

## **D r a f t**

**Decision of the President's Chamber of the Bundesnetzagentur für Elektrizität, Gas, Telekommunikation, Post und Eisenbahnen of [Datum] on the order for and choice of proceedings and on the determinations and rules (award rules) and on the determinations and rules for conduct of the proceedings (auction rules) to award spectrum in the 700 MHz, 900 MHz and 1800 MHz bands and additional spectrum in the 1452 to 1492 MHz band for wireless access for the provision of telecommunications services; decision taken under section 55(4), (5) and (10), section 61(1), (2), (3), (4) and (6) and section 132(1) and (3) of the Telecommunications Act (TKG)**

**- Reference: BK1-11/003 -**

The President's Chamber of the Bundesnetzagentur is inviting responses to its draft decision on the award of spectrum in the 700 MHz, 900 MHz and 1800 MHz bands and in the 1452 to 1492 MHz band (1.5 GHz band) for wireless access for the provision of telecommunications services (mobile broadband).

The following draft decision makes provision for auctioning usage rights for spectrum at 700 MHz, 900 MHz, 1800 MHz and 1.5 GHz on account of the scarcity of spectrum.

In June 2013 the Bundesnetzagentur published a draft document for consultation and a Strategic Aspects study (Strategic Aspects of the Availability of Spectrum for Broadband Rollout in Germany) which proposed that all the spectrum available for broadband be awarded early in one set of proceedings, taking due account of the interests of other user groups. This concerns the spectrum in the 900 MHz and 1800 MHz bands for which assignments expire on 31 December 2016 as well as spectrum in the 700 MHz and 1.5 GHz bands. The inclusion of the 700 MHz spectrum in award proceedings calls for a national consensus between the federal government and the federal states.

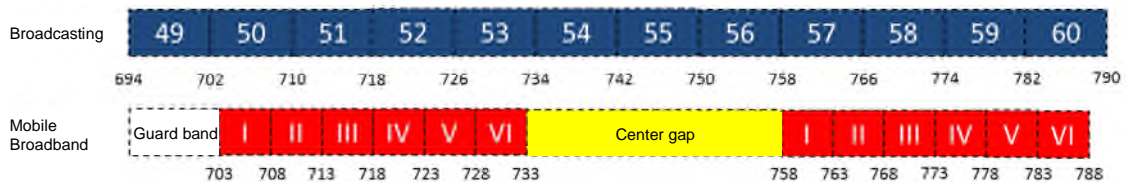
With regard to the provision of the 700 MHz spectrum, the federal government's Digital Agenda 2014 - 2017 makes provision for using spectrum in the 700 MHz band for mobile broadband rollout for the purpose of meeting the broadband strategy's target of nationwide broadband coverage by 2018.

Furthermore, planning and legal certainty is to be provided in open, transparent and non-discriminatory proceedings in good time before the GSM assignments (900 MHz/1800 MHz) expire at the end of 2016.

At the same time, the assessment of the merger between Telefónica and E-Plus in terms of telecommunications law makes it necessary to conduct the present award proceedings as swiftly as possible, in the first half of 2015, as there is a need for short term action on account of the merger to ensure non-discriminatory broadband spectrum holdings for all mobile operators and to prevent a distortion of competition.

With regard to the inclusion of the 700 MHz spectrum, this is conditional in particular on a national consensus being reached between the federal government and the federal states on the use of the 700 MHz spectrum for mobile broadband.

The following figure illustrates the different frequencies in the 700 MHz band which are currently being used for broadcasting (DVB-T), depending on the region, and how the individual frequency blocks can be used in the future for mobile communications:



In 2011 the President's Chamber opened official demand identification proceedings to establish ex officio the demand for spectrum in the 900 MHz and 1800 MHz bands for wireless access as from 1 January 2017.

In view in particular of the change in the market structure as a result of the merger between Telefónica Deutschland Holding AG and E-Plus Mobilfunk GmbH & Co. KG, the President's Chamber gave all interested undertakings the opportunity in August 2014 to notify or update their forecast requirements in the 700 MHz, 900 MHz, 1800 MHz and 1.5 GHz bands. The responses showed that the demand for frequencies exceeds the spectrum available.

### Main elements of the draft decision

The following spectrum is to be made available for award:

Band	Spectrum volume	Lot
700 MHz	2 x 30 MHz (paired)	2 x 5 MHz (paired)
900 MHz	2 x 35 MHz (paired)	2 x 5 MHz (paired)
1800 MHz	2 x 45 MHz (paired)	2 x 5 MHz (paired)
1.5 GHz	1 x 40 MHz (unpaired)	1 x 5 MHz (unpaired)

Since there is a shortage of spectrum, assignment is to be preceded by open, transparent and non-discriminatory award proceedings in the form of an auction. The Chamber is considering an auction design as used for the 2010 auction.

The Chamber is considering setting a spectrum cap of 2 x 15 MHz (paired) at 900 MHz. The aim of safeguarding the existing mobile operators' infrastructure, as proposed in the 2013 draft document for consultation by means of a "frequency reserve", can be achieved with a spectrum cap as a milder means, on account of the change in the market structure. At the same time the interests of potential new entrants are safeguarded.

The minimum bids are to be stipulated on the basis of the Frequency Fee Ordinance. Thus the minimum bids per lot to be awarded for 15 years are as follows:

<b>Band</b>	<b>Lot</b>	<b>Minimum bid</b>
700 MHz/900 MHz	2 x 5 MHz (paired)	€75m
1800 MHz	2 x 5 MHz (paired)	€37.5m
1.5 GHz	1 x 5 MHz (unpaired)	€18.75m

The Bundesnetzagentur, under section 61(4) sentence 2 para 4, determines the frequency usage conditions, including the degree of coverage with the frequency usage and the time required for this, prior to carrying out award proceedings. In this respect the federal states have presented a proposal based on an agreed broadband policy framework, which has been included in the draft.

### **Concepts for other user groups**

The Bundesnetzagentur has developed a concept which takes account of the interests of other user groups and shows how the requirements of these user groups can be satisfied:

#### **Wireless microphones**

With regard to the interests of wireless microphone users, the Chamber points out the following: Firstly, all professional users are now able to use unused spectrum in the UHF band. The Bundesnetzagentur has discontinued the previous subdivision of the 470 to 790 MHz band for wireless microphones into "broadcasting-related applications" (use by broadcasters) (470 to 710 MHz) and "other professional applications" (theatres, schools, concerts, churches, etc) (710 to 790 MHz), thus enabling all professional users to use the remaining spectrum in the core band (470 to 790 MHz) flexibly and on equal terms.

Secondly, European harmonised spectrum is available for this user group, including spectrum in the duplex gaps at 800 MHz and 1800 MHz and in the newly available 1492 to 1518 MHz band.

Hence the following frequencies are available for exclusive or shared use for wireless microphones:

- 32.475 to 38.125 MHz,
- 174 to 230 MHz,
- 470 to 790 MHz,
- 823 to 832 MHz,
- 863 to 865 MHz,
- 1452 to 1518 MHz,
- 1785 to 1805 MHz,
- 2400 to 2483.5 MHz.

In total, more than 440 MHz of spectrum is available for exclusive or shared use for Programme Making and Special Events (PMSE) applications such as wireless microphones. The Bundesnetzagentur will campaign in regard to the existing primary users to achieve additional general assignments.

### **Broadcasting**

The President's Chamber takes due account of the significance of terrestrial television broadcasting as a means of transmission and of the need for sufficient transmission capacity for the switch from DVB-T to DVB-T2.

In the interest both of establishing DVB-T2 early and on a lasting basis and of swiftly improving broadband coverage, in particular in those regions still without coverage, the switch to DVB-T2 and broadband rollout must be realised as soon as possible and in the best possible interests of the consumers.

The Chamber is quite aware that, in the event of the 700 MHz band being cleared, suitable measures need to be taken to facilitate, in both technical and economic terms, the prompt switch to DVB-T2 and prompt clearance of the 700 MHz band by the broadcasting services.

The Bundesnetzagentur is developing a switchover plan, involving national and international frequency coordination, on the basis of a DVB-T2 requirements plan drawn up by the federal states and in close cooperation with the federal states and stakeholders. The Bundesnetzagentur has set up a national planning group ("UHF AG") for this purpose, which comprises representatives from the federal states, broadcasters, PMSE services and other stakeholders. In addition to these planning

activities at national level, the Bundesnetzagentur has already consulted with the European countries concerned within various bodies and forums (WEDDIP, NEDDIF) at international level and has already agreed bilateral memoranda of understanding or letters of intent with nearly all the neighbouring countries.

In respect of the introduction of mobile broadband in the 700 MHz band – with priority for rural areas – it is conceivable that mobile broadband rollout can begin early in certain regions (eg in Schleswig-Holstein, Mecklenburg-Western Pomerania, Brandenburg, Saxony and Bavaria) or even throughout the whole country. The Bundesnetzagentur will therefore support the private and public service broadcasters to enable them to begin switchover work on their transmitters, if possible in April 2015.

### **Public safety agencies and federal armed forces**

The Bundesnetzagentur has already presented and commented on the spectrum requirements of the public safety agencies and the federal armed forces in its strategy paper (cf Strategic Aspects, chapter 4.1.2). The 700 MHz band and the 400 MHz band (380 to 470 MHz) are currently being discussed at international level for these requirements. The Bundesnetzagentur set out in its strategy paper how the requirements of the public safety agencies and the federal armed forces could be met in the 400 MHz band.

The federal government's Digital Agenda states the following:

*"Public protection and disaster relief agencies (PPDR) and the Federal Armed Forces will be guaranteed access to an adequate frequency spectrum. We will also ensure that, in addition to the planned provision of 2x30 MHz to support the expansion of the broadband network, frequencies will be provided for the future broadband communication of the security agencies and the Federal Armed Forces in the 700 MHz range."*

### **Timetable**

It is planned to commence the award proceedings as soon as possible. As soon as a national consensus on the inclusion of the 700MHz spectrum has been reached between the federal government and the federal states at the Conference of Minister Presidents on 11 December 2014, consultation will be held with the Advisory Council; subsequently, the President's Chamber decision will be published. The proceedings

for qualification to take part in the auction will open with publication of the decision.

The auction is scheduled for the second quarter of 2015.

Interested parties are invited to respond to the President's Chamber draft decision on the award of spectrum in the 700 MHz, 900 MHz, 1800 MHz and 1.5 GHz bands for wireless access for the provision of telecommunications services. Comments should be submitted in writing, in German,

not later than 26 November 2014,

to the address below:

Bundesnetzagentur

Referat 212

Tulpenfeld 4

53113 Bonn

and

electronically as a Word (or Word-compatible) or PDF file (copying and printing must be possible) to the following email address: [referat212@bnetza.de](mailto:referat212@bnetza.de).

We intend to publish the responses on the Bundesnetzagentur's website, in the original, and so would ask respondents to give their consent to publication when they submit their comments. If your comments include confidential information, we would ask you to send us an additional version for publication in which the confidential parts have been blacked out.

**D r a f t**

**Decision of the President's Chamber of the Bundesnetzagentur für Elektrizität, Gas, Telekommunikation, Post und Eisenbahnen of [Date] on the order for and choice of proceedings and on the determinations and rules (award rules) and on the determinations and rules for conduct of the proceedings (auction rules) to award spectrum in the 700 MHz, 900 MHz and 1800 MHz bands and additional spectrum in the 1452 to 1492 MHz band for wireless access for the provision of telecommunications services;  
decision taken under section 55(4), (5) and (10), section 61(1), (2), (3), (4) and (6) and section 132(1) and (3) of the Telecommunications Act (TKG)**

**- Reference: BK1-11/003 -**

**I. Order of award proceedings**

It is hereby ordered under section 55(10) TKG that assignment of spectrum for wireless access for the provision of telecommunications services in the 700 MHz, 900 MHz and 1800 MHz bands and other spectrum in the 1452 - 1492 MHz band is to be preceded by award proceedings as set out in section 61 TKG.

**II. Choice of award proceedings**

The proceedings referred to in section 61(1) of the TKG will be conducted in the form of an auction in accordance with section 61(2) TKG.

**III. Determination and rules**

**III.1 Qualification requirements, section 61(3) second sentence para 1 TKG**

1. The right to take part in the auction, given the minimum specialist and other requirements within the meaning of section 61(3) second sentence para 1 TKG, is not limited.
2. Undertakings may qualify once only. This also applies in respect of consortia. Undertakings that have merged under section 37 of the German Restraints of Competition Act (GWB) are deemed to be one undertaking.
3. In their application, applicants must state how the requirements for admission to the auction as set out in section 61(3) second sentence para 1 and subsection (4) TKG are met (cf Annex 1 for details of the application requirements).
4. In their application for admission, applicants are entitled to request the minimum frequency requirements for their business model (minimum essential spectrum package).

Applicants requesting a minimum essential spectrum package but actively bidding for less during the auction will be eliminated from the entire proceedings.

Any minimum essential spectrum package requested should be set out accordingly in the frequency usage concept.

5. The Bundesnetzagentur will state the particular bidding entitlements and the minimum essential spectrum package allowed on the qualification notice. This determination of the essential spectrum package is binding and will be reflected in the auction software for the particular bidder. The bidding entitlements will be given in lot ratings (cf subsection IV.3.8).
6. Qualification to take part in the auction opens with publication of this Decision in the Bundesnetzagentur Official Gazette.

Applications to qualify to take part in the auction should be made in writing, in German, in one original and six copies, and electronically on a data storage medium in Word or PDF format, to

Bundesnetzagentur  
Referat 212  
Kennwort: Versteigerungsverfahren  
Tulpenfeld 4  
53113 Bonn  
Germany

Applications to qualify to take part in the auction are to be submitted by 3 pm on ## ##### 2015.

### **III.2 Determining the frequency usage for which the spectrum to be assigned may be used in compliance with the Frequency Plan (Section 61(3) second sentence para 2 TKG)**

1. In compliance with the Frequency Plan, the frequencies to be assigned may be used for wireless access for the provision of telecommunications services.
2. The frequencies in the 700 MHz, 900 MHz, 1800 MHz and 1.5 GHz bands are available for a nationwide usage.

### **III.3 Basic spectrum package and restriction of bidding rights, section 61(3) second sentence para 3 TKG, section 61(4) in conjunction with section 61(2) first sentence TKG**

1. A basic spectrum package as referred to in section 61(3) second sentence para 3 TKG will not be stipulated.



2. Bidding rights in the 900 MHz band are limited to a maximum spectrum package of 2 x 15 MHz (paired) (spectrum cap).

**III.4 Frequency usage conditions including the degree of coverage with the frequency usage, section 61(3) second sentence para 4 TKG**

1. The spectrum for award in the 700 MHz, 900 MHz, 1800 MHz and 1.5 GHz bands is to be used for wireless access for the provision of telecommunications services. There are no restrictions on the technologies that may be used. Every available technology can be deployed in observance of the usage provisions .

The spectrum is available for award as follows:

<b>Band</b>	<b>Spectrum volume</b>	<b>Lot</b>
700 MHz	2 x 30 MHz (paired)	2 x 5 MHz (paired)
900 MHz	2 x 35 MHz (paired)	2 x 5 MHz (paired)
1800 MHz	2 x 45 MHz (paired)	2 x 5 MHz (paired)
1.5 GHz	1 x 40 MHz (unpaired)	1 x 5 MHz (unpaired)

Table 1:

2. The usage conditions in Annex 2 apply to frequency usages in the 900 MHz and 1800 MHz bands. The provisional usage conditions in Annexes 3 and 4 apply to frequency usages in the 700 MHz and 1.5 GHz bands.

Assignees may diverge from these conditions if they have made mutual arrangements to this effect and divergence is without detriment to the frequency usage rights of third parties. The Bundesnetzagentur must be informed of this in writing beforehand.

The frequency usage conditions can be modified subsequently, particularly if this is necessary to secure efficient and interference-free use of frequencies or as a result of international harmonisation agreements. The usage conditions in Annex 3 for the 700 MHz band are a case in point, as final decisions at European and national level are still outstanding.

3. The frequency assignments will be valid until 31 December 2031.

#### 4. Coverage obligation

Under priority use of the 700 MHz frequency band (694 – 790 MHz), assignees must ensure nationwide broadband coverage of the population with a minimum [10 Mbit/s]<sup>1</sup> downstream transmission rate with mobile-based transmission technology.

Within three years of the award of spectrum, coverage of a minimum of 98% of households nationwide must be reached with the above-referred mobile-based broadband access, whereby a minimum of 95% must be achieved in each federal state and 99% in city-states. Full coverage must be ensured for the main transport routes (federal motorways, high-speed railways lines (ICE)).

Insofar as the aforementioned targets have not been achieved within three years of assignment of spectrum, a rollout obligation will be imposed on the specific assignees to guarantee the aforementioned objectives within a reasonable deadline.

Assignees may enter into cooperation agreements and lease frequencies, as long as this is permitted under the regulatory and competition law frameworks.

An assignee that has not previously operated a nationwide mobile communications network is required in its frequency usage to cover at least 25% of the population from 1 January 2019 and at least 50% of the population from 1 January 2021.

Assignees must provide evidence that the coverage obligation imposed on them has been met. Evidence of nationwide coverage shall be substantiated unequivocally and plausibly through appropriate simulations. The Bundesnetzagentur will check this using appropriate measuring procedures. The parameters to be met under the obligation will be decided subsequently taking account of the technology deployed.

5. From the time the frequencies are assigned, assignees must report to the Bundesnetzagentur every year on the progress of frequency usage and of network build and rollout.
6. A condition subsequent will be attached to the assignment of frequencies which, at the time of the present Decisions, were the subject matter of an administrative law dispute pending at the time of assignment, to the effect that assignment will be rescinded if the legal requirements are to be regarded as not given at the time of assignment as a result of the court's final decision. This

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<sup>1</sup> Cf reasoning "Re subsection III.4.4".

secondary provision may be worded differently on the individual assignment notices.

7. No obligation will be imposed on assignees to offer service providers access to services on a non-discriminatory basis.

### **III.5 Minimum bid, section 61(4) second sentence TKG**

1. The minimum bid for a frequency block of 2 x 5 MHz (paired) is set at €75 million in the 700 MHz and 900 MHz bands and at €37.5 million in the 1800 MHz band.
2. The minimum bid for a frequency block of 1 x 5 MHz (unpaired) in the 1.5 GHz band is set at €18.75 million.

## **IV. Auction rules**

### **IV.1 General provisions**

#### **IV.1.1 Venue**

The auction will be held in the physical presence of the bidders at the Bundesnetzagentur's Mainz office in Canisiusstrasse 21 in Mainz.

#### **IV.1.2 Eligibility**

Eligible to take part in the auction are applicants qualified under subsection IV.3.3 who have provided security for the bidding entitlements in accordance with subsection IV.1.3 and whose representatives have been authorised in accordance with subsection IV.2.2.

#### **IV.1.3 Security**

Qualified applicants shall pay a deposit no later than 14 days before the auction begins to an account to be specified by the Bundesnetzagentur. The security can also take the form of an unconditional, continuing, irrevocable, absolute bank guarantee for the amount of the security payable, issued by a domestic financial institution or a financial institution authorised as a customs and tax guarantor.

The security is €18,750,000 per lot rating (cf Annex 1). The total is derived from the bidding entitlements in lot ratings (cf subsections IV.3.8 and III.5).

#### **IV.1.4 Lots**

Frequencies in the 700 MHz band will be auctioned in five abstract frequency blocks and one specific block of 2 x 5 MHz (paired).

Frequencies in the 900 MHz band will be auctioned in six abstract frequency blocks and one specific block of 2 x 5 MHz (paired).

Frequencies in the 1800 MHz band will be auctioned in nine abstract frequency blocks of 2 x 5 MHz (paired).

Frequencies in the 1.5 GHz band will be auctioned in eight abstract frequency blocks of 5 MHz (unpaired).

Details can be found in Annexes 5 and 6.

#### **IV.1.5 Restriction of bidding rights**

Bidding entitlements for frequency blocks in the 900 MHz band are restricted to a maximum of 2 x 15 MHz (paired) per bidder (spectrum cap).

### **IV.2 Power of attorney and auction tutorial**

#### **IV.2.1 Power of attorney**

Applicants must, by the auction tutorial date at the latest, authorise four to eight persons to take part in the tutorial and to bid at the auction on behalf of their undertaking. A written declaration of power of attorney must be provided to the Bundesnetzagentur. During the auction, at least two authorised persons per bidder who have attended the tutorial must be present in the bidder's room.

#### **IV.2.2 Auction Tutorial**

The authorised agents must take part in a tutorial before the auction is held. The tutorial is to give these persons instruction in the practical conduct of the auction, in particular in the electronic bidding proceedings and the special software used.

The tutorial will be held in the Bundesnetzagentur's Mainz office. The tutorial date should be close to the auction date.

The authorised agents must provide the Bundesnetzagentur at the end of the tutorial with a written declaration stating that they have understood the auction rules and the electronic bidding method. They must also undertake to comply with the rules.

Participation in the tutorial and the declaration specified in paragraph 3 are a precondition for participation in the auction. The tutorial will be held once only.

Only the persons holding a power of attorney and who have attended the tutorial are authorised to submit bids on the bidder's behalf. On the part of the bidders, only authorised agents have access to their rooms (cf subsection IV.3.2).

### **IV.3 Conduct of the auction**

#### **IV.3.1 Type of auction**

The auction will be held as an open ascending simultaneous multiround auction.

### **IV.3.2 Procedure**

The auction will be held Mondays to Fridays. It will begin at 08:00 hours and finish as a rule at 18:00 hours.

Each bidder will be provided with a separate room within the building. Each room will be equipped with a computer for making bids, a telephone permitting connections solely to the auctioneer, and a second telephone and fax permitting connections solely to the decision-makers in the qualified undertaking.

Any suspension of the auction will be announced by the auctioneer, who will also inform the bidders of the time at which the auction will be resumed.

The auction results will be announced publicly.

### **IV.3.3 The bidder**

The bidder is the undertaking that has qualified to take part in the auction. Bidders will be represented by authorised agents and those with powers of attorney.

### **IV.3.4 Bid submission**

In each round, bidders can submit bids simultaneously and independently of one another and, subject to their bidding entitlements, are free to choose which blocks to bid for (cf subsections IV.1.5 and III.1.5).

Bids will be submitted electronically by means of special software.

### **IV.3.5 Valid Bids**

In the first round the minimum valid bid is the minimum bid for a frequency block. In the subsequent rounds the minimum valid bid is a bid that exceeds the current highest bid for a frequency block by the current minimum bid increment. If no valid bid was made for a frequency block in the previous rounds, the minimum valid bid will count as the minimum bid. If the highest bid in a round is withdrawn (cf subsection IV.3.11) and no new valid bid for this block is submitted in that round, the new minimum valid bid will be derived from the amount of the withdrawn highest bid plus the current minimum bid increment.

In each round, the software will provide a list for each frequency block showing the valid bids from which bidders can choose their bid amount (click box bidding).

The bidder may choose a bid from the following list of bid amounts:

- the minimum valid bid,
- the minimum valid bid plus €10,000
- the minimum valid bid plus €20,000

- the minimum valid bid plus €50,000
- the minimum valid bid plus €100,000
- the minimum valid bid plus €200,000
- the minimum valid bid plus €500,000
- the minimum valid bid plus €1,000,000
- the minimum valid bid plus €2,000,000
- the minimum valid bid plus €5,000,000
- the minimum valid bid plus €10,000,000
- the minimum valid bid plus €20,000,000
- the minimum valid bid plus €50,000,000
- the minimum valid bid plus €100,000,000.

#### **IV.3.6 Minimum bid increment**

If there is a highest bid for a frequency block after a round in the auction, the auctioneer will stipulate a minimum bid increment for it for the subsequent rounds.

The minimum bid increment is a particular (not minus) sum of money by which the highest valid bid in a round must increase as a minimum.

In the first stage, the minimum bid increment is 10% of the designated highest bid.

Depending on how the auction proceeds, the minimum bid increment can be lowered step by step by the auctioneer for further stages to 5% and 2% of the designated highest bid (incremental stages).

Diverging from this, the auctioneer can stipulate a specific amount for individual frequency blocks as the minimum bid increment.

The auctioneer will notify bidders at the start of a round of the level of the particular minimum bid increment, rounded to the next whole multiple of €1,000.

#### **IV.3.7 Highest bids**

At the end of every round the highest bid for each frequency block will be identified by evaluating the round. The highest bid is the highest active bid for a frequency block at the end of a round. If identical highest valid amounts are bid for a frequency block, the bidder who submitted his bid first will be considered to have the highest bid. The current highest bid for a frequency block will be designated as such at the beginning of the next round.

#### **IV.3.8 Lot ratings**

Standardised numerical values (lot ratings) are determined for every frequency block depending on its spectral extent.

A frequency block of 1 x 5 MHz (unpaired) is given a lot rating of 1, a block of 2 x 5 MHz (paired) is given a lot rating of 2. Details are given in Annex 6.

Bidding entitlements are given in lot ratings.

#### **IV.3.9 Activity Rules**

A bidder's activity in a round is the sum of all the bidding entitlements in lot ratings exercised for frequency blocks for which the bidder has submitted an active bid.

An active bid for a block in a round is deemed to have been given when, at the beginning of the round, either the bidder holds the highest bid for the block – and does not withdraw it in the current round as set out in subsection IV.3.11 – or submits a valid bid for a block in the current round in accordance with subsection IV.3.5.

A bidder must exercise his bidding entitlements to a certain extent if he is not to lose any (minimum level of activity), unless he makes use of a waiver as provided for in subsection IV.3.10.

The auction is divided into two consecutive activity phases:

- Activity phase 1 requires a minimum activity level of 65% of the current bidding entitlement.
- Activity phase 2 requires a minimum activity level of 80% of the current bidding entitlement.

The auctioneer will decide when to move on to the next activity phase in accordance with the progress of the auction.

The minimum activity level determines the minimum activity a bidder has to engage in. Minimum activity is derived from the product of the number of the bidder's bidding entitlements and the minimum activity level in the particular activity phase, rounded up to the next highest whole number.

A bidder keeps his full bidding entitlement for the next round if he has complied with or surpassed the minimum activity level in the current round.

If a bidder falls below the minimum activity level and does not use a waiver (cf subsection IV.3.10), his bidding entitlement will be determined anew for the next round:

- in activity phase 1 by multiplying his activity level (sum of the lot ratings for frequency blocks for which an active bid has been submitted) by 100/65.
- in activity phase 2 by multiplying his activity level (sum of the lot ratings for frequency blocks for which an active bid has been submitted) by 100/80.

A bidder not submitting a new valid bid in a round for any frequency block, not holding a highest bid and not using a waiver (active or passive) as provided for in subsection IV.3.10, will be eliminated from the auction.

Notwithstanding this activity rule, a bidder must in any case exercise his bidding entitlements to match the extent of the minimum essential spectrum package he has specified (cf subsection III.1.5). If fewer bidding entitlements are exercised than the minimum essential spectrum package agreed, the bidder will lose all his bidding entitlements and will be eliminated from the auction, provided he has not used any waivers (active or passive) as specified in subsection IV.3.10.

#### **IV.3.10 Waivers**

Each bidder will be given five waivers that he can use in five different rounds. Using a waiver means that no bidding entitlements will be lost in the particular round (cf subsection IV.3.9).

A distinction is made between active and passive waivers.

Active use of a waiver is made by activating a command to this effect in the software (active waiver).

There are two possibilities of use:

1. A bidder can sit out a whole round, ie he does not submit a valid bid and does not withdraw a bid in the particular round. In this case he does not lose any bidding entitlements.
2. He can also submit valid bids and/or withdraw bids and – as long as he remains under the required minimum activity level – can avoid his bidding entitlements being reduced by active use of the waiver.

If the bidder engages in less than the minimum activity level and exercises his bidding entitlements to match his minimum essential spectrum package, the bidder can explicitly decide to do without a waiver. In this case he will lose bidding entitlements (cf subsection IV.3.9).

This form of active waiver is not available to a bidder with an agreed minimum essential spectrum package if he has not exercised bidding entitlements to match his minimum essential spectrum package.

A passive waiver, by contrast, is automatically effected by the software when the bidder allows time to elapse in a round without submitting a valid bid or withdrawing a bid and he falls below the minimum activity level even with his highest bids



(cf subsection IV.3.9). A passive waiver has no effect on the termination rule (cf subsection IV.3.16).

#### **IV.3.11 Withdrawal of highest bids**

Every bidder is entitled to withdraw, in part or in full, the highest bids he holds in ten rounds of the auction. A bidder can also submit new valid bids in the same round with the entitlements that have been released.

A bidder is not permitted to withdraw a bid if this would mean falling below his agreed minimum essential spectrum package in the particular round.

Withdrawal of a bid does not have any effect on the termination rule of the auction (cf subsection IV.3.16). If a bidder withdraws one or more bids in the last activity phase and none of the bidders submits a new valid bid or uses an active waiver, the auction will end.

A bidder withdrawing a bid will be bound by his bid to pay if no new valid bid is made for the frequency block in question in the course of the first stage of the auction. In this case the bidder will be obliged to pay a sum equivalent to the bid he has withdrawn.

If the frequency block is awarded in a second stage, the price bid for the block will be deducted from the amount the withdrawing bidder has to pay.

#### **IV.3.12 Time of a round, completion of a round, discontinuation of a round and suspension of the auction**

At the beginning of the auction, the time for a round in which bids can be submitted is 60 minutes. The auctioneer may set a different time before the start of a round, after due consideration of the circumstances.

There will be an automatic reminder ten minutes before the round expires.

A round is completed after the bids from all the bidders have been received by the auctioneer or after expiry of the specified time period for the submission of bids. A round is closed after evaluation by the auctioneer.

The auctioneer may discontinue a round not yet completed if there is a technical defect in the equipment needed for conducting the auction or for other reason if proper conduct of the auction is jeopardised. In this case the auction will resume with the result of the previous round.

Each bidder will be given one opportunity to request the auctioneer to suspend the auction. Upon request, it can also be suspended during a round. The request must be

declared for the record with the auctioneer. The auction will then be continued at 13:00 hours on the next working day.

Bidders will be notified of the reason for and length of any suspension of the auction.

#### **IV.3.13 Provision of information to bidders**

The auctioneer will provide every bidder with the following information at the start of a round:

- the current round,
- the current activity phase (cf subsection IV.3.9),
- the duration of the round (cf subsection IV.3.12),
- the highest bid and the correspondingly highest bidder for each frequency block (cf subsection IV.3.7),
- the minimum valid bid and the minimum bid increment for each frequency block (cf subsections IV.3.5 and IV.3.6),
- a click box list of valid bids from which bidders can choose their bid amount (cf subsection IV.3.5),
- the extent of their current bidding entitlements (in lot ratings) and their minimum activity level in the current round (cf subsection IV.3.9),
- the number of their waivers remaining (cf subsection IV.3.10),
- the number of their bid withdrawal opportunities remaining (cf subsection IV.3.11),
- the names of bidders eliminated or excluded.

At the close of every round the auctioneer will inform every bidder of the current highest bid for each frequency block and the active bids of all the bidders and their identity by means of special software. This information will also be provided electronically solely to the authorised agents in the bidder's room for further processing.

#### **IV.3.14 Exclusion of bidders/collusion**

Any bidders working together before or during the auction to influence the course or the result of the auction (collusion) may be excluded from taking part in the entire proceedings. Bidders may also be excluded from taking part as a result of irregular behaviour or as a result of holding up proper conduct of the auction.

An excluded bidder is bound by his bid to pay if, in the course of the auction, no new valid bid is submitted to take the place of the highest bid he held at the time of exclusion. In this case he must pay the amount of his highest bid. If the frequency

block is awarded in the second section of the auction (cf subsection IV.3.18) to another bidder, the bid price for the block will be deducted from the amount to be paid by the excluded bidder. If the price for the particular frequency block in the second stage is higher or the same as the highest bid in the first stage of the auction, the excluded bidder is not obliged to pay.

The frequency block will not be awarded to the excluded bidder.

If collusion or irregular behaviour is only established after the auction has closed, award and/or frequency assignment can be revoked. A highest bidder shall remain bound by his bid to pay. He must also meet his payment obligation for withdrawing his bids (cf subsection IV.3.11). Payments made will not be refunded.

#### **IV.3.15 Elimination from the auction**

A bidder will be eliminated from the auction if he has no more bidding entitlements (cf subsection IV.3.9) or has been excluded (cf subsection IV.3.14).

#### **IV.3.16 End of the auction (termination rule)**

The auction will end if no valid bid has been made in the last activity phase for any frequency block and none of the bidders has used an active waiver. The final result of the auction will be announced by the auctioneer.

If, in an earlier activity phase of the auction, no valid bid has been submitted in a round and none of the bidders has used an active waiver and if all the bidding entitlements are bound by highest bids, it is up to the auctioneer to continue the auction by taking it into the next activity phase or to end it directly.

The auction can also end through discontinuation. The auctioneer may discontinue the auction if there is a technical defect in the equipment necessary to conduct the auction, if bidders collude or for other reason if the proper conduct of the auction is jeopardised. In this case, the Bundesnetzagentur will set a date for a new auction.

#### **IV.3.17 Award**

The bidder holding the highest bid for a frequency block at the end of the auction will be awarded the block. Bidders with an agreed minimum essential spectrum package will be awarded the spectrum only if they have at least won their minimum essential package.

The award price will be equal to the highest bid submitted by the particular bidder. Award will be made in writing. The award notice will be presented after the auction.

A frequency award for which

- a) there is no valid bid at the end of the auction,
- b) no new valid bid was submitted after a bid was withdrawn,
- c) award was denied, or
- d) there is a bid, but the highest bidder failed to acquire his agreed minimum essential spectrum package,

will not be awarded in the auction.

#### **IV.3.18 Second stage of the auction**

If frequency blocks have not been awarded at the close of the first stage of the auction (cf subsection IV.3.17), the President's Chamber will take a decision within two working days on whether, and if so when, these blocks should be auctioned in full or in part in a second stage. Provided that it is appropriate to award the frequencies in a second stage, the following arrangements will apply as a general rule:

The bidding entitlements will also be restricted in the second stage as a result of the cap on spectrum in the 900 MHz band. Spectrum won in the first stage will count.

The same minimum bids for the frequency blocks will apply in the second stage of the auction as in the first stage.

For the second stage of the auction, the same auction rules will apply as for the first stage, with the following exceptions:

- Only bidders that have been awarded one or more frequency blocks in the first stage will be eligible to take part.
- The maximum number of bidding entitlements in the second stage will be derived from the difference between the number of bidding entitlements established as a result of application and the entitlements successfully exercised in the first stage. Bidders may also submit bids for frequency blocks for which they withdrew a bid in the first stage.
- Bid withdrawal is not possible.
- A minimum essential spectrum package cannot be requested.

#### **IV.4 Auction close**

##### **IV.4.1 Obligation to pay**

The bidder awarded a frequency block at the close of the auction must pay the amount of his highest bid.

A bidder that has withdrawn a current highest bid must pay his highest bid if no new valid bid is made for the frequency block in question in the course of the first stage of

the auction. If the frequency block is awarded in the second stage of the auction, the price bid for the block will be deducted from the amount the withdrawing bidder has to pay (cf subsection IV.3.11)

The award notice will be presented together with the notice of amount payable against acknowledgement of receipt. Payment of the award price less any security deposited as a sum of money (cf subsection IV.1.3) is due immediately after presentation of the notice of amount payable and must be paid within five banking days onto the account specified by the Bundesnetzagentur. Compliance with the deadline is determined by the time at which the sum is credited to the account (value date). The debtor automatically defaults if payment has not been made before the deadline expires. There does not need to be a reminder. Interest will be charged during the period of default on the award price less any security deposited as a sum of money. The interest rate for the year shall be five percentage points above the base rate in accordance with section 274 of the German Civil Code (BGB).

The security will likewise be deducted if there are other payment obligations under the auction rules.

The security will not earn interest. If a bidder has not received any award and has no other payment obligations, his security deposit will be refunded without undue delay after the close of the entire auction. The surety bonds will be returned following receipt of payment.

#### **IV.4.2 Allocation of the abstract frequency blocks won**

At the end of the auction the abstract frequency blocks won will be allocated to their highest bidders.

The Bundesnetzagentur will allocate the abstract frequency blocks won taking account of the preferences of the successful bidders. The allocation will take account of existing utilisation, the contiguous spectrum aspect and any preferences stated. Successful bidders must state their preferences within 10 working days of award.

Allocation will be determined by drawing lots if the abstract frequency blocks won cannot be allocated after award in observance of these principles.