**Tender No. IFT-7**

**Appendix B. Overview of the Auction Rules and Procedures**

\* The current version of Appendix B was translated into English for a better understanding of the Bidding Process and does not replace by any means the original Spanish version; consequently, the only document to be considered official for any legal purposes is the published Spanish version, which is available at: http://www.ift.org.mx/sites/default/files/industria/espectro-radioelectrico/telecomunicaciones/2018/7/apendiceb\_0.pdf

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# **Definitions.**

\* **Note**: The current glossary is in the same order of the original Spanish version. Therefore, the sequence of the definitions may not follow an alphabetical order.

For the purposes of Appendix B:

1. **3GPP**: English acronym for *"3rd Generation Partnership Project"*. It is a private international organization of standardization, whose objective is to define the specifications of last generation mobile communications systems.
2. **Wireless Access**: Bidirectional radio link between a public telecommunications network and the end user, for the transmission of signs, signals, writings, images, video, voice, sounds, data or information of any nature.
3. **Assignment Resolution**: Resolution issued by the Plenary of the Institute which determines and specifies who was a Winning Bidder in the Tender, in terms of the Auction rules, with respect to one or more specific Blocks.
4. **AWS Band**: Radio spectrum segment comprising the ranges between 1710-1780 MHz and 2110-2180 MHz frequencies.
5. **700 MHz Band**: Radio spectrum segment ranging from 698 MHz to 806 MHz, in which 90 MHz have been granted in concession.
6. **800 MHz Band**: Radio spectrum segment comprising the 814-824/859-869 MHz frequency ranges.
7. **850 MHz Band**: Radio spectrum segment comprising the 824-849/869-894 MHz frequency ranges.
8. **2500 MHz Band or 2.5 GHZ Band**: Radio spectrum segment comprising the 2500-2690 MHz frequency range.
9. **Capacity Band**: Any of the following frequency bands: PCS Band, AWS Band and 2500 MHz Band.
10. **Guard Band**: Radio spectrum segment comprising the 2570 – 2575 MHz and 2615 – 2620 MHz frequency ranges.
11. **PCS Band**: Radio spectrum segment comprising the 1850 – 1910 MHz and 1930 – 1990 MHz frequency ranges.
12. **Block**: Portion of radio spectrum of either 10 + 10 MHz paired segments or, 20 MHz non-paired segments subject to this Tender, with national coverage in any of the following ranges: i) 2530 – 2570 MHz and 2650 – 2690 MHz, in the case of paired segments , and II) 2575 – 2615 MHz, in the case of non-paired segments.
13. **F1 Block**: Paired Block comprising the 2530-2540 MHz and 2650-2660 MHz frequency segments.
14. **F2 Block**: Paired Block comprising the 2540-2550 MHz and 2660-2670 MHz frequency segments.
15. **F3 Block**: Paired Block comprising the 2550-2560 MHz and 2670-2680 MHz frequency segments.
16. **F4 Block**: Paired Block comprising the 2560-2570 MHz and 2680-2690 MHz frequency segments.
17. **T1 Block**: A non-paired Block comprising the 2575-2595 MHz frequency segment.
18. **T2 Block**: Non-paired Block comprising the 2595-2615 MHz frequency segment.
19. **Switch**: Request by a Bidder to make a Block exchange between Categories.

1. **Denied Switch**: Switch not authorized by the SEPRO according to the Bidding Process rules.

1. **Category**: Each of the two segments contained in the frequency band 2500-2690 MHz based on the duplexing method defined in segmentation C1 of the RM. 1036 recommendation of the International Telecommunications Union: TDD Category or FDD Category.

1. **FDD Category**: Paired segment operating with FDD technology on the 2530 – 2570 MHz and 2650 – 2690 MHz frequency ranges.

1. **TDD Category**: Non-paired segment operating with TDD technology on the 2575 – 2615 MHz frequency range.

1. **Economic Component**: Amount expressed in Mexican pesos resulting from the application of the Conversion Formula applicable at the Allocation Stage.
2. **Non-economic Component**: Variable associated to the participation incentive through the incorporation of New Competitors in Capacity Bands, which is part of the Conversion Formula.

1. **Radio Spectrum Concession for Commercial Use**: Administrative procedure whereby the Institute, in terms of the provisions of articles 3 section XIII and 76 section I of the Law, confers the right to natural persons or legal entities to use, seize and exploit bands of frequencies of the radio spectrum of specific use, for profit.
2. **Certificate of Participation:** Document issued by the Institute that formally recognizes a Stakeholder as a Bidder in the Tender.
3. **Upfront Fee**: Total amount of money, expressed in Mexican pesos, to be paid by the Winning Bidder for the granting of the Radio Spectrum Title of Concession for Commercial Use, in terms of the Law, which equals the sum of the Assignment Price and the Allocation Price, and that cannot be less than the Minimum Reference Value.
4. **Extension Rights**: Prerogative of a Bidder to extend by 30 (thirty) minutes the time limit for the completion of a Bid.
5. **Frequency Division Duplexing (FDD)**: Duplexing method in which the transmitter and receiver use different channels or frequency bands at all times.
6. **Time Division Duplexing (TDD):** Duplexing method in which the transmitter and the receiver use the same frequency band, alternating the availability between transmission and reception at different time intervals.
7. **Allocation Stage:** Stage that determines the number of Blocks allocated to each Bidder in each Category, the price per Block in each Category and its Allocation Price, which consists of a bidding mechanism of one or more Clock Rounds.

1. **Assignment Stage**: Stage that determines the specific frequency Blocks that will be assigned to each Bidder and its Assignment Price through a Sealed Bid Round.
2. **Conversion Formula**: Mathematical representation used to determine the Economic Component of a Bidder, based on the score each Bidder accepts for a Block of a particular Category in each of the Clock Rounds. The Conversion Formula is composed of a Non-economic Component, the Bidder's score and a scaling factor.

1. **Deposit requirement**: Stand-by Letter of Credit in favor of the Treasury of the Federation that must be delivered by the Stakeholder on the date established in the Calendar of Activities. This letter, which must comply with the format contained in Annex 6 of Appendix A of the Auction Rules, supports the formality of the participation of the Stakeholder in the Tender, as well as the fulfilment of the conditions set forth in the Auction Rules in case of incurring in any disqualification envisaged in these.
2. **GIE**: Economic Interest Group. Set of subjects of law with related commercial and financial interests that coordinate their activities to participate in the markets and economic activities, through the decisive control or influence, direct or indirect, that one of its members exerts over the others.
3. **Institute**: The Federal Telecommunications Institute.
4. **Stakeholder**: A natural person, a legal entity or a consortium which, in terms of the provisions of the Auction Rules, has submitted the documents corresponding to section 5.1.1 of the Auction Rules.
5. **Spectrum Cap:** Maximum amount of Radio Spectrum that a Bidder can obtain in each of the phases of the Allocation Stage, taking into account the available and assigned spectrum in the 700 MHz Band, the 800 MHz Band, the 850 MHz Band, the PCS Band, the AWS Band and the 2500 MHz Band, as well as the spectrum likely to be granted in this Tender.
6. **NCBC:** New Competitor in Capacity Bands. Character that the Institute confers on a Bidder who, in evaluating it as a Stakeholder in its dimension of GIE and considering the economic agents with which that GIE has links of commercial, organizational, economic or legal type, does not have Titles of Concession of Radio Spectrum for Commercial Use in Capacity Bands for wireless mobile access service.
7. **Bid**: Offer confirmed and presented in accordance with the rules of the Tender, which represents a binding commitment of the Bidder to acquire Blocks within the Bidding Process at a price equal to the amount specified by the SEPRO.
8. **Default** **Bid**: Bid assigned to the Bidder when he has exhausted the Extension Rights or does not present a Bid during the extension period, and is considered as the Bidder’s Bid during the Bidding Process.
9. **Bidder**: Stakeholder who has received the corresponding Certificate of Participation, in terms of the provisions of the Auction Rules.
10. **Winning Bidder:** Bidder declared by the Plenary of the Institute, which declares him as winner on one or more Blocks of radio spectrum available in the 2500 MHz Band, matter of the Tender, that have been allocated during the Bidding Process.
11. **Reporting Period:** Lapse of 30 (thirty) minutes, during the Bidding Process, in which Bidders may consult the results corresponding to the end of each Clock Round or the exercise of an Extension Right, if applicable.
12. **Allocation Price**: Is the amount in Mexican pesos established for a Bidder related to the Blocks obtained in the Allocation Stage.
13. **Assignment Price**: Is the amount in Mexican pesos set for a Bidder related to the assigned Blocks during the Assignment Stage.
14. **Bidding Process**: A procedure that is determined by the dates and specific schedule established by the SEPRO. This procedure is composed of an Allocation Stage, consisting of one or more Clock Rounds, and one Assignment Stage.
15. **Clock Round Scheduling**: A publication by the Institute establishing for each day schedules, time intervals between scheduled Clock Rounds and relevant information on the schedule of the Bidding Process.
16. **Clock Score**: Value in points determined by the Minimum Reference Values (Appendix F of the Auction Rules) and the range of increments established by the SEPRO at the beginning of each Clock Round for a Block of a particular Category, which may be accepted by the Bidders during the period of any Clock Round.

1. **Exit Score**: Value in points set by a Bidder for the withdrawal of a Block in a certain Clock Round.
2. **Withdrawal**: A Bidder's request to reduce its Bid from one Block for the previous Clock Round.
3. **Denied Withdrawal**: Withdrawal retained by the SEPRO in accordance with the provisions of this Appendix B.

1. **Clock Round:** Round of the Allocation Stage in which Bidders make Bids.
2. **Sealed Bid Round**: Round of the Assignment Stage that determines the frequency position of each Block obtained by the Bidders during the Allocation Stage and its Assignment Price.
3. **SEPRO**: Online bidding platform that hosts the Bidding Process.
4. **Minimum Reference Value (VMR)**: Amount of money expressed in Mexican pesos which will be considered as the minimum amount to be paid as an Upfront Fee for any Block. These quantities are specified in Appendix F of the Auction Rules.

# **Introduction.**

The Bidding Process shall be executed through an auction mechanism, which contains two Stages:

• **Allocation Stage**: Which will consist of one or more Clock Rounds, up to two different phases; it is based on a point system.

• **Assignment Stage**: Which will consist, if any, of a single Sealed Bid Round; it is based on monetary values expressed in Mexican pesos.

The entire process is illustrated in Figure 1.

**Figure 1: The Bidding Process**

**Allocation** **Stage**

**PHASE I**

**PHASE II**

Clock Rounds (with phase I Cap)

Clock Rounds (with phase II Cap)

YES

YES

Excessive demand in any category?

Excessive demand in any category?

NO

NO

The Blocks offered in this phase are allocated.

The Blocks offered in this phase are allocated.

YES

NO

END OF

STAGE

Unallocated Blocks?

 END OF STAGE ETAPA

**Assignment Stage**

Assignment Bid

Winner and price determination

Blocks assignment and Upfront Fees announced

Allocation Stage and Assignment Stage Bids will be submitted via SEPRO.

# **Spectrum Available.**

As shown in the Figure 2, there are 120 MHz of Radio Spectrum available in the 2500 MHz Band, which may be classified into two Categories:

* **FDD Category**: This spectrum is part of the Band 7 from the 3GPP.
* **TDD Category**: This spectrum is part of the Band 38 from the 3GPP.

Both 3GPP Bands have been adopted in Canada and the European Union, and many other countries worldwide for the provision of Wireless Access service.

Figure 2: 2500 MHz Band in Mexico.



The 2570-2575 MHz and 2615-2620 MHz spectrum segments are not the subject of the Tender because they make up the established Guard Band to ensure adequate frequency separation between the high-power use of the Frequency Division Duplexing (FDD) technology in the FDD Category Blocks and Time Division Duplexing (TDD) in the TDD Category Blocks.

## **Blocks.**

As shown in Figure 3, according to the classification of the Blocks in the Tender, the following are available:

* 4 (four) Blocks Categories FDD (F1, F2, F3 y F4), and
* 2 (two) Blocks Categories TDD (T1 y T2).

 Figure 3: Available Blocks in the Auction.



As described below, the Bidding Process will be developed in two stages: an Allocation Stage and an Assignment Stage.

In the Allocation Stage, all Blocks will be allocated without a specific frequency, which will be determined at the Assignment Stage, with the guarantee that all Bidders who obtain Blocks will be assigned contiguous frequencies within each Category.

The Table 1 provides a summary of the Block information according to their Category. Each Block has the same total frequency endowment (20 MHz) and will have the same eligibility points weighting for the purpose to determine the activity in the Bidding Process.

Table 1: Available Blocks by Category.

|  |  |  |  |  |
| --- | --- | --- | --- | --- |
| Category | Type of Spectrum | Number of Blocks | Size of Block  | Eligibility points per Block |
| FDD | Paired | 4 | 10 +10 MHz | 1 |
| TDD | Non -Paired | 2 | 1. MHz
 | 1 |

## **[Spectrum Cap.](#_Spectrum_Accumulation_Limits.)**

In the Allocation Stage, composed for up to two phases, Bidders will be subject to a Spectrum Cap.

In this sense, the Spectrum Cap for phase I will be 32.5% and if there are unallocated Blocks at that phase, the Spectrum Cap will be increased to 35% in phase II, as shown below:

* Phase I: 32.5% of spectrum= 194.46 MHz
* Phase II: 35.0% of spectrum= 209.42 MHz

The Spectrum Cap for each Bidder will be calculated based on its GIE and taking into consideration its commercial, organizational, economic and legal links. The Table 2 shows an example of mobile spectrum holdings at the date of the approval of the Auction Rules, so that the competition assessment will be made with the specific holdings at the same date, regardless of the transactions and operations that may be received /made and/or notified by the Stakeholders at a later date. The spectrum holdings is calculated on a national basis.

On the other hand, in bands in which the spectrum holdings of the concessionaire varies between regions, the Institute weighted the population in each region with the national population.

Table 2: Mobile Spectrum Holdings in Mexico (MHz)[[1]](#footnote-2).

|  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- |
|  | Altán | AT&T | Telcel | Telefónica | Other or unassigned | Total |
| 700 MHz Band | 90 | 0 | 0 | 0 | 0 | **90** |
| 800 MHz Band | 0 | 22.63 | 2.76 | 0 | 0 | **25.39** |
| 850 MHz Band | 0 | 16.93 | 21.51 | 4.51 | 0 | **42.95** |
| PCS Band | 0 | 32.26 | 28.40 | 59.34 | 0 | **120** |
| AWS Band | 0 | 50 | 80 | 0 | 10 | **140** |
| 2500 MHz (FDD) Band | 0 | 0 | 45.25 | 0 | 94.75 | **140** |
| 2500 MHz (TDD) Band | 0 | 0 | 0 | 0 | 40 | **40** |
| Total (MHz) | **90** | **121.82** | **177.92** | **63.85** | **144.75** | **598.34** |
| Total (percentage) | **15.04%** | **20.36%** | **29.74%** | **10.67%** | **24.19%** |  |

Notes: Where applicable, regional holdings in MHz have been weighted by population to obtain a nationwide equivalent number. The percentages were rounded to two decimals.

# **Allocation Stage.**

The purpose of the Allocation Stage is to determine the number of Blocks in each Category that will be awarded to each Bidder and to determine its Allocation Price.

## **Description.**

The Allocation Stage will be undertaken as an auction in one or two phases that proceeds in Clock Rounds. In each Clock Round, the SEPRO will state a Clock Score and each Bidder must select the number of Blocks it wishes to get at the prevailing Clock Scores.

If the total number of Blocks for a given Category of Bidder’s Bid is greater than the available Blocks for that Category (i.e. there is excess demand for that Category), the Clock Score will increase for that Category in the subsequent Clock Round. Otherwise, if there is no excess demand, the Clock Score will remain unchanged for that Category.

A Bidder cannot increase, from one Clock Round to the next, the total number of Blocks placed on its Bid across in both Categories. In any given Clock Round, the total number of Blocks bid by a Bidder must not exceed the total number of Blocks that the Bidder bid in the preceding Clock Round (except for transitions between the Allocation Stage phases).

A Bidder may decrease, from one Clock Round to the next, the number of Blocks of his Bid for a particular Category by making a request for a Withdrawal in accordance with numeral 3.11.1. A Withdrawal may be denied by the SEPRO in accordance with numeral 3.12.1, both numerals of the current Appendix.

If a Bidder presents a Withdrawal for one or both Categories, the number of Blocks the Bidder may submit a Bid in the subsequent Clock Rounds (eligibility points) will be reduced accordingly.

The Bidders may switch Blocks from one Category to the other Category from a Bid to the next one by requesting a Switch in accordance with numeral 3.11.2. A request to Switch may be denied by the SEPRO in accordance with numeral 3.12.2, both of this Appendix.

If there is no excess demand for a Category, the next Clock Round will not allow any Bidder to present a Withdrawal from that Category or present a Switch to another Category.

Phase I of the Allocation Stage will continue until there is a Clock Round where the demand in both Categories is equal or less than the total number of Blocks available in each Category. If, at the end of phase I, all the available Blocks in both Categories were allocated, the Allocation Stage will be completed. Failing that, if unallocated Blocks were left at the end of phase I, the Allocation Stage will continue to phase II with additional Clock Rounds and with the Spectrum Cap of phase II for Blocks that have been left unallocated in phase I. Phase II will conclude when there is no excess demand in either of the two Categories.

## **Minimum Reference Value.**

Each one of the Blocks has a VMR equal to each other. This VMR will define the minimum permissible value of the initial Clock Round and thus establish the minimum score that may be accepted by a Bidder on a particular Block.

In this sense, when there is a Winning Bidder, the corresponding Upfront Fee in no case may be inferior to the VMR, even in the case the Bidder may be a New Competitor in Capacity Bands.

The Institute establishes a VMR of $350,000,000.00 (Three hundred fifty million pesos 00/100 M.N.) per Block as illustrated in Table 3 below:

Table 3: VMR by Category.

|  |  |  |
| --- | --- | --- |
| Category | VMR by Block (Mexican pesos) | Score\* |
| FDD | **350,000,000.00** | 350 |
| TDD | 350,000,000.00 | 350 |

\* This value is standardized by a scaling factor **N** (equal to 1 million) that facilitates the reading and handling of the score.

## **Conversion Formula for Contested Blocks.**

The Conversion Formula determines the value of each Bidder's Economic Component by a Block of a Category, and it is defined by a score, a Non-Economic Component, and a scaling factor. The Non-Economic Component is determined according to the Bidder's condition as a New Competitor in Capacity Bands. The score is associated to that Bidder at the time of the calculation.

The calculation of the Economic Component corresponding to the jth Bidder by a Block of a specific Category shall be executed as follows:

$$CE^{j}=Pt^{j}\*\left(1-x\right)\*N$$

Where:

$CE^{j}$ and $Pt^{j}$are, respectively, the Economic Component and the score of the Bidder J by a Block of a specific Category at the time of the calculation:

*N* =1,000,000 is the scaling factor used in Table 3;

*x* =.30, if it is a New Competitor in Capacity Bands; Otherwise, x = 0.

## **License term.**

The validity of the Radio Spectrum Title of Concession for Commercial Use granted shall be 20 (twenty) years from the delivery of the corresponding license.

The Winning Bidders of any type of Block that have been defined as NCBC may opt to defer the date of delivery of the Radio Spectrum Title of Concession title for Commercial Use for up to two years, according to what was pointed out in the Auction Rules in terms of Appendix G. Should the deferral is authorized, they will have the possibility of requesting the Institute the issuance of the corresponding title(s) at any time within the deferred period, without it being able to exceed the originally authorized period. It should be noted that this deferral, in no case, postpones the coverage obligations provided for in the numeral 3.4 of the Auction Rules.

## **Deposit requirements.**

In order to be able to obtain the corresponding Certificate of Participation, each Stakeholder must give the Institute a Deposit requirement in the form of a stand-by letter of credit, issued in order of the Treasury of the Federation in strict adherence to the format set out in Annex 6 of Appendix A to the Auction Rules, for a minimum amount of $700,000,000.00 pesos (seven hundred million pesos 00/100 M.N.).

During the Bidding Process, the Institute shall monitor the level of each Bid made by each Bidder relative to the amount of its Deposit requirement. When appropriate, the Institute, through the UER will temporarily suspend such procedure and require one or more Bidders to increase their Deposit requirement, under the following condition:

* After the completion of any Clock Round, if the Deposit requirement provided by one or more Bidders is less than 20% (Twenty percent) of the total of the Economic Component associated with its Bid in that round, the Institute will suspend for a period of up to 5 (Five) working days the Bidding Process. It will require the respective Bidders to present to the Institute the updating of the Deposit requirement, so that it corresponds to at least 50% (fifty percent) of the Economic Component associated with its last Bid.

The foregoing, without undermining that the Bidders can increase the amount of their Deposit requirement, without the aforementioned requirement, at any time during the Bidding Process.

The updating of the Deposit requirement will be performed by means of the physical delivery in the Domicile of the Institute of a new stand-by letter of credit. The new stand-by letter of credit should comply to the stipulations of Auction Rules and will be the subject of confirmation of its validity with the Credit Institution (Bank) to be considered as valid.

In the case of the updating of the Deposit requirement, the stand-by letter of credit may not be returned by the Institute until the validity of the updated letter of credit with the issuing Credit Institution is confirmed.

If, after the deadline granted by the Institute to a Bidder to increase its Deposit requirement, the Bidder does not comply with the respective requirements, such Bidder will be excluded from submitting a new Bid at the Allocation Stage. However, all of its submitted Bids will remain valid and binding.

## **Exceptional Circumstances.**

The Institute, through the UER, shall determine the existence of a situation of exceptional circumstances referred to in paragraph 2.2 of the Bases. Such circumstances may be:

* A technical failure by SEPRO;
* The identification by the Institute of Anti-Competitive Practices, in which the Stakeholders/Bidders have incurred, either ex officio, at the request of the Federal Executive or at the request of any Stakeholder/Bidder, or
* Incidental cases or causes of force majeure.

In the event of exceptional circumstances during the Bidding Process, the UER may carry out any of the following actions:

1. Delay the termination of the Bidding Process, and/or
2. Suspend and resume the Bidding Process.

Likewise, if a situation of exceptional circumstances arises, the Plenary of the Institute may carry out any of the following actions:

1. Cancel and reschedule the Bidding Process, even if Bids have already been submitted;
2. Cancel a Clock Round and Bids presented on that round and continue the Bidding Process from the previous Clock Round;
3. Definitively cancel the Bidding Process;
4. If phase II of the Allocation Stage was not completed, return to the end of phase I and declare the last Clock Round of that phase as the final Clock Round, although this could result in unallocated Blocks.

## **Allocation Stage Phases.**

The Allocation Stage can have up to two phases:

**Phase I**: Each Bidder starts phase I with an eligibility equal to the maximum allowed number of Blocks according to the Spectrum Cap for that phase, as indicated in the numeral 2.2 of this Appendix. Phase I will continue until there is a Clock Round where there is no excess demand for Blocks in both Categories.

If in a Clock Round the demand per Category is equal to the total number of Blocks available in each Category, the Allocation Stage will end and the SEPRO shall determine the Allocation Prices for each Bidder, as set out in numeral 3.16 of the this Appendix.

If in a Clock Round there is no excess demand in both Categories, that is, the aggregate demand in both Categories is less than the total number of Blocks offered, the Stage of Allocation will continue to phase II, with the allocation of the Blocks that did receive a Bid at the corresponding phase I Allocation Prices. In this sense, only the unallocated Blocks of phase I will be offered for phase II, taking into account the corresponding Spectrum Cap.

In this sense, in phase I the Blocks that receive a Bid by a Bidder will be allocated.

**Phase II**: In this phase, the eligibility of a Bidder will be equal to the maximum number of Blocks allowed according to the Spectrum Cap of phase II, once the Blocks already allocated in phase I have been taken into account.

Accordingly, in phase II whenever possible and in response to the corresponding Spectrum Cap, all Bidders receive an increment of one point in eligibility (equivalent to 1 Block) that is provided as a free eligibility point, because of the new Spectrum Cap in phase II.

Phase II continues until there is a Clock Round where there is no excess demand in both Categories. At that time, the Allocation Stage will finish and the SEPRO shall determine the allocated Blocks that did receive a Bid and the Allocation Prices for each Bidder, as set out in numeral 3.16 of this Appendix.

The Allocation Stage always ends, at the most, in phase II, so if there are Blocks not allocated at the end of phase II, they will be announced as deserted Blocks in terms of the Auction Rules.

On the other hand, if there are exceptional circumstances, by which it is determined to cancel phase II and declare the last Clock Round in phase I as the final Clock Round, then after the Bidding Process will proceed to the Assignment Stage.

Finally, in the event that once each of the two phases of this procedure has been completed with a non-allocated Block of the TDD Category, a Bidder with Blocks allocated in both Categories will have the option of switching their Blocks of FDD Category for the same number of Blocks not allocated in the TDD Category. So that the Bidder may have all the Blocks in the latter Category allocated.

In this sense, the Bidder must pay for the exchange of the TDD Category Block the original Allocation Price of the Block of the FDD Category.

## **Scheduling Clock Rounds.**

All Clock Rounds will be scheduled by the Institute to begin between 10:00 and 16:30 hours on working days, with the exception of Friday, where the hours will be from 10:00 to 13:30 hours; the schedule of Clock Rounds will be notified to Bidders during the activity called *"Practice Sessions"*, according to the schedule of activities set out on the Auction Rules.

In this regard, it is important to consider the following:

* The duration of any Clock Round will be 30 minutes, without taking into account the 30 minute Extension Periods (if appropriate, activated for one or more Bidders) nor the Reporting Period of 30 minutes.
* There is no upper limit on the number of Clock Rounds per day, although the Institute estimates not to execute more than 7 (seven) Clock Rounds in a single day.
* Bidders will be notified by SEPRO of the start time for a Clock Round at least 15 minutes before the scheduled Clock Round starts.

### **Bid submission.**

When a Clock Round is open, Bidders should submit their Bids using the SEPRO.

To prepare a Bid, the Bidder must specify the number of Blocks in each Category it wishes to get at the current Clock Score, using the drop down boxes provided on the Bid form presented by the SEPRO.

Bidders are also asked to enter an Exit Score whenever Blocks are being withdrawn.

The SEPRO is designed to block submission of invalid Bids, that is, the drop down boxes for selection of Bids will not allow the user to select more Blocks in a Category than are available; and the SEPRO will not allow Bidders to submit a Bid with activity that exceeds the Bidder’s current eligibility.

A Bid represents a binding commitment to acquire each Block that composes the Bid to its respective Economic Component; Each Bid for a Block is kept valid for the duration of the Bidding Process, unless is cancelled by the Institute (see numeral 3.6 of this Appendix).

Bidding Process is a two-step process:

1. **First:**: The Bidder enters its Bid, this is the number of Blocks in each Category that wants to acquire during the Clock Score in process in the SEPRO, so that its validity can be reviewed:
* If the Bid complies with the rules of the Bidding Process, the Bidder proceeds to the second step.
* If the Bid fails to comply with the rules of the Bidding Process, the SEPRO will display an explanation and the Bidder shall be redirected to the Bid form so that it can modify the Bid.
1. **Second**: A summary of the Bid will be presented (including the score and the associated Economic Component) and the Bidder will be asked to confirm submission. Only the confirmed Bids will be registered by SEPRO. A warning will be provided if the Bidder is reducing eligibility points (withdrawing Blocks).

Once the SEPRO has registered the Bid of a Bidder, he will not be able to modify or withdraw it, or present a new Bid in that same Clock Round.

It is considered that a Bidder has submitted a Bid until the moment in which the confirmation of the Bid is received on the server hosting the SEPRO, so that an acknowledgment of receipt of such confirmation will be communicated to the Bidder through such system.

It is the responsibility of the Bidder to present his Bid before the end of a Clock Round and to review the acknowledgment receipt confirmation of the Bid by the SEPRO. That is why Bidders are encouraged to report immediately to the Institute if they experience any problems with the system during the Bidding Process, in which case a back-up procedure by telephone is contemplated for this specific Bid submission.

More information about this back-up procedure will be provided in the SEPRO manual that is granted during the activity called *"Manual, user and access codes (to enter the SEPRO for practice sessions and the Bidding Process) delivery”*, according to the schedule of activities.

### **Extension Rights.**

An Extension Right gives a Bidder additional time to submit a Bid during a Clock Round (Extension Period). Each Bidder begins the Allocation Stage with 2 (Two) Extension Rights. An Extension Right can only be exercise once by each Bidder in the same Clock Round.

In the event that a Bidder with one or more Extension Rights remaining fails to submit a Bid during a Clock Round, the round will automatically be extended for that Bidder, and its remaining Extension Rights will be reduced accordingly.

When an Extension Right is used, the SEPRO will automatically extend the time by 30 minutes from the original scheduled end of the Clock Round, during which that Bidder can submit a Bid.

The extension period ends 30 minutes after the scheduled end of the Clock Round.

Bidders who submit a Bid during the Clock Round will not be able to perform any further action during the Extension Period so they will be informed that the Clock Round has been extended and should wait for the announcement that the Clock Round has concluded.

Bidders who haven´t submitted a Bid during the Clock Round and does not have any more Extension Rights, cannot place any further Bids during the Extension Period. So that a default Bid will be registered by SEPRO, in accordance with the numeral 3.13 of the current Appendix.

On the other hand, additional Extension Rights for the Clock Rounds may be granted to one or more Bidders at the discretion of the Institute. In this context, the Institute does not expect to grant additional Extension Rights unless it has evidence that one or more Bidders experienced technical or other problems that could not have been anticipated. In this sense, the granting of additional Extension Rights is in the general interest of carrying out an efficient Bidding Process.

Additional Extension Rights can only be granted in the periods between Clock Rounds. They cannot be granted during a Clock Round.

Furthermore, a Bidder must notify the Institute when it is unable to submit a Bid during a Clock Round and requires an additional Extension Right; In this case, the notification is compulsory.

## **Clock Scores.**

In each Clock Round the Institute shall specify a Clock Score and its respective Economic Component. In the first Clock Round of phase I, the Economic Component shall be equal to the Minimum Reference Value of the corresponding Category (see table 3).

In the first Clock Round of phase II, the Clock Score will be equal to the maximum score of phase I of the corresponding Category, without considering that this score has corresponded to a NCBC. In this sense, if there are no increases in the Clock Score of any Category in phase I, the Economic Component of the Clock Score of the first Clock Round of phase II will be equivalent to the Minimum Reference Value of the corresponding Category.

On the other hand, for the subsequent Clock Rounds, the Clock Score for each Category will be increased if there is an excess of demand. In this regard, a Category is considered to have too much demand if aggregate demand for Blocks in that Category, along all Bids presented in the same Clock Round by all Bidders, exceeds the total number of Blocks in that Category; For Categories where there is no excess demand the Clock Score will remain unchanged.

Derived from the above, there is no possibility of declining the Clock Score in any Category.

However, in each Clock Round and for each Category with excess demand the increase to the Clock Score will be 5%.

The Institute will inform Bidders through the SEPRO the applicable increase before the start of the next Clock Round.

## **Bids in the first Clock Round of phase I in the Allocation Stage**.

In the first Clock Round of phase I of the Allocation Stage, Bidders with one or more eligibility points must submit a Bid for at least one Block of any Category.

The Bidder who does not submit a Bid for at least one Block in the first Clock Round in phase I of the Allocation Stage shall be excluded from continuing to participate in the Bidding Process and will be disqualified. This rule will also apply to Bidders with no eligibility points in phase I, once they should start activity in the Clock Round corresponding to the beginning of phase II.

In the first Clock Round of each phase of the Allocation Stage, the total number of Blocks that make up the Bid of each Bidder in both Categories should not exceed the number of Blocks allowed according to the Spectrum Cap of the corresponding phase.

## **[Bids in the second Clock Round of phase I in the Allocation Stage and in subsequent Clock Rounds.](#_Offers_in_the)**

In the second Clock Round phase I of the Allocation Stage and in all subsequent Clock Rounds each Bidder is allowed to:

* Bid the same number of Blocks for each Category corresponding to the Bid in the preceding Clock Round, or
* Submit a Withdrawal for one or both Categories and/or submit a Switch.

The total number of Blocks of a Bid by each Bidder across both Categories, must not exceed the Bidder's eligibility points, which shall be calculated as follows:

* In the second Clock Round of phase I in the Allocation Stage, a Bidder's eligibility points will be equal to the total number of Blocks in both Categories that were part of the Bidder's Bid in the first Clock Round of phase I of the Stage of Allocation.
* In all subsequent Clock Rounds, a Bidder's eligibility points will be equal to their eligibility points in the preceding Clock Round less the number of Blocks for which the Bidder presented a Withdrawal in the preceding Clock Round.

Regardless of the foregoing, in the first Clock Round of phase II the eligibility points will be equal to the maximum number of Blocks allowed, always considering the Spectrum Cap and the Blocks allocated in phase I.

In accordance with the statement above, a Bidder shall have an additional eligibility point when another Bidder exceeds his Bid on a Clock Score, resulting from a Denied Switches, as described in the numeral 3.12.2 of this Appendix B.

The rules for determining eligibility points for each Bidder in the Clock Round immediately following a phase change of the Allocation Stage are described in numeral 3.7 of this Appendix.

### **Withdrawals.**

In all subsequent Clock Rounds (i.e., after the initial round), a Bidder may submit a Withdrawal for a given Category, only if the Clock Score for that Category has increased from the preceding Clock Round.

SEPRO will accept the Bidder’s Withdrawal from a given Category except in the circumstances described in the numeral 3.12.1 of this Appendix.

A Bidder who presents a Withdrawal must establish an Exit Score for the Blocks to be withdrawn; The Exit Score is the Bid of the Bidder and the one that, if appropriate, the SEPRO accepts for the number of Blocks that will be removed. Then the Exit Score should be:

* The same for all Blocks to be withdrawn within a given Category;
* Expressed in points, with respect to its equivalent in Mexican pesos;
* Greater than or equal to the Clock Score in the previous Clock Round for the corresponding Category; and
* Less than the Clock Score of the same Category in the Clock Round in which the request to withdraw the relevant Blocks is being made.

Under no circumstances will the Economic Component of the Exit Score be less than the Minimum Reference Value. If this is the case, the Exit Score will be the same as it was originally offered and expressed in points by the Bidder, irrespective of whether it is a New Competitor in Capacity Bands.

The Bidder submitting a Block Withdrawal from both Categories is authorized to specify a different Exit Score for each Category.

If a Bidder presents a Withdrawal by a Block, his/her eligibility points are reduced by one on the subsequent Clock Rounds, regardless of whether the Block is retained when a Denied Withdrawal is filed, in accordance with the numeral 3.12.1 of this Appendix.

Therefore, the Bidder who presents a Withdrawal loses a point of eligibility to file a Bid for a Block in subsequent Clock Rounds, unless their eligibility points are increased in later Clock Rounds in terms of this Appendix.

### **Switches.**

In the second Clock Round of phase I of the Allocation Stage, and in all subsequent Clock Rounds, a Bidder may present a Switch only if the Clock Score has increased with respect to the previous Clock Round for the Category that will be abandoned.

The Bidder is authorized to present at least one Switch for a Block of a Category, and to increase in the same amount the number of Blocks for the other Category, although the Clock Score of this last Category has not increased with respect to the previous Clock Round.

The SEPRO shall accept the Switch except in the circumstances described in the numeral 3.12.2 of this Appendix.

Bidders can submit one or more Withdrawals and Switches in the same Clock Round.

## **Allocating each Category.**

In each Clock Round SEPRO will analyze and, if appropriate, supplement the demand for each Category in the following order:

* First, it will quantify the Bids according to the Clock Score of the corresponding Clock Round to determine if there is insufficient demand for each Category;
* Second, if the total number of Blocks for which Bids were submitted according to the Clock Score in a Category is less than the total number of Blocks in that Category, the SEPRO may reject one or more Withdrawals and will use the Blocks corresponding to the Denied Withdrawals to complement the respective demand, and;
* Third, once the above is done, if the total number of Blocks in a Category is still insufficient to complement the demand in that Category, the SEPRO may reject one or more Switches and will use the Blocks corresponding to the Denied Switches to supplement the corresponding demand.

It is important to mention that the Blocks offered at the end of phase I will be allocated, so that in phase II only the Blocks that were not allocated in phase I will be offered.

### **Denied Withdrawals.**

To determine a Denied Withdrawal the SEPRO will start in the Block with the highest Exit Score. This Block will be retained to the Exit Score set by the corresponding Bidder.

In this regard, it is important to mention that any Bidder who has a Denied Withdrawal will lose the eligibility point corresponding to the retained Block.

If one or more Bidders have set the same Exit Score and the SEPRO must retain some, but not all of the withdrawn Blocks of such Bidders, it will randomly determine which Withdrawal is denied.

Denied Withdrawals will be released in a subsequent Clock Round if:

* The demand for Blocks is increased in the same Category as in the Clock Score; and
* The increase in demand covers the Blocks corresponding to the Denied Withdrawals for the Category at issue.

Denied Withdrawals will be released starting with the Blocks with the lowest Exit Score. It is important to note that under no circumstances will the Economic Component of the Exit Score be less than the Minimum Reference Value. If this is the case, the Exit Score will be the same as it was originally offered and expressed in points by the Bidder, irrespective of whether it is a NCBC.

If Denied Withdrawals correspond to more than one Bidder at the same Exit Score and only a few of those Blocks can be released, SEPRO will randomly determine for each Block at a time the Denied Withdrawal to be released. In this case, SEPRO will release the Withdrawals of the same Bidder before releasing those of a different one.

### **Denied Switches.**

The SEPRO will reject the Switches as necessary to supplement the demand for each Category after having valued the Withdrawals for that Category, if any. Blocks related to Denied Switches will be retained at the Clock Score of the preceding Clock Round.

If one or more Bidders have made Switches and some of the Blocks corresponding to the Switches must be kept, but not all of them, SEPRO will randomly determine which Switch shall be accepted. In that case, SEPRO will accept the Switches of the same Bidder before accepting those of a different one.

A Denied Switch may be released in a subsequent Clock Round if:

* The demand for Blocks is increased in the same Category as in the Clock Score; and
* The increase in demand covers the Blocks corresponding to the Denied Switch for the Category at issue.

If the Denied Switch is released, the corresponding Bidder will receive an additional eligibility point in the next Clock Round. This additional eligibility point shall be used by the Bidder in its Bid in the Clock Round in which it is available at any Category. Otherwise, the additional eligibility point will be forfeited.

It is important to note that under no circumstances will the Economic Component of the Clock Score of a denied or released Switch be less than the Minimum Reference Value. If this is the case, the aforementioned Clock Score shall be determined by the corresponding Clock Round in accordance with the provisions of this paragraph and of the numeral 3.11.2 of this Appendix, regardless of whether it is a NCBC.

If the Bidder with a Denied Switch presents a Bid for a Block in the same Category with a Clock Score higher than the one set on the Denied Switch, it will be understood that the Bidder submitted a Bid for all the Blocks (which comprises its new Bid and every Denied Switch) at the last Clock Score.

With this in mind, the Block of the Denied Switch as referred to in the preceding paragraph will be considered a Block with a Bid at the last Clock Score.

On the other hand, if there are Denied Switches of more than one Bidder and not all of them have been improved in score, SEPRO will determine randomly which Denied Switch is released, for each Block at the same time.

## **Default Bids.**

The Bidder with one or more eligibility points must submit a Bid in each Clock Round, even if the Bid remains unchanged with respect to the previous Clock Round, and even if the Clock Score has not increased with respect to the previous Clock Round.

If the Bidder with one or more eligibility points does not present a Bid during a Clock Round and has remaining Extension Rights, SEPRO will automatically activate an extension period and thus reduce the Extension Rights of that Bidder.

If the Bidder has exhausted his Extension Rights or does not submit a Bid for an extension period he shall be assigned a Default Bid in accordance with the following rules:

1. In the Clock Round in which the Bidder is enabled to present a Bid for the first time within the Allocation Stage, the Default Bid will be zero (0) Blocks for both Categories. In accordance with the numeral 3.10 of this Appendix, the Bidder with a Default Bid in the Clock Round in which he is entitled to present a Bid for the first time within the Allocation Stage shall be disqualified.
2. In all subsequent Clock Rounds:
* If the Bidder had one or more additional eligibility points, the corresponding additional eligibility points will be forfeited;
* If from the second Clock Round the Bidder does not present a Bid and does not have any Denied Withdrawal, or any Denied Switch, the default Bid shall be zero (0) Blocks[[2]](#footnote-3);
* If in the previous Clock Round the Bidder submitted a Bid for one or more Blocks at the Clock Score and it increases from the previous Clock Round to the current Clock Round, it will be understood that the Bidder submitted the corresponding Block(s) Withdrawal(s). The Withdrawal score in a Default Bid will be equal to the Clock Score of the previous Clock Round. In the event that these Blocks are subject of a Denied Withdrawal, the corresponding Blocks may be released only after the procedure described in the numeral 3.12.1 of this Appendix B is applied, for all Withdrawals not corresponding to Default Bids.

In the event of Denied Withdrawals by more than one Bidder derived from Default Bids, SEPRO will randomly determine the Denied Withdrawals to be released for each Block at a time.

* If in the previous Clock Round the Bidder submitted a Bid for one or more Blocks at the Clock Score of the previous Clock Round; Or had Denied Withdrawals or Denied Switches, and the Clock Score did not increase from the previous Clock Round to the current, then:
* If there is excess demand for a Category in the current Clock Round, such that the Clock Score will increase in the next Clock Round, the following will apply:
	+ - All Blocks included in a previous Bid at the current Clock Score will be considered in the Default Bid for that score;
		- All Denied Withdrawals will be released; and
		- All Denied Switches will be released and the Bidder will be given an additional eligibility point for each Denied Switch released.
* If there is no excess demand for a Category in the current Clock Round, such that the Clock Score will not increase in the subsequent Clock Round, the following applies:
	+ - All the Blocks that the Bidder had previously Bid at the current Clock Score will be considered in the Default Bid with that score;
		- If the demand increases in a Category at the current Clock Score, the Denied Switches derived from a Default Bid will be released first (before the Denied Switches of Bidders that does not correspond to a Default Bid). If there is more than one Bidder with a Default Bid and not all of the Blocks associated with the Denied Switches from such Bidders can be out, the SEPRO will randomly determine for each Block at time, the Denied Switches of the Default Bids that will be released. In that case, the SEPRO will release the Switches of the same Bidder before releasing those of a different one;
		- If the demand increases in a Category at the Clock Score of the current Clock Round, and if all the Blocks associated with Denied Switches resulting from both Switches and Default Bids are outbid, then any denied Withdrawals derived of Default Bids will be released first.

If there is more than one Bidder with denied Withdrawals derived of Default Bids and only some Blocks can be released, then the SEPRO will randomly determine, for each Block at a time, the Denied Withdrawals that will be released.

## **Available information during Reporting Periods.**

In the Reporting Period each Bidder will be provided with the following information:

* Excess demand for Blocks in each Category at the Clock Scores and their applicable Economic Components;
* The last Bid or Default Bid, including a breakdown of Blocks, Clock Scores and Economic Components by Category;
* Information of any Denied Withdrawal or Denied Switch;
* The maximum number of Block that the Bidder can submit a Bid in the next Clock Round (eligibility points);
* The number of Extension Rights available;
* The starting and ending time of the next Clock Round; and
* The Clock Score of the next Clock Round for each Category.

There will be no information on the Bids submitted individually by other Bidders during the Reporting Period.

The SEPRO has a function for viewing and downloading information on Clock Scores, over-demand by Category, and the Bids of the Bidders in previous Clock Rounds.

## **Bidders that have allocated Blocks at the Allocation Stage**.

The Blocks offered at the end of phase I will be allocated, so in phase II only the Blocks not allocated in phase I will be offered.

When the Bidding Process concludes, the number of Blocks allocated to each Bidder is defined, in accordance with the following:

* If in the final Clock Round the number of Blocks for which Bids were presented at the Clock Score of the final Clock Round is equal to the total number of Blocks for each Category, the Blocks to be allocated will correspond to those Bidders who presented Bids at the Clock Score of the final Clock Round;
* If in the final Clock Round the number of Blocks by which Bids were presented at the Clock Score of the final Clock Round is less than the total number of Blocks for each Category, then:
1. If there are Denied Withdrawals, but no Denied Switches, the Bidders to whom the Blocks will be allocated will be those who presented Bids at the Clock Score of the final Clock Round and those who had Denied Withdrawals.
2. If there are Blocks resulting from Denied Switches, the Bidders to whom the Blocks will be allocated will be those who presented Bids at the Clock Score of the final Clock Round, those who had Denied Withdrawals (if any) and those who had Denied Switches.

The number of Blocks to be allocated to each Bidder in a Category shall be the one resulting from the sum of:

* The number of Blocks for which the Bidder presented a Bid at the Clock Score of the final Clock Round;
* The number of Blocks corresponding to Denied Withdrawals, if appropriate, in the final Clock Round (in terms of rules i and ii above); and
* The number of Blocks corresponding to the Denied Switches, if any, in the final Clock Round (in terms of rule ii above).

Bidders submitting Bids in the Bidding Process are subject to the condition that their Bids may be denied or partially released in accordance with the methodology described in the numerals 3.12.1 and 3.12.2 above.

## **Prices in the Allocation Stage.**

Bidders with allocated Blocks of a given Category pay the Allocation Price for that Category, calculated in accordance with the following rules:

* If the total number of Blocks in a given Category by which Bids were presented at the Clock Score of the final Clock Round is equal to the total number of Blocks in that Category, then the Allocation Price for that Category is the Economic Component of the Clock Score of the final Clock Round; Or
* If the total number of Blocks in a given Category by which Bids were presented at the Clock Score of the final Clock Round is less to the total number of Blocks in that Category, then:
	+ If there are Denied Withdrawals in that Category, but no Denied Switches, then the Allocation Price for that Category is the Economic Component of the Exit Score of the last Denied Withdrawal, that is, the Economic Component of the lower Withdrawal associated with a Block that had been retained.
	+ If there are Denied Switches in that Category, then the Allocation Price is the last Economic Component considered in a Bid for the Blocks object of the Denied Switch, that is, the Economic Component of the Clock Round score precedent to that in which the Denied Switch occurred.

In this sense, when there is a Winning Bidder the Economic Component of the Clock Score under no circumstances may be inferior to the Minimum Reference Value, even considering that the Bidder may be a NCBC.

Once the Institute has determined the Bids to be allocated and the Allocation Prices, each Bidder will be informed of its outcome, including:

* The number of Blocks of each Category that are allocated to them, if any; and
* The Allocation Price that is applicable to the Blocks that are allocated to them.

No information will be provided on the outcome of the Allocation Stage for other Bidders until the Assignment Stage is completed.

# **Assignment Stage.**

The objective of the Assignment Stage is to determine the specific frequencies to be assigned to the allocated Blocks to the Bidders in the Allocation Stage.

The following criteria shall be followed in the assignment of the specific frequencies:

1. To ensure the contiguous allocation of spectrum for the Blocks allocated to a Bidder in the Allocation Stage in each Category; and
2. Subject to this restriction, allow Bidders to express their relative preferences for specific frequencies.

If there is only one Bidder with Blocks allocated in a given Category, and there are no unallocated Blocks, then it will not be required to carry out a Sealed Bid Round in the Assignment Stage for that Category, in that case the Assignment Price will be equal to (0) zero.

If there is more than one Bidder with Blocks allocated in a Category or if there are unallocated Blocks for that Category, then is required to conduct a Sealed Bid Round at the Assignment Stage.

In the Sealed Bid Round, each Bidder with Blocks allocated at the Allocation Stage must submit a *“Sealed Bid"* through the SEPRO to determine the preferred position of their Blocks. This Bid will be expressed in Mexican pesos.

To this effect, for each Category, Bidders with allocated Blocks will be provided with a list of selected Bid options in the following manner:

* The number of Blocks in each option presented to a Bidder shall be equal to the number of Blocks allocated to that Bidder;
* Each Bid option will be consistent with those of other Bidders with allocated Blocks receiving Bid options;
* Unallocated Blocks of the same Category will be positioned in a contiguous manner; and
* If a Bidder with Blocks allocated in the Allocation Stage in the FDD Category had Radio Spectrum in the 2500 MHz Band before the start of the Bidding, the corresponding allocated Blocks will be assigned in the lowest segment of this tendered band.

All Bids at the Assignment Stage will be presented simultaneously but will be assessed separately for each Category.

## **Block assignation in the Assignment Stage.**

For each Category subject to a Sealed Bid Round, the winning Bids shall be those with the highest total monetary value, subject to the following conditions:

* Only one Bid for each Bidder may be a winning Bid;
* Each Bidder shall be assigned the number of Blocks equal to the number of Blocks allocated at the Allocation Stage;
* Each Bidder will receive Blocks at contiguous frequencies in each Category;
* The Block assignments of the winning Bids of the Bidders will not overlap; and
* Unallocated Blocks in the same Category will be positioned at contiguous frequencies.

If there is more than one combination of Bids that meet the above conditions, the SEPRO will randomly select the combination of the winning Bids.

## **Assignment Price determination.**

For each Category in which a Sealed Bid is required during the Assignment Stage an Assignment Price will be calculated.

The Assignment Price is calculated by applying the following conditions:

* First condition: Prices must not be negative (they must be greater than or equal to zero).
* Second condition: The sum of the prices of the winning Bids combined must be sufficiently high in such a way that there is no other Bid from a Bidder or a set of Bids from a group of Bidders which surpass the amount of any Bidder with a winning Bid or a group of Bidders with winning Bids.
* Third condition: If there are multiple combinations of Bids that meet with the first and second conditions, the combination that helps to minimize the sum of the prices between the winning Bids will be utilized.
* Fourth condition: If there are multiple combinations of Bids that meet the first three conditions, the combination that helps to minimize the sum of the squares of the differences between the price for each Bidder and the cost of individual opportunity for that Bidder will be used. The opportunity cost for a Bidder is the amount of that Bidder's winning Bid minus the difference between the total amount of the winning Bid combination and the amount of the combined Bids, which would be a winning combination if the respective Bidder would have submitted a Bid equal to zero pesos.

## **End of Assignment Stage.**

Once the specific frequencies and the corresponding Assignment Prices have been determined, the SEPRO will provide all Bidders with the following information:

* The identity of Bidders who obtained one or more Blocks;
* The specific frequency ranges assigned to the Blocks obtained by each Bidder; and
* The sum of the Allocation Price plus the Assignment Price of each Bidder, when appropriate, shall be the amount to be set as Upfront Fee once it is determined as a Winning Bidder.
1. Denomination of companies as they are commonly known in the telecommunications market; It includes all the companies that conform each of its corresponding Economic Interest Groups. [↑](#footnote-ref-2)
2. A Bidder should not be disqualified if it reduces demand to zero in the second Clock Round during phase I of the Allocation Stage or in subsequent Clock Rounds. [↑](#footnote-ref-3)