned adjacent frequencies in each category;
- d) the frequency ranges assigned to a bidder do not overlap with the frequency ranges assigned to another bidder; and
- e) any unassigned blocks must be adjacent and located in accordance with the rules under Section 5.4.6.

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

In case several combinations of assignment bids meeting the above conditions have equal and the highest value, the Commission will select a combination by means of draw.

#### *5.4.6. Positioning the unassigned frequencies*

It is possible that certain blocks from certain bands remain unassigned as a result of the primary and additional rounds. Any unassigned blocks will be positioned according to the rules in the table below.

**Table 24 Way of positioning the unassigned frequencies**

Category	Number of blocks	Band	Size of blocks	Positioning any unassigned blocks
A	6	791-821/832-862 MHz	2 x 5 MHz	Any unassigned blocks will be adjacent and positioned immediately above 791 MHz paired with 832 MHz.
B	5	880-915/925-960 MHz	2 x 5 MHz	The positioning of the unassigned blocks will be established by ANCOM, in keeping with the auction outcome and in view of ensuring the compatibility between the existing and the future networks.
C	7	880-915/925-960 MHz	2 x 5 MHz	
D	6	1710-1785/1805-1880 MHz	2 x 5 MHz	The positioning of the unassigned blocks will be established by ANCOM, in keeping with the auction outcome and in view of ensuring the compatibility between the existing and the future networks.
E	15	1710-1785/1805-1880 MHz	2 x 5 MHz	
F	14	2500-2570/2620-2690 MHz	2 x 5 MHz	Any unassigned blocks will be positioned immediately under 2570 MHz paired with 2690 MHz.
G	3	2570-2615 MHz	1 x 15 MHz	Any unassigned blocks will be positioned immediately under 2615 MHz.

*5.4.7. Determining the additional price*

Each winning bid, in each band, has an associated additional price. This price corresponds to the assignment option afferent to the winning bid of each bidder in the respective band and represents the sum to be paid by the holder of the respective bid, in addition to the basic price determined as a result of the primary and additional rounds (if such is the case), in order to obtain the said assignment.

#### *5.4.8. Completion of the assignment round*

After the completion of the assignment round, the Commission will communicate to each participating bidder a series of pieces of information on the results of the round, as follows:

- a) each bidder will be informed on the assignment obtained in each category;
- b) each winning bidder will be informed on the additional price for the assignment obtained in each category.

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

### **5.5. Completion of the auction stage**

After the completion of the auction stage, the Commission:

- a) will determine the final price each winning bidder must pay for gaining the rights to use the frequency blocks awarded to the respective bidder, representing the sum between the basic price determined as a result either of the initial bid or of the primary or additional rounds (and which cannot be less 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, during the licence award stage;
- b) will inform the bidders not gaining usage rights during the procedure on the term within which the participation bond is to be returned to them.

## **Chapter 6 – Miscellaneous**

### **6.1. Publicity of 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 communications means, as it considers necessary, including written and online mass-media, its webpage ([www.ancom.org.ro](http://www.ancom.org.ro)) etc.

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

- a) the identity of the participants and of the winning bidders;
- b) the actual frequency blocks the usage rights of which have been gained by the winning bidders as a result of the procedure;
- c) the licence fees owed by the winning bidders;
- d) licences that will be awarded as a result of the selection procedure.

### **6.2. Suspension of the selection procedure**

In case 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 assessed 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 occurrence of indications or acknowledgements 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.

### **6.3. Cancellation of the selection procedure**

According to the provisions under art. 26 paragraph (6) of the Framework-Ordinance, ANCOM may cancel the started selection procedure, prior to the deadline for the submission of the last bid during the principal stage. The decision to cancel the selection procedure must be objectively justified or must represent a consequence of certain conditions that might 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 days timeframe.

## **Annexes**

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**Annex 1 – Statement on the bidder's capacity as a participant in the selection procedure**

**Annex 2 – Application form**

**Annex 3 – Models of licence for the use of radio frequencies**

**Annex 4 – Model of a letter of bank guarantee**

**Annex 5 – Practical examples on carrying out the auction**

**Annex 6 – Work flow of the selection procedure**

**Annex 7 – List of localities required to be covered**

**Annex 8 – Digital broadcasting plan (Geneva Agreement 2006)**

*[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 Noua Street, Sector 3, Bucharest**

**With reference to:**

**Participation in the competitive selection procedure in view of  
awarding the rights to use the radio frequencies in the 800 MHz, 900  
MHz, 1800 MHz and 2600 MHz bands**

After examining the provisions of the *Terms of Reference for the organisation of the competitive selection procedure in view of awarding the rights to use the radio frequencies in the 800 MHz, 900 MHz, 1800 MHz and 2600 MHz bands*, as well as of the ANCOM President's Decision no. [...] / [...] *[on the organisation of the selection procedure in view of awarding the rights to use radio frequencies]*, I, the undersigned *[name and firstname]*, 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, contact data 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 the documents and information presented and provided as part of the application file are complete and 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 require any other justifying documents for the purpose of verifying and confirming my statement.

5. I will immediately inform the auction commission appointed by decision of the president of ANCOM if any changes will 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.292 "False statements" of the Penal Code of Romania, stating that, "*A statement which does not correspond to the truth, delivered to a state body or institution or to another entity referred to under art. 145 [i.e. public bodies], 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 and seal)



[*candidate heading*]

## FREQUENCY ALLOCATION APPLICATION

To

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

With reference to:

**Participation in the competitive selection procedure in view of awarding the rights to use the radio frequencies in the 800 MHz, 900 MHz, 1800 MHz and 2600 MHz bands**

After examining the provisions of the *Terms of Reference for the organisation of the competitive selection procedure in view of awarding the rights to use the radio frequencies in the 800 MHz, 900 MHz, 1800 MHz and 2600 MHz bands*, as well as of the ANCOM President's Decision no. [...] / [...] [on the organisation of the selection procedure in view of awarding the rights to use radio frequencies] (the "ANCOM Decision"), I, the undersigned [*name and firstname*], legal/mandated representative of [*name and headquarters of the candidate*], hereby firmly, 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), so as they 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 also enforce certain sanctions after the licence award (e.g. licence revoking);
2. To maintain valid the bid for the usage rights over the amounts of radio frequencies in each of the bands indicated in the table below, at the price specified therein (to which the possible additional price communicated by ANCOM by the closing of the assignment round may be added) until [*the date when the bid validity expires*] or until the date of the bid validity advance termination<sup>7</sup>; I thereby acknowledge that:

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<sup>7</sup> 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 or additional rounds; or

- the bid is valid only for the entire package of frequency blocks indicated in the table and, based on this bid, I may not gain a lower amount of frequencies than the amount afferent to the indicated package;
- the submission of the present bid does not prejudice my right to subsequently submit a bid for any other package of frequency blocks during the primary and/or additional rounds of the auction stage, provided that the activity and eligibility rules, as well as the rules regarding the limitations on frequency usage rights established under the Terms of Reference and the ANCOM Decision, are observed;

3. In case the candidate I represent is designated winner as the result of 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 with respect to the licence awarded through the selection procedure.

(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. In case the candidate does not submit a bid for any of the blocks within a certain band, he will cross the respective sections. Pay attention: the candidate must select minimum one block in at least one of the categories from A to G and must observe the caps as to the gaining of the usage rights imposed in Section 4.1.3. under the Terms of Reference; its application will otherwise be rejected!)

Category	Number of available blocks	Band	Usage	Reserve price/ block	INITIAL BID (number of blocks)	Total (euro)
A	6	791-821 / 832-862 MHz	06.04.2014 – 05.04.2029	35,000,000		
B	5	880-915 / 925-960 MHz	01.01.2013 –	3,400,000		

- 
- b) the bid is cancelled as the effect of the Commission cancelling one round or several rounds, as well as the bids submitted therein; or
  - c) the winning bidders are awarded licences for the usage rights gained as a result of the selection procedure.

			05.04.2014			
C	7	880-915 / 925-960 MHz	06.04.2014 – 05.04.2029	40,000,000		
D	6	1710-1785 / 1805-1880 MHz	01.01.2013 – 05.04.2014	800,000		
E	15	1710-1785 / 1805-1880 MHz	06.04.2014 – 05.04.2029	10,000,000		
F	14	2500-2570 / 2620-2690 MHz	06.04.2014 – 05.04.2029	4,000,000		
G	3	2570-2615 MHz	06.04.2014 – 05.04.2029	3,000,000		

4. I hereby expressly and unequivocal, 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 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 .....

[*candidate name*]

.....  
(authorised signature and seal)



2 Delea Noua Street, Bucharest 3, Romania  
Phone: +40 372 845 400 / +40 372 845 454. Fax: +40 372 845 402  
E-mail: [ancom@ancom.org.ro](mailto:ancom@ancom.org.ro). Website: [www.ancom.org.ro](http://www.ancom.org.ro)

On grounds of the Decree of the President of Romania no. 509/2009 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 the setting up of the National Authority for Management and Regulation in Communications, approved by Law no. 113/2010, with the subsequent amendments and completions, as well as of art. 23 paragraph (1), art. 24 paragraphs (1), (2) and (3), art. 31 paragraph (1)<sup>8</sup>/(2)<sup>9</sup> of the Government Emergency Ordinance no. 111/2011 on electronic communications,

Having regard to the provisions of the Decision of the president of the National Authority for Management and Regulation in Communications no. \_\_\_/\_\_\_\_\_ on the holding of the selection procedure for the award of the radio frequency usage rights,

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

issues this

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<sup>8</sup> Article 31 paragraph (1) of the Government Emergency Ordinance no. 111/2011 on electronic communications is the grounds for the award of the temporary lots.

<sup>9</sup> Article 31 paragraph (2) of the Government Emergency Ordinance no. 111/2011 on electronic communications is the grounds for the award of the radio frequency usage rights for the period between 6 April 2014 and 5 April 2029.

**LICENCE<sup>10</sup>**  
**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 in order to provide public electronic communications networks and mobile electronic communications services, in the following assigned frequency sub-bands:**

1. in the frequency bands \_\_\_\_\_:
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 (UIT) or in the national legislation in the electronic communications field also apply.

**II. Technical and operational conditions<sup>11</sup>**

1. The holder of the Licence 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.

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<sup>10</sup> The Licence for the use of radio frequencies to be awarded 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" has a guiding character 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.

<sup>11</sup> The reference technical and operational conditions are provided in the Terms of Reference and are to be concretely mentioned depending on the outcomes of the selection procedure (the radio frequency bands to be gained by the interested parties).

- 2.** The 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 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 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 holders will use the allocated frequency blocks only on the basis of 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 allocated spectrum.
- 7.** The 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.
- 8.** The holder has the obligation to notify to ANCOM the location of the base stations, at least 30 days before beginning the execution works. ANCOM may request the holder to change the location, in view of ensuring the electromagnetic compatibility. The 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.
- 10.** The change of the notified base station locations in accordance with point 8 or the decommission of a notified location entails the obligation to notify the situation within 30 days.
- 11.** The 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.
- 12.** With a view to prevent or remove the harmful interferences, the holder has the obligation to observe the technical and operational conditions for the use of radio frequencies established by ANCOM.

13. The 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.

14. The equipment within the network will observe the essential requirements and the harmonised European standards applicable in Romania. The 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 conditions<sup>12</sup>

#### 1. Coverage conditions

- a) \_\_\_\_\_;
- b) \_\_\_\_\_;
- c) \_\_\_\_\_.
- d) locality coverage.

1.1. The List of localities and main roads to be covered by the holder is available in Annex no.

#### 2. GSM quality conditions

- a) \_\_\_\_\_;
- b) \_\_\_\_\_;
- c) \_\_\_\_\_.

#### 3. UMTS quality conditions

- a) \_\_\_\_\_;
- b) \_\_\_\_\_;
- c) \_\_\_\_\_.

#### 4. IMT quality conditions other than GSM and UMTS.

In the event of introduction of other technologies, the holder has the obligation to observe the requirements provided for in the corresponding IMT standards.

### IV. Verification of the compliance with the coverage and quality conditions

1. The evaluation methodology to be used in order to verify the compliance with the coverage and quality conditions will be established by decision of the ANCOM president on grounds of art. 10 paragraph (1) point 1 and paragraph (2) point 20 of the Government Emergency Ordinance no. 22/2009.

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<sup>12</sup> The conditions set in the Terms of Reference will be mentioned.

2. The evaluation of the compliance with the coverage conditions – a determination process by calculation (simulation) or measurements made on the spot with a view to identify the relevant technical parameters of a radiocommunication network for verifying and observing the imposed coverage conditions. For large networks, such as the cellular mobile networks, the on the spot measurements are made on the move, using the equipment installed on autocars.

## **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 provided at point 1, ANCOM will inform the holder of the usage rights with regard to the modifications which must be operated and grants the holder a corresponding term in view of implementing these modifications, proportionate to their qualitative or quantitative nature.

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<sup>13</sup>**

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 conditions and objectives set or considered at the award of the right.

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<sup>13</sup> The transfer of the usage rights is also achieved in compliance with art. 35 of the Government Emergency Ordinance no. 111/2011 on electronic communications.



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 effect in the restriction, prevention 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 licence for the use of radio frequencies is transferred in totality, the change of the usage destination of the frequencies for which the Licence was awarded is not allowed.

## **VII. Obligations on the access of the operators of mobile virtual networks<sup>14</sup>**

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## **VIII. National roaming<sup>15</sup>.**

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## **IX. The spectrum usage tariff**

1. The 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.

## **X. Validity period**

The radio frequency usage rights are awarded until 5 April 2014<sup>16</sup>/5 April 2029.

## **XI. Revoking of the radio frequency usage rights**

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

- a) 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;

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<sup>14</sup> The conditions set in the Terms of Reference will be specified.

<sup>15</sup> The conditions set in the Terms of Reference will be specified.

<sup>16</sup> The date of 5 April 2014 is relevant only for the usage rights awarded on a temporary basis (for the period spanning between 1 January 2013 - 5 April 2014).

- b) 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 and national defence impose this measure, as well as where certain engagements assumed under international agreements must be observed.
2. The 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 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 the purpose of 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 frequency spectrum, for a specified term or the revoking of the usage rights, as the case may be.
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 payment term 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 from 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 electronic communications field.

*[heading of the issuer]*

**GUARANTEE TOOL (LETTER OF GUARANTEE)  
for the participation with a bid in the competitive selection procedure for  
awarding the rights to use the radio frequencies in the  
800 MHz, 900 MHz, 1800 MHz and 2600 MHz bands**

**To:**

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

Regarding the competitive selection procedure for awarding the rights to use the radio frequencies in the 800 MHz, 900 MHz, 1800 MHz and 2600 MHz bands, we *[name and headquarters of the bank/insurance company]*, 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,*

upon the first 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 of the selection procedure, does not pay in due time one or several instalments of the owed final price representing the licence fee;
- (2) *[name of the candidate]*, being declared winner of the selection procedure, waives the right to be awarded the licence for the use of radio frequencies;
- (2) *[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)

## Practical examples on auction

## Assumptions considered:

Block category	Number of blocks per category	Eligibility points per block	Minimum licence fee per block - euro -
A (800 MHz, 06.04.14–05.04.29)	6	175	35,000,000
B (900 MHz, 01.01.13–05.04.14)	5	17	3,400,000
C (900 MHz, 06.04.14–05.04.29)	7	200	40,000,000
D (1800 MHz , 01.01.13–05.04.14)	6	4	800,000
E (1800 MHz, 06.04.14–05.04.29)	15	50	10,000,000
F (2600 MHz, 06.04.14–05.04.29)	14	20	4,000,000
G (2600 MHz, 06.04.14–05.04.29)	3	15	3,000,000

**PRACTICAL EXAMPLE NO. 1**

**Application form (initial bid) of the application submission stage**

Number of bidders and their name: 4 (Alfa, Beta, Gama Delta)

The original bid of the bidders includes requests for the number and categories of blocks, as well as the points of eligibility according to the table below:

Block category / Frequency band code	Number of blocks requested through the original bid				
	Alfa	Beta	Gama	Delta	Total
<b>A</b> (800 MHz, 06.04.14–05.04.29)	2	2	2	2	<b>8</b>
<b>B</b> (900 MHz, 01.01.13–05.04.14)	3	3	1	2	<b>9</b>
<b>C</b> (900 MHz, 06.04.14–05.04.29)	2	2	2	2	<b>8</b>
<b>D</b> (1800 MHz , 01.01.13–05.04.14)	3	3	2	2	<b>10</b>
<b>E</b> (1800 MHz, 06.04.14–05.04.29)	4	4	4	4	<b>16</b>
<b>F</b> (2600 MHz, 06.04.14–05.04.29)	4	4	4	4	<b>16</b>
<b>G</b> (2600 MHz,	1	1	1	1	<b>4</b>

06.04.14– 05.04.29)					
<b>Eligibility points</b>	<b>1108</b>	<b>1108</b>	<b>1070</b>	<b>1048</b>	

### Aggregating the initial bids from all applications and determining the aggregate frequency demand

The need for primary rounds and the bid price in the first primary round result from the following table:

Block category / Frequency band code	Minimum price per block (minimum licence fee per block)	Available blocks (supply)	Blocks required (demand)	Demand > supply?	Demand/supply rate ( <i>r</i> )	Price incremented for the first primary round
A (800 MHz, 06.04.14–05.04.29)	35,000,000	6	8	Yes	1.33	38,500,000
B (900 MHz, 01.01.13–05.04.14)	3,400,000	5	9	Yes	1.80	4,080,000
C (900 MHz, 06.04.14–05.04.29)	40,000,000	7	8	Yes	1.14	42,000,000
D (1800 MHz , 01.01.13–05.04.14)	800,000	6	10	Yes	1.67	960,000
E (1800 MHz, 06.04.14–05.04.29)	10,000,000	15	16	Yes	1.07	10,500,000
F (2600 MHz, 06.04.14–05.04.29)	4,000,000	14	16	Yes	1.14	4,200,000

G (2600 MHz, 06.04.14– 05.04.29)	3,000,000	3	4	Yes	1.33	3,300,000
<b>Is the first primary round to be held? (is there even one block category where the demand exceeds the supply?)</b>						<b>Yes</b>

**Primary round no. 1**

The bidders submit their bids in accordance with the maximum limit of eligibility points of the initial bid:

Block category / Frequency band code	Number of blocks requested in the primary round no. 1				
	Alfa	Beta	Gama	Delta	Total
<b>A</b> (800 MHz, 06.04.14– 05.04.29)	2	2	2	2	<b>8</b>
<b>B</b> (900 MHz, 01.01.13– 05.04.14)	3	3	1	2	<b>9</b>
<b>C</b> (900 MHz, 06.04.14– 05.04.29)	2	2	2	2	<b>8</b>
<b>D</b> (1800 MHz , 01.01.13– 05.04.14)	3	3	2	2	<b>10</b>
<b>E</b> (1800 MHz, 06.04.14– 05.04.29)	4	4	4	4	<b>16</b>
<b>F</b> (2600 MHz, 06.04.14– 05.04.29)	4	4	4	4	<b>16</b>
<b>G</b> (2600 MHz, 06.04.14–	1	1	1	1	<b>4</b>



05.04.29)				
<b>Points of eligibility according to the activity in primary round no. 1</b>	<b>1108</b>	<b>1108</b>	<b>1070</b>	<b>1087</b>
<b>Points of eligibility under the initial bid</b>	<b>1108</b>	<b>1108</b>	<b>1070</b>	<b>1087</b>
<b>Is the limit of eligibility points met?</b>	<b>Yes</b>	<b>Yes</b>	<b>Yes</b>	<b>Yes</b>

**Conclusions after the primary round no. 1:**

- all bidders maintained their initial bids and retained the eligibility points.

The need for the primary round no. 2 and the bidding price for the primary round no. 2 result from the following table:

<b>Block category / Frequency band code</b>	<b>Minimum price per block (minimum licence fee per block)</b>	<b>Available blocks (supply)</b>	<b>Blocks required (demand)</b>	<b>Demand &gt; supply?</b>	<b>Demand/supply rate (<i>r</i>)</b>	<b>Price incremented for the second primary round</b>
<b>A</b> (800 MHz, 06.04.14–05.04.29)	38,500,000	6	8	Yes	1.33	<b>42,350,000</b>
<b>B</b> (900 MHz, 01.01.13–05.04.14)	4,080,000	5	9	Yes	1.80	<b>4,896,000</b>
<b>C</b> (900 MHz, 06.04.14–)	42,000,000	7	8	Yes	1.14	<b>44,100,000</b>

05.04.29)						
D (1800 MHz , 01.01.13– 05.04.14)	960,000	6	10	Yes	1.67	1,152,000
E (1800 MHz, 06.04.14– 05.04.29)	10,500,000	15	16	Yes	1.07	11,025,000
F (2600 MHz, 06.04.14– 05.04.29)	4,200,000	14	16	Yes	1.14	4,410,000
G (2600 MHz, 06.04.14– 05.04.29)	3,300,000	3	4	Yes	1.33	3,630,000
<b>Is the second primary round to be held? (is there even one block category where the demand exceeds the supply?)</b>						<b>Yes</b>

**Primary round no. 2**

The bidders submit their bids in accordance with the maximum limit of eligibility points from the primary round no. 1:

Block category / Frequency band code	Number of blocks requested in the primary round no. 2				
	Alfa	Beta	Gama	Delta	Total
A (800 MHz, 06.04.14– 05.04.29)	2	2	1	1	6
B (900 MHz, 01.01.13– 05.04.14)	3	3	1	2	9
C (900 MHz, 06.04.14– 05.04.29)	2	2	2	2	8
D (1800 MHz ,	3	3	2	2	10

01.01.13– 05.04.14)					
<b>E</b> (1800 MHz, 06.04.14– 05.04.29)	4	4	4	4	<b>16</b>
<b>F</b> (2600 MHz, 06.04.14– 05.04.29)	4	4	6	6	<b>20</b>
<b>G</b> (2600 MHz, 06.04.14– 05.04.29)	1	1	1	1	<b>4</b>
<b>Points of eligibility according to the activity in primary round no. 2</b>	<b>1108</b>	<b>1108</b>	<b>935</b>	<b>952</b>	
<b>Points of eligibility according to the activity in primary round no. 1</b>	<b>1108</b>	<b>1108</b>	<b>1070</b>	<b>1087</b>	
<b>Is the limit of eligibility points met?</b>	<b>Yes</b>	<b>Yes</b>	<b>Yes</b>	<b>Yes</b>	

**Conclusions after the primary round no. 2:**

- Gama and Delta partially give up blocks of category B, but increase the demand for blocks in category F, observing the limit of eligibility points according to the activity in the previous round;
- due to submitting their bids this way, Gamma and Delta lower their eligibility points.

The need for primary round no. 3 and the bid price for the primary round no. 3 result from the following table:

Block category / Frequency band code	Minimum price per block (minimum licence fee per block)	Available blocks (supply)	Blocks required (demand)	Demand > supply?	Demand/supply rate ( <i>r</i> )	Price incremented for the third primary round
<b>A</b> (800 MHz, 06.04.14–05.04.29)	42,350,000	6	6	No	1.00	<b>42,350,000</b>
<b>B</b> (900 MHz, 01.01.13–05.04.14)	4,896,000	5	9	Yes	1.80	<b>5,875,200</b>
<b>C</b> (900 MHz, 06.04.14–05.04.29)	44,100,000	7	8	Yes	1.14	<b>46,305,000</b>
<b>D</b> (1800 MHz, 01.01.13–05.04.14)	1,152,000	6	10	Yes	1.67	<b>1,382,400</b>
<b>E</b> (1800 MHz, 06.04.14–05.04.29)	11,025,000	15	16	Yes	1.07	<b>11,576,250</b>
<b>F</b> (2600 MHz, 06.04.14–05.04.29)	4,410,000	14	20	Yes	1.43	<b>5,071,500</b>
<b>G</b> (2600 MHz, 06.04.14–)	3,630,000	3	4	Yes	1.33	<b>3,993,000</b>

05.04.29)						
<b>Is the third primary round to be held? (is there even one block category where the demand exceeds the supply?)</b>						<b>Yes</b>

**Primary round no. 3**

The bidders submit their bids in accordance with the maximum limit of eligibility points from the primary round no. 2:

Block category / Frequency band code	Number of blocks requested in the primary round no. 3				
	Alfa	Beta	Gama	Delta	Total
<b>A</b> (800 MHz, 06.04.14– 05.04.29)	2	2	1	1	<b>6</b>
<b>B</b> (900 MHz, 01.01.13– 05.04.14)	2	2	1	2	<b>7</b>
<b>C</b> (900 MHz, 06.04.14– 05.04.29)	2	2	2	2	<b>8</b>
<b>D</b> (1800 MHz , 01.01.13– 05.04.14)	3	3	2	2	<b>10</b>
<b>E</b> (1800 MHz, 06.04.14– 05.04.29)	4	4	3	3	<b>14</b>
<b>F</b> (2600 MHz, 06.04.14– 05.04.29)	3	3	6	6	<b>18</b>
<b>G</b> (2600 MHz, 06.04.14– 05.04.29)	1	1	1	1	<b>4</b>

Points of eligibility according to the activity in primary round no. 3	1071	1071	885	902
Points of eligibility according to the activity in primary round no. 2	1108	1108	935	952
Is the limit of eligibility points met?	Yes	Yes	Yes	Yes

**Conclusions after the primary round no. 3:**

- all bidders give up certain blocks and do not bid others instead;
- each bidder thus lowers its eligibility points.

The need for primary round no. 4 and the bid price for the primary round no. 4 result from the following table:

Block category / Frequency band code	Minimum price per block (minimum licence fee per block)	Available blocks (supply)	Blocks required (demand)	Demand > supply?	Demand/supply rate ( <i>r</i> )	Price incremented for the fourth primary round
A (800 MHz, 06.04.14–05.04.29)	42,350,000	6	6	No	1.00	42,350,000
B (900 MHz, 01.01.13–05.04.14)	5,875,200	5	7	Yes	1.40	6,756,480

C (900 MHz, 06.04.14–05.04.29)	46,305,000	7	8	Yes	1.14	48,620,250
D (1800 MHz , 01.01.13–05.04.14)	1,382,400	6	10	Yes	1.67	1,658,880
E (1800 MHz, 06.04.14–05.04.29)	11,576,250	15	14	No	0.93	11,576,250
F (2600 MHz, 06.04.14–05.04.29)	5,071,500	14	18	Yes	1.29	5,578,650
G (2600 MHz, 06.04.14–05.04.29)	3,993,000	3	4	Yes	1.33	4,392,300
<b>Is the fourth primary round to be held? (is there even one block category where the demand exceeds the supply?)</b>						<b>Yes</b>

**Primary round no. 4**

The bidders submit their bids in accordance with the maximum limit of eligibility points from primary round no. 3:

Block category / Frequency band code	Number of blocks requested in the primary round no. 4				
	Alfa	Beta	Gama	Delta	Total
A (800 MHz, 06.04.14–05.04.29)	2	2	1	1	6
B (900 MHz, 01.01.13–05.04.14)	2	2	1	1	6
C (900 MHz, 06.04.14–05.04.29)	2	2	1	2	7
D (1800 MHz , 01.01.13–05.04.14)	3	3	2	2	10
E (1800 MHz,	4	4	4	3	15

06.04.14–05.04.29)					
F (2600 MHz, 06.04.14–05.04.29)	2	2	5	5	14
G (2600 MHz, 06.04.14–05.04.29)	1	1	1	1	4
Points of eligibility according to the activity in primary round no. 4	1051	1051	715	865	
Points of eligibility according to the activity in primary round no. 3	1071	1071	885	902	
Is the limit of eligibility points met?	Yes	Yes	Yes	Yes	

#### Conclusions after the primary round no. 4:

- following the bids of Gama and Delta, the number of bands where demand is in excess is reduced;
- Alpha and Beta maintain their bids nearly identical with their initial ones.

The need for primary round no. 5 and the bid price for the primary round no. 5 result from the following table:

Block category / Frequency band code	Minimum price per block (minimum licence fee per block)	Available blocks (supply)	Blocks required (demand)	Demand > supply?	Demand/supply rate ( <i>r</i> )	Price incremented for the fifth primary round
A (800 MHz, 06.04.14–05.04.29)	42,350,000	6	6	No	1.00	42,350,000
B (900 MHz, 01.01.13–05.04.14)	6,756,480	5	6	Yes	1.20	7,094,304



C (900 MHz, 06.04.14–05.04.29)	48,620,250	7	7	No	1.00	<b>48,620,250</b>
D (1800 MHz , 01.01.13–05.04.14)	1,658,880	6	10	Yes	1.67	<b>1,990,656</b>
E (1800 MHz, 06.04.14–05.04.29)	11,576,250	15	15	No	1.00	<b>11,576,250</b>
F (2600 MHz, 06.04.14–05.04.29)	5,578,650	14	14	No	1.00	<b>5,578,650</b>
G (2600 MHz, 06.04.14–05.04.29)	4,392,300	3	4	Yes	1.33	<b>4,831,530</b>
<b>Is the fifth primary round to be held? (is there even one block category where the demand exceeds the supply?)</b>						<b>Yes</b>

### Primary round no. 5

The bidders submit their bids in accordance with the maximum limit of eligibility points from the primary round no. 4:

Block category / Frequency band code	Number of blocks requested in the primary round no. 5				
	Alfa	Beta	Gama	Delta	Total
A (800 MHz, 06.04.14–05.04.29)	2	2	1	1	<b>6</b>
B (900 MHz, 01.01.13–05.04.14)	2	2	1	0	<b>5</b>
C (900 MHz, 06.04.14–05.04.29)	2	2	1	2	<b>7</b>
D (1800 MHz , 01.01.13–05.04.14)	3	3	2	0	<b>8</b>
E (1800 MHz, 06.04.14–05.04.29)	4	4	4	3	<b>15</b>
F (2600 MHz, 06.04.14–05.04.29)	2	2	5	5	<b>14</b>
G (2600 MHz, 06.04.14–05.04.29)	1	1	1	0	<b>3</b>

06.04.14–05.04.29)				
<b>Points of eligibility according to the activity in primary round no. 5</b>	<b>1051</b>	<b>1051</b>	<b>715</b>	<b>825</b>
<b>Points of eligibility according to the activity in primary round no. 4</b>	<b>1051</b>	<b>1051</b>	<b>715</b>	<b>865</b>
<b>Is the limit of eligibility points met?</b>	<b>Yes</b>	<b>Yes</b>	<b>Yes</b>	<b>Yes</b>

**Conclusions after the primary round no. 5:**

- Delta gives up certain blocks;
- The demand remains in excess only in the D category.

The need for primary round no. 6 and the bid price for the primary round no. 6 result from the following table:

<b>Block category / Frequency band code</b>	<b>Minimum price per block (minimum licence fee per block)</b>	<b>Available blocks (supply)</b>	<b>Blocks required (demand)</b>	<b>Demand &gt; supply?</b>	<b>Demand/supply rate (<i>r</i>)</b>	<b>Price incremented for the sixth primary round</b>
<b>A</b> (800 MHz, 06.04.14–05.04.29)	42,350,000	6	6	No	1.00	<b>4,350,000</b>
<b>B</b> (900 MHz, 01.01.13–05.04.14)	7,094,304	5	5	No	1.00	<b>7,094,304</b>
<b>C</b> (900 MHz, 06.04.14–05.04.29)	48,620,250	7	7	No	1.00	<b>48,620,250</b>
<b>D</b> (1800 MHz ,	1,990,656	6	8	Yes	1.33	<b>2,189,722</b>

01.01.13–05.04.14)						
E (1800 MHz, 06.04.14–05.04.29)	11,576,250	15	15	No	1.00	<b>11,576,250</b>
F (2600 MHz, 06.04.14–05.04.29)	5,578,650	14	14	No	1.00	<b>5,578,650</b>
G (2600 MHz, 06.04.14–05.04.29)	4,831,530	3	3	No	1.00	<b>4,831,530</b>
<b>Is the sixth primary round to be held? (is there even one block category where the demand exceeds the supply?)</b>						<b>Yes</b>

### Primary round no. 6

The bidders submit their bids in accordance with the maximum limit of eligibility points from the primary round no. 5:

Block category / Frequency band code	Number of blocks requested in the primary round no. 6				
	Alfa	Beta	Gama	Delta	Total
A (800 MHz, 06.04.14–05.04.29)	2	2	1	1	6
B (900 MHz, 01.01.13–05.04.14)	2	2	1	0	5
C (900 MHz, 06.04.14–05.04.29)	2	2	1	2	7
D (1800 MHz , 01.01.13–05.04.14)	3	3	0	0	6
E (1800 MHz, 06.04.14–05.04.29)	4	4	3	3	14
F (2600 MHz, 06.04.14–05.04.29)	2	2	5	3	12
G (2600 MHz, 06.04.14–05.04.29)	1	0	1	0	2
<b>Points of eligibility according to the</b>	<b>1051</b>	<b>1036</b>	<b>657</b>	<b>785</b>	

activity in primary round no. 6				
Points of eligibility according to the activity in primary round no. 5	1051	1051	715	825
Is the limit of eligibility points met?	Yes	Yes	Yes	Yes

**Conclusions after the primary round no. 6:**

- Gama gives up the blocks in the D category;
- thus, in category D, demand is no longer in excess;
- no other bidder requires additional blocks, but certain blocks in other categories are given up.

There is no excess demand within any category of frequency blocks, as shown in the following table, so round no. 6 is the last primary round.

Block category / Frequency band code	Minimum price per block (minimum licence fee per block)	Available blocks (supply)	Blocks required (demand)	Demand > supply?	Demand/supply rate ( <i>r</i> )	Basic price
<b>A</b> (800 MHz, 06.04.14–05.04.29)	42,350,000	6	6	No	1.00	<b>42,350,000</b>
<b>B</b> (900 MHz, 01.01.13–05.04.14)	7,094,304	5	5	No	1.00	<b>7,094,304</b>
<b>C</b> (900 MHz, 06.04.14–05.04.29)	48,620,250	7	7	No	1.00	<b>48,620,250</b>
<b>D</b> (1800 MHz, 01.01.13–05.04.14)	2,189,722	6	6	No	1.00	<b>2,189,722</b>

E (1800 MHz, 06.04.14–05.04.29)	11,576,250	15	14	No	0.93	<b>11,576,250</b>
F (2600 MHz, 06.04.14–05.04.29)	5,578,650	14	12	No	0.86	<b>5,578,650</b>
G (2600 MHz, 06.04.14–05.04.29)	4,831,530	3	2	No	0.67	<b>4,831,530</b>
<b>Is the seventh primary round to be held? (is there even one block category where the demand exceeds the supply?)</b>						<b>No</b>

#### Determining the winning bidders in the primary rounds and determining the basic price in these rounds

All bidders submitted valid offers in the primary round no. 6, so all their bids will be declared as winning bids, and the basic prices that bidders must pay are calculated by multiplying the incremented price for each block category with the number of blocks required by each bidder individually, as follows:

Block category / Frequency band code	Number of blocks won in the final primary round				Basic price per block
	Alfa	Beta	Gama	Delta	
A (800 MHz, 06.04.14–05.04.29)	2	2	1	1	42,350,000
B (900 MHz, 01.01.13–05.04.14)	2	2	1	0	7,094,304
C (900 MHz, 06.04.14–05.04.29)	2	2	1	2	48,620,250
D (1800 MHz, 01.01.13–05.04.14)	3	3	0	0	2,189,722
E (1800 MHz, 06.04.14–05.04.29)	4	4	3	3	11,576,250
F (2600 MHz, 06.04.14–05.04.29)	2	2	5	3	5,578,650
G (2600 MHz, 06.04.14–05.04.29)	1	0	1	0	4,831,530
<b>Basic price per</b>	<b>264,992,102.80</b>	<b>260,160,572.80</b>	<b>165,518,084.00</b>	<b>191,055,200.00</b>	

<b>bidder</b>				
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**Additional rounds**

Since in the E, F and G categories of blocks, following completion of primary rounds, there are still blocks available, they will be offered for auction in additional rounds at the bid value of the last primary round for which the demand exceeded the supply, as follows:

<b>Block category / Frequency band code</b>	<b>Minimum price per block</b>	<b>Available blocks (supply)</b>	<b>Remarks</b>
E (1800 MHz, 06.04.14–05.04.29)	11,576,250.00	1	Price obtained in round no. 2
F (2600 MHz, 06.04.14–05.04.29)	5,578,650.00	2	Price obtained in round no. 5
G (2600 MHz, 06.04.14–05.04.29)	4,831,530.00	1	Price obtained in round no. 2

**Additional round no. 1**

No bid is made and the Commission decides to hold another additional round. During this round, the minimum price per block will be as in the following table:

<b>Block category / Frequency band code</b>	<b>Minimum price per block (minimum licence fee per block)</b>	<b>Available blocks (supply)</b>	<b>Remarks</b>
E (1800 MHz, 06.04.14–05.04.29)	10,000,000	1	The minimum price is equal to the minimum licence fee per block

F (2600 MHz, 06.04.14–05.04.29)	4,000,000	2	The minimum price is equal to the minimum licence fee per block
G (2600 MHz, 06.04.14–05.04.29)	3,000,000	1	The minimum price is equal to the minimum licence fee per block

### Additional round no. 2

Bids are submitted as shown in the following table:

Block category / Frequency band code	Number of blocks requested in the additional round no. 2					
	Alfa-package_1	Alfa-package_2	Alfa-package_3	Beta_package_1	Delta_package_1	Delta_package_2
E (1800 MHz, 06.04.14–05.04.29)	1	1	1	0	0	1
F (2600 MHz, 06.04.14–05.04.29)	0	2	2	2	0	2
G (2600 MHz, 06.04.14–05.04.29)	1	0	1	0	1	1
<b>Price bid</b>	<b>14,000,000.00</b>	<b>2,000,000.00</b>	<b>21,000,000.00</b>	<b>9,000,000.00</b>	<b>4,000,000.00</b>	<b>22,000,000.00</b>

**Conclusions after the additional round no. 2:**

- bids or combinations of bids that result in the awarding of the largest amount of spectrum are the following:

1. Alfa-package\_1 + Beta-package\_1 = 23,000,000 (the entire available spectrum is awarded)
2. Alfa-package\_2 + Delta-package\_1 = 24,000,000 (the entire available spectrum is awarded)
3. Alfa-package\_3 = 21,000,000 (the entire available spectrum is awarded)
4. Delta-package\_2 = 22,000,000 (the entire available spectrum is awarded)

- thus, through the package combination no. 2, the full radio spectrum that remained available after the primary rounds is mainly awarded and, also, the higher basic price is obtained;

- in the additional rounds, Alfa obtains 1 block in the E category and 2 blocks in the F category for the basic price of 20,000,000;

- in the additional rounds, Delta obtains 1 block in the G category for the basic price of 4,000,000.

**Following the primary and additional rounds, the bidders have won the following blocks, at the following basic prices:**

Block category / Frequency band code	Number of blocks won in the primary and additional rounds			
	Alfa	Beta	Gama	Delta
A (800 MHz, 06.04.14–05.04.29)	2	2	1	1
B (900 MHz, 01.01.13–05.04.14)	2	2	1	0
C (900 MHz, 06.04.14–05.04.29)	2	2	1	2
D (1800 MHz , 01.01.13–05.04.14)	3	3	0	0
E (1800 MHz, 06.04.14–05.04.29)	5	4	3	3
F (2600 MHz, 06.04.14–05.04.29)	4	2	5	3
G (2600 MHz, 06.04.14–05.04.29)	1	0	1	1
Basic price in the primary round	264,992,102.80	260,160,572.80	165,518,084.00	191,055,200.00



Basic price in the additional round	20,000,000.00	0.00	0.00	4,000,000.00
<b>Total basic price</b>	<b>284,992,102.80</b>	<b>260,160,572.80</b>	<b>165,518,084.00</b>	<b>195,055,200.00</b>

## Assignment round

For each bidder, the Commission prepares and presents him with his bid form which will include a list of **all frequency assignment options available to that respective bidder** in each of the bands where he has won blocks of frequencies in primary and additional rounds. Thus, the structure of the bid forms is different for each bidder if, in at least one category of blocks, the number of assigned blocks is different.

Each bidder may bid additional prices for one or several combinations of assignments included in the bid form.

The winning combination is the combination of valid assignment bids submitted, which has the highest total value of all possible combinations, if the following conditions are fulfilled:

- a) combination includes one single bid from each bidder;
- b) each bidder is assigned, in each category, the amount of spectrum that he gained in the primary and additional rounds;
- c) each bidder is assigned adjacent frequencies in each category;
- d) ranges of frequencies assigned to a certain must not overlap with those assigned to another bidder; and
- e) any unassigned blocks will be adjacent and will be positioned in accordance with the rules under Section 5.4.6.

For the purposes of this example, we assume the winning combination is made of the following bids:

- **Alfa\_bid\_X (contains the frequency assignment option no. 2 from the Alfa bid form) = 12,000,000**
- **Beta\_bid\_Y (contains the frequency assignment option no. 7 from the Beta bid form) = 9,000,000**
- **Gama\_bid\_Z (contains the frequency assignment option no. 1 from the Gama bid form) = 6,000,000**

Conclusions after the assignment round:

- [the frequency assignment option no. 2 from the Alfa bid form] & [the frequency assignment option no. 7 from the Beta bid form] & [the frequency assignment option no. 1 from the Gama bid form] covers all frequency blocks awarded during the primary and additional rounds;
- Alpha, Beta and Gama will have the awarded blocks assigned in bands according to the options / previous winning assignment bids;
- Delta will have the awarded blocks assigned in bands in the combination that remains after Alpha, Beta and Gama assignments, according to their winning options;
- Alfa, Beta and Gama must pay the additional bided prices, respectively 12,000,000, 9,000,000 and 6,000,000.

Following the auction stages (primary rounds, additional rounds and assignment round) the bidders must pay the following licence fees:

Alfa	Beta	Gama	Delta
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Basic price in the primary round	264,992,102.80	260,160,572.80	165,518,084.00	191,055,200.00
Basic price in the additional round	20,000,000.00	0.00	0.00	4,000,000.00
Additional price	12,000,000.00	9,000,000.00	6,000,000.00	0.00
<b>Licence fee</b>	<b>296,992,102.80</b>	<b>269,160,572.80</b>	<b>171,518,084.00</b>	<b>195,055,200.00</b>

## PRACTICAL EXAMPLE NO. 2

### Application form (initial bid) of the application phase

Number of bidders and their name: 4 (Alfa, Beta, Gama Delta)

The original bid of the bidders includes requests for the number and category of blocks, as well as the points of eligibility according to the table below:

Block category / Frequency band code	Number of blocks requested by the original bid				
	Alfa	Beta	Gama	Delta	Total
<b>A</b> (800 MHz, 06.04.14– 05.04.29)	2	2	1	1	<b>6</b>
<b>B</b> (900 MHz, 01.01.13– 05.04.14)	2	2	0	0	<b>4</b>
<b>C</b> (900 MHz, 06.04.14– 05.04.29)	2	2	2	0	<b>6</b>
<b>D</b> (1800 MHz , 01.01.13– 05.04.14)	2	2	1	1	<b>6</b>
<b>E</b> (1800 MHz, 06.04.14– 05.04.29)	2	2	4	4	<b>12</b>
<b>F</b> (2600 MHz, 06.04.14– 05.04.29)	4	4	3	3	<b>14</b>

G (2600 MHz, 06.04.14– 05.04.29)	1	0	1	1	3
<b>Eligibility points</b>	<b>987</b>	<b>972</b>	<b>854</b>	<b>454</b>	

### Aggregating the initial bids from all applications and determining the aggregate frequency demand

The following result from the table below:

- there is no excess demand following the initial bids, therefore the primary rounds are not needed
- there are certain blocks remaining, for which there is no aggregate demand through the initial bids, therefore no additional rounds are required
- the minimum prices for the packages bid during the additional round/rounds, which is the minimum license fee.

Block category / Frequency band code	Minimum price per block (minimum licence fee per block)	Available blocks (supply)	Blocks required (demand)	Demand > supply?	Demand/supply rate ( <i>r</i> )	Reserve price
A (800 MHz, 06.04.14–05.04.29)	35,000,000	6	6	No	1.00	35,000,000
B (900 MHz, 01.01.13–05.04.14)	3,400,000	5	4	No	0.80	3,400,000
C (900 MHz, 06.04.14–05.04.29)	40,000,000	7	6	No	0.86	40,000,000
D (1800 MHz , 01.01.13–05.04.14)	800,000	6	6	No	1.00	800,000
E (1800 MHz, 06.04.14–05.04.29)	10,000,000	15	12	No	0.80	10,000,000
F (2600 MHz, 06.04.14–05.04.29)	4,000,000	14	14	No	1.00	4,000,000
G (2600 MHz, 06.04.14–05.04.29)	3,000,000	3	3	No	1.00	3,000,000
<b>Is the first primary round to be held? (is there even one block category where the demand exceeds the supply?)</b>						<b>No</b>

Is the first additional round to be held? (is there even one block category where the demand is lower than the supply?)	Yes
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### Additional rounds

Since in the B, C and E categories of blocks, following the initial bids, there are blocks still available, they will be offered for auction in additional rounds at a value equal to the minimum licence fee, as follows:

Block category / Frequency band code	Minimum price per block	Available blocks (supply)	Remarks
B (900 MHz, 01.01.13–05.04.14)	3,400,000	1	Minimum licence fee
C (900 MHz, 06.04.14–05.04.29)	40,000,000	1	Minimum licence fee
E (1800 MHz, 06.04.14–05.04.29)	10,000,000	3	Minimum licence fee

### Additional round no. 1

The bids are submitted as in the following table:

Block category / Frequency band code	Number of blocks requested in additional round no. 1					
	Alfa-package_1	Beta_package_1	Beta_package_2	Gama_package_1	Delta_package_1	Delta_package_2
B (900 MHz, 01.01.13–05.04.14)	1	1	1	0	0	0
C (900 MHz, 06.04.14–05.04.29)	0	0	0	1	1	1
E (1800 MHz, 06.04.14–05.04.29)	1	2	1	0	0	3

Price bid	14,000,000.00	25,000,000.00	15,000,000.00	42,000,000.00	45,000,000.00	80,000,000.00
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**Conclusions after the additional round no. 1:**

- bids or combinations of bids leading to the awarding of the largest amount of spectrum are the following:

1. Alfa-package\_1 + Gama-package\_1 = 74,000,000 (1 E block is not awarded)
2. Beta\_package\_1 + Gama-package\_1 = 67,000,000 (1 E block is not awarded)
2. Beta\_package\_1 + Delta-package\_1 = 70,000,000 (1 E block is not awarded)
4. Delta\_package\_3 = 80,000,000 (1 B bloc is not awarded)

- thus, by the package combination no. 4, the largest amount of spectrum, available after the initial bids and due to the primary rounds not being held, is mainly awarded and also, the highest basic price is obtained;

- in additional round no. 1, Delta obtains 1 block in the C category and 3 blocks in the E category for the basic price of 80,000,000.

**Following the initial bid and the first additional round, the bidders have won the following blocks, at the following basic prices:**

Block category / Frequency band code	Number of blocks won in the primary and additional rounds			
	Alfa	Beta	Gama	Delta
A (800 MHz, 06.04.14–05.04.29)	2	2	1	1
B (900 MHz, 01.01.13– 05.04.14)	2	2	0	0
C (900 MHz, 06.04.14– 05.04.29)	2	2	2	1
D (1800 MHz , 01.01.13– 05.04.14)	2	2	1	1
E (1800 MHz,	2	2	4	7

06.04.14– 05.04.29)				
<b>F</b> (2600 MHz, 06.04.14– 05.04.29)	4	4	3	3
<b>G</b> (2600 MHz, 06.04.14– 05.04.29)	1	0	1	1
Basic price in the initial bid	197,400,000.00	194,400,000.00	170,800,000.00	160,800,000.00
Basic price in the additional round	0.00	0.00	0.00	80,000,000.00
<b>Total basic price</b>	<b>197,400,000.00</b>	<b>194,400,000.00</b>	<b>170,800,000.00</b>	<b>240,800,000.00</b>

Since in the B category of blocks, following the initial bids and the first additional round, there are blocks still available, they will be offered for auction in the additional round no. 2 at a value equal to the minimum license fee, as follows:

Block category / Frequency band code	Minimum price per block	Available blocks (supply)	Remarks
<b>B</b> (900 MHz, 01.01.13–05.04.14)	3,400,000	1	Minimum licence fee

#### Additional round no. 2

Bids are submitted as shown in the following table:

Block category / Frequency band code	Number of blocks requested in the additional round no. 2			
	Alfa	Beta	Gama	Delta
<b>B</b> (900 MHz, 01.01.13–05.04.14)	1	1	1	1



<b>Price bid</b>	<b>4,000,000.00</b>	<b>3,500,000.00</b>	<b>5,000,000.00</b>	<b>4,000,000.00</b>
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**Conclusions after the additional round no. 2:**

- the highest bid belongs to Gama, the last block from the B category remained unawarded;
- in additional round no. 2, Gama obtains 1 block in the B category at the basic price of 5,000,000;
- there is no other unawarded block, in any category.

**Following the initial bid and the additional rounds, the bidders have won the following blocks, at the following basic prices:**

<b>Block category / Frequency band code</b>	<b>Number of blocks won in the primary and additional rounds</b>			
	<b>Alfa</b>	<b>Beta</b>	<b>Gama</b>	<b>Delta</b>
<b>A</b> (800 MHz, 06.04.14–05.04.29)	2	2	1	1
<b>B</b> (900 MHz, 01.01.13–05.04.14)	2	2	1	0
<b>C</b> (900 MHz, 06.04.14–05.04.29)	2	2	2	1
<b>D</b> (1800 MHz , 01.01.13–05.04.14)	2	2	1	1
<b>E</b> (1800 MHz, 06.04.14–05.04.29)	2	2	4	7
<b>F</b> (2600 MHz, 06.04.14–05.04.29)	4	4	3	3
<b>G</b> (2600 MHz, 06.04.14–05.04.29)	1	0	1	1
Basic price in the initial bid	197,400,000.00	194,400,000.00	170,800,000.00	160,800,000.00
Basic price in the additional round no. 1	0.00	0.00	0.00	80,000,000.00
Basic price in the additional round no . 2	0.00	0.00	5,000,000.00	0.00
<b>Total basic price</b>	<b>197,400,000.00</b>	<b>194,400,000.00</b>	<b>175,800,000.00</b>	<b>240,800,000.00</b>

## Assignment round

For each bidder, the Commission prepares and present him with its bid form which includes a list of **all frequency assignment options available to that respective bidder** in each of the bands where he won blocks of frequencies during the primary and additional rounds. Thus, the structure of the bid forms is different for each bidder if, at least in one category of blocks, the number of assigned blocks is different.

Each bidder may bid additional prices for one or several combinations of assignments included in the bid form.

The winning combination is the combination of valid assignment bids submitted, which has the highest total value of all possible combinations, if the following conditions are fulfilled:

- a) the combination includes one single offer from each bidder;
- b) each bidder is assigned, in each category, the amount of radio spectrum he has won in the primary and additional rounds;
- c) each bidder is assigned adjacent frequencies in each category ;
- d) ranges of frequencies assigned to a bidder do not overlap with those assigned to another bidder; and
- e) any unassigned blocks are adjacent and are positioned in accordance with the rules under Section 5.4.6.

For the purposes of this example, we assume the winning combination is made of the following bids:

- **Alfa\_bid\_X (contains the frequency assignment option no. 2 from the bid form of Alfa) = 8,000,000**
- **Beta\_bid\_Y (contains the frequency assignment option no. 1 from the bid form of Beta) = 10,000,000**
- **Gama\_bid\_Z (contains the frequency assignment option no. 5 from the bid form of Gama) = 15,000,000**
- **Delta\_bid\_T (contains the frequency assignment option no. 3 from the bid form of Gama) = 6,000,000**

Conclusions after the assignment round:

- [frequency assignment option no. 2 of the tender form of Alfa] &  
[frequency assignment option no. 1 from the bid form of Beta] &  
[frequency assignment option no. 5 from the bid form of Gama] &  
[frequency assignment option no. 3 from the bid form of Gama] covers all frequency blocks awarded in the primary and additional rounds.
- the bidders will have the awarded blocks assigned in bands according to the options / previous winning assignment bids
- the bidders must pay additional prices bid, respectively 8,000,000, 10,000,000, 15,000,000 and 6,000,000.

Following the auction stages (additional rounds and assignment round) the bidders must pay the following licence fees:

	Alfa	Beta	Gama	Delta
Basic price in the initial bid	197,400,000.00	194,400,000.00	170,800,000.00	160,800,000.00
Basic price in the additional round no. 1	0.00	0.00	0.00	80,000,000.00
Basic price in the additional round no. 2	0.00	0.00	5,000,000.00	0.00
<b>Additional price</b>	8,000,000.00	10,000,000.00	15,000,000.00	6,000,000.00
<b>Licence fee</b>	<b>205,400,000.00</b>	<b>204,400,000.00</b>	<b>190,800,000.00</b>	<b>246,800,000.00</b>

## PRACTICAL EXAMPLE NO. 3

### Application form (initial bid) of the application phase

Number of bidders and their name: 4 (Alfa, Beta, Gama Delta)

Original bid of the bidders includes requests for the number and category of blocks, as well as the points of eligibility according to the table below:

Block category / Frequency band code	Number of blocks requested by the initial bids				
	Alfa	Beta	Gama	Delta	Total
<b>A</b> (800 MHz, 06.04.14–05.04.29)	2	2	1	1	<b>6</b>
<b>B</b> (900 MHz, 01.01.13–05.04.14)	2	2	1	0	<b>5</b>
<b>C</b> (900 MHz, 06.04.14–05.04.29)	2	2	3	0	<b>7</b>
<b>D</b> (1800 MHz , 01.01.13–05.04.14)	3	3	0	0	<b>6</b>
<b>E</b> (1800 MHz, 06.04.14–05.04.29)	4	3	4	4	<b>15</b>
<b>F</b> (2600 MHz, 06.04.14–05.04.29)	4	4	3	3	<b>14</b>
<b>G</b> (2600 MHz, 06.04.14–05.04.29)	1	0	1	1	<b>3</b>

<b>Eligibility points</b>	<b>1091</b>	<b>1026</b>	<b>1067</b>	<b>450</b>
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**Aggregating the initial bids from all applications and determining the aggregate frequency demand**

The following result from the table below:

- there is no excess demand following the initial bids, therefore the primary rounds are not needed
- blocks remain for which there is no aggregate demand through initial offers so there is no require for additional rounds
- the allocation round is to follow directly.

<b>Block category / Frequency band code</b>	<b>Minimum price per block (minimum licence fee per block)</b>	<b>Available blocks (supply)</b>	<b>Blocks required (demand)</b>	<b>Demand&gt;supply?</b>	<b>Demand/supply rate (<i>r</i>)</b>	<b>Reserve price</b>
<b>A</b> (800 MHz, 06.04.14–05.04.29)	35,000,000	6	6	No	1.00	<b>35,000,000</b>
<b>B</b> (900 MHz, 01.01.13–05.04.14)	3,400,000	5	5	No	1.00	<b>3,400,000</b>
<b>C</b> (900 MHz, 06.04.14–05.04.29)	40,000,000	7	7	No	1.00	<b>40,000,000</b>
<b>D</b> (1800 MHz , 01.01.13–05.04.14)	800,000	6	6	No	1.00	<b>800,000</b>
<b>E</b> (1800 MHz, 06.04.14–05.04.29)	10,000,000	15	15	No	1.00	<b>10,000,000</b>
<b>F</b> (2600 MHz, 06.04.14–05.04.29)	4,000,000	14	14	No	1.00	<b>4,000,000</b>
<b>G</b> (2600 MHz, 06.04.14–05.04.29)	3,000,000	3	3	No	1.00	<b>3,000,000</b>
<b>Is the first primary round to be held? (is there even one block category where the demand exceeds the supply?)</b>						<b>No</b>
<b>Is the first additional round to be held? (is there even one block category where the demand is lower than the supply?)</b>						<b>No</b>

Following the initial bid, the bidders have won the following blocks, at the following basic prices:

Block Category / Frequency band code	Number of blocks won in the primary and additional rounds			
	Alfa	Beta	Gama	Delta
<b>A</b> (800 MHz, 06.04.14–05.04.29)	2	2	1	1
<b>B</b> (900 MHz, 01.01.13–05.04.14)	2	2	1	0
<b>C</b> (900 MHz, 06.04.14–05.04.29)	2	2	3	0
<b>D</b> (1800 MHz , 01.01.13–05.04.14)	3	3	0	0
<b>E</b> (1800 MHz, 06.04.14–05.04.29)	4	3	4	4
<b>F</b> (2600 MHz, 06.04.14– 05.04.29)	4	4	3	3
<b>G</b> (2600 MHz, 06.04.14– 05.04.29)	1	0	1	1
Basic price in the initial bid	218,200,000.00	205,200,000.00	213,400,000.00	90,000,000.00
<b>Total basic price</b>	<b>218,200,000.00</b>	<b>205,200,000.00</b>	<b>213,400,000.00</b>	<b>90,000,000.00</b>

### Assignment round

For each bidder, the Commission prepares and presents to him the bid form which will include a list of **all frequency assignment options available to that respective bidder** in each of the bands where he has won blocks of frequencies during the primary and additional rounds. Thus, the structure of the bid forms is different for each bidder if, in at least one category of blocks, the number of assigned blocks is different. Each bidder may bid additional prices for one or several combinations of assignments included in the bid form.

The winning combination is the combination of valid assignment bids submitted, which has the highest total value of all possible combinations, if the following conditions are fulfilled:

- a) combination includes one single bid from each bidder;
- b) each bidder is assigned, in each category, the amount of spectrum that he gained in the primary and additional rounds;
- c) each bidder is assigned adjacent frequencies in each category;
- d) ranges of frequencies assigned to a certain must not overlap with those assigned to another bidder; and
- e) any unassigned blocks will be adjacent and will be positioned in accordance with the rules under Section 5.4.6.

For the purposes of this example, we assume the winning combination is made of the following bids:

- **Gama\_bid\_Z (contains the frequency assignment option no. 5 from the Gama bid form) = 20,000,000**

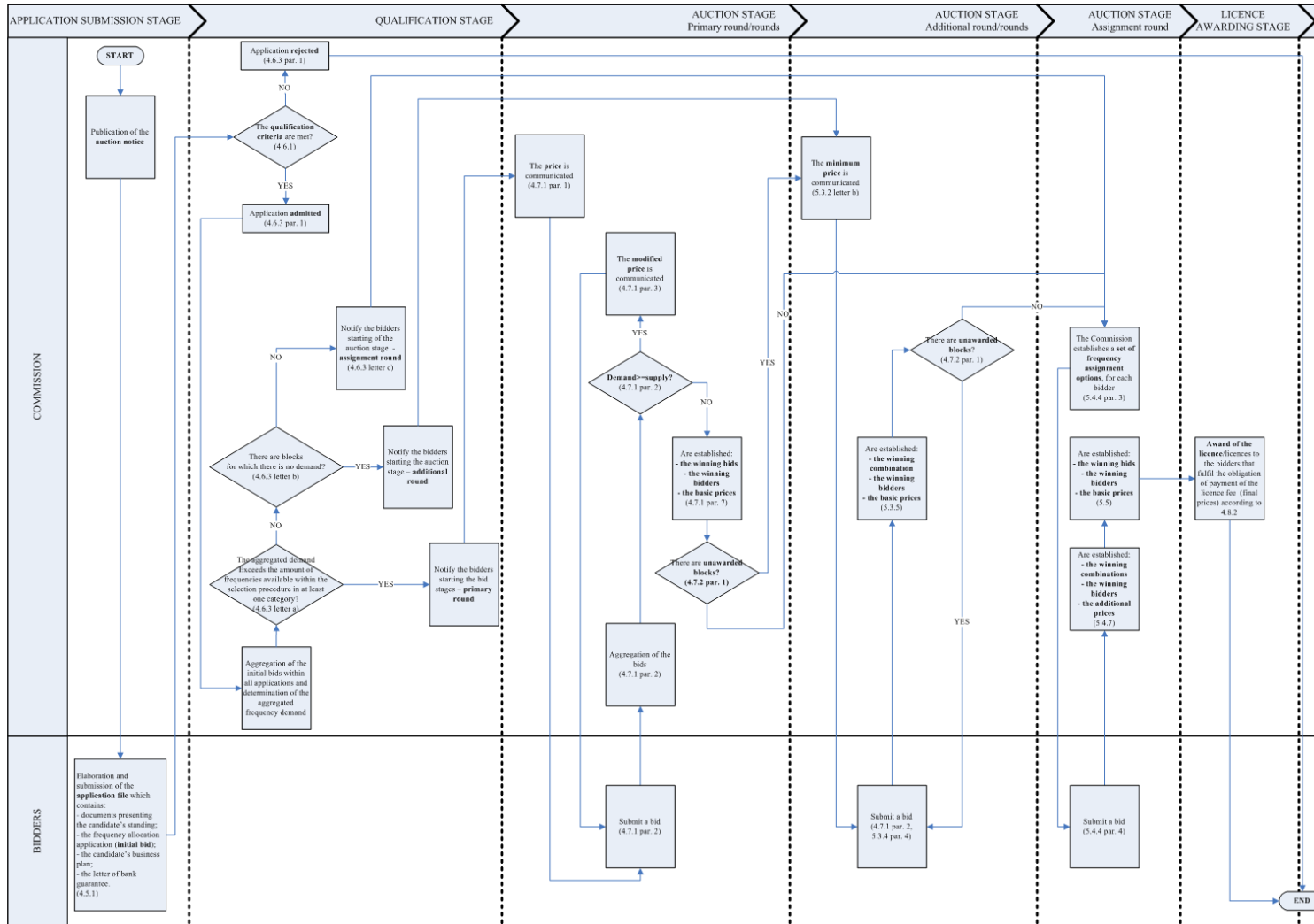
Conclusions after the assignment round:

- [the frequency assignment option no. 5 from the Gama bid form] covers all frequency blocks awarded during the primary and additional rounds;
- the bidders will have the awarded blocks assigned in the bands in accordance with the option in the Gama bid
- Gama must pay the additional bid price, respectively 20,000,000.

Following the initial bid and the assignment round, the bidders must pay the following licence fees:

	Alfa	Beta	Gama	Delta
Basic price in the initial bid	218,200,000.00	205,200,000.00	213,400,000.00	90,000,000.00
Additional price	0.00	0.00	20,000,000.00	0.00
<b>Licence fee</b>	<b>218,200,000.00</b>	<b>205,200,000.00</b>	<b>233,400,000.00</b>	<b>90,000,000.00</b>

### Work flow of the selection procedure





## Annex 7

## List of localities not-covered with mobile communications networks

SIRUTA Code	County	Locality name	Belonging localities/villages	Locality type	Population	Households
2274	AB	Albac	Rusești	rural	25	26
2327	AB	Almașu Mare	Almașu de Mijloc	rural	314	113
2318	AB	Almașu Mare	Almașu Mare	rural	592	246
2336	AB	Almașu Mare	Brădet	rural	27	32
2354	AB	Almașu Mare	Cib	rural	460	202
2363	AB	Almașu Mare	Glod	rural	310	109
2372	AB	Almașu Mare	Nădăștia	rural	170	77
2595	AB	Avram Iancu	Achimețești	rural	35	15
2611	AB	Avram Iancu	Bădăi	rural	29	16
2666	AB	Avram Iancu	Cârăști	rural	29	22
2675	AB	Avram Iancu	Cârțulești	rural	52	17
2648	AB	Avram Iancu	Căsoaia	rural	36	16
2684	AB	Avram Iancu	Cocești	rural	76	31
2728	AB	Avram Iancu	Dolești	rural	113	53
2791	AB	Avram Iancu	Orgești	rural	50	33
2817	AB	Avram Iancu	Plai	rural	37	21
2835	AB	Avram Iancu	Șoicești	rural	38	18
2853	AB	Avram Iancu	Târșă	rural	324	118
2862	AB	Avram Iancu	Târșă-Plai	rural	30	14
3887	AB	Ceru Băcăinți	Cucuta	rural	51	24
3930	AB	Ceru Băcăinți	Valea Mare	rural	27	18
4776	AB	Horea	Horea	rural	340	124

SIRUTA Code	County	Locality name	Belonging localities/villages	Locality type	Population	Households
5005	AB	Întregalde	Dealul Geoagiului	rural	80	43
5014	AB	Întregalde	Ghioncani	rural	102	43
5023	AB	Întregalde	Iliești	rural	21	11
5032	AB	Întregalde	Ivăniș	rural	95	41
4990	AB	Întregalde	Întregalde	rural	91	40
5041	AB	Întregalde	Mărinești	rural	22	11
5050	AB	Întregalde	Modolești	rural	126	51
5069	AB	Întregalde	Necrilești	rural	185	63
5087	AB	Întregalde	Sfârcea	rural	62	32
5185	AB	Livezile	Izvoarele	rural	190	143
5283	AB	Lopadea Nouă	Ocnișoara	rural	35	30
5363	AB	Lupșa	Bârzan	rural	44	7
5522	AB	Lupșa	Valea Holhorii	rural	34	15
5559	AB	Lupșa	Văi	rural	144	50
5611	AB	Metేశ	Lunca Ampoiței	rural	165	51
5620	AB	Metేశ	Lunca Metేశului	rural	105	36
5648	AB	Metేశ	Poiana Ampoiului	rural	316	105
5675	AB	Metేశ	Remetea	rural	25	14
5693	AB	Metేశ	Văleni	rural	279	82
5862	AB	Mogoș	Bârlești-Cătun	rural	26	11
5871	AB	Mogoș	Bârzogani	rural	40	18
5844	AB	Mogoș	Bărbеști	rural	36	19
5906	AB	Mogoș	Butești	rural	34	18
5915	AB	Mogoș	Cojocani	rural	58	31
5924	AB	Mogoș	Cristești	rural	64	26
5933	AB	Mogoș	Mămăligani	rural	48	24

SIRUTA Code	County	Locality name	Belonging localities/villages	Locality type	Population	Households
5835	AB	Mogoș	Mogoș	rural	107	63
5951	AB	Mogoș	Oncești	rural	29	21
5960	AB	Mogoș	Poienile Mogoș	rural	129	68
5997	AB	Mogoș	Valea Barnii	rural	74	44
6002	AB	Mogoș	Valea Cocești	rural	37	17
6011	AB	Mogoș	Valea Giogești	rural	40	26
6020	AB	Mogoș	Valea Mlacii	rural	75	34
6039	AB	Mogoș	Valea Țupilor	rural	51	23
6137	AB	Ocoliș	Lunca Largă	rural	86	63
6128	AB	Ocoliș	Ocoliș	rural	460	236
6155	AB	Ocoliș	Vidolm	rural	126	122
6262	AB	Pianu	Strungari	rural	238	72
6324	AB	Poiana Vadului	Făgetu de Sus	rural	188	49
6280	AB	Poiana Vadului	Poiana Vadului	rural	210	68
6413	AB	Ponor	După Deal	rural	105	51
6422	AB	Ponor	Geogel	rural	159	96
6431	AB	Ponor	Măcărești	rural	47	23
6404	AB	Ponor	Ponor	rural	144	87
6459	AB	Ponor	Vale în Jos	rural	181	81
6440	AB	Ponor	Valea Bucurului	rural	69	35
6501	AB	Poșaga	Lunca	rural	204	124
6510	AB	Poșaga	Orășți	rural	126	52
6477	AB	Poșaga	Poșaga de Jos	rural	485	241
6529	AB	Poșaga	Poșaga de Sus	rural	241	100
6538	AB	Poșaga	Săgăgea	rural	301	141
6654	AB	Râmeț	Brădești	rural	48	21

SIRUTA Code	County	Locality name	Belonging localities/villages	Locality type	Population	Households
6734	AB	Râmeț	Valea Poienii	rural	53	43
6994	AB	Sălciuma	Dealul Caselor	rural	111	38
7008	AB	Sălciuma	Dumăști	rural	79	44
6985	AB	Sălciuma	Sălciuma de Jos	rural	673	256
7017	AB	Sălciuma	Sălciuma de Sus	rural	576	201
7026	AB	Sălciuma	Sub Piatra	rural	178	75
7035	AB	Sălciuma	Valea Larga	rural	140	75
7464	AB	Sohodol	Băzești	rural	42	502
7650	AB	Sohodol	Nicorești	rural	60	19
8087	AB	Șugag	Tău Bistra	rural	297	216
8372	AB	Valea Lungă	Făget	rural	58	58
8390	AB	Valea Lungă	Lodroman	rural	233	120
8407	AB	Valea Lungă	Lunca	rural	468	167
8568	AB	Vidra	Goiăști	rural	69	34
8620	AB	Vidra	Lunca Bisericii	rural	68	24
8648	AB	Vidra	Lunca Goiăști	rural	53	27
8657	AB	Vidra	Lunca Vesești	rural	80	28
8675	AB	Vidra	Nemeși	rural	74	30
8755	AB	Vidra	Segaj	rural	25	13
8817	AB	Vidra	Vărtășnești	rural	61	23
8434	AB	Vidra	Vidra	rural	50	25
1954	AB	ZLATNA	Botăști	rural	104	43
2050	AB	ZLATNA	Pârâu Gruului	rural	231	57
2078	AB	ZLATNA	Runc	rural	41	29
14423	AG	Berevoiești	Bratia	rural	145	51
15215	AG	Călinești	Valea Corbului	rural	889	201

SIRUTA Code	County	Locality name	Belonging localities/villages	Locality type	Population	Households
17076	AG	Mălureni	Păuleasca	rural	784	164
17236	AG	Micești	Păuleasca	rural	840	208
17272	AG	Mihăești	Drăghici	rural	1.153	423
17325	AG	Mihăești	Văcarea	rural	636	249
18830	AG	Stâlpeni	Pițigaia	rural	48	28
13418	AG	ȘTEFĂNEȘTI	Enculești	rural	551	193
16695	AG	Vulturești	Huluba	rural	231	74
10140	AR	Bârzava	Dumbrăvița	rural	327	110
10159	AR	Bârzava	Groșii Noi	rural	283	95
10186	AR	Bârzava	Slatina de Mureș	rural	209	71
10257	AR	Brazii	Buceava-Șoimuș	rural	217	64
10275	AR	Brazii	Mădrigești	rural	298	88
10284	AR	Brazii	Secaș	rural	472	139
10435	AR	Chisindia	Păiușeni	rural	465	217
11012	AR	Gurahonț	Mustești	rural	94	32
11049	AR	Gurahonț	Zimbru	rural	502	246
11192	AR	Hălmăgel	Luncșoara	rural	537	159
11708	AR	Petriș	Obârșia	rural	124	40
11717	AR	Petriș	Roșia Nouă	rural	313	100
11897	AR	Săvârșin	Pârnești	rural	207	69
11922	AR	Săvârșin	Troaș	rural	197	66
12484	AR	Tauț	Minișul de Sus	rural	116	49
12493	AR	Tauț	Nadăș	rural	870	367
12590	AR	Vărădia de Mureș	Baia	rural	126	38
21034	BC	Agăș	Coșnea	rural	570	278
21837	BC	Căiuți	Pralea	rural	883	257

SIRUTA Code	County	Locality name	Belonging localities/villages	Locality type	Population	Households
21908	BC	Colonești	Colonești	rural	681	287
21962	BC	Colonești	Zăpodia	rural	279	108
22558	BC	Filipeni	Slobozia	rural	126	46
22683	BC	Găiceana	Arini	rural	1.338	458
22763	BC	Ghimeș-Făget	Răchitiș	rural	306	140
23626	BC	Motoșeni	Sendrești	rural	472	192
23993	BC	Palanca	Cădărești	rural	112	95
24016	BC	Palanca	Pajiștea	rural	36	26
24891	BC	Răchitoasa	Dănăila	rural	97	50
24908	BC	Răchitoasa	Dumbrava	rural	606	214
24944	BC	Răchitoasa	Magazia	rural	152	49
25601	BC	Stănișești	Slobozia Nouă	rural	735	207
26154	BC	Vultureni	Dorneni	rural	109	37
26163	BC	Vultureni	Ghilăvești	rural	261	118
27766	BH	Brusturi	Brusturi	rural	1.186	490
27775	BH	Brusturi	Cuieșd	rural	469	179
27800	BH	Brusturi	Păulești	rural	353	141
27819	BH	Brusturi	Picleu	rural	731	303
27828	BH	Brusturi	Țigăneștii de Criș	rural	323	149
27837	BH	Brusturi	Varasău	rural	142	42
27926	BH	Buduslău	Albiș	rural	974	301
28460	BH	Cetariu	Șușturogi	rural	260	141
29065	BH	Derna	Sacalasău	rural	658	218
31146	BH	Sârbi	Almașu Mic	rural	141	78
31155	BH	Sârbi	Burzuc	rural	824	373
31164	BH	Sârbi	Chioag	rural	190	95

SIRUTA Code	County	Locality name	Belonging localities/villages	Locality type	Population	Households
30979	BH	SĂCUENI	Sănnicolau de Munte	rural	966	286
31253	BH	Spinuș	Săliște	rural	248	107
31583	BH	Tarcea	Adoni	rural	777	290
33177	BN	Coșbuc	Coșbuc	rural	2.020	642
33471	BN	Lechința	Sângeorzu Nou	rural	1.009	313
33523	BN	Leșu	Leșu	rural	1.817	500
33676	BN	Matei	Bidiu	rural	244	112
33694	BN	Matei	Enciu	rural	224	100
33809	BN	Mărișelu	Jeica	rural	88	72
34128	BN	Nușeni	Malin	rural	445	182
34084	BN	Nușeni	Nușeni	rural	930	279
34146	BN	Nușeni	Vița	rural	391	147
34164	BN	Parva	Parva	rural	2.685	732
34315	BN	Rebrișoara	Gersa 2	rural	267	60
34388	BN	Romuli	Dealul Ștefăniței	rural	383	130
34379	BN	Romuli	Romuli	rural	1.395	420
34413	BN	Runcu Salvei	Runcu Salvei	rural	1.402	442
32875	BN	Spermezeu	Dumbrăvița	rural	761	229
34574	BN	Spermezeu	Lunca Borleseii	rural	98	36
34583	BN	Spermezeu	Păltineasa	rural	130	37
34609	BN	Spermezeu	Șesuri Spermezeu-Vale	rural	118	25
34663	BN	Șieu	Ardan	rural	803	198
34896	BN	Șieuț	Sebiș	rural	931	192
35223	BN	Târlișua	Molișet	rural	240	93
35232	BN	Târlișua	Oarzina	rural	177	49
35250	BN	Târlișua	Șendroaia	rural	210	63

SIRUTA Code	County	Locality name	Belonging localities/villages	Locality type	Population	Households
33195	BN	Telciu	Bichigiu	rural	988	301
35072	BN	Telciu	Fiad	rural	290	94
35081	BN	Telciu	Telcișor	rural	1.139	317
35465	BN	Zagra	Poienile Zagrei	rural	1.003	220
35474	BN	Zagra	Suplai	rural	689	252
35438	BN	Zagra	Zagra	rural	1.192	352
36220	BT	Adășeni	Adășeni	rural	1.092	459
36168	BT	Albești	Coștiugeni	rural	681	278
36177	BT	Albești	Jijia	rural	657	288
36186	BT	Albești	Mășcăteni	rural	466	155
36195	BT	Albești	Tudor Vladimirescu	rural	1.994	527
36239	BT	Avrămeni	Aurel Vlaicu	rural	639	257
36248	BT	Avrămeni	Dimitrie Cantemir	rural	137	69
36284	BT	Avrămeni	Tudor Vladimirescu	rural	659	351
36505	BT	Călărași	Călărași	rural	2.785	1.398
36514	BT	Călărași	Libertatea	rural	531	258
36523	BT	Călărași	Pleșani	rural	692	362
36541	BT	Concești	Concești	rural	2.054	797
36550	BT	Concești	Movileni	rural	423	143
36658	BT	Cordăreni	Cordăreni	rural	1.138	571
36827	BT	Coțușca	Avram Iancu	rural	90	41
36836	BT	Coțușca	Cotu Miculinți	rural	570	249
36845	BT	Coțușca	Crasnaleuca	rural	796	346
36872	BT	Coțușca	Nichiteni	rural	701	225
36881	BT	Coțușca	Nicolae Bălcescu	rural	33	7
36890	BT	Coțușca	Puțurenii	rural	754	309



SIRUTA Code	County	Locality name	Belonging localities/villages	Locality type	Population	Households
36998	BT	Cristinești	Fundu Hertji	rural	643	253
37066	BT	Dângeni	Dângeni	rural	816	245
37075	BT	Dângeni	Hulub	rural	633	285
37084	BT	Dângeni	Iacobeni	rural	1.130	305
37093	BT	Dângeni	Strahotin	rural	473	110
35964	BT	DARABANI	Bajura	rural	1.966	687
35955	BT	DARABANI	DARABANI	urban	8.971	3.110
35973	BT	DARABANI	Eșanca	rural	483	193
37128	BT	Dobârceni	Bivolari	rural	191	92
37164	BT	Dobârceni	Brăteni	rural	708	357
37137	BT	Dobârceni	Cișmănești	rural	428	198
37119	BT	Dobârceni	Dobârceni	rural	892	434
37155	BT	Dobârceni	Murguța	rural	494	200
37208	BT	Drăgușeni	Sarata	rural	162	60
37244	BT	Durnești	Bârsănești	rural	253	75
37235	BT	Durnești	Băbicieni	rural	521	195
37253	BT	Durnești	Broșteni	rural	286	92
37262	BT	Durnești	Cucuteni	rural	893	348
37226	BT	Durnești	Durnești	rural	1.163	404
37271	BT	Durnești	Guranda	rural	959	303
37404	BT	George Enescu	Dumeni	rural	1.653	1.067
37440	BT	George Enescu	Stâncă	rural	357	210
37477	BT	Gorbănești	Bătrânești	rural	286	118
37486	BT	Gorbănești	George Coșbuc	rural	258	140
37510	BT	Gorbănești	Socrujeni	rural	846	388
37565	BT	Havârna	Balinți	rural	456	258

SIRUTA Code	County	Locality name	Belonging localities/villages	Locality type	Population	Households
37556	BT	Havârna	Havârna	rural	3.160	1.344
37636	BT	Hănești	Borolea	rural	405	176
37627	BT	Hănești	Hănești	rural	1.273	665
37645	BT	Hănești	Moara Jorii	rural	106	47
37654	BT	Hănești	Sărata-Basarab	rural	471	197
37663	BT	Hănești	Slobozia	rural	83	47
37716	BT	Hilișeu-Horia	Hilișeu-Crișan	rural	937	448
37752	BT	Hlipiceni	Dragalina	rural	521	179
37743	BT	Hlipiceni	Hlipiceni	rural	1.765	741
37805	BT	Hudești	Baranca	rural	1.082	297
37814	BT	Hudești	Mlenăuți	rural	733	343
37878	BT	Leorda	Belcea	rural	34	13
37994	BT	Manoleasa	Iorga	rural	106	95
38009	BT	Manoleasa	Liveni	rural	891	326
38018	BT	Manoleasa	Loturi	rural	234	61
38027	BT	Manoleasa	Manoleasa Prut	rural	116	41
38036	BT	Manoleasa	Sadoveni	rural	534	218
38054	BT	Manoleasa	Zahoreni	rural	597	163
38170	BT	Mihăileni	Mihăileni	rural	1.536	537
38205	BT	Mihăileni	Pârâu Negru	rural	558	194
38214	BT	Mihăileni	Rogojești	rural	702	239
38269	BT	Mihălășeni	Caraiman	rural	207	91
38250	BT	Mihălășeni	Mihălășeni	rural	843	320
38278	BT	Mihălășeni	Năstase	rural	228	94
38287	BT	Mihălășeni	Negrești	rural	306	100
38296	BT	Mihălășeni	Păun	rural	313	115

SIRUTA Code	County	Locality name	Belonging localities/villages	Locality type	Population	Households
38303	BT	Mihălășeni	Sărata	rural	337	129
38312	BT	Mihălășeni	Slobozia	rural	210	107
38330	BT	Mileanca	Mileanca	rural	1.774	816
38394	BT	Mitoc	Horia	rural	592	345
38508	BT	Păltiniș	Păltiniș	rural	2.086	1.082
38571	BT	Pomârla	Racovăț	rural	334	120
38651	BT	Rădăuți Prut	Miorcani	rural	2.116	976
38642	BT	Rădăuți Prut	Rădăuți Prut	rural	945	378
38660	BT	Rădăuți Prut	Rediu	rural	1.096	442
38704	BT	Răuseni	Pogorăști	rural	195	90
38688	BT	Răuseni	Răuseni	rural	1.235	644
38713	BT	Răuseni	Rediu	rural	641	327
38740	BT	Ripiceni	Ripiceni	rural	2.313	945
38866	BT	Românești	Dămideni	rural	551	315
38857	BT	Românești	Românești	rural	1.821	909
38884	BT	Românești	Sărata	rural	65	20
38919	BT	Santa Mare	Bădărăi	rural	136	54
38928	BT	Santa Mare	Berza	rural	239	81
38937	BT	Santa Mare	Bogdănești	rural	438	151
38946	BT	Santa Mare	Durnești	rural	92	41
38955	BT	Santa Mare	Ilișeni	rural	219	94
38964	BT	Santa Mare	Rânghilești	rural	429	178
38973	BT	Santa Mare	Rânghilești Deal	rural	263	107
38900	BT	Santa Mare	Santa Mare	rural	1.203	473
36088	BT	SĂVENI	Bodeasa	rural	458	138
39006	BT	Suharău	Izvoare	rural	76	39

SIRUTA Code	County	Locality name	Belonging localities/villages	Locality type	Population	Households
39024	BT	Suharău	Oroftiana	rural	1.120	591
38991	BT	Suharău	Suharău	rural	2.247	1.154
39186	BT	ȘTEFĂNEȘTI	Bădiuți	rural	839	272
39195	BT	ȘTEFĂNEȘTI	Bobulești	rural	1.782	573
39202	BT	ȘTEFĂNEȘTI	Stâncă	rural	1.176	381
39177	BT	ȘTEFĂNEȘTI	ȘTEFĂNEȘTI	urban	1.676	544
39211	BT	ȘTEFĂNEȘTI	Ștefănești-Sat	rural	2.048	666
39300	BT	Todireni	Gârbești	rural	145	57
39275	BT	Todireni	Todireni	rural	2.339	952
39373	BT	Trușești	Ionășeni	rural	1.463	530
39382	BT	Trușești	Păsăteni	rural	65	53
39337	BT	Trușești	Trușești	rural	2.123	839
39462	BT	Ungureni	Durnești	rural	295	100
39578	BT	Unțeni	Mănăstireni	rural	758	217
39630	BT	Văculești	Gorovei	rural	64	37
39676	BT	Viișoara	Cuza Vodă	rural	634	264
39667	BT	Viișoara	Viișoara	rural	1.033	431
41328	BV	Jibert	Lovnic	rural	537	216
41337	BV	Jibert	Văleni	rural	182	76
40321	BV	PREDEAL	Pârâul Rece	rural	1.040	118
41998	BV	Șoarș	Seliștat	rural	311	128
41952	BV	Șoarș	Șoarș	rural	623	188
42094	BV	Ticușu	Cobor	rural	194	102
42227	BV	Vama Buzăului	Dălghiu	rural	98	58
45263	BZ	Bisoca	Băltăgari	rural	229	107
45325	BZ	Bisoca	Șindrila	rural	246	89

SIRUTA Code	County	Locality name	Belonging localities/villages	Locality type	Population	Households
45290	BZ	Bisoca	Pleși	rural	498	207
45307	BZ	Bisoca	Recea	rural	357	136
45316	BZ	Bisoca	Sărilor	rural	587	189
45398	BZ	Bozioru	Bozioru	rural	438	189
45414	BZ	Bozioru	Fișici	rural	110	44
45423	BZ	Bozioru	Găvanele	rural	143	54
45441	BZ	Bozioru	Izvoarele	rural	200	86
45450	BZ	Bozioru	Nucu	rural	99	44
45469	BZ	Bozioru	Scăeni	rural	81	36
45487	BZ	Bozioru	Văvălucile	rural	58	28
45548	BZ	Brăești	Brăești	rural	594	230
45566	BZ	Brăești	Goidești	rural	391	120
45575	BZ	Brăești	Ivănețu	rural	689	260
45593	BZ	Brăești	Pârscovelu	rural	59	26
45584	BZ	Brăești	Pinu	rural	322	134
45600	BZ	Brăești	Ruginoasa	rural	111	40
45762	BZ	Calvini	Calvini	rural	826	281
46000	BZ	Cătina	Zeletin	rural	187	142
46457	BZ	Colți	Aluniș	rural	186	78
46448	BZ	Colți	Colți	rural	586	263
46466	BZ	Colți	Colții de Jos	rural	362	182
46475	BZ	Colți	Muscelul Cărămănești	rural	155	90
46572	BZ	Cozieni	Anini	rural	91	43
46590	BZ	Cozieni	Bercești	rural	190	84
46616	BZ	Cozieni	Cocârceni	rural	206	97
46750	BZ	Cozieni	Zăpodia	rural	22	15

SIRUTA Code	County	Locality name	Belonging localities/villages	Locality type	Population	Households
47097	BZ	Gura Teghii	Furtunești	rural	1.087	376
47088	BZ	Gura Teghii	Gura Teghii	rural	1.152	357
47104	BZ	Gura Teghii	Nemertea	rural	449	151
47113	BZ	Gura Teghii	Păltiniș	rural	973	280
47131	BZ	Gura Teghii	Vadu Oii	rural	67	30
47140	BZ	Gura Teghii	Varlaam	rural	551	240
47211	BZ	Lopătari	Fundata	rural	175	78
47239	BZ	Lopătari	Pestrițu	rural	118	47
47248	BZ	Lopătari	Plaiul Nucului	rural	669	207
47257	BZ	Lopătari	Ploștina	rural	613	231
47284	BZ	Lopătari	Terca	rural	581	183
47701	BZ	Mânzălești	Jgheab	rural	165	68
48003	BZ	NEHOIU	Stănila	rural	45	42
48058	BZ	Odăile	Corneanu	rural	40	19
48600	BZ	Pârscov	Oleșești	rural	36	19
48370	BZ	PĂTÂRLAGELE	Gornet	rural	23	19
48469	BZ	PĂTÂRLAGELE	Valea Sibiciului	rural	277	134
49518	BZ	Siriu	Cașoca	rural	648	229
49527	BZ	Siriu	Gura Siriolui	rural	49	34
56149	CJ	Bobâlna	Cremenea	rural	88	37
56700	CJ	Cășeu	Custura	rural	42	17
56728	CJ	Cășeu	Guga	rural	312	93
56746	CJ	Cășeu	Rugășești	rural	1.098	296
56755	CJ	Cășeu	Sălătruc	rural	87	23
57065	CJ	Chinteni	Sânmartin	rural	217	71
57136	CJ	Chiuiești	Strâmbu	rural	386	122

SIRUTA Code	County	Locality name	Belonging localities/villages	Locality type	Population	Households
57573	CJ	Dăbâca	Pâglișa	rural	166	81
55428	CJ	GHERLA	Silivaș	rural	190	69
58044	CJ	Iara	Buru	rural	215	94
58071	CJ	Iara	Lungești	rural	60	28
58099	CJ	Iara	Măgura Ierii	rural	57	35
58106	CJ	Iara	Ocolișel	rural	168	69
58516	CJ	Mărgău	Răchițele	rural	823	300
59096	CJ	Poieni	Lunca Vișagului	rural	261	109
59167	CJ	Recea-Cristur	Ciubanca	rural	132	69
59513	CJ	Sânmartin	Ceaba	rural	281	110
59531	CJ	Sânmartin	Diviciorii Mari	rural	198	98
59568	CJ	Sânmartin	Sâmboieni	rural	194	93
59504	CJ	Sânmartin	Sânmartin	rural	248	109
59292	CJ	Săcuieu	Săcuieu	rural	552	191
59853	CJ	Țaga	Sântejude	rural	211	91
59906	CJ	Unguraș	Batin	rural	791	330
59899	CJ	Unguraș	Unguraș	rural	1.906	717
59933	CJ	Unguraș	Valea Ungurașului	rural	304	138
59960	CJ	Vad	Bogata de Jos	rural	295	125
60044	CJ	Valea Ierii	Cerc	rural	140	55
101733	CL	Căscioarele	Căscioarele	rural	1.939	834
101831	CL	Chiselet	Chiselet	rural	3.489	1.160
93094	CL	Ciocănești	Ciocănești	rural	4.459	1.772
104190	CL	Mânăstirea	Mânăstirea	rural	3.690	1.190
105268	CL	Spanțov	Spanțov	rural	1.176	338
105286	CL	Spanțov	Stancea	rural	2.489	716

SIRUTA Code	County	Locality name	Belonging localities/villages	Locality type	Population	Households
94615	CL	Ulmu	Ulmu	rural	754	455
51396	CS	Berliște	Berliște	rural	403	259
51403	CS	Berliște	Iam	rural	437	174
51412	CS	Berliște	Milcoveni	rural	301	120
51421	CS	Berliște	Rusova Nouă	rural	109	43
51430	CS	Berliște	Rusova Veche	rural	85	34
51458	CS	Berzasca	Berzasca	rural	1.466	696
51467	CS	Berzasca	Bigăr	rural	307	111
51476	CS	Berzasca	Cozla	rural	114	45
51494	CS	Berzasca	Liubcova	rural	1.238	495
51591	CS	Bozovici	Poneasca	rural	76	31
51859	CS	Cărbunari	Cărbunari	rural	811	304
51868	CS	Cărbunari	Știnăpări	rural	456	179
51957	CS	Ciclova Română	Ciclova Română	rural	1.227	844
51966	CS	Ciclova Română	Ilidia	rural	377	151
51975	CS	Ciclova Română	Socolari	rural	181	73
51993	CS	Ciuchici	Ciuchici	rural	581	313
52008	CS	Ciuchici	Macoviște	rural	170	90
52017	CS	Ciuchici	Nicolinț	rural	307	170
52026	CS	Ciuchici	Petrilova	rural	178	99
52044	CS	Ciudanovița	Ciudanovița	rural	576	299
52053	CS	Ciudanovița	Jitin	rural	188	96
52188	CS	Cornereva	Arsuri	rural	52	19
52197	CS	Cornereva	Bogâltin	rural	221	80
52204	CS	Cornereva	Bojia	rural	167	61
52213	CS	Cornereva	Borugi	rural	31	12



SIRUTA Code	County	Locality name	Belonging localities/villages	Locality type	Population	Households
52222	CS	Cornereva	Camena	rural	123	44
52231	CS	Cornereva	Cireșel	rural	39	15
52179	CS	Cornereva	Cornereva	rural	299	108
52259	CS	Cornereva	Cozia	rural	144	52
52286	CS	Cornereva	Dobraia	rural	22	9
52295	CS	Cornereva	Dolina	rural	38	15
52302	CS	Cornereva	Gruni	rural	59	21
52311	CS	Cornereva	Hora Mare	rural	81	30
52339	CS	Cornereva	Ineleț	rural	23	13
52348	CS	Cornereva	Izvor	rural	92	35
52357	CS	Cornereva	Lunca Florii	rural	68	27
52366	CS	Cornereva	Lunca Zaicii	rural	98	36
52393	CS	Cornereva	Obița	rural	38	15
52419	CS	Cornereva	Pogara	rural	44	16
52400	CS	Cornereva	Pogaru de Sus	rural	208	77
52437	CS	Cornereva	Prisacina	rural	29	11
52446	CS	Cornereva	Prislop	rural	80	31
52455	CS	Cornereva	Ruștin	rural	101	37
52464	CS	Cornereva	Scărișoara	rural	24	14
52473	CS	Cornereva	Strugasca	rural	47	17
52482	CS	Cornereva	Studena	rural	60	22
52491	CS	Cornereva	Sub Crâng	rural	35	13
52507	CS	Cornereva	Sub Plai	rural	102	37
52516	CS	Cornereva	Topla	rural	160	58
52525	CS	Cornereva	Țațu	rural	43	16
52534	CS	Cornereva	Zănogi	rural	123	44

SIRUTA Code	County	Locality name	Belonging localities/villages	Locality type	Population	Households
52543	CS	Cornereva	Zbegu	rural	169	61
52552	CS	Cornereva	Zmogotin	rural	100	36
52561	CS	Cornereva	Zoina	rural	68	26
53498	CS	Coronini	Coronini	rural	1.337	431
53504	CS	Coronini	Sfânta Elena	rural	510	169
52703	CS	Dognecea	Dognecea	rural	1.898	909
52874	CS	Forotic	Brezon	rural	126	47
52883	CS	Forotic	Comorâște	rural	660	249
52865	CS	Forotic	Forotic	rural	601	421
52892	CS	Forotic	Surducu Mare	rural	499	178
52918	CS	Gârnic	Gârnic	rural	515	301
52927	CS	Gârnic	Padina Matei	rural	993	484
53041	CS	Iablanița	Globu Craiovei	rural	831	287
53176	CS	Lupac	Lupac	rural	949	249
51074	CS	MOLDOVA NOUĂ	Măcești	rural	596	140
51065	CS	MOLDOVA NOUĂ	MOLDOVA NOUĂ	urban	3.437	1.375
51083	CS	MOLDOVA NOUĂ	MOLDOVA VECHE	urban	9.362	3.802
51092	CS	MOLDOVA NOUĂ	Moldovița	rural	304	122
53363	CS	Naidăș	Leșcovița	rural	350	102
53354	CS	Naidăș	Naidăș	rural	943	475
51154	CS	ORAVIȚA	Agadici	rural	254	100
51163	CS	ORAVIȚA	Brădișoru de Jos	rural	577	231
51136	CS	ORAVIȚA	Ciclova Montană	rural	626	250
51145	CS	ORAVIȚA	Marila	rural	68	37
53531	CS	Pojejena	Belobreșca	rural	645	430
53540	CS	Pojejena	Divici	rural	336	224

SIRUTA Code	County	Locality name	Belonging localities/villages	Locality type	Population	Households
53522	CS	Pojejena	Pojejena	rural	1.240	827
53559	CS	Pojejena	Radimna	rural	551	367
53568	CS	Pojejena	Șuşca	rural	474	316
53684	CS	Răcășdia	Răcășdia	rural	1.710	556
53693	CS	Răcășdia	Vrăniuț	rural	437	199
53817	CS	Sasca Montană	Bogodiuț	rural	189	126
53826	CS	Sasca Montană	Potoc	rural	296	185
53808	CS	Sasca Montană	Sasca Montană	rural	577	481
53835	CS	Sasca Montană	Sasca Română	rural	443	221
53844	CS	Sasca Montană	Slatina Nera	rural	350	242
53871	CS	Sichevița	Brestelnic	rural	28	12
53899	CS	Sichevița	Cârșie	rural	57	24
53906	CS	Sichevița	Cracu Almaj	rural	23	12
53915	CS	Sichevița	Crușovița	rural	104	45
53924	CS	Sichevița	Curmătura	rural	25	10
53933	CS	Sichevița	Frăsiniș	rural	32	14
53942	CS	Sichevița	Gornea	rural	651	284
53951	CS	Sichevița	Liborajdea	rural	42	19
53960	CS	Sichevița	Lucacevăț	rural	30	13
53979	CS	Sichevița	Martinovăț	rural	23	11
53862	CS	Sichevița	Sichevița	rural	1.373	597
54010	CS	Sichevița	Valea Ravensca	rural	78	33
54029	CS	Sichevița	Valea Sicheviței	rural	58	24
54038	CS	Sichevița	Zănou	rural	59	26
54047	CS	Sichevița	Zăsloane	rural	50	22
54127	CS	Socol	Baziaș	rural	67	25

SIRUTA Code	County	Locality name	Belonging localities/villages	Locality type	Population	Households
54136	CS	Socol	Câmpia	rural	633	234
54145	CS	Socol	Pârneaura	rural	75	28
54118	CS	Socol	Socol	rural	776	287
54154	CS	Socol	Zlatița	rural	711	264
54190	CS	Șopotu Nou	Drîștie	rural	21	7
54216	CS	Șopotu Nou	Ravensca	rural	162	50
54225	CS	Șopotu Nou	Răchita	rural	164	51
54234	CS	Șopotu Nou	Stancilova	rural	395	131
54172	CS	Șopotu Nou	Șopotu Nou	rural	328	102
54243	CS	Șopotu Nou	Urcu	rural	42	13
54252	CS	Șopotu Nou	Valea Răchitei	rural	104	32
54323	CS	Ticvanu Mare	Cârnecea	rural	355	163
54314	CS	Ticvanu Mare	Ticvanu Mare	rural	818	377
54341	CS	Ticvanu Mare	Ticvaniul Mic	rural	356	164
54528	CS	Vărădia	Mercina	rural	632	256
54519	CS	Vărădia	Vărădia	rural	878	318
54591	CS	Vrani	Ciortea	rural	218	85
54608	CS	Vrani	Iertof	rural	139	54
54582	CS	Vrani	Vrani	rural	880	340
60909	CT	Adamclisi	Abrud	rural	115	47
60892	CT	Adamclisi	Adamclisi	rural	1.177	432
60918	CT	Adamclisi	Hațeg	rural	36	17
60927	CT	Adamclisi	Urluia	rural	322	106
60936	CT	Adamclisi	Zorile	rural	645	286
60954	CT	Albesti	Albești	rural	1.398	763
60972	CT	Albesti	Coroana	rural	130	56

SIRUTA Code	County	Locality name	Belonging localities/villages	Locality type	Population	Households
60990	CT	Albesti	Vârtop	rural	299	96
61014	CT	Aliman	Aliman	rural	734	338
61032	CT	Aliman	Dunăreni	rural	1.576	476
63090	CT	Amzacea	Amzacea	rural	1.274	309
61470	CT	Amzacea	Casicea	rural	425	255
61489	CT	Amzacea	General Scărișoreanu	rural	951	349
61078	CT	BĂNEASA	BĂNEASA	urban	3.501	1.446
61087	CT	BĂNEASA	Făurei	rural	918	197
61096	CT	BĂNEASA	Negureni	rural	786	256
61103	CT	BĂNEASA	Tudor Vladimirescu	rural	63	22
62164	CT	Băraganu	Lanurile	rural	922	281
61185	CT	Cerchezu	Căscioarele	rural	307	96
61176	CT	Cerchezu	Cerchezu	rural	549	274
61194	CT	Cerchezu	Măgura	rural	145	61
61201	CT	Cerchezu	Viroaga	rural	541	285
61229	CT	Chirnogeni	Chirnogeni	rural	2.165	725
61238	CT	Chirnogeni	Credința	rural	305	103
61247	CT	Chirnogeni	Plopeni	rural	1.319	462
61336	CT	Cobadin	Conacu	rural	428	123
61354	CT	Cobadin	Negrești	rural	521	394
61461	CT	Comana	Comana	rural	902	276
61504	CT	Comana	Tătaru	rural	637	241
61684	CT	Deleni	Deleni	rural	413	139
61693	CT	Deleni	Petroșani	rural	627	237
61700	CT	Deleni	Pietreni	rural	894	247
61728	CT	Deleni	Șipotetele	rural	550	210

SIRUTA Code	County	Locality name	Belonging localities/villages	Locality type	Population	Households
61755	CT	Dobromir	Cetatea	rural	285	84
61746	CT	Dobromir	Dobromir	rural	787	206
61764	CT	Dobromir	Dobromiru din Deal	rural	462	167
61773	CT	Dobromir	Lespezi	rural	541	151
61782	CT	Dobromir	Pădureni	rural	196	59
61791	CT	Dobromir	Văleni	rural	590	148
61899	CT	Dumbrăveni	Dumbrăveni	rural	485	365
61915	CT	Dumbrăveni	Furnica	rural	90	44
61906	CT	Independența	Fântâna Mare	rural	368	109
61880	CT	Independența	Independența	rural	1.270	685
61924	CT	Independența	Movila Verde	rural	639	220
61933	CT	Independența	Olteni	rural	475	179
61942	CT	Independența	Tufani	rural	391	126
61979	CT	Ion Corvin	Brebeni	rural	31	10
61988	CT	Ion Corvin	Crângu	rural	175	55
61960	CT	Ion Corvin	Ion Corvin	rural	563	489
62002	CT	Ion Corvin	Rariștea	rural	308	109
62011	CT	Ion Corvin	Viile	rural	1.067	337
62075	CT	Lipnița	Canlia	rural	692	254
62093	CT	Lipnița	Coslugea	rural	829	256
62100	CT	Lipnița	Cuiugiuc	rural	374	187
62119	CT	Lipnița	Goruni	rural	145	69
62066	CT	Lipnița	Lipnița	rural	777	350
62155	CT	Mereni	Ciobănița	rural	316	132
62146	CT	Mereni	Mereni	rural	1.226	455
62173	CT	Mereni	Miriștea	rural	126	32

SIRUTA Code	County	Locality name	Belonging localities/villages	Locality type	Population	Households
62182	CT	Mereni	Osmancea	rural	570	337
62413	CT	NEGRU VODĂ	Darabani	rural	760	201
62404	CT	NEGRU VODĂ	NEGRU VODĂ	urban	4.414	1.477
62501	CT	Oltina	Răzoarele	rural	716	385
62510	CT	Oltina	Satu Nou	rural	212	179
62556	CT	Ostrov	Almălău	rural	982	330
62565	CT	Ostrov	Bugeac	rural	258	101
62574	CT	Ostrov	Esechioi	rural	308	126
62725	CT	Peștera	Ivrinezu Mare	rural	529	221
62716	CT	Peștera	Peștera	rural	1.821	718
63651	CV	Barcani	Lădăuți	rural	737	210
63820	CV	Bățani	Aita Seacă	rural	766	287
63848	CV	Bățani	Herculian	rural	1.154	381
63562	CV	Comandău	Comandău	rural	1.029	369
64309	CV	Dobârlău	Valea Dobârlăului	rural	354	115
64559	CV	Malnaș	Valea Zălanului	rural	137	90
64675	CV	Ozun	Lisnău-Vale	rural	93	64
63704	CV	Sita Buzăului	Crasna	rural	583	167
64979	CV	Vâlcele	Hetea	rural	345	76
66571	DB	Cândești	Valea Mare	rural	178	104
67531	DB	Glodeni	Glodeni	rural	1.357	459
67540	DB	Glodeni	Gușoiu	rural	874	326
67559	DB	Glodeni	Lăculețe	rural	921	294
67577	DB	Glodeni	Malu Mierii	rural	274	108
67586	DB	Glodeni	Schela	rural	534	208
65887	DB	Iedera	Colibași	rural	554	225

SIRUTA Code	County	Locality name	Belonging localities/villages	Locality type	Population	Households
68208	DB	Moroeni	Dobrești	rural	146	81
68333	DB	Ocnița	Ocnița	rural	4.343	1.598
65459	DB	Răzvad	Gorgota	rural	1.372	463
69438	DB	Vișinești	Urseiu	rural	813	437
70664	DJ	Amărăștii de Jos	Prapor	rural	1.649	464
70959	DJ	Bârca	Bârca	rural	4.042	1.391
70904	DJ	Bistreț	Bistreț	rural	2.539	907
70922	DJ	Bistreț	Brândușa	rural	183	65
70931	DJ	Bistreț	Plosca	rural	909	325
71037	DJ	Brabova	Urdinița	rural	443	202
72668	DJ	Cârna	Cârna	rural	1.515	414
71867	DJ	Ciupercenii Noi	Ciupercenii Noi	rural	4.469	1.190
72043	DJ	Desa	Desa	rural	4.832	1.168
72141	DJ	Dobrești	Toceni	rural	706	223
73683	DJ	Ghidici	Ghidici	rural	2.430	709
72659	DJ	Goicea	Goicea	rural	2.850	1.843
72999	DJ	Măceșu de Jos	Măceșu de Jos	rural	1.187	443
73022	DJ	Măceșu de Sus	Măceșu de Sus	rural	1.479	691
73353	DJ	Moțăței	Dobridor	rural	926	296
73674	DJ	Piscu Vechi	Piscu Vechi	rural	2.601	1.279
73692	DJ	Piscu Vechi	Pisculeț	rural	351	172
73745	DJ	Poiana Mare	Poiana Mare	rural	10.470	2.871
73754	DJ	Poiana Mare	Tunarii Noi	rural	585	160
73763	DJ	Poiana Mare	Tunarii Vechi	rural	1.473	405
73914	DJ	Rast	Rast	rural	3.566	1.111
74019	DJ	Sadova	Piscu Sadovei	rural	1.347	380



SIRUTA Code	County	Locality name	Belonging localities/villages	Locality type	Population	Households
74000	DJ	Sadova	Sadova	rural	6.886	1.942
74126	DJ	Seaca de Câmp	Piscu Nou	rural	1.151	381
74117	DJ	Seaca de Câmp	Seaca de Câmp	rural	1.065	352
74251	DJ	Sopot	Sopot	rural	529	216
74723	DJ	Verbița	Verbicioara	rural	575	203
79530	GJ	Căpreni	Bulbuceni	rural	577	198
80016	GJ	Crușeț	Slăvuța	rural	743	267
80542	GJ	Hurezani	Plopu	rural	249	88
81120	GJ	Padeș	Cerna-Sat	rural	123	45
82270	GJ	Stejari	Băcești	rural	467	169
82298	GJ	Stejari	Piscoiu	rural	882	317
82305	GJ	Stejari	Popești Stejari	rural	214	68
82252	GJ	Stejari	Stejari	rural	831	309
75560	GL	Bălăbănești	Bursucani	rural	649	315
75604	GL	Bălăbănești	Zimbru	rural	56	28
75659	GL	Bălășesti	Pupezeni	rural	268	108
75695	GL	Băneasa	Băneasa	rural	1.535	571
75702	GL	Băneasa	Roșcani	rural	630	276
75347	GL	BEREȘTI	BEREȘTI	urban	3.510	1.447
75374	GL	Berești-Meria	Aldești	rural	395	181
75383	GL	Berești-Meria	Balintești	rural	1.116	405
75365	GL	Berești-Meria	Berești-Meria	rural	602	237
75392	GL	Berești-Meria	Onciu	rural	50	17
75409	GL	Berești-Meria	Pleșa	rural	752	289
75418	GL	Berești-Meria	Prodănești	rural	130	100
75427	GL	Berești-Meria	Puricani	rural	168	95

SIRUTA Code	County	Locality name	Belonging localities/villages	Locality type	Population	Households
75436	GL	Berești-Meria	Săseni	rural	101	58
75445	GL	Berești-Meria	Slivna	rural	778	310
75454	GL	Berești-Meria	Șipote	rural	90	38
75873	GL	Cavadinești	Cavadinești	rural	1.625	837
75882	GL	Cavadinești	Comănești	rural	287	125
75891	GL	Cavadinești	Gănești	rural	938	505
75908	GL	Cavadinești	Vădeni	rural	669	341
76013	GL	Corni	Corni	rural	956	392
76031	GL	Corni	Urlești	rural	564	212
76193	GL	Drăgușeni	Adam	rural	874	316
76184	GL	Drăgușeni	Drăgușeni	rural	1.733	624
76219	GL	Drăgușeni	Fundeanu	rural	874	327
76228	GL	Drăgușeni	Ghinghești	rural	325	109
76237	GL	Drăgușeni	Nicopole	rural	488	169
76246	GL	Drăgușeni	Știețești	rural	369	111
76264	GL	Fârtănești	Fârtănești	rural	3.510	1.265
76273	GL	Fârtănești	Viile	rural	1.805	645
76291	GL	Foltești	Foltești	rural	2.220	722
76308	GL	Foltești	Stoicani	rural	1.094	329
76335	GL	Frumușița	Ijdileni	rural	1.334	413
76647	GL	Jorăști	Jorăști	rural	1.381	574
76656	GL	Jorăști	Lunca	rural	266	11
76665	GL	Jorăști	Zărnești	rural	489	144
76941	GL	Oancea	Oancea	rural	1.399	646
76950	GL	Oancea	Slobozia Oancea	rural	158	73
76987	GL	Pechea	Lupele	rural	43	23

SIRUTA Code	County	Locality name	Belonging localities/villages	Locality type	Population	Households
76978	GL	Pechea	Pechea	rural	11.243	3.396
75579	GL	Rădești	Cruceanu	rural	270	87
75597	GL	Rădești	Rădești	rural	1.437	494
77117	GL	Rediu	Suhurlui	rural	1.491	587
77171	GL	Schela	Negrea	rural	679	246
77162	GL	Schela	Schela	rural	2.914	1.231
77199	GL	Slobozia Conachi	Slobozia Conachi	rural	3.351	1.752
77279	GL	Smulți	Smulți	rural	1.683	768
77304	GL	Suceveni	Rogojeni	rural	738	413
77297	GL	Suceveni	Suceveni	rural	1.452	738
75490	GL	TÂRGU BUJOR	Moscu	rural	1.646	513
75481	GL	TÂRGU BUJOR	TÂRGU BUJOR	urban	5.237	1.329
77527	GL	Vârlezi	Crăiești	rural	941	401
77518	GL	Vârlezi	Vârlezi	rural	1.535	512
77554	GL	Vlădești	Brănești	rural	915	369
77545	GL	Vlădești	Vlădești	rural	1.424	497
102124	GR	Comana	Budeni	rural	893	326
103201	GR	Găujani	Găujani	rural	1.418	565
103229	GR	Găujani	Pietrișu	rural	1.099	365
103327	GR	Gogoșari	Drăghiceanu	rural	191	85
103318	GR	Gogoșari	Gogoșari	rural	966	541
103336	GR	Gogoșari	Izvoru	rural	885	351
103489	GR	Greaca	Greaca	rural	2.012	721
103498	GR	Greaca	Puțu Greci	rural	428	147
103504	GR	Greaca	Zboiu	rural	355	126
104733	GR	Putineiu	Hodivoaia	rural	502	278

SIRUTA Code	County	Locality name	Belonging localities/villages	Locality type	Population	Households
87763	HD	Baia de Criș	Baldovin	rural	115	42
87816	HD	Baia de Criș	Rișculița	rural	423	164
87861	HD	Balșa	Almașu Mic de Munte	rural	79	43
87870	HD	Balșa	Ardeu	rural	54	32
87852	HD	Balșa	Balșa	rural	325	122
87898	HD	Balșa	Galbina	rural	24	23
87914	HD	Balșa	Oprișești	rural	32	22
87923	HD	Balșa	Poiana	rural	108	51
87932	HD	Balșa	Poienița	rural	61	35
87950	HD	Balșa	Stăuini	rural	22	35
87969	HD	Balșa	Techereu	rural	36	25
87987	HD	Balșa	Voia	rural	111	76
88369	HD	Blăjeni	Blăjeni	rural	344	114
88403	HD	Blăjeni	Grosuri	rural	137	70
88467	HD	Boșorod	Alun	rural	83	34
88494	HD	Boșorod	Cioclovina	rural	50	17
88500	HD	Boșorod	Luncani	rural	91	24
88797	HD	Buceș	Buceș	rural	181	80
88859	HD	Buceș	Tarnița	rural	365	217
88886	HD	București	Curechiu	rural	361	138
88948	HD	Bulzeștii de Sus	Bulzeștii de Jos	rural	80	33
88939	HD	Bulzeștii de Sus	Bulzeștii de Sus	rural	61	32
88984	HD	Bulzeștii de Sus	Rusești	rural	21	13
89035	HD	Bunila	Bunila	rural	71	38
89053	HD	Bunila	Cernișoara Florese	rural	160	59
89062	HD	Bunila	Poienița Voinii	rural	120	50

SIRUTA Code	County	Locality name	Belonging localities/villages	Locality type	Population	Households
89071	HD	Bunila	Vadu Dobrii	rural	27	21
89124	HD	Burjuc	Petrești	rural	44	20
86794	HD	Cârjiți	Popești	rural	130	61
89213	HD	Cerbăl	Poiana Răchițelii	rural	147	51
89222	HD	Cerbăl	Socet	rural	56	30
89366	HD	Densuș	Criva	rural	21	17
89419	HD	Densuș	Ștei	rural	210	90
89507	HD	Dobra	Panc-Săliște	rural	62	37
89516	HD	Dobra	Rădulești	rural	135	51
89703	HD	Gurasada	Boiu de Jos	rural	46	30
89758	HD	Gurasada	Dănulești	rural	60	26
89794	HD	Gurasada	Vica	rural	49	29
86856	HD	HUNEDOARA	Groș	rural	67	27
90075	HD	Lelese	Lelese	rural	167	63
90093	HD	Lelese	Runcu Mare	rural	130	54
90155	HD	Lunca Cernii de Jos	Gura Bordului	rural	51	29
90128	HD	Lunca Cernii de Jos	Lunca Cernii de Jos	rural	271	57
90164	HD	Lunca Cernii de Jos	Lunca Cernii de Sus	rural	165	80
90173	HD	Lunca Cernii de Jos	Meria	rural	281	79
90182	HD	Lunca Cernii de Jos	Negoiu	rural	203	79
90271	HD	Mărtinești	Mărtinești	rural	190	68
90565	HD	Pui	Federi	rural	302	128
90609	HD	Pui	Ohaba-Ponor	rural	292	81
90654	HD	Pui	Uric	rural	319	113
90823	HD	Ribița	Crișan	rural	474	161
90832	HD	Ribița	Dumbrava de Jos	rural	219	161

SIRUTA Code	County	Locality name	Belonging localities/villages	Locality type	Population	Households
90850	HD	Ribița	Ribicioara	rural	58	21
91465	HD	Tomești	Dobroț	rural	128	50
91571	HD	Toplița	Dăbâca	rural	157	82
91599	HD	Toplița	Hășdău	rural	363	126
91615	HD	Toplița	Vălari	rural	37	21
91848	HD	Vața de Jos	Căzănești	rural	297	100
91857	HD	Vața de Jos	Ciungani	rural	299	126
92159	HD	Vorța	Valea Poenii	rural	182	65
92168	HD	Vorța	Visca	rural	380	115
92104	HD	Vorța	Vorța	rural	190	68
92202	HD	Zam	Almaș-Săliște	rural	139	67
92195	HD	Zam	Almășel	rural	28	18
92248	HD	Zam	Godinești	rural	168	72
92257	HD	Zam	Micănești	rural	98	40
92266	HD	Zam	Pogănești	rural	78	33
92293	HD	Zam	Tămășești	rural	74	32
84004	HR	Ciucsângeorgiu	Armășeni	rural	691	255
84059	HR	Ciucsângeorgiu	Eghersec	rural	398	95
84077	HR	Ciucsângeorgiu	Potiond	rural	249	86
84674	HR	Lunca de Jos	Barațcoș	rural	233	81
84692	HR	Lunca de Jos	Puntea Lupului	rural	159	47
85485	HR	Săcel	Șoimușu Mare	rural	340	136
85500	HR	Săcel	Uilac	rural	46	23
85519	HR	Săcel	Vidacut	rural	346	104
85617	HR	Secuieni	Eliseni	rural	1.151	381
85957	HR	Suseni	Liban	rural	64	26

SIRUTA Code	County	Locality name	Belonging localities/villages	Locality type	Population	Households
86151	HR	Tulgheș	Hagota	rural	167	56
86419	HR	Zetea	Șicasău	rural	170	63
95676	IS	Andrieșeni	Andrieșeni	rural	1.677	668
95685	IS	Andrieșeni	Buhăeni	rural	558	191
95694	IS	Andrieșeni	Drăgănești	rural	158	75
95701	IS	Andrieșeni	Fântânele	rural	398	160
95729	IS	Andrieșeni	Iepureni	rural	88	40
95738	IS	Andrieșeni	Spineni	rural	637	226
95952	IS	Bivolari	Bivolari	rural	2.394	779
95961	IS	Bivolari	Buruienești	rural	205	58
95970	IS	Bivolari	Soloneț	rural	566	179
95989	IS	Bivolari	Tabăra	rural	1.098	373
95998	IS	Bivolari	Traian	rural	190	49
96245	IS	Ciortesteți	Șerbești	rural	811	303
96398	IS	Comarna	Comarna	rural	2.453	1.026
96405	IS	Comarna	Curagău	rural	145	56
96432	IS	Costuleni	Costuleni	rural	1.589	733
96441	IS	Costuleni	Covasna	rural	1.474	717
96450	IS	Costuleni	Cozia	rural	1.265	556
96600	IS	Cozmești	Cozmești	rural	1.476	570
96619	IS	Cozmești	Podolenii de Jos	rural	354	145
96628	IS	Cozmești	Podolenii de Sus	rural	1.220	467
96771	IS	Dagâța	Piscu Rusului	rural	474	143
96922	IS	Dolhești	Brădicești	rural	1.166	425
96913	IS	Dolhești	Dolhești	rural	732	250
96931	IS	Dolhești	Pietriș	rural	1.014	294

SIRUTA Code	County	Locality name	Belonging localities/villages	Locality type	Population	Households
96977	IS	Dumești	Chilișoaia	rural	183	58
97198	IS	Gorban	Gorban	rural	796	406
97205	IS	Gorban	Gura Bohotin	rural	465	295
97214	IS	Gorban	Podu Hagiului	rural	650	315
97232	IS	Gorban	Zberoaia	rural	349	185
97376	IS	Gropnița	Săveni	rural	858	246
97410	IS	Grozești	Colțu Cornii	rural	519	270
97401	IS	Grozești	Grozești	rural	1.271	428
97429	IS	Grozești	Sălăgeni	rural	51	49
98211	IS	Moșna	Moșna	rural	1.949	842
98275	IS	Movileni	Iepureni	rural	867	316
98284	IS	Movileni	Larga-Jijia	rural	734	248
98293	IS	Movileni	Potângeni	rural	961	344
98364	IS	Plugari	Onești	rural	196	61
98462	IS	Popești	Hărpășești	rural	1.097	269
98532	IS	Popricani	Cotu Morii	rural	267	94
98569	IS	Popricani	Rediu Mitropoliei	rural	137	89
98621	IS	Prisăceni	Măcărești	rural	626	257
98676	IS	Progota	Perieni	rural	1.725	616
98701	IS	Răducăneni	Bohotin	rural	1.376	497
98710	IS	Răducăneni	Isaia	rural	349	125
98694	IS	Răducăneni	Răducăneni	rural	5.247	1.709
98729	IS	Răducăneni	Roșu	rural	606	185
98747	IS	Românești	Românești	rural	939	374
99637	IS	Roșcani	Rădeni	rural	843	261
99646	IS	Roșcani	Roșcani	rural	888	262



SIRUTA Code	County	Locality name	Belonging localities/villages	Locality type	Population	Households
98854	IS	Schitu Duca	Dumitreștii Gălății	rural	697	298
98881	IS	Schitu Duca	Poiana	rural	530	279
98872	IS	Schitu Duca	Poieni	rural	807	322
99076	IS	Sinești	Bocnița	rural	357	146
99085	IS	Sinești	Osoi	rural	1.131	294
99398	IS	Șipote	Chișcăreni	rural	1.950	783
99405	IS	Șipote	Hălțeni	rural	861	319
99414	IS	Șipote	Iazu Nou	rural	996	435
99423	IS	Șipote	Iazu Vechi	rural	523	138
99432	IS	Șipote	Mitoc	rural	584	175
99389	IS	Șipote	Șipote	rural	933	400
99628	IS	Trifești	Hermeziu	rural	1.023	321
99619	IS	Trifești	Trifești	rural	1.575	693
99655	IS	Trifești	Vladomira	rural	307	117
99664	IS	Trifești	Zaboloteni	rural	738	266
99897	IS	Țigănași	Cârniceeni	rural	1.557	608
99913	IS	Țigănași	Stejarii	rural	486	228
100166	IS	Vlădeni	Alexandru cel Bun	rural	553	217
100175	IS	Vlădeni	Borșa	rural	893	305
100184	IS	Vlădeni	Broșteni	rural	431	133
100193	IS	Vlădeni	Iacobeni	rural	281	123
100200	IS	Vlădeni	Vâlcelele	rural	453	158
100157	IS	Vlădeni	Vlădeni	rural	1.808	591
110465	MH	Balta	Balta	rural	381	243
110483	MH	Balta	Costești	rural	260	166
110492	MH	Balta	Gornovița	rural	244	156

SIRUTA Code	County	Locality name	Belonging localities/villages	Locality type	Population	Households
110517	MH	Balta	Prejna	rural	346	217
110526	MH	Balta	Sfodea	rural	118	75
110731	MH	Bălvănești	Pârlagele	rural	457	287
113867	MH	Braniștea	Braniștea	rural	1.622	693
113876	MH	Braniștea	Goanța	rural	583	250
110955	MH	Burila Mare	Burila Mare	rural	786	430
110964	MH	Burila Mare	Crivina	rural	861	471
110973	MH	Burila Mare	Izvoru Frumos	rural	310	169
110982	MH	Burila Mare	Țigănași	rural	437	239
111248	MH	Cireșu	Bunoaica	rural	201	144
111257	MH	Cireșu	Jupânești	rural	77	55
111266	MH	Cireșu	Negrușa	rural	212	152
111435	MH	Corlățel	Valea Anilor	rural	706	369
111462	MH	Cujmir	Aurora	rural	798	290
111453	MH	Cujmir	Cujmir	rural	2.460	895
111471	MH	Cujmir	Cujmiru Mic	rural	515	186
111578	MH	Dârvari	Gemeni	rural	1.335	561
111514	MH	Devesel	Bistrețu	rural	684	396
111499	MH	Devesel	Devesel	rural	1.372	793
111532	MH	Devesel	Scăpău	rural	917	531
112922	MH	Dubova	Baia Nouă	rural	269	119
112940	MH	Dubova	Eibenthal	rural	303	134
111792	MH	Gârla Mare	Gârla Mare	rural	3.334	1.787
111836	MH	Godeanu	Marga	rural	106	84
111881	MH	Gogoșu	Balta Verde	rural	1.293	599
111890	MH	Gogoșu	Burila Mică	rural	974	451

SIRUTA Code	County	Locality name	Belonging localities/villages	Locality type	Population	Households
111872	MH	Gogoșu	Gogoșu	rural	1.186	553
111907	MH	Gogoșu	Ostrovu Mare	rural	1.879	870
112049	MH	Gruia	Gruia	rural	1.781	730
112058	MH	Gruia	Izvoarele	rural	1.101	452
112067	MH	Gruia	Poiana Gruii	rural	230	93
112138	MH	Husnicioara	Husnicioara	rural	306	193
112192	MH	Husnicioara	Marmanu	rural	25	16
112281	MH	Ilovăț	Budănești	rural	180	105
112307	MH	Ilovăț	Dâlbocița	rural	325	192
112316	MH	Ilovăț	Firizu	rural	67	40
112361	MH	Ilovița	Moisești	rural	127	74
112405	MH	Isverna	Cerna-Vârf	rural	242	117
112423	MH	Isverna	Giurgiani	rural	81	39
112432	MH	Isverna	Nadanova	rural	208	100
112487	MH	Izvoru Bârzii	Balotești	rural	471	192
112539	MH	Izvoru Bârzii	Schitu Topolniței	rural	205	83
112566	MH	Jiana	Cioroboreni	rural	930	383
112575	MH	Jiana	Dănceu	rural	1.318	542
112557	MH	Jiana	Jiana	rural	779	321
112584	MH	Jiana	Jiana Mare	rural	899	370
112593	MH	Jiana	Jiana Veche	rural	1.083	445
112637	MH	Livezile	Izvoru Aneștilor	rural	293	173
112619	MH	Livezile	Livezile	rural	1.141	667
112646	MH	Livezile	Petriș	rural	130	77
112655	MH	Livezile	Ștefan Odobleja	rural	197	116
112735	MH	Malovăț	23 August	rural	379	198

SIRUTA Code	County	Locality name	Belonging localities/villages	Locality type	Population	Households
112673	MH	Malovăț	Malovăț	rural	1.005	524
112762	MH	Obârșia de Câmp	Izimșa	rural	1.218	622
112753	MH	Obârșia de Câmp	Obârșia de Câmp	rural	956	487
110045	MH	Obârșia-Cloșani	Godeanu	rural	209	82
110036	MH	Obârșia-Cloșani	Obârșia-Cloșani	rural	898	351
112977	MH	Podeni	Gornenți	rural	228	155
112986	MH	Podeni	Malarișca	rural	186	126
112968	MH	Podeni	Podeni	rural	740	497
113019	MH	Ponoarele	Băluța	rural	229	70
113171	MH	Poroina Mare	Fântânile Negre	rural	246	234
113224	MH	Pristol	Cozia	rural	666	346
113215	MH	Pristol	Pristol	rural	1.137	588
113411	MH	Punghina	Cearângu	rural	239	83
113420	MH	Punghina	Drincea	rural	505	174
113439	MH	Punghina	Măgurele	rural	102	34
113402	MH	Punghina	Punghina	rural	1.462	496
113484	MH	Rogova	Poroinița	rural	770	378
113475	MH	Rogova	Rogova	rural	704	347
113509	MH	Salcia	Salcia	rural	3.388	1.554
113616	MH	Svinița	Svinița	rural	1.114	386
109899	MH	Șimian	Poroina	rural	265	94
113670	MH	Șișești	Crăgusești	rural	465	244
113885	MH	Vânători	Roșiori	rural	1.120	1.028
113858	MH	Vânători	Vânători	rural	1.287	1.186
110250	MH	VÂNJU MARE	Bucura	rural	375	203
110269	MH	VÂNJU MARE	Nicolae Bălcescu	rural	934	505

SIRUTA Code	County	Locality name	Belonging localities/villages	Locality type	Population	Households
110278	MH	VÂNJU MARE	Orevița Mare	rural	1.084	587
110287	MH	VÂNJU MARE	Traian	rural	720	390
110241	MH	VÂNJU MARE	VÂNJU MARE	urban	3.717	2.009
113910	MH	Vânjuleț	Hotărani	rural	404	176
113901	MH	Vânjuleț	Vânjuleț	rural	1.509	661
113956	MH	Vlădaia	Scorila	rural	315	159
111809	MH	Vrata	Vrata	rural	1.997	849
106336	MM	BAIA MARE	Blidari	rural	181	62
106345	MM	BAIA MARE	Firiza	rural	1.306	447
106354	MM	BAIA MARE	Valea Neagră	rural	153	52
107323	MM	Bârsana	Bârsana	rural	4.069	1.373
107163	MM	Băiuț	Băiuț	rural	1.783	748
107172	MM	Băiuț	Poiana Botizii	rural	280	115
107289	MM	Bistra	Bistra	rural	1.683	269
107298	MM	Bistra	Crasna Vișeului	rural	1.721	481
107305	MM	Bistra	Valea Vișeului	rural	1.613	447
107387	MM	Bocicoiu Mare	Lunca la Tisa	rural	905	316
107421	MM	Bogdan Vodă	Bocicoel	rural	945	428
107412	MM	Bogdan Vodă	Bogdan Vodă	rural	2.510	975
106764	MM	BORȘA	Baia Borșa	rural	5.636	3.938
107494	MM	Botiza	Botiza	rural	2.959	881
107537	MM	Budești	Sârbi	rural	738	327
107573	MM	Călinești	Văleni	rural	1.489	443
107635	MM	Cernești	Izvoarele	rural	45	22
107699	MM	Cicârlău	Handalu Ilbei	rural	570	162
107984	MM	Desești	Desești	rural	996	335

SIRUTA Code	County	Locality name	Belonging localities/villages	Locality type	Population	Households
107993	MM	Desești	Hărnițești	rural	635	218
108008	MM	Desești	Mara	rural	1.006	325
108026	MM	DRAGOMIREȘTI	DRAGOMIREȘTI	urban	3.344	1.369
108179	MM	Giulești	Berbești	rural	1.500	546
108160	MM	Giulești	Giulești	rural	1.162	460
108197	MM	Giulești	Mănăstirea	rural	158	59
108213	MM	Ieud	Ieud	rural	4.745	1.572
108259	MM	Leordina	Leordina	rural	2.552	921
108428	MM	Ocna Șugatag	Breb	rural	1.482	502
108437	MM	Ocna Șugatag	Hoteni	rural	472	158
108419	MM	Ocna Șugatag	Ocna Șugatag	rural	1.457	497
108446	MM	Ocna Șugatag	Sat Șugatag	rural	1.092	465
108464	MM	Petrova	Petrova	rural	2.667	998
108482	MM	Poienile de sub Munte	Poienile de sub Munte	rural	10.139	3.741
107500	MM	Poienile Izei	Poienile Izei	rural	1.043	468
108570	MM	Remeți	Piatra	rural	408	124
108561	MM	Remeți	Remeți	rural	2.415	1.219
108589	MM	Remeți	Teceu Mic	rural	182	114
108605	MM	Repedea	Repedea	rural	4.725	1.419
108623	MM	Rona de Jos	Rona de Jos	rural	2.165	886
108650	MM	Rona de Sus	Coștiui	rural	772	354
108641	MM	Rona de Sus	Rona de Sus	rural	3.864	1.319
108678	MM	Rozavlea	Rozavlea	rural	3.819	984
108703	MM	Ruscova	Ruscova	rural	5.253	1.264
108954	MM	Săpânța	Săpânța	rural	3.248	1.280
109023	MM	Strâmtura	Glod	rural	651	291

SIRUTA Code	County	Locality name	Belonging localities/villages	Locality type	Population	Households
109032	MM	Strâmtura	Slătioara	rural	529	246
109014	MM	Strâmtura	Strâmtura	rural	3.002	1.101
108687	MM	Șieu	Șieu	rural	2.817	1.019
106871	MM	TÂRGU LĂPUȘ	Dobricu Lăpușului	rural	444	157
106522	MM	TĂUȚII MĂGHERĂUȘ	Nistru	rural	1.072	313
106666	MM	Vadu Izei	Valea Stejarului	rural	537	217
109513	MM	Vișeu de Jos	Vișeu de Jos	rural	5.429	2.197
106997	MM	VIȘEU DE SUS	Vișeu de Mijloc	rural	2.599	947
106988	MM	VIȘEU DE SUS	VIȘEU DE SUS	urban	14.067	4.497
115334	MS	Bahnea	Cund	rural	189	60
115352	MS	Bahnea	Gogan	rural	663	234
115361	MS	Bahnea	Idiciu	rural	368	104
115566	MS	Batoș	Uila	rural	592	190
116625	MS	Eremitu	Câmpu Cetații	rural	370	141
117364	MS	Gurghiu	Fundoaia	rural	135	42
117373	MS	Gurghiu	Glăjărie	rural	1.772	567
117382	MS	Gurghiu	Larga	rural	123	38
117408	MS	Gurghiu	Orșova Pădure	rural	168	55
117453	MS	Hodac	Bicașu	rural	137	49
117596	MS	Ibănești	Dulcea	rural	366	109
118496	MS	Nadeș	Pipea	rural	97	44
118539	MS	Neaua	Ghinești	rural	380	153
118566	MS	Neaua	Vădaș	rural	394	143
119368	MS	SÂNGEORGIU DE PĂDURE	Bezidu Nou	rural	38	10
120272	MS	Vânători	Archita	rural	779	255

SIRUTA Code	County	Locality name	Belonging localities/villages	Locality type	Population	Households
120192	MS	Vețca	Jacodu	rural	289	127
120236	MS	Viișoara	Ormeniș	rural	388	124
120245	MS	Viișoara	Sântioana	rural	530	177
120227	MS	Viișoara	Viișoara	rural	717	230
121411	NT	Boghicea	Căușeni	rural	395	98
121439	NT	Boghicea	Nistria	rural	413	113
122203	NT	Crăcăoani	Cracăul Negru	rural	1.221	452
122221	NT	Crăcăoani	Mitocu Bălan	rural	347	128
122267	NT	Dămuc	Huisurez	rural	761	317
122588	NT	Farcașa	Frumosu	rural	480	163
123503	NT	Piatra Șoimului	Negulești	rural	683	205
123825	NT	Poiana Teiului	Dreptu	rural	677	278
123852	NT	Poiana Teiului	Pârâul Fagului	rural	297	122
124359	NT	Stănița	Chicerea	rural	284	149
124395	NT	Stănița	Veja	rural	240	84
124518	NT	Tarcău	Ardeluța	rural	26	16
124527	NT	Tarcău	Brateș	rural	281	117
124545	NT	Tarcău	Schitu Tarcău	rural	38	11
126175	OT	Cârlogani	Cârlogani	rural	1.370	499
126200	OT	Cârlogani	Scorbura	rural	321	113
125597	OT	Gârcov	Gârcov	rural	1.652	401
125604	OT	Gârcov	Ursa	rural	1.051	285
128329	OT	Poboru	Albești	rural	584	218
129308	OT	Ștefan cel Mare	Ianca Nouă	rural	773	238
129291	OT	Ștefan cel Mare	Ștefan cel Mare	rural	1.382	463
132440	PH	Brebu	Podu Cheii	rural	202	64



SIRUTA Code	County	Locality name	Belonging localities/villages	Locality type	Population	Households
132477	PH	Călugăreni	Valea Scheilor	rural	139	58
132583	PH	Cerașu	Cerașu	rural	896	338
132592	PH	Cerașu	Slon	rural	2.421	762
132618	PH	Cerașu	Valea Brădetului	rural	385	129
132636	PH	Cerașu	Valea Tocii	rural	352	127
132663	PH	Chiojdeanca	Nucet	rural	439	154
132672	PH	Chiojdeanca	Trenu	rural	678	211
134817	PH	Predeal-Sărari	Talburea	rural	92	38
134826	PH	Predeal-Sărari	Talburea Văleni	rural	56	19
134880	PH	Provița de Jos	Piatra	rural	142	49
134933	PH	Provița de Sus	Valea Bradului	rural	127	63
135137	PH	Salcia	Salcia	rural	1.279	468
135299	PH	Sângeru	Piatra Mica	rural	195	47
135565	PH	Șotriile	Lunca Mare	rural	523	166
135592	PH	Șotriile	Seciuri	rural	384	127
135663	PH	Talea	Talea	rural	934	309
144143	SB	Axente Sever	Șoala	rural	309	135
144250	SB	Bârghiș	Apoș	rural	270	86
144241	SB	Bârghiș	Bârghiș	rural	760	272
144278	SB	Bârghiș	Pelișor	rural	483	184
144296	SB	Bârghiș	Zlagna	rural	180	69
144642	SB	Hoghilag	Valchid	rural	675	253
144660	SB	Iacobeni	Iacobeni	rural	925	285
144704	SB	Iacobeni	Ștejărișu	rural	492	163
144759	SB	Laslea	Florești	rural	124	69
144768	SB	Laslea	Mălâncrav	rural	1.122	437

SIRUTA Code	County	Locality name	Belonging localities/villages	Locality type	Population	Households
144973	SB	Merghindeal	Merghindeal	rural	773	215
145015	SB	Micășasa	Chesler	rural	108	57
145060	SB	Mihăileni	Metiș	rural	295	100
145088	SB	Mihăileni	Răvășel	rural	153	46
145097	SB	Mihăileni	Șalcău	rural	114	43
145122	SB	Moșna	Alma Vii	rural	377	107
145391	SB	Râu Sadului	Râu Sadului	rural	719	265
145694	SB	Șeica Mare	Buia	rural	624	416
145710	SB	Șeica Mare	Petiș	rural	87	144
145729	SB	Șeica Mare	Șteneș	rural	183	160
145756	SB	Șeica Mică	Soroștin	rural	570	201
140075	SJ	Almașu	Țăudu	rural	204	83
140155	SJ	Bălan	Bălan	rural	1.026	384
140164	SJ	Bălan	Chechiș	rural	626	268
140173	SJ	Bălan	Chendrea	rural	872	228
140191	SJ	Bălan	Gâlgău Almașului	rural	1.065	337
140413	SJ	Buciumi	Huta	rural	29	15
140789	SJ	Cristolț	Cristolț	rural	740	251
141269	SJ	Gârbou	Călăcea	rural	336	168
141278	SJ	Gârbou	Cernuc	rural	273	103
141287	SJ	Gârbou	Fabrica	rural	105	32
141241	SJ	Gârbou	Gârbou	rural	669	245
141296	SJ	Gârbou	Popteleac	rural	366	131
141303	SJ	Gârbou	Solomon	rural	420	159
141465	SJ	Hida	Baica	rural	133	53
141474	SJ	Hida	Miluani	rural	110	65

SIRUTA Code	County	Locality name	Belonging localities/villages	Locality type	Population	Households
141492	SJ	Hida	Racâș	rural	554	206
141508	SJ	Hida	Sânpetru Almașului	rural	533	241
141526	SJ	Hida	Trestia	rural	362	138
142220	SJ	Năpradea	Vădurele	rural	247	75
142391	SJ	Poiana Blenchii	Fălcușa	rural	89	34
142694	SJ	Sânmihaiu Almașului	Bercea	rural	222	88
142792	SJ	Surduc	Brâglez	rural	347	124
142818	SJ	Surduc	Solona	rural	283	108
143085	SJ	Zalha	Ceaca	rural	289	118
143094	SJ	Zalha	Ciureni	rural	135	56
143138	SJ	Zalha	Vârteșca	rural	78	27
143076	SJ	Zalha	Zalha	rural	371	147
136928	SM	Batarci	Batarci	rural	2.381	703
136937	SM	Batarci	Comlăușa	rural	876	282
136946	SM	Batarci	Șirlău	rural	341	102
137265	SM	Călinești Oaș	Pășunea Mare	rural	306	133
137283	SM	Cămărzana	Cămărzana	rural	2.607	833
137782	SM	Halmeu	Băbești	rural	433	139
137808	SM	Halmeu	Daboț	rural	344	122
137773	SM	Halmeu	Halmeu	rural	3.688	1.023
138128	SM	Medieșu Aurit	Medieș Râturi	rural	325	169
138093	SM	Medieșu Aurit	Medieșu Aurit	rural	2.680	916
138609	SM	Pișcolt	Scărișoara Nouă	rural	502	202
137791	SM	Porumbesti	Cidreag	rural	1.519	319
137835	SM	Porumbesti	Porumbesti	rural	1.049	413
138707	SM	Sanislău	Horea	rural	197	118

SIRUTA Code	County	Locality name	Belonging localities/villages	Locality type	Population	Households
139027	SM	Tarna Mare	Bocicău	rural	677	254
139018	SM	Tarna Mare	Tarna Mare	rural	2.449	835
139036	SM	Tarna Mare	Valea Seacă	rural	1.234	512
139152	SM	Târșoț	Târșoț	rural	2.591	816
139198	SM	Turț	Gherța Mare	rural	1.622	535
139205	SM	Turț	Turț Băi	rural	162	35
146806	SV	Adâncata	Adâncata	rural	2.725	868
147027	SV	Bălcăuți	Negostina	rural	1.451	503
147214	SV	Breaza	Breaza	rural	1.140	496
147232	SV	Breaza	Pârâul Negrei	rural	194	84
147269	SV	Brodina	Brodina de Jos	rural	409	124
147278	SV	Brodina	Cununschi	rural	93	29
147287	SV	Brodina	Dubiusca	rural	64	20
147296	SV	Brodina	Ehrește	rural	148	46
147312	SV	Brodina	Norocu	rural	40	12
147321	SV	Brodina	Paltin	rural	174	52
147330	SV	Brodina	Sadău	rural	361	108
147349	SV	Brodina	Zalomestra	rural	134	40
147385	SV	BROȘTENI	Dârmoxa	rural	191	73
147722	SV	Cârlibaba	Cârlibaba	rural	1.041	333
147731	SV	Cârlibaba	Cârlibaba Nouă	rural	427	137
147740	SV	Cârlibaba	Iedu	rural	171	55
147768	SV	Cârlibaba	Țibău	rural	185	59
147777	SV	Cârlibaba	Valea Stânei	rural	113	35
147982	SV	Dărmănești	Călinești - Vasilache	rural	237	93
148792	SV	Fundu Moldovei	Botuș	rural	675	264

SIRUTA Code	County	Locality name	Belonging localities/villages	Locality type	Population	Households
148783	SV	Fundu Moldovei	Botușel	rural	144	56
148809	SV	Fundu Moldovei	Braniștea	rural	127	50
148827	SV	Fundu Moldovei	Delnița	rural	105	41
148836	SV	Fundu Moldovei	Deluț	rural	82	32
148845	SV	Fundu Moldovei	Obcina	rural	49	19
148863	SV	Fundu Moldovei	Smida Ungurenilor	rural	32	13
148934	SV	Grămești	Bălinești	rural	542	218
148943	SV	Grămești	Botoșenița Mică	rural	280	112
148925	SV	Grămești	Grămești	rural	1.924	773
148952	SV	Grămești	Rudești	rural	135	54
149209	SV	Izvoarele Sucevei	Bobeca	rural	494	165
149218	SV	Izvoarele Sucevei	Brodina	rural	800	269
149192	SV	Izvoarele Sucevei	Izvoarele Sucevei	rural	949	318
149361	SV	Mălini	Văleni - Stânișoara	rural	775	263
149405	SV	Mănăstirea Humorului	Poiana Micului	rural	982	392
149557	SV	Moldovița	Argel	rural	1.002	354
149566	SV	Moldovița	Demacușa	rural	1.002	354
149575	SV	Moldovița	Rașca	rural	748	264
149593	SV	Mușenița	Baineț	rural	369	164
149619	SV	Mușenița	Climăuți	rural	507	228
149664	SV	Ostra	Ostra	rural	2.905	1.002
149708	SV	Panaci	Catrinari	rural	71	28
149726	SV	Panaci	Drăgoiasa	rural	208	81
149735	SV	Panaci	Glodu	rural	313	120
149744	SV	Panaci	Păltiniș	rural	98	37
149888	SV	Poiana Stampei	Dornișoara	rural	342	122

SIRUTA Code	County	Locality name	Belonging localities/villages	Locality type	Population	Households
146664	SV	SIRET	SIRET	urban	8.086	2.732
150374	SV	Stulpicani	Gemenea	rural	898	274
150383	SV	Stulpicani	Negrileasa	rural	1.086	331
150409	SV	Stulpicani	Vadu Negrilesei	rural	611	185
147615	SV	Șerbăuți	Călinești	rural	1.188	429
150720	SV	Ulma	Costileva	rural	340	109
150739	SV	Ulma	Lupcina	rural	700	295
150748	SV	Ulma	Măgura	rural	357	114
150757	SV	Ulma	Nisipitu	rural	440	141
150711	SV	Ulma	Ulma	rural	414	133
151264	SV	Zamostea	Badraji	rural	232	88
151273	SV	Zamostea	Ciomârtan	rural	220	83
151282	SV	Zamostea	Cojocăreni	rural	154	58
151308	SV	Zamostea	Lunca	rural	293	110
151317	SV	Zamostea	Nicani	rural	529	199
151326	SV	Zamostea	Răuțeni	rural	107	40
151255	SV	Zamostea	Zamostea	rural	1.282	480
151362	SV	Zvoriștea	Buda	rural	1.117	552
151353	SV	Zvoriștea	Zvoriștea	rural	1.080	390
159801	TL	Baia	Camena	rural	521	150
160751	TL	Beștepe	Băltenii de Sus	rural	117	66
160760	TL	Beștepe	Beștepe	rural	1.852	677
159892	TL	C.A. Rosetti	C.A. Rosetti	rural	290	105
159909	TL	C.A. Rosetti	Cardon	rural	26	11
159918	TL	C.A. Rosetti	Letea	rural	397	153
159927	TL	C.A. Rosetti	Periprava	rural	307	126

SIRUTA Code	County	Locality name	Belonging localities/villages	Locality type	Population	Households
159936	TL	C.A. Rosetti	Sfiștofca	rural	138	59
160421	TL	Frecăței	Telița	rural	648	359
160500	TL	Hamcearca	Căprioara	rural	75	38
160485	TL	Hamcearca	Hamcearca	rural	360	148
160519	TL	Hamcearca	Nifon	rural	741	280
159703	TL	ISACCEA	Tichilești	rural	21	6
160591	TL	Izvoarele	Iulia	rural	333	111
160671	TL	Jurilovca	Sălcioara	rural	1.384	400
160699	TL	Luncavița	Luncavița	rural	3.642	1.451
160902	TL	Mihail Kogălniceanu	Rândunica	rural	723	205
161213	TL	Sarichioi	Visterna	rural	470	175
160608	TL	Valea Teilor	Valea Teilor	rural	1.542	503
155644	TM	Banloc	Partoș	rural	391	145
155653	TM	Banloc	Soca	rural	515	191
155733	TM	Beba Veche	Beba Veche	rural	1.042	386
155751	TM	Beba Veche	Pordeanu	rural	68	26
157111	TM	Birda	Birda	rural	964	357
157139	TM	Birda	Mănăstire	rural	241	90
157166	TM	Birda	Sângeorge	rural	489	181
156080	TM	Bogda	Comeat	rural	27	10
156446	TM	Comloșu Mare	Comloșu Mare	rural	3.381	1.252
156464	TM	Comloșu Mare	Lunga	rural	547	203
157013	TM	Foeni	Foeni	rural	1.189	440
157148	TM	GĂTAIA	Percosova	rural	291	108
156393	TM	Ghilad	Ghilad	rural	1.651	611
157282	TM	Giera	Giera	rural	644	239

SIRUTA Code	County	Locality name	Belonging localities/villages	Locality type	Population	Households
157308	TM	Giera	Toager	rural	344	128
157335	TM	Giulvăz	Crai Nou	rural	495	183
157371	TM	Jamu Mare	Jamu Mare	rural	1.353	501
157415	TM	Jamu Mare	Lățunaș	rural	231	86
155617	TM	Livezile	Dolaț	rural	532	197
155626	TM	Livezile	Livezile	rural	1.038	385
157807	TM	Moravița	Dejan	rural	261	97
157790	TM	Moravița	Moravița	rural	1.023	379
157905	TM	Nădrag	Nădrag	rural	2.552	945
158868	TM	Teremia Mare	Teremia Mare	rural	2.547	944
158939	TM	Tomești	Luncanii de Jos	rural	45	17
158948	TM	Tomești	Luncanii de Sus	rural	588	218
156758	TM	Vălcani	Vălcani	rural	1.287	476
152136	TR	Bogdana	Bogdana	rural	1.092	516
152154	TR	Bogdana	Ulmeni	rural	783	334
152163	TR	Bogdana	Urlui	rural	552	286
152243	TR	Bragadiru	Bragadiru	rural	4.216	1.463
152323	TR	Bujoru	Bujoru	rural	1.749	668
152519	TR	Cervenیا	Cervenیا	rural	3.136	1.161
152573	TR	Coțești	Coțești	rural	3.598	1.171
152671	TR	Crângu	Crângu	rural	1.101	426
152680	TR	Dracea	Dracea	rural	1.392	518
153008	TR	Frumoasa	Frumoasa	rural	1.764	654
153017	TR	Frumoasa	Păuleasca	rural	613	255
152966	TR	Furculești	Moșteni	rural	505	209
153115	TR	Izvoarele	Izvoarele	rural	2.853	761



SIRUTA Code	County	Locality name	Belonging localities/villages	Locality type	Population	Households
153133	TR	Lisa	Lisa	rural	1.631	563
153142	TR	Lisa	Vânători	rural	727	273
153160	TR	Lunca	Lunca	rural	2.244	748
153357	TR	Mârzănești	Cernetu	rural	1.398	506
153598	TR	Pietroșani	Pietroșani	rural	3.006	1.218
153856	TR	Putineiu	Cârlomanu	rural	397	179
153838	TR	Putineiu	Putineiu	rural	1.193	524
153179	TR	Saelele	Pleașov	rural	997	312
153197	TR	Saelele	Saelele	rural	1.826	596
153945	TR	Salcia	Salcia	rural	1.096	432
154406	TR	Smârdioasa	Șoimu	rural	546	191
154479	TR	Suhaia	Suhaia	rural	2.577	938
167703	VL	BĂILE OLĂNEȘTI	Cheia	rural	1.095	314
171584	VL	Muereasca	Hotarele	rural	458	131
171548	VL	Muereasca	Muereasca	rural	645	210
168176	VL	OCNELE MARI	Gura Suhasului	urban	1.618	502
168194	VL	OCNELE MARI	Ocnița	rural	571	179
172858	VL	Runcu	Snamâna	rural	37	22
175484	VN	Broșteni	Arva	rural	361	285
176365	VN	Gura Caliței	Cocoșari	rural	108	64
176374	VN	Gura Caliței	Dealul Lung	rural	511	177
176392	VN	Gura Caliței	Lacu lui Baban	rural	467	182
176579	VN	Jitia	Cerbu	rural	246	102
176560	VN	Jitia	Jitia	rural	534	169
176597	VN	Jitia	Jitia de Jos	rural	401	161
176604	VN	Jitia	Măgura	rural	322	138

SIRUTA Code	County	Locality name	Belonging localities/villages	Locality type	Population	Households
177325	VN	Poiana Cristei	Petreanu	rural	208	85
178144	VN	Tulnici	Greșu	rural	80	47
178509	VN	Vintileasca	După Măgura	rural	85	39
178536	VN	Vintileasca	Tănăsari	rural	171	61
178484	VN	Vintileasca	Vintileasca	rural	709	259
162096	VS	Alexandru Vlahuță	Ghicani	rural	241	88
162158	VS	Arsura	Arsura	rural	765	251
162167	VS	Arsura	Fundătura	rural	493	215
162185	VS	Arsura	Pâhnești	rural	626	233
162283	VS	Banca	Stoiești	rural	748	305
162309	VS	Banca	Țifu	rural	519	172
162363	VS	Băcani	Suseni	rural	448	174
162504	VS	Berezeni	Berezeni	rural	2.594	817
162513	VS	Berezeni	Mușata	rural	500	167
162522	VS	Berezeni	Rânceni	rural	647	236
162531	VS	Berezeni	Satu Nou	rural	1.497	444
162540	VS	Berezeni	Stuhuleț	rural	292	109
162568	VS	Blăgești	Blăgești	rural	1.332	591
162577	VS	Blăgești	Igești	rural	324	150
162586	VS	Blăgești	Sipeni	rural	143	77
162746	VS	Bogdănești	Orgoiești	rural	209	88
162755	VS	Bogdănești	Ulea	rural	407	123
162835	VS	Bogdănița	Coroiești	rural	277	126
162862	VS	Bogdănița	Tunsești	rural	265	79
162880	VS	Boțești	Boțești	rural	1.087	444
162933	VS	Bunești Averești	Averești	rural	177	131

SIRUTA Code	County	Locality name	Belonging localities/villages	Locality type	Population	Households
162951	VS	Bunești Averești	Bunești	rural	1.407	489
162960	VS	Bunești Averești	Plopi	rural	354	160
162979	VS	Bunești Averești	Podu Oprii	rural	315	123
162988	VS	Bunești Averești	Roșiori	rural	157	87
162997	VS	Bunești Averești	Tăbălăești	rural	285	126
163048	VS	Codăești	Rediu Galian	rural	667	236
163128	VS	Coroiești	Păcurărești	rural	46	23
163226	VS	Crețești	Budești	rural	287	121
163235	VS	Crețești	Crețeștii de Sus	rural	758	321
163244	VS	Crețești	Satu Nou	rural	369	143
164295	VS	Dimitrie Cantemir	Grumezoaia	rural	619	400
164302	VS	Dimitrie Cantemir	Gușiței	rural	895	386
164286	VS	Dimitrie Cantemir	Hurdugi	rural	765	354
164311	VS	Dimitrie Cantemir	Plotonești	rural	412	297
164320	VS	Dimitrie Cantemir	Urlați	rural	315	162
166725	VS	Dodești	Dodești	rural	1.529	750
166743	VS	Dodești	Urdești	rural	297	100
163654	VS	Drânceni	Ghermănești	rural	2.141	864
163716	VS	Duda Epureni	Duda	rural	1.476	628
163725	VS	Duda Epureni	Valea Grecului	rural	1.728	578
163805	VS	Epureni	Bârlălești	rural	779	246
163814	VS	Epureni	Bursuci	rural	903	287
163823	VS	Epureni	Horga	rural	468	152
163869	VS	Fălcu	Bozia	rural	521	256
163878	VS	Fălcu	Copăceana	rural	697	311
163841	VS	Fălcu	Fălcu	rural	2.721	1.083

SIRUTA Code	County	Locality name	Belonging localities/villages	Locality type	Population	Households
163887	VS	Fălcium	Odaia Bogdana	rural	374	126
163896	VS	Fălcium	Rânzești	rural	1.138	447
164106	VS	Gârceni	Racovița	rural	202	67
163912	VS	Găgești	Găgești	rural	501	143
163921	VS	Găgești	Giurcani	rural	642	192
163930	VS	Găgești	Peicani	rural	624	210
163949	VS	Găgești	Popeni	rural	43	19
163958	VS	Găgești	Tupilați	rural	417	156
164017	VS	Gherghești	Draxeni	rural	176	84
164026	VS	Gherghești	Lazu	rural	111	48
164213	VS	Hoceni	Barboși	rural	793	288
164204	VS	Hoceni	Hoceni	rural	580	232
164231	VS	Hoceni	Oțeleni	rural	632	323
164259	VS	Hoceni	Șișcani	rural	414	207
164268	VS	Hoceni	Tomșa	rural	164	73
164758	VS	Lunca Banului	Lunca Banului	rural	2.200	744
164794	VS	Lunca Banului	Lunca Veche	rural	105	35
164801	VS	Lunca Banului	Oțetoaia	rural	857	266
164847	VS	Mălușteni	Ghireasca	rural	214	113
164856	VS	Mălușteni	Lupești	rural	632	266
164865	VS	Mălușteni	Mânăstirea	rural	144	85
164874	VS	Mălușteni	Mânzătești	rural	504	218
164838	VS	Mălușteni	Mălușteni	rural	599	289
164883	VS	Mălușteni	Țuțcani	rural	643	338
165005	VS	MURGENI	Cârja	rural	1.210	597
165050	VS	MURGENI	Floreni	rural	639	210

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165014	VS	MURGENI	Lățești	rural	610	259
164990	VS	MURGENI	MURGENI	urban	3.655	1.057
165041	VS	MURGENI	Raiu	rural	718	235
165023	VS	MURGENI	Sărățeni	rural	443	156
165032	VS	MURGENI	Schineni	rural	413	177
165087	VS	Oltenești	Curteni	rural	271	110
165158	VS	Oșești	Buda	rural	1.393	501
165167	VS	Oșești	Pădureni	rural	411	84
165176	VS	Oșești	Vâlcele	rural	63	15
165201	VS	Pădureni	Capotești	rural	138	76
165229	VS	Pădureni	Ivănești	rural	517	265
165194	VS	Pădureni	Pădureni	rural	1.216	576
165265	VS	Pădureni	Văleni	rural	1.333	695
166609	VS	Pochidia	Satu Nou	rural	281	77
165620	VS	Pungești	Pungești	rural	931	357
165853	VS	Roșiști	Gura Idrici	rural	522	219
165862	VS	Roșiști	Idrici	rural	417	211
165826	VS	Roșiști	Roșiști	rural	1.360	476
165880	VS	Roșiști	Valea lui Darie	rural	684	293
166002	VS	Stăniilești	Budu Cantemir	rural	333	137
166039	VS	Stăniilești	Pogănești	rural	1.165	500
166164	VS	Șuletea	Jigălia	rural	291	97
166173	VS	Șuletea	Rășcani	rural	267	125
166146	VS	Șuletea	Șuletea	rural	1.300	465
166280	VS	Tăcuta	Mircești	rural	316	151
166306	VS	Tăcuta	Sofieni	rural	90	28

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166333	VS	Tătărași	Bălțați	rural	697	227
166404	VS	Tătărași	Valea Seacă	rural	51	23
166681	VS	Vetrișoara	Vetrișoara	rural	3.947	1.333
166690	VS	Vetrișoara	Bumbăta	rural	166	100
166761	VS	Viișoara	Văltotești	rural	273	118
166752	VS	Viișoara	Văleni	rural	190	69
166716	VS	Viișoara	Viișoara	rural	1.303	561
166814	VS	Vinderei	Docăneasa	rural	401	148
166823	VS	Vinderei	Gara Docăneasa	rural	123	47
166841	VS	Vinderei	Obârșeni	rural	1.132	473
166850	VS	Vinderei	Valea Lungă	rural	418	135
166958	VS	Voinești	Rugăria	rural	66	23
167053	VS	Vutcani	Mălăiești	rural	423	169
167062	VS	Vutcani	Poșta Elan	rural	192	72
167044	VS	Vutcani	Vutcani	rural	1.752	812
167204	VS	Zorleni	Popeni	rural	2.569	989

Distribution of DVB-T channels around Romania

