

# **Appendix 7**

of the invitation to submit bids

for a tender to issue individual permits to use frequencies

from the

800 MHz, 1800 MHz, and 2600 MHz frequency bands in the form of an electronic auction

**Auction Rules** 

# 1 Introduction

This document is an appendix to the tender invitation specifying the auction rules.

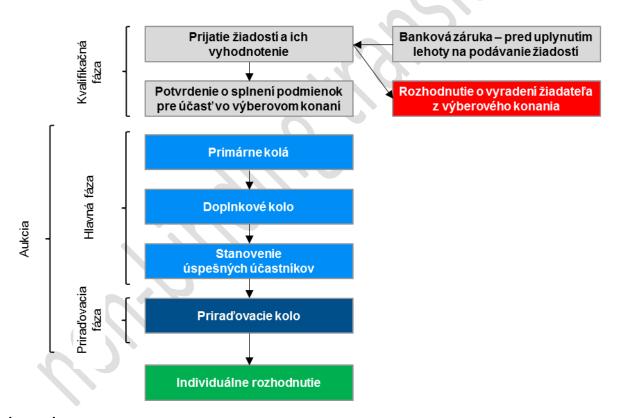
## 1.1 Auction Format

The electronic auction will be carried out in the CCA format.

This auction format allows submitting bids for the combinations of spectrum blocks within one process, providing the participants with flexibility and an opportunity to try for various frequency block combinations across several spectrum sections at the same time.

#### 1.2 Scheme of the Tender Process

Figure 1: Scheme of the tender process



# Legend:

Aukcia = Auction

Kvalifikačná fáza = Qualification stage

Hlavná fáza = Main stage

Priraďovacia fáza = Assigning stage

Prijatie žiadostí a ich vyhodnotenie = Accepting and evaluating submissions

Potvrdenie o splnení podmienok pre účasť vo výberovom konaní = Confirmation about meeting the conditions for tender participation

Primárne kolá = Primary rounds

Doplnkové kolo = Additional round Stanovenie úspešných účastníkov = Selecting successful participants Priraďovacie kolo = Assigning round Individuálne rozhodnutie = Individual decision

Banková záruka – pred uplynutím lehoty pre podávanie žiadostí = Bank guarantee – before the deadline for tender submissions

Rozhodnutie o vyradení žiadateľa z výberového konania = Decision on excluding the candidate from the tender

#### 1.2.1 Tender Process

The process is divided into three stages:

- Qualification stage, in which the tender participants submit their bids and announce the number of required competence points. The amount of the bank guarantee derives from the number of required competence points. Those participants who comply with the tender conditions given by the law on electronic communications and the tender announcement will advance to the auction.
- The main auction stage, in which the number of general auction blocks is determined and assigned to each successful participant. The main stage consists of one or more primary rounds and one additional round.
- Assigning auction stage, in which the successful participants from the main stage are assigned specific frequency blocks corresponding to the number of general auction blocks gained in the main stage.

# 1.3 Subject of the Tender

## 1.3.1 800 MHz Frequency Band

Table 1: Auction blocks for the 800 MHz frequency band

Auction block category	Auction block designation	Frequency spectrum  – upward direction in MHz	Frequency spectrum  – downward  direction in MHz	Spectrum amount in MHz
	A1.1	832 – 837	791 – 796	2 x 5.0
	A1.2	837 – 842	796 – 801	2 x 5.0
A1	A1.3	842 – 847	801 – 806	2 x 5.0
AI	A1.4	847 – 852	806 – 811	2 x 5.0
	A1.5	852 – 857	811 – 816	2 x 5.0
	A1.6	857 – 862	816 – 821	2 x 5.0

# 1.3.2 1800 MHz Frequency Band

Table 2: Auction blocks for the 1800 MHz frequency band

Auction block category	Auction block designation	Frequency spectrum  – upward direction in MHz	Frequency spectrum  – downward direction in MHz	Spectrum amount in MHz
B1	B1.1	1710.1-1715.1	1805.1-1810.1	2 x 5.0
B2	B2.1	1715.1-1716.3	1810.1-1811.3	2 x 1.2
B3	B3.1	1724.1-1725.1	1819.1-1820.1	2 x 1.0
B4	B4.1	1743.9-1746.1	1838.9-1841.1	2 x 2.2

Auction block category	Auction block designation	Frequency spectrum – upward direction in MHz	Frequency spectrum  – downward  direction in MHz	Spectrum amount in MHz
B5	B5.1	1749.9-1750.3	1844.9-1845.3	2 x 0.4
B6	B6.1	1765.5-1766.1	1860.5-1861.1	2 x 0.6
В7	B7.1	1766.1-1771.1	1861.1-1866.1	2 x 5.0
D1	B7.2	1771.1-1776.1	1866.1-1871.1	2 x 5.0

# 1.3.3 2600 MHz Frequency Band

Table 3: Auction blocks for the FDD part of the 2600 MHz frequency band

Auction block category	Auction block designation	Frequency spectrum  – upward direction in MHz	Frequency spectrum - downward direction in MHz	Spectrum amount in MHz
	C1.1	2500 – 2505	2620 – 2625	2 x 5.0
	C1.2	2505 – 2510	2625 – 2630	2 x 5.0
	C1.3	2510 – 2515	2630 – 2635	2 x 5.0
	C1.4	2515 – 2520	2635 – 2640	2 x 5.0
	C1.5	2520 – 2525	2640 – 2645	2 x 5.0
	C1.6	2525 – 2530	2645 – 2650	2 x 5.0
C1	C1.7	2530 – 2535	2650 – 2655	2 x 5.0
Ci	C1.8	2535 – 2540	2655 – 2660	2 x 5.0
	C1.9	2540 – 2545	2660 – 2665	2 x 5.0
	C1.10	2545 – 2550	2665 – 2670	2 x 5.0
	C1.11	2550 – 2555	2670 – 2675	2 x 5.0
	C1.12	2555 – 2560	2675 – 2680	2 x 5.0
	C1.13	2560 – 2565	2680 – 2685	2 x 5.0
	C1.14	2565 – 2570	2685 – 2690	2 x 5.0

Table 4: Auction blocks for the TDD part of the 2600 MHz frequency band

Auction block category	Auction block designation	Frequency spectrum in MHz	Spectrum amount in MHz
	C2.1	2570 – 2575	1 x 5.0
	C2.2	2575 – 2580	1 x 5.0
	C2.3	2580 – 2585	1 x 5.0
	C2.4	2585 – 2590	1 x 5.0
C2	C2.5	2590 – 2595	1 x 5.0
62	C2.6	2595 – 2600	1 x 5.0
	C2.7	2600 – 2605	1 x 5.0
	C2.8	2605 – 2610	1 x 5.0
	C2.9	2610 – 2615	1 x 5.0
	C2.10	2615 – 2620	1 x 5.0

## 1.4 Starting Bids and Eligibility Points

Based on Paragraph 33, Section 2, g) of the Act on Electronic Communications, the office determined in the tender invitation the lowest bid for the offered auction blocks in all categories. The lowest bid is the starting one.

Table 5: Starting bids and eligibility points for the auction block categories

Auction block category	Starting bid (in eur)	Eligibility points
A1	19,000,000	18
B1	2,200,000	3
B2	500,000	1
В3	400,000	1
B4	1,000,000	1
B5	200,000	1
B6	300,000	1
B7	2,200,000	3
C1	1,100,000	2
C2	400,000	1

The amount of the one-time payment for assigning frequencies will be equal to the summary of the basic price for the winning bid from the main auction stage, and the relevant assignment bids in all relevant auction block categories.

The eligibility points are assigned to the offered auction blocks.

The participant's eligibility is determined by the highest possible number of auction blocks upon which the participant can submit a combined bid within the primary rounds of the main auction stage. In each round, the participant can submit bids only to such block combinations with the number of eligibility points lower or equal to the eligibility of the given participant for the given round.

The number of the participant's eligibility points for the first primary round of the main auction stage must be secured by a bank guarantee at the time of the tender submission deadline. The maximum number of eligibility points for one participant is limited in accordance with the maximum frequency spectrum in the individual frequency bands that can be assigned to one company. In the additional round, a participant can only submit bids for such block combinations whose summary of eligibility points is equal or lower than the participant's eligibility in the first primary round of the main auction stage.

# 1.5 Restrictions for the Range of Assigned Frequencies in Frequency Bands

## 1.5.1 800 MHz Frequency Band

The maximum frequency spectrum that can be assigned to one company on the 800 MHz band is 2 x 10.0 MHz.

## 1.5.2 1800 MHz Frequency Band

The maximum frequency spectrum, including the existing individual permits at the time of the deadline for submitting tender bids that can be assigned to one company on the 1800 MHz frequency band is 2 x 20.0 MHz.

# 1.5.3 2600 MHz Frequency Band

The maximum frequency spectrum that can be assigned to one company on the 2600 MHz band is unlimited.

# 2 Electronic Auction - Auction Rules

## 2.1 General Auction Rules

# 2.1.1 Electronic Auction System

The auction will be carried out in electronic form using the electronic auction system (just "EAS" from here on). EAS will be operated on secured servers belonging to the EAS distributor, and the participants will access it via Internet with a high level of access security.

Only those participants who qualify for the main auction stage will have the option to log onto EAS. The office shall assign login information to each participant who qualifies for the main stage. The participant is responsible for the physical safety of the computer that they use to access EAS, and for securing their login information against abuse and the computer against malicious software. In case of any breach of login information security, the participant is obliged to inform the office as soon as possible.

EAS will allow for submission only those bids complying with the tender invitation and auction rules. Besides the option to submit bids, EAS will serve to provide information about the auction process. EAS will be set to minimize the risk of inadvertent errors from the participant's side.

The office is not responsible for technical problems or problems with internet connection on the participant's side preventing them from logging onto EAS. For their own benefit, the participants should have sufficiently secured and fast internet

connection and a backup computer in case of a technical error. The office also recommends that the computers used for accessing EAS shouldn't be used for any other purpose during the auction and no other server that isn't required for accessing EAS should be used simultaneously.

EAS will secure the anonymity of auction participants. EAS will be secured against the attack and disclosure of a participant's identity. Electronic communication within EAS will be encrypted.

EAS will contain a system of one-direction message sending, allowing the office to send messages to participants during the entire auction. This means of communication will be primary. Messages sent via EAS are considered as delivered the moment they're sent.

EAS will also contain a system ensuring time synchronization with the auction server. This time will be relevant for all actions, such as the start of an auction round, time remaining to the end of a round, time of the bid submission, etc.

Tender participants will have the opportunity to become familiar with the EAS environment and functionality during the EAS user training and test auction.

The participants will also be provided with an EAS user manual. This manual contains information the participant is obliged to become familiar with before the start of an auction stage. Information contained in the EAS user manual will include the requirements for software and hardware equipment, login instructions, description of the interface and forms for submitting bids in individual auction rounds, as well as instructions for using EAS.

# 2.1.2 Informing Participants

The office will provide necessary information before and during each auction round, and announce the results after its completion and evaluation. Information provided to participants is specified below in these auction rules.

The method and deadlines for submitting bids in individual rounds are specified below in these auction rules.

## 2.1.3 Auction Monitoring

The auction process will be monitored using EAS.

Information will be recorded at least in two independent locations simultaneously, and won't be released during the auction. The information will only be used in exceptional cases, especially in the case of disputes concerning the auction process.

## 2.1.4 Exceptional Situations

In the case of exceptional situations, the office may adopt the following decisions:

- a) defer the auction round
- b) finish the ongoing round prematurely

- c) interrupt the ongoing round
- d) defer the provision of information to the participants
- e) cancel the ongoing round
- f) retroactively cancel one or more auction rounds and bids submitted during these rounds, and restore the auction from the last uncancelled round or the first primary round
- g) suspend the auction
- h) cancel the auction.

The following situations can be considered as exceptional: obstacles that occured independently from the office's and participants' will (force majeure, such as natural disasters, demonstrations, strikes, violent conflicts, etc.), technical problems on the EAS distributor's side that may affect the auction process in a way that it wouldn't be possible to maintain the auction rules, exclusion of a participant from the auction, a serious areal internet connection failure, or any other exceptional situations that could have a significant impact on the auction process and results.

The right to judge whether an exceptional situation occured belongs to the office. The office shall justify the decision about declaring an exceptional situation.

The participants are obliged to notify the office immediately about any occurrence that may disrupt the auction process. The notification method will be specified to the participants who qualify for the main auction stage.

# 2.1.5 Disrupting the Auction Purpose or Process

The participants must refrain from any actions that may disrupt the auction purpose or process, particularly the following:

- failing to report reasonable suspicion of the coordinated behavior of other tender participants. However, if such a suspicion is assessed as unfounded, it will be considered as an unjustifiable disruption.
- unreasonable delaying or disrupting of the tender process
- intentionally harmful action or the disclosure of information that hinders or endangers the participation of other subjects in the tender
- violating obligations and rules determined in the auction rules and tender invitation.

In accordance with Paragraph 33, Section 11 of the Act on Electronic Communications, the office shall exclude participants from the auction who violate the auction rules with their actions.

In accordance with Paragraph 33, Section 16 of the Act on Electronic Communications, the bank guarantee deposited by the participant is forfeited to the state if the participant disrupted the auction process or purpose with their actions.

#### 2.1.6 Collusive Behavior

During the entire tender process from the invitation announcement, the tender participants must refrain from any form of coordination and information exchange with other subjects interested in participation in the tender, whether direct or through a third subject in order to influence the auction rules.

The participants are also obliged to refrain from any actions that may represent any information release about the participation, submitted bids, estimated prices, or estimated or real strategy for bidding in the auction.

Any violation of these obligations will be considered as violating the auction rules and disrupting the auction purpose or process. In accordance with Paragraph 33, Section 11 of the Act on Electronic Communications, the office shall exclude participants from the auction who break the auction rules with their actions. In accordance with Paragraph 33, Section 16 of the Act on Electronic Communications, the bank guarantee deposited by the participant is forfeited to the state if the participant disrupted the auction process or purpose with their actions.

# 2.2 Rules for the Primary Rounds of the Main Auction Stage

# 2.2.1 Planning the Primary Rounds of the Main Auction Stage

The office will announce the date and time of the first primary round's start to the participants at least 48 hours in advance.

The office will plan the primary rounds individually, always before the start of the given round. The office shall announce the date and time of the next round and its duration no later than 15 minutes after the end of the primary round, and at least 10 minutes before the start of the next round. The duration will be determined between 30 and 60 minutes.

Primary rounds will be planned for working days between **9AM and 4PM**. Each participant has the obligation to ensure a continuing participation of their representative at the auction during the entire period from **9AM and 4PM** or until the office announces the completion of the primary rounds for the given day.

The office can plan several primary rounds for one day. There will be a break of at least 20 minutes between individual rounds within one day. Each round must be completed within one auction day.

The office shall announce that it is the last round of the day no later than at the beginning of the last round. The office shall also announce the date and time of the first primary round of the next auction day within 15 minutes after the completion of the last round for that day. The office has the right to push the first round of the next auction day; in such a case, the change will be announced at least **15 minutes** before the originally planned start of the first primary round for the next auction day.

The office has the right to plan the individual days for the primary rounds according to its own purview, including the disruption of the main auction stage for one or several days, due to public holidays or other reasons.

# 2.2.2 Informing Participants

The office shall provide the following information to every participant at the beginning of the main auction stage's first primary round:

- a) number of blocks in each category offered in the main stage
- b) the starting number of eligibility points for the given participant

The office shall provide the following information to every participant at the beginning of each primary round:

- a) duration of the next round, along with stating its time of completion, provided that no participant will apply the right to prolong the round
- b) prices for all auction block categories
- c) the current eligibility expressed in the number of the participant's eligibility points for submitting the bid in the next round
- d) the number of participant's remaining opportunities to apply the right to prolong the primary round

The office shall provide the following information to every participant within 15 minutes from the completion of the last round for the given auction day:

a) the total demand for the auction blocks in all categories within all primary rounds that were realized during that day.

# 2.2.3 Prices in the Primary Rounds

Prices for the auction block categories in the primary rounds of the main auction stage are announced by the office.

The price for each block category will be equal to the starting bid for the given category in the primary round of the main auction stage.

The category price will increase with each primary round if the total demand in the previous round was higher than the block bid in the given category. The total category demand is defined as the summary of all valid block bids in the category. If the total demand was lower or equal to the block bid, the price of the given category remains unchanged.

If the total demand was higher than the bid in the previous round, the price for the next round will be increased based on the office's decision. The increased amount is generally based on the extra amount over the bid and it may vary between individual rounds and offered categories. In any case, the increase in the category price between two successive rounds can't exceed 30%.

When planning the primary rounds for the given day, the office will take into account the dynamics of price increases in individual categories. If the price of some category doubles within one day, the office will proceed normally with planning the last primary round for the given day. However, the office reserves the right to continue planning the primary rounds for the given day even in the cases when the price of some category more than doubles.

# 2.2.4 Rules for Submitting Bids in the Primary Rounds

The participants can submit bids for combinations of auction blocks in the offered categories in each primary round.

A participant can submit only one bid in each primary round. Each bid shall contain the number of blocks for each category that the participant commits to obtain at the category prices valid for the given round. The bid can specify any combination of block amounts in the offered categories, under the condition to comply with the restrictions on the frequency range specified in Chapter 1.5, activity rules specified in Chapter 2.2.5, and restrictions given by the amount of the bank guarantee.

In each round, the participant can submit a "zero" bid, i.e. a bid in which the number of required auction blocks equals zero in each category. If the participant submits a zero bid, their eligibility will be reduced to zero, in accordance with the Activity Rules specified in Chapter 2.2.5.

If the participant doesn't submit any bid during the given round or its prolongation (see Chapter 2.2.6), the auction system will automatically report a "zero" offer and the participant's eligibility will automatically decrease to zero.

The price of the submitted bid in the primary rounds will be automatically determined in the following way:

- a) the number of blocks from each category within the submitted bid is multiplied by the price determined for the given category and round
- b) subsequently, the summary of all nominal values from point a) is calculated.

Each submitted bid is considered as a valid, final, irrevocable, and unconditional commitment to obtain the combination of blocks for the price corresponding with the bid in the given round, determined according to the rule defined in this chapter.

The bid remains valid until:

- a) it's cancelled due to the cancellation of one or more primary rounds or the entire auction by the office
- b) the decision on assigning frequencies issued to the participant based on this tender becomes effective
- c) the decision on stopping the application process if the participant is unsuccessful or excluded from the tender becomes effective

# 2.2.5 Activity Rules

Activity pertaining to the submitted bid is given by the number of eligibility points for all blocks specified within the bid, and is calculated in the following way:

- a) the number of blocks in each category within the bid is multiplied by the eligibility points pertaining to the given category
- b) subsequently, the summary of all nominal values from point a) is calculated

The participant can only submit in each primary round a bid whose activity level is lower or equal to their eligibility for the given round, simultaneously complying with

the restrictions on the frequency range specified in Chapter 1.5 and limitations given by the bank guarantee.

The eligibility in the first primary round is initial. This initial eligibility is given by the number of eligibility points the participant stated in the tender bid. This number must be secured by the minimum bank guarantee amount equal to the portion of required eligibility points stated in the bid and the sum of €500,000. If the bank guarantee isn't sufficient to secure the required points, the participant's eligibility will be reduced to a number secured by the guarantee.

The participant's eligibility in the given primary round (except for the first round) equals their activity in the previous round. Thus, the eligibility can either remain unchanged or decrease, but it can never grow.

If the eligibility decreases to zero, the participant will be automatically excluded from further participation in the primary rounds. However, the participant will still have the opportunity to submit bids in the additional round. At the same time, all bids submitted in the primary rounds will be taken into account when determining the winning bids of the main auction stage.

The participants will be informed at EAS about whether their bid complies with the requirements given by their eligibility, restrictions on the frequency range defined in Chapter 1.5, and the amount of the deposited guarantee.

## 2.2.6 Right to Prolong the Primary Round

This right allows the participants to prolong the duration of the primary round and submit a bid within the extra time.

At the beginning of the first primary round of the main stage, each participant has three opportunities to prolong the round.

If a participant applies this right, the round will be prolonged for them by 30 minutes from the planned round's conclusion. A round's prolongation may be terminated earlier, in the moment when all participants who excercised their right submitted their bids.

The number of rights for one participant is reduced by one after each excercise. The participants can apply their right just once during one round.

If the participant has a non-zero number of eligibility points in the given round and one or more remaining rights, and if they don't submit any bid for the round, the round will be automatically prolonged for them and their number of rights reduced by one.

If the participant doesn't submit a bid within the round's prolongation, they will automatically be entered as a "zero" bid in the auction system. In this case, their eligibility will decrease to zero (see Chapter 2.2.4) and the participant will be automatically excluded from the following primary rounds of the main auction stage (see Chapter 2.2.5).

Participants who didn't excercise their right during the round don't have the opportunity to revise their offer during the prolongation. These participants will be informed about the prolongation and wait for its termination.

Between individual primary rounds, the office can assign additional prolongation rights to one or more participants in exceptional and justified cases. These additional rights cannot be granted during the round's duration.

This right provides protection against unforeseen circumstances that may prevent the participants from submitting bids during the planned round's duration. The primary purpose of these rights is protection against unforeseen technical problems on the participant's side.

# 2.2.7 Termination of Primary Rounds

The last primary round is the round in which the total demand isn't higher than the bid in any of the auctioned block categories. An additional round follows automatically after the last primary round.

The office shall announce the completion of primary rounds and the time of the additional round after the last primary round is finished.

The office can also announce that the last primary round is the round in which the total demand is higher than the bid within one or more categories. The office shall take such a step only in exceptional cases when it evaluates that such a termination and procedure to the additional round is in the general interest of the frequency assignment process' efficiency.

# 2.3 Rules for Carrying Out an Additional Round in the Main Auction Stage

# 2.3.1 Planning the Additional Round of the Main Auction Stage

The office shall announce the date and time of the additional round and its duration after the last primary round of the main stage.

There shall be a break of at least three entire working days between the end of the last primary round and the start of the additional round.

The start and duration of the additional round will be determined based on the office's judgment. It will be planned for one to three working days, while its start won't be before 9AM. The participants will be notified about the date and starting time via EAS within **24 hours** from the completion of the last primary round.

Each participant will have one opportunity to exercise their prolongation right by one hour.

The additional round may be terminated before its planned time of completion, if all participants have already submitted their valid bids.

## 2.3.2 Informing the Participants before the Additional Round

Along with announcing the date and time of the additional round, the office shall inform the participants

a) about the additional round's duration, along with stating the time of its completion, provided that no participant will apply the right to prolong the round.

## 2.3.3 Rules for Submitting Bids in the Additional Round

In the additional round, each participant who submitted at least one non-zero bid during the primary rounds can submit several bids, each including:

- a) the bid price, and
- b) the number of auction blocks in each category the participant wants to obtain for the bid price.

The bid prices must be in whole euros.

Bids in the additional round can be submitted for any combinations of block amounts in the offered categories, while:

- a) the activity corresponding to the block combination cannot exceed the participant's eligibility in the first primary round
- b) the block combination complies with the restrictions for the range of assigned frequencies on the bands specified in Chapter 1.5
- c) the bid price complies with the restrictions defined in Chapter 2.3.4

A maximum of one bid can be submitted for one block combination in the additional round.

The maximum number of bids submitted by one participant in the additional round will be determined by the office before the auction starts and after the deadline for submitting bids to the tender, based on the number of participants who qualify for the auction. However, the maximum number of bids cannot be lower than 300 and higher than 3,000.

Details of the method for submitting bids in the additional round are specified in the user manual to the electronic auction system.

### 2.3.4 Restrictions for Prices in the Additional Round

In the additional round, each participant can submit only one bid for such a block combination for which they've already submitted in one of the primary rounds. The bid price of such a bid must be higher than the highest price the participant submitted for the given block combination in one of the primary rounds.

The participant can also submit bids to block combinations that they didn't submit for in the primary rounds, but in compliance with the activity rules, restrictions for the range of assigned frequencies in frequency bands (see Chapter 1.5), and limitations given by the bank guarantee. The bid price for such bids must be at least equal to the summary of bid prices for all blocks in the given bids' block combination.

The following definitions are relevant for determining the maximum level of bid prices for bids submitted in the additional round:

- the last primary bid is the last bid (except for a "zero" bid) the participant submitted in one of the primary rounds
- the round of the last primary bid is the primary round in which the last primary bid was submitted

All bid prices within bids submitted in the additional round must also comply with the following restrictions:

- the bid price within any bid submitted in the additional round must be lower or equal to the maximum price bid level corresponding to the deposited bank guarantee
- if the participant submitted their last primary bid in the last primary round, they
  can submit an arbitrarily high price bid for the block combination same as the
  combination in this bid; however, this price bid cannot be lower than the price
  of the given block combination in the last primary round
- if the participant submitted their last primary bid in other than the last primary round, they can submit a price bid to the block combination same as the combination in this bid; this price cannot be higher than the price of the given block combination determined according to category prices valid in the first primary round following the one in which the participant submitted their last primary offer
- for all other bids submitted in the additional round, the price bids must comply with so-called relative restriction. This means, that the price bid P<sub>K</sub> within the bid for the K combination in the additional round cannot be higher than the summary of the highest price bid P<sub>M</sub> for the M combination and the difference between the H<sub>K</sub> value of the K combination and the H<sub>M</sub> value of the M combination for prices valid in the n primary round, while:
  - a. The **n** primary round is the highest round, at the beginning of which the participant had a sufficient amount of eligibility points to submit a bid for the **K** block combination.
  - b. The M combination is one to which the participant submitted a bid in the n primary round. If the participant didn't submit any bid in the n primary round, the M combination is a zero combination and its  $H_M$  value equals zero.
  - c. The highest price bid  $P_M$  for the M combination is the highest price bid the participant submitted to the M combination in one of the primary rounds for the additional round. If the M combination is a zero combination, the highest price bid  $P_M$  equals zero.

$$P_K \leq P_M + H_K - H_M$$

## 2.3.5 Bid Validity in the Additional Round

Each bid submitted in the additional round complying with the restrictions specified in Chapters 2.3.3 and Chyba! Nenašiel sa žiaden zdroj odkazov. is considered as a valid, final, irrevocable, and unconditional commitment to obtain the combination of blocks corresponding with the submitted bid for the price specified in it.

All bids submitted in the additional round remain valid until:

- a) they're cancelled due to the cancellation of the additional round or the entire auction by the office
- b) the decision on assigning frequencies issued to the participant based on this tender becomes effective
- c) the decision on stopping the application process if the participant is unsuccessful or excluded from the tender becomes effective

# 2.3.6 Selecting Winning Bids

After the additional round's completion, the office will select the combination of winning bids.

The combination of winning bids from the main stage will be determined as the subset of all valid bids submitted in all primary rounds and the additional round, so that the following is fulfilled:

- a) the given combination contains maximum one bid from each participant.
- b) the total amount of assigned blocks in each category cannot exceed the number of blocks offered within one category.
- c) the total value of the given combination equal to the summary of all bid prices within one combination cannot be lower than the total value of any alternative combination of submitted bids complying with the requirements specified in points a) and b).

If only one bid combination complies with these points, this combination will be announced as the combination of winning bids.

If several bid combinations with the same total value comply with these points, the winning combination will be the one with the most eligibility points belonging to the blocks of the given combination.

If several bid combinations with the same total value and number of eligibility points comply with these points, the winning combination will be the one with the most bids.

If several bid combinations with the same total value, number of eligibility points, and number of bids comply with these points, the winning combination will be selected randomly from these combinations.

Bids belonging to the winning combination are the winning bids. Successful main stage participants are the ones whose bid is in the winning combination. These participants will be assigned block combinations corresponding to their winning bid for the basic prices calculated as in Chapter 2.3.7.

# 2.3.7 Determining Basic Prices from the Main Auction Stage

A basic price will be calculated for each winning bid, corresponding with the sum the successful participant is obliged to pay for their bid. This means, that the basic price won't be calculated for individual block categories, but as a total, further indivisible price for the entire block combination corresponding to the participant's winning bid.

The basic prices will be calculated using an algorithm for all successful participants from the main auction stage.

To calculate the basic price, each successful participant or a group will pay the smallest possible amount they could offer for their winning bid, without having to change the winning combination.

To be specific, the basic prices for winning bids are calculated as the lowest prices, meeting the following conditions:

- a) the basic price isn't lower than the summary of auction block starting bids within the winning bid
- b) the basic price isn't higher than the bid price within the winning bid
- c) the combination of winning bids at the given basic prices complies with the a) to c) requirements specified in Chapter 2.3.6, while when determining the basic price for the given successful participant, the rest of their price bids are reduced by the difference between the bid price belonging to the winning bid and the basic price; if this difference leads to a negative value, the rest of the price bids valued as zero is relevant.

If there's a single set of basic prices complying with the a) to c) requirements, it will be determined as the set of final basic prices.

If there's more sets of basic prices complying with the a) to c) requirements, the set of final basic prices is the one minimizing the squared difference between the basic prices and individual opportunity costs of all successful participants.

Successful participants' opportunity costs will be calculated individually. The costs are equal to the higher from the values:

- a) summary of the starting block bids in their winning bid, or
- b) the submitted price of their winning bid, reduced for the difference between the summary of all submitted price bids within the winning bid combination and the summary of all submitted price bids within the alternative winning bid combination that would occur if all bids from the successful participant were excluded from the set.

The final basic prices will be rounded to whole euros.

## 2.3.8 Additional Round's Completion

After determining the winning bids and final basic prices, the office shall inform the participants. Each participant shall be notified about:

- a) whether they were successful, and if yes
- b) also the number of blocks in each category of their winning bid
- c) the bid's final basic price.

This information shall not be revealed to other participants.

## 2.4 Assigning Stage Rules

# 2.4.1 Planning the Assigning Stage

The office shall announce the date and time of the assigning stage's start and its duration after the completion of the main stage's additional round. Submitting bids in the assigning stage will be done in one assigning round. However, the winner selection and assignment price determination will be carried out for individual categories of frequency blocks.

There shall be a break of at least three entire working days between the end of the main stage's additional round and the start of the assigning stage.

The office shall determine the start and duration of the assigning stage according to its own judgment. The round will be planned for one working day between **9AM and 6PM**, while its duration cannot be shorter than 3 hours. The participants shall be notified about the date and starting time within 48 hours from the additional round's completion.

Each participant will have one opportunity to excercise their right to prolong the round by one hour.

The assigning round may be terminated before its planned time of completion, if all participants have already submitted their valid bids.

Only the successful participants from the main stage with at least one existing category with two frequency assignment options will participate in the assigning stage.

# 2.4.2 Informing Tender Participants before the Assigning Round

Along with announcing the date and time of the assigning round, the office shall inform the main stage's successful participants

- about the assignment round's duration, along with stating the time of its completion
- number of unassigned blocks in each category
- number of winning combinations belonging to each block category

This information will allow the participant to assess whether they're the only successful participant in the given block category, and how many blocks remained unassigned in the category.

# 2.4.3 Bidding Options in the Assigning Round

Gaining block combinations within the winning bid from the main stage is related to the right and obligation to obtain one of the specific frequency assignments corresponding to the main stage's winning bid. The options of specific frequency assignments will be submitted to participants before the assigning round.

In the assigning round, the participants are invited to submit their price bids for individual frequency assignment options in the block categories, determined by EAS as follows:

- for each block category in which there are winning bids from two or more successful participants, EAS will determine the set of all frequency assignment options to each relevant participant
- the set of all frequency assignment options for the given participant must meet the following conditions:
  - a. the number of blocks in each option is equal to the number of blocks in the given category of the participant's winning bid
  - b. each frequency assignment option must be continuous in the category and provide the option of continuous assignment for other successful participants in the given category
  - c. unassigned auction blocks will be placed on the frequency bands under the rules specified in Chapter 2.4.7.

If the given category contains only one successful participant's winning bid, this participant will be assigned frequencies within this category that remain free after placing the unassigned auction blocks under the rules specified in Chapter 2.4.7.

# 2.4.4 Rules for Submitting Bids in the Assigning Round

At the beginning of the assigning round, the office shall provide each participant with a form containing the set of all possible frequency assignments in all categories corresponding with their winning bid, in which they have more than one option for frequency assignment.

For each of the presented possible frequency assignments within the category, the participant can submit one price bid, reflecting the sum the participant commits to pay in order to obtain the relevant frequency assignment.

Each price bid's value must be in whole euros. This value isn't limited, but can't be lower than zero. No limitations given by the bank guarantee apply to the price bids within the assignment round.

If the participant doesn't submit any price bid for the given option, EAS will automatically create a bid with zero value for this option.

Each bid submitted during this round is considered as a valid, final, irrevocable, and unconditional commitment to pay the determined price to obtain the frequency assignment. This fee is not included in the final price of their winning bid.

The assignment bid remains valid until:

- a) it's cancelled due to the cancellation of the assignment round or the entire auction by the office
- b) the decision on assigning frequencies issued to the participant based on this tender becomes effective
- c) the decision on stopping the application process if the participant is unsuccessful or excluded from the tender becomes effective

# 2.4.5 Selecting Winning Bids

After the completion of the assignment round, the winning assignment bids will be calculated within each offered block category containing winning bids from two or more main stage's successful participants.

A combination of winning assignment bids with the highest summary value of price bids from all possible submitted bid combinations within the given block category will be determined for each category complying with the following conditions:

- the combination contains just one assignment bid from each participant who
  had the option to submit a bid within the given category in the assigning round
- each participant is assigned specific frequencies in the amount corresponding to the number of blocks in their winning bid from the main stage
- all frequency assignments are continuous in the given category
- the frequency assignments don't overlap within the category
- all unassigned auction blocks are located on the frequency spectrum continuously, in compliance with the rules specified in Chapter 2.4.7.

If several assignment bid combinations exist in one category complying with the conditions specified above and have the same value, the combination of winning assignment bids is selected randomly from among these combinations.

After determining the winning combination in all block categories, each category's successful participant will have exactly one winning bid for the frequency assignment in their combination, corresponding with their bid's block volume.

# 2.4.6 Determining the Assignment Price for the Winning Bid in the Assigning Round

Additional assignment prices will be determined for each block category with winning bids from two or more successful main stage participants.

Assignment prices are determined individually for each block category. The prices are determined simultaneously for all successful participants in each category within one calculation. The assignment prices for the combination of one category's winning bids are the lowest prices complying with the following requirements:

- a) the assignment price must be higher or equal to zero
- b) the winning bid combination's prices comply with the requirements specified in Chapter 2.4.5, while when determining the price for the given participant's winning bid, the prices of their other bids are reduced for the difference between the submitted price for their winning bid and its assignment price; if such a decrease leads to a negative value, the relevant prices of other assignment bids equal zero.

If there's only one set of assignment prices for the given block category complying with the a) and b) requirements, this becomes the set of final assignment prices.

If there are several sets of assignment prices for the given block category complying with the a) and b) requirements, the set of final assignment prices will be the one minimizing the squared difference between the assignment prices and individual opportunity costs of all winning bids within the given block category.

Individual opportunity costs of all winning bids will be calculated individually for each successful participant and each block category. These costs are equal to the value of the winning bid's submitted price reduced for the difference between the summary of all bids within the winning combination in the given category and the summary of all submitted prices within the alternative winning combination that would occur if all assignment prices belonging to one participant had zero value.

The final assignment prices will be rounded to whole euros.

# 2.4.7 Placing Unassigned Blocks

If some auction blocks remain unassigned after the main stage's completion, they will be placed in sequential order on the frequency bands corresponding to the individual auction block categories, in accordance with the following rules.

Table 6: Positions of unassigned blocks on the 800 MHz frequency band

Auction block category	Unassigned block positions
A1	All unassigned blocks will be placed continuously right above 791 MHz, paired with 832 MHz

Table 7: Positions of unassigned blocks on the 1800 MHz frequency band

Auction block category	Unassigned block positions
B7	Location of the unassigned blocks will be determined by the office before the assigning stage

Table 8: Positions of unassigned blocks on the 2600 MHz frequency band

Auction block category	Unassigned block positions
C1	All unassigned blocks will be placed continuously right below 2570 MHz, paired with the 2690 MHz frequency
C2	All unassigned blocks will be placed continuously right above the 2570 MHz frequency

## 2.4.8 Assigning Round's Completion

The office shall announce the following information to each winning participant after the assignment round's completion:

- a) their specific frequency assignment in each block category
- b) their final assignment prices for each relevant block category

# 2.5 Electronic Auction's Completion

The final price the participant has to pay for the assigned frequencies is equal to the summary of their final basic price from the main stage and their final assignment prices in all relevant block categories.

After all decisions on assigning frequencies issued based on this auction come into effect along with all decisions on stopping all application processes, the office shall publicly announce the following information:

- a) the identity of all participants
- b) specific frequencies assigned to the successful participants
- c) final prices that the participants have to pay for the assigned frequencies gained in this auction, along with determining the price corresponding to the final basic price from the main stage and the sum of final assignment prices in all relevant block categories.

The office reserves the right to publish additional information about the auction process after all decisions on assigning frequencies issued based on this auction come into effect along with all decisions on stopping all application processes.

Unsuccessful tender participants will be returned their original guarantee letters without any delay after the decision on stopping their application process comes into effect.

#### 2.6 Final Provision

By submitting a tender bid, the participant agrees with all the terms and conditions listed in the auction rules and commits to comply with them.

## 2.7 Explanation of Terms and Abbreviations

**Activity** – a participant's bid range in the given primary round, calculated as the summary of all eligibility points for all auction blocks included in their submitted bid. The number of auction block eligibility points is determined by the number of points belonging to the category in which the auction block is located. A participant's activity in the given round can't exceed their eligibility for the round.

**Auction day –** a day with at least one auction round within the main or assigning stage.

**Eligibility points** – point evaluation of auction blocks. A participant's eligibility allows them to submit bids for such block combinations whose point summary is lower or equal to the participant's eligibility. The summary of eligibility points belonging to the given round's block combination determines the participant's activity in that round.

**Bid price in a primary round** – this price is calculated as the summary of prices determined for the given primary round for all auction blocks included in the submitted bid.

**Final price** – the price that the participant has to pay for the assigned frequencies, equal to the summary of their final basic price from the main stage and their final assignment prices in all relevant block categories from the assigning stage.

**Additional round** – auction round following the last primary round. Each participant can submit several bids here, even for a block combination to which they didn't submit in any of the primary rounds.

**EAS –** Electronic Auction System – software allowing organization and participation in the auction.

**Frequency assignment** – frequencies assigned to a successful participant through a decision following the auction's completion.

**Main auction stage** – here the number of auction blocks that will be assigned to each successful participant is determined. The main stage consists of one or several primary rounds and one additional round.

**Round of the last primary offer –** a primary round in which the given participant submitted their last primary offer, not being a zero offer

Combination of the main stage's winning bids – combination of valid bids with the highest value from all valid combinations submitted in all ordinary rounds and the

additional round, while containing maximum one bid from each participant. The total block amount contained in each bid combination cannot exceed the number of offered blocks within each auction block category.

**Zero bid** – a bid in which the required number of auction blocks equals zero in each category.

**Restrictions on the frequency range** – "frequency cap:" restriction on the maximum frequency range that can be assigned to one company in the given frequency band.

**Initial eligibility** – participant's eligibility in the first primary round. The intial eligibility is given by the number of points the participant stated in their tender bid. If the bank guarantee isn't sufficient to secure the required points, the participant's eligibility will be reduced to a number secured by the guarantee.

**Bid price in the additional round bid –** a sum the participant commits to paying for the number of auction blocks in each category corresponding to the additional round bid.

**Additional round bid** – binding bid submitted in the additional round for an auction block combination by specifying the bid price and number of auction blocks in each category the participant commits to obtaining for this price.

**Primary round bid** – binding bid submitted in the primary round for an auction block combination by specifying the number of auction blocks in each category the participant commits to obtaining at the category prices valid for the given round.

**Last primary bid** – last bid (except for a "zero" bid) the participant submitted in one of the primary rounds.

**Last primary round –** primary round in which the total demand isn't higher than the bid in any of the auctioned block categories. The office can also announce that the last primary round is the round in which the total demand is higher than the bid within one or more categories, if this is in the general interest of the frequency assignment process' efficiency.

**Right to prolong a round** – participant's right to prolong the round duration for the predefined time and thus submit their bid in the additional time.

**Primary round –** auction rounds in the main stage in which the participants can submit binding bids for auction block combinations by specifying the number of auction blocks in each category they're interested in for the prices valid in the given primary round.

**Assignment price** – a sum which the successful participant must pay for their winning bid in the assigning stage for the given auction block category. An assigning price with a single winning bid from the main stage has a zero value.

**Tender participant** – a person who submitted their bid within the period determined in the tender invitation.

**Main auction stage's successful participant** – participant whose bid submitted in one of the primary rounds or the additional round belonging to the main stage's winning bid combination.

**Main auction stage's winning bid** – a bid belonging to the main stage's winning bid combination.

**Assigning auction stage's winning bid** – a bid belonging to the assigning stage's winning bid combination for the given auction block category.

**Starting bid** – the lowest bid for an auction block determined in the tender invitation.

**Main auction stage basic price** – a sum that the successful participant must pay for their winning offer from the main stage.