



**Rules of Procedure (§ 49a par. 7 TKG)  
Auction Procedure for Frequency Allocations  
for Wireless Local Loop (WLL) Systems in the 26  
GHz Frequency Range**

**Non binding translation**

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# **1 General Information**

## **1.1 Introduction**

In the course of the invitation to tender published on September 15, 2000, 5 frequency packages in each of 6 regions will be auctioned off (cf. Section 2.1).

## **1.2 Eligibility to Participate**

Those applicants who were not excluded from the frequency allocation procedure under § 49a Par. 6 of the Austrian Telecommunications Act (TKG) or due to the regulation concerning affiliated companies shall be admitted to the auction.

## **1.3 Auctioneer**

The auctioneer will be Telekom-Control GmbH, represented by its chief executive officer or an employee authorized by the chief executive officer.

## **1.4 Collusive Behavior**

Any and all forms of cooperation among the applicants or their stakeholders, be it direct or indirect, with the intention of influencing the events or results of the auction (collusive behavior) are prohibited. Any and all applicants who engage in collusive behavior during the auction procedure will be excluded from the remaining procedure. The auctioneer shall have the right to take all appropriate measures to prevent collusive behavior.

## **1.5 Discontinuation of the Procedure**

The auctioneer shall have the right to terminate the auction procedure if applicants engage in collusive behavior or if other significant reasons are found to endanger the proper performance of the auction. In such cases, the auctioneer will decide whether the procedure is to be terminated or whether a new auction date is to be set.

## 2 Auction Rules

### 2.1 Objects of the Auction

2.1.1 6 regions with 5 frequency packages each will be allocated in the auction (cf. Section 2.2 of the Tender Documentation). These frequency packages will be labeled as follows for the purposes of the auction procedure:

Region	Frequency Package				
	A 2x56 MHz	B 2x56 MHz	C 2x84 MHz	D 2x84 MHz	E 2x112 MHz
1	1A	1B	1C	1D	1E
2	2A	2B	2C	2D	2E
3	3A	3B	3C	3D	3E
4	4A	4B	4C	4D	4E
5	5A	5B	5C	5D	5E
6	6A	6B	6C	6D	6E

2.1.2 Each of the frequency packages has been given a rating according to sociodemographic and technical criteria (see Section 2.2.2 of the Tender Documentation). This rating will be referred to as the lot rating in the course of the procedure; the ratings of each package are given in the table below.

Region	Frequency Package	Name	Size	Lot Rating
1	A	1A	2 x 56 MHz	200
	B	1B	2 x 56 MHz	200
	C	1C	2 x 84 MHz	250
	D	1D	2 x 84 MHz	250
	E	1E	2 x 112 MHz	300
2	A	2A	2 x 56 MHz	110
	B	2B	2 x 56 MHz	110
	C	2C	2 x 84 MHz	140
	D	2D	2 x 84 MHz	140
	E	2E	2 x 112 MHz	165
3	A	3A	2 x 56 MHz	40
	B	3B	2 x 56 MHz	40
	C	3C	2 x 84 MHz	50
	D	3D	2 x 84 MHz	50
	E	3E	2 x 112 MHz	60
4	A	4A	2 x 56 MHz	20
	B	4B	2 x 56 MHz	20
	C	4C	2 x 84 MHz	25
	D	4D	2 x 84 MHz	25
	E	4E	2 x 112 MHz	30
5	A	5A	2 x 56 MHz	40
	B	5B	2 x 56 MHz	40
	C	5C	2 x 84 MHz	50
	D	5D	2 x 84 MHz	50
	E	5E	2 x 112 MHz	60
6	A	6A	2 x 56 MHz	70
	B	6B	2 x 56 MHz	70
	C	6C	2 x 84 MHz	90
	D	6D	2 x 84 MHz	90
	E	6E	2 x 112 MHz	105

2.1.3 The minimum bids (opening bids) listed in the table below will be required in the first round of the auction procedure.

<b>Region</b>	<b>Frequency Package</b>	<b>Name</b>	<b>Size</b>	<b>Opening bid in ATS</b>
1	A	1A	2 x 56 MHz	3,000,000.-
	B	1B	2 x 56 MHz	3,000,000.-
	C	1C	2 x 84 MHz	4,500,000.-
	D	1D	2 x 84 MHz	4,500,000.-
	E	1E	2 x 112 MHz	6,000,000.-
2	A	2A	2 x 56 MHz	1,650,000.-
	B	2B	2 x 56 MHz	1,650,000.-
	C	2C	2 x 84 MHz	2,475,000.-
	D	2D	2 x 84 MHz	2,475,000.-
	E	2E	2 x 112 MHz	3,300,000.-
3	A	3A	2 x 56 MHz	600,000.-
	B	3B	2 x 56 MHz	600,000.-
	C	3C	2 x 84 MHz	900,000.-
	D	3D	2 x 84 MHz	900,000.-
	E	3E	2 x 112 MHz	1,200,000.-
4	A	4A	2 x 56 MHz	300,000.-
	B	4B	2 x 56 MHz	300,000.-
	C	4C	2 x 84 MHz	450,000.-
	D	4D	2 x 84 MHz	450,000.-
	E	4E	2 x 112 MHz	600,000.-
5	A	5A	2 x 56 MHz	600,000.-
	B	5B	2 x 56 MHz	600,000.-
	C	5C	2 x 84 MHz	900,000.-
	D	5D	2 x 84 MHz	900,000.-
	E	5E	2 x 112 MHz	1,200,000.-
6	A	6A	2 x 56 MHz	1,050,000.-
	B	6B	2 x 56 MHz	1,050,000.-
	C	6C	2 x 84 MHz	1,575,000.-
	D	6D	2 x 84 MHz	1,575,000.-
	E	6E	2 x 112 MHz	2,100,000.-

## **2.2 Bids and Bidding**

- 2.2.1 Each bid shall be submitted for a specific frequency package and considered a binding offer on the part of the bidder to pay the price indicated in the bid.
- 2.2.2 Bids will be submitted electronically using a software program (cf. Description of the auction software). The submission of bids by telephone will only be permitted in exceptional cases (e.g., technical difficulties). The auctioneer shall be responsible for deciding whether such an exceptional case is warranted.
- 2.2.3 The bid amount can not be chosen freely; instead, the auction software displays a list of valid offers from which the bid amount can be chosen (cf. Rule 2.7).

## **2.3 Bidding Eligibility**

- 2.3.1 The bidding eligibility determines the maximum number of frequency packages on which a bidder can be active in one round. Rule 2.3.2 notwithstanding, bidders will be allowed to be active on any combination of frequency packages as long as the total of the packages' lot ratings does not exceed their current bidding eligibility. Bidding eligibility will be expressed as numbers with three decimal places.
- 2.3.2 Bidders will only be permitted to exercise their bidding eligibility in the regions which they selected in their applications and in which they were not excluded from the auction procedure due to the regulation concerning affiliated companies. A bidder can only be active on one frequency package per region in each round.
- 2.3.3 Each bidder's bidding eligibility for the first round of the auction procedure will be determined by the information in that bidder's application (cf. Section 2.3 of the Tender Documentation). In the ensuing rounds, each bidder's current bidding eligibility will be determined by the Rules of Activity.

## **2.4 Rules of Activity**

- 2.4.1 The activity of a bidder in a given round will be equal to the total lot ratings of all frequency packages for which the bidder is active. Bidders who are not active on any frequency packages and do not exercise a waiver will be disqualified from the auction procedure and not allowed to place any further bids. Those who are active on at least one frequency package or exercise a waiver are referred to as active bidders in this document.
- 2.4.2 A bidder shall be considered to be active on a frequency package in a given round if s/he either
  - holds the standing high bid for the frequency package at the beginning of the round, or
  - submits a valid bid for the frequency package in the given round.

The corresponding bids will be referred to as active bids in this procedure.



2.4.3 The auction will be carried out in three consecutive stages with varying minimum levels of activity.<sup>1</sup> Bidders will retain their entire bidding eligibility if they are active on:

- at least 60% of their current bidding eligibility in Stage I,
- at least 80% of their current bidding eligibility in Stage II,
- and at least 97% of their current bidding eligibility in Stage III.

Minimum activity levels will be expressed as an absolute value (in activity points) and rounded up to the next integer. The decision to move on to the next stage will be made by the auctioneer.

2.4.4 If a bidder does not attain the minimum activity level described in Section 2.4.3 and does not apply for a waiver, his/her bidding eligibility will be recalculated as follows:<sup>2</sup>

- in Stage I, the bidder's activity points will be multiplied by 100/60,
- in Stage II, the bidder's activity points will be multiplied by 100/80,
- and in Stage III, the bidder's activity points will be multiplied by 100/97.

Bidding eligibility will be rounded off to three decimal places. If a bidder that does not attain the minimum activity level applies for a waiver (assuming the bidder can still do so), his/her bidding eligibility will remain unchanged.

## 2.5 Waivers

2.5.1 Bidders who do not attain the minimum activity level and would therefore lose part of their bidding eligibility can apply for a waiver if they still have such waivers at their disposal. In such cases, the bidder's bidding eligibility from the beginning of the round will remain unchanged. Waivers can either be requested by the bidder (proactive waiver) or applied automatically by the auction software (automatic waiver). Only one waiver can be used by each bidder in each round.

2.5.2 Each bidder will be allotted five waivers at the beginning of the auction procedure. Each waiver used by a bidder will reduce his/her number of waivers.

2.5.3 A proactive waiver is used when a bidder who still has unused waivers uses a waiver(cf. Description of the auction software).

2.5.4 Bidders who do not attain the minimum activity level can opt not to use a waiver. In this case, the bidding eligibility will be reduced as outlined in Rule 2.4.4 (cf. Description of the auction software).

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<sup>1</sup> The percentages used to determine minimum activity levels may still be changed; these will be finalized in the Rules of Procedure.

<sup>2</sup> This factor will depend on the minimum level of activity determined in each stage (cf. Footnote 1).

- 2.5.5 An automatic waiver is used when a bidder who still has unused waivers and does not attain the minimum activity level does not explicitly opt out of using a waiver (cf. Rule 2.5.4). In such cases, the auction software will apply the waiver automatically (cf. Description of the auction software).

## **2.6 Standing High Bids**

- 2.6.1 The standing high bid for each frequency package will be determined at the end of each round. The highest bid received shall be the standing high bid for the given frequency package. If no valid bids are received in a given round, the high bid from the previous round will remain the standing high bid.
- 2.6.2 If two or more high bids of the same amount are submitted in the same round, then the bid that was submitted earlier will be considered the standing high bid.
- 2.6.3 The obligations arising from a bid shall be considered void as soon as a new standing high bid has been placed for the respective frequency package.

## **2.7 Valid Bids**

- 2.7.1 The bid amount can not be chosen freely; instead, the auction software displays a list of valid offers from which the bid amount can be chosen. This list will contain the following bid amounts:
- the minimum bid
  - the minimum bid plus 1 bidding unit (ATS 1,000)
  - the minimum bid plus 5 bidding units (ATS 5,000)
  - the minimum bid plus 10 bidding units (ATS 10,000)
  - the minimum bid plus 20 bidding units (ATS 20,000)
  - the minimum bid plus 50 bidding units (ATS 50,000)
  - the minimum bid plus 100 bidding units (ATS 100,000)
  - and the minimum bid plus 200 bidding units (ATS 200,000).

If the auctioneer announces three final open rounds as described in Rule 2.10.3, bidding amounts can be chosen freely in these rounds, as long as Rules 2.7.2 to 2.7.4 are observed.

- 2.7.2 Bids shall only be considered valid when they exceed the standing high bid from the previous round by at least the minimum bid increment. If no bid has been submitted for a specific frequency package yet, then the opening bid defined in Rule 2.1.3 will be considered a valid bid. The lowest valid bid for a certain frequency package will be considered the minimum bid for that package.

2.7.3 A bid will only be considered valid if it is a whole multiple of ATS 1,000.

2.7.4 A bid will likewise only be considered valid if it is submitted within the time period defined by the auctioneer for the given round. Exceptions will be made in the case of bidding by telephone.

## **2.8 Minimum Bidding Increment**

2.8.1 The minimum bidding increment will be between 2% and 10% of the standing high bid, rounded off to a multiple of ATS 1,000. The minimum bidding increment will be set by the auctioneer at the beginning of each round and conveyed to the active bidders as an absolute amount.

2.8.2 It is planned that the minimum bid increment will be set using the following scheme:

- In Phase 1 of the auction: 10%
- In Phase 2 of the auction: 5%
- In Phase 3 of the auction: 2%

## **2.9 Information Disseminated to the Bidders**

2.9.1 After the close of each round, the auctioneer will disseminate the following information concerning that round to the active bidders:

- The standing high bid and the identity of the high bidder for each frequency package
- The active bids placed by active bidders

2.9.2 At the beginning of each round, the auctioneer will communicate the following information to each active bidder:

- the current round
- the current stage
- the time period allotted for the round
- the standing high bids and high bidders for each frequency package
- the active bids placed by active bidders in the previous round
- the minimum bid and the minimum increment (as an absolute amount) for each frequency package
- a list of valid bids from which the bidders can choose a bid amount
- the bidders who have been eliminated or disqualified

- the bidder's number of unused waivers
- the bidder's current bidding eligibility and his/her minimum level of activity for that round.

## **2.10 End of the Auction Procedure**

- 2.10.1 The auction procedure will come to an end when no valid bid is submitted for any frequency package and no bidder uses a proactive waiver in any one round of the final stage of the auction (Stage III).
  - 2.10.2 If no valid bids are submitted and no proactive waiver are used in an earlier stage of the auction, the auctioneer shall be obliged to continue the procedure by moving on to the next stage or to end the procedure immediately.
  - 2.10.3 From the 50th round onward, the auctioneer furthermore reserves the right to announce that the auction will end after three open rounds (cf 2.7.1). In such a case, the auction procedure will come to an end after the third open round.
- 1.1. The frequency packages will then be allocated to the high bidders in accordance with their respective standing high bids.

### 3 TKC Auction Software

#### 3.1 Basics

3.1.1 Bids will be submitted electronically using an auction software program. The submission of bids by telephone will only be permitted in exceptional cases (e.g., technical difficulties). It is the duty of the auctioneer to decide whether such an exceptional case is warranted and the current round is to be stopped and repeated, or whether the bidder experiencing technical difficulties will be allowed to submit bids by telephone.

#### 3.2 Procedure for Auction Rounds

3.2.1 From the bidders' point of view, each round will be divided into three phases:

- Bid submission phase
- Break
- Display of results or termination of the round.

3.2.2 Bids can only be placed during the bid submission phase. This phase will begin when the bidding window is displayed at the start of each round. The bidding window will remain active until either the round time has passed or the bidder has performed one of the following actions:

Action	Description
Send bids	The bids entered are transmitted to the auction server and are considered binding.
Suspend	The bidder uses one of his/her waiver (proactively). A message is sent to the auction server to announce that the bidder would like to use a waiver. Any bids entered will not be sent to the server.

3.2.3 Once one of these actions has been performed, the "Break" window will appear. This window will remain active until the auctioneer has closed or terminated the round.

3.2.4 If the auctioneer closes the round, the bids will be processed and the results of the round will be displayed to the bidders. If the auctioneer decides to terminate the round, the "Round terminated" window will appear. In this case, all bids entered will be invalidated and the round will be repeated.

### **3.3 Submission of Bids**

3.3.1 The bids themselves will be submitted in two steps:

- In the first step, the bidders enter their bids for the desired frequency packages,
- after which they send them to the server (second step).

3.3.2 If a bidder wants only to confirm standing high bids from the previous round,<sup>3</sup> then s/he can skip the first step and go straight to the second.

3.3.3 Bids can be entered one by one by selecting the desired frequency package and entering the bid amount for that package. The bid amount can not be chosen freely; instead, the auction software displays a list of valid offers from which the bid amount can be chosen. When the bidder performs the action "Send bids", all bids entered are sent to the auction server simultaneously and are considered binding on the bidder. It is not possible to send bids one by one during a round, nor is it possible to correct or withdraw bids after sending them.

### **3.4 Time Period Allotted per Round**

3.4.1 The time period allotted per round will be between 40 and 120 minutes, which will be determined by the auctioneer and conveyed to the bidders at the beginning of each round. The time remaining in each round will be displayed on the bidding screen (stopwatch). Bidders that have not submitted their bids 20 minutes before the end of each round will receive a warning to this effect.

3.4.2 A round is considered to come to an end when all active bidders have sent their bids or when the time period allotted for the round is over. With the exception of bids submitted by telephone, only those bids which are sent before the end of the allotted round time will be considered valid.

3.4.3 A round is considered closed once the results of the round have been evaluated.

### **3.5 Waivers**

3.5.1 Bidders who do not attain the minimum activity level and would therefore lose part of their bidding eligibility can apply for a waiver if they still have such waivers at their disposal. In such cases, the bidder's bidding eligibility from the beginning of the round will remain unchanged. A waiver can either be applied automatically by the auction software

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<sup>3</sup> This applies, for example, to bidders whose standing high bids from the previous round fulfill the minimum activity requirements for the current round. Such bidders do not necessarily have to submit bids in the current round in order to retain their full bidding eligibility.

(automatic waiver) or requested by the bidder (proactive waiver), as described in the table below.

APPLICATION OF WAIVERS	TYPE OF WAIVER	Effects on the Termination Rule
Bidder does not send bids or the bids are not received by the server, thus causing the bidder to fall short of the minimum activity level.	Automatic waiver	No
The bidder clicks the “Suspend” button. A message is sent to the auction server to announce that the bidder would like to use a waiver. Any bids entered will not be sent to the server.	Proactive waiver	Yes
The bidder clicks the “Send bids” button and falls short of the minimum activity level. The software displays the corresponding warning message. The bidder has the choice of either using a waiver or opting not to use a waiver. In all cases, the bids entered are transmitted to the auction server and are considered binding.	Proactive waiver	Yes

3.5.2 An automatic waiver is used when a bidder who still has a waiver at his/her disposal does not send bids in a given round, or when the bids sent are not received by the auction server, and the bidder would lose part of his/her bidding eligibility. In such cases, the auction server will automatically use one of the bidder’s waivers.

3.5.3 A proactive waiver can be used in two different ways: The bidder can either click the “Suspend” button instead of the “Send bids” button, in which case a message indicating that the bidder would like to use a waiver is sent to the auction server. Any bids entered will not be sent to the server.

In the second case, the auction server checks whether the bidder has fallen short of the minimum activity level when bids are sent to the server. If this is the case, a warning is displayed and the software gives the bidder the choice of:

- using a proactive waiver or
- opting not to use a waiver. In this case, the bidder’s bidding eligibility will be reduced in accordance with the Rules of Activity.

In all cases, the bids entered are transmitted to the auction server and are considered binding.

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<sup>4</sup> This assumes that the respective bidders still have waivers at their disposal.

### **3.6 Termination of a Round and Interruption of the Auction**

- 3.6.1 The auctioneer can interrupt the auction at any time and continue it at a later point. If the auction is interrupted before the end of a round (e.g., due to technical difficulties), the current round will be terminated and repeated at a later point in time. The bids placed in that round will then be considered void and remain unannounced (even to the auctioneer). Interruptions will be displayed to the bidders on the bidding screen. In addition, the reason for and duration of the interruption will be conveyed to the bidders by fax or via the Internet.



## **4 Auction Organization**

### **4.1 Schedule**

- 4.1.1 The auction will begin on February 5, 2001 at 10:00 am. All frequency packages in all six regions will be auctioned off simultaneously.
- 4.1.2 Before the auction, the rules of the procedure will be explained to the applicants orally in the course of the bidders' training seminar on February 22.
- 4.1.3 The first round will last 120 minutes. The following rounds on the first day of the auction will last 90 minutes. The precise schedule for each ensuing day of the auction will be announced to the bidders in the evening of the previous auction day.

### **4.2 Auction Performance**

- 4.2.1 The auction will be carried out in a decentralized environment. Bids will be submitted using a PC and an auction software program provided by the auctioneer. An ISDN connection will be used for communication between the bidders and the auctioneer. Information will also be disseminated to the bidders by means of the auction software program. Bidders are responsible for ensuring that only authorized representatives have access to their certificates. Bids submitted in conjunction with a certificate will be considered binding on the applicant.

### **4.3 Authorization**

- 4.3.1 By January 22, 2001, each applicant is to name two representatives who will be authorized to submit legally binding bids in the name of the company during the auction. The authorization to represent the applicant is to be verified by a current excerpt from the Commercial Register, or by submitting documents granting the corresponding power of attorney.
- 4.3.2 These representatives will also act as contact persons for the auctioneer throughout the course of the auction. Applicants are responsible for ensuring that the representatives can be reached by telephone, fax and e-mail during the auction. For this purpose, the direct telephone and fax numbers as well as the e-mail address of each representative are to be indicated next to their names.

### **4.4 Certification**

- 4.4.1 A certificate will be required for participation in the auction. This certificate will be handed over to the representative authorized to receive it in the name of the applicant in the course of the bidders' training seminar on January 22, 2001. The certificate is to be

installed by the bidder. Without this certificate, no bids can be submitted during the auction.

## **4.5 Submission of Bids by Telephone**

4.5.1 The submission of bids by telephone will only be permitted in exceptional cases (e.g., technical difficulties). In such cases, the auctioneer must be informed by telephone immediately. Calls placed after the end of the time period allotted for a given round will not be taken into consideration. The auctioneer will be responsible for deciding whether to interrupt the auction and repeat the round or to allow bids to be placed by telephone.

4.5.2 In cases where bids are submitted by telephone, the following procedure is planned:

Technical difficulties are to be reported to the auctioneer immediately. The telephone number for this purpose will be announced in the course of the bidders' training seminar. Bids submitted by telephone will be recorded by the auctioneer and considered binding on the bidder. In cases where bids are submitted by telephone, user authorization will be based on a code handed over along with the certificate in the course of the bidders' training seminar. If the technical difficulties arise at least 15 minutes before the end of the round, screen shots can be faxed to the affected bidder with the views s/he would have had if the difficulties had not been encountered. If the difficulties occur in the last 15 minutes of the round, screen shots will no longer be sent, because the bidder will have been left sufficient time to print the screen shots her/himself. Telephone bids will be accepted immediately after the time allotted for the round has expired; the bidder will be called back by the auctioneer. The bids will then be entered by the auctioneer. Before sending bids, the bidder will again receive printouts of the bidding submission screens as well as a form for submitting bids in writing. The printouts and the form are to be signed by the bidder's authorized representative and faxed to the auctioneer. It is not until then that the bids are considered sent and binding.

## **4.6 Transmission of Bids**

4.6.1 Any transmission problems arising in the network are the responsibility of the bidder. In cases where no bid has been received from a bidder five minutes before the end of the round, the bidder will be notified of this by telephone.

## **4.7 Technical Requirements of Bidders**

4.7.1 The auction server to which bids will be sent is located at Telekom-Control GmbH, Mariahilferstrasse 77-79, A-1060 Vienna. The bidders' PCs will be connected to the auction server by ISDN. For this purpose, bidders will be required to fulfill the following technical requirements:

- One ISDN base connection
- One ISDN router

4.7.2 The ISDN link can be a conventional ISDN dialup connection or a direct ISDN connection.

4.7.3 Please note that a direct ISDN connection has the advantage of a constant link between the bidder and the auction server, thus eliminating the need to establish a dialup connection.

#### **4.8 System Requirements to be Fulfilled by Bidders:**

- their own ISDN base connection with a point-to-multipoint configuration (used exclusively for the auction)
- One router with one ISDN BRI (S/T) interface and one LAN interface (compatible with Cisco IOS V12.1 and supporting ISDN); for the call-back solution, Cisco 801, Cisco 803 or better with the interfaces named above is necessary.
- A single workstation without a LAN connection, with operating system installed  
Microsoft Windows NT Workstation 4.0 / SP5  
Connection to the router by means of a crossover patch cable  
At least 32 MB RAM  
17" monitor, screen resolution 1024 x 768 Pixel

#### **4.9 Trial Auction**

4.9.1 Bidders will be given the opportunity to take part in a trial auction on January 31, 2001, from 1:00 pm to 5:00 pm. This auction will simulate the same technical circumstances as those of the actual auction. The information necessary for the trial auction will be distributed to the bidders in the course of the bidders' training seminar.

Telekom-Control GmbH  
Vienna, January 12, 2000

Univ. Prof. Dr. Heinrich Otruba  
Chief Executive Officer