

F 1/16

# **Tender Document**

# in the procedure for awarding spectrum

in the 700, 1500 and 2100 MHz ranges

**NON BINDING TRANSLATION** 

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# 1 Goals of the award procedure

Following the publication of a position paper on infrastructure sharing and the awarding of licences in the 3410 to 3800 MHz range, the Telekom-Control-Kommission (hereinafter: TKK) sees the awards in the 700/1500/2100 MHz bands as making a significant additional contribution to the introduction of 5G in Austria.

The basis of any award procedure is firstly to define the goals pursued by the regulatory authority in carrying out the specific procedure. This process follows clear provisions of law. Core concerns are the legal certainty of the award procedure, efficient frequency usage, safeguarding competition and innovation, and the best possible coverage of residents and businesses with services. Maximising revenue is not an award objective, nor is the provision of active support to new market entrants by means of measures such as reserving spectrum.

Powerful digital infrastructure is framed here as a prerequisite for deploying digital technologies such as those used for autonomous driving and Industry 4.0. Access to modern broadband infrastructure will be the deciding factor in whether businesses succeed at international level, employees are able to work from their homes or people have to relocate from rural areas. As an intermediate step on the way towards the gigabit network, it is therefore necessary to pursue the goal of providing widespread coverage with high-speed network infrastructure. The goal is to be among the European pioneers to roll out 5G. The general preconditions here (such as expanded broadband networks and rolling out the 5G standard) need to be met in order to ensure the success of Austrian residents and businesses. Awarding this frequency band will contribute towards this goal.

The 700 MHz band may be the last coverage spectrum to be awarded for mobile services for some time. The Telekom-Control-Kommission (TKK) is placing particular emphasis on ensuring the best possible coverage for the Austrian population and for Austrian companies. This also properly accounts for the ambitious goals at national (e.g. 5G strategy)<sup>1</sup> and European (e.g. 5G Action Plan)<sup>2</sup> levels. For this purpose, the regulatory authority is stipulating appropriate and ambitious coverage obligations as part of the spectrum award (e.g. speed and coverage targets in relation to primary traffic connections, metropolitan areas and settlement areas).

 $<sup>^{\</sup>rm 1}$  For the 5G Strategy, see the BMVIT website:

https://www.bmvit.gv.at/service/publikationen/telekommunikation/5g/index.html

<sup>&</sup>lt;sup>2</sup> For the 5G Action Plan, see the website of the European Commission: https://ec.europa.eu/digital-single-market/en/5g-europe-action-plan



# 2 General legal conditions

In accordance with Art. 55 of the Telecommunications Act 2003 (TKG 2003), the TKK is conducting a procedure for assigning spectrum in the frequency ranges of 700, 1500 and 2100 MHz.

#### 2.1 General conditions under Austrian law

The current invitation to tender is based on the 2003 Telecommunications Act (TKG 2003), Federal Law Gazette (FLG) I No. 70/2003 as last amended by FLG I No. 111/2018. Current provisions of Austrian procedural law also apply, in particular the 1991 General Administrative Procedure Act, FLG No. 51/1991 as last amended by FLG I No. 58/2018.

The TKK's competence for the awarding of spectrum as set out in Art. 55 TKG 2003 results from Art. 54 Par. 3 No. 2 in conjunction with Art. 117 No. 9 TKG 2003. Pursuant to Art. 54 Par. 3 No. 2 TKG 2003, the regulatory authority is responsible for spectrum award as well as for any modification or revocation of a licence relating to spectra for which a provision as referred to in Art. 52 Par. 3 TKG 2003 (where the number of frequencies is limited) has been made in the frequency usage plan.

For the frequency ranges considered here, such a provision was made in the Ordinance of the Federal Minister of Transport, Innovation and Technology on frequency utilisation (*Frequenznutzungsverordnung 2013*), FLG II No. 63/2014 as last amended by FLG II No. 390/2016.

# 2.2 Spectrum award procedure

Art. 55 Par. 1 TKG 2003 requires the regulatory authority to assign the frequencies entrusted to the authority to that applicant who meets the general requirements set out in Art. 55 Par. 2 No. 2 TKG 2003 and guarantees the most efficient usage of the spectrum. This is determined based on the amount offered for the frequency licence fee.

In accordance with TKG 2003 Art. 55 Par. 2, the regulatory authority has the duty to assign spectrum in accordance with the principles of an open, fair and non-discriminatory procedure, as well as standards of economic efficiency. In planning the auction procedure, the authority must properly consider the regulatory goals set out in TKG 2003 Art. 1 Par. 2 No. 1, particularly as these apply to competition and economic efficiency. Essentially, any auction procedure must be designed to be simple, clear and comprehensible. One important way in which these requirements can be met is to ensure that bidders submit their bids in full knowledge of the maximum payment obligation that results from doing so.

The spectrum award procedure consists of two steps:



- 1. Once the applications have been received, the regulatory authority verifies whether the requirements set out in Art. 55 Par. 2 No. 2 TKG 2003 have been met (cf. section 0). Any applicants not meeting the requirements are excluded from the spectrum award procedure, as specified in Art. 55 Par. 8 TKG 2003.
- 2. The second step is carried out in the form of an auction.

#### 2.3 Collusion

In the context of procedures for awarding spectrum, the Telecommunications Act refers repeatedly to the possibility of collusion.

Art. 55 Par. 8 TKG 2003 in conjunction with Art. 55 Par. 9 TKG 2003 lays down the principle that collusion of applicants prior to or during the auction procedure can lead to exclusion of those applicants from further procedures.

The regulatory authority is additionally entitled to cancel the invitation to tender and to terminate the procedure if applicants are found to have behaved collusively and an efficient, fair and non-discriminatory procedure cannot be conducted (Art. 55 Par. 12 No. 1 TKG 2003).

Other potential grounds for exclusion from the procedure are threats against competitors as well as disclosure of participation in the auction, of bids, or of bidding strategies, even prior to the auction procedure.

The auctioneer will take all suitable measures to prevent collusive behaviour. Specific mention is made here of the obligation of bidders to allow the presence of a staff member of the regulatory authority in the bidders' areas at any time during the auction.

In connection with possible offences relating to collusion, reference is made here to provisions of general competition law and to Art. 168b of the Austrian Criminal Code (*Strafgesetzbuch*).

# 2.4 Cancellation of the invitation to tender and termination of the procedure

Art. 55 Par. 12 TKG 2003 authorises the regulatory authority to cancel the invitation to tender and to terminate the procedure at any stage, in either case where there is good cause, and in particular under one of the following conditions:

- 1. the regulatory authority identifies collusive behaviour among applicants and/or an efficient, fair and non-discriminatory procedure cannot be conducted;
- 2. no or only one applicant meets the requirements set out in Par. 2;
- 3. no or only one applicant meeting the requirements set out in Par. 2 actually participates in the procedure for determining the highest bid;
- 4. the procedure results in the applicants requesting less frequency spectrum than has been specified for assignment.



None of these conditions justifies any claim to compensation; claims based on official liability remain unaffected thereby.

In the view of the authority calling for tenders, a 'good cause' may exist where procedures are currently pending that relate to a change in ownership structure of market participants involved in the tender procedure and, as a result, an open, fair and non-discriminatory procedure cannot be guaranteed.

# 2.5 Spectrum award

Spectrum is usually awarded within one month of when the TKK publishes the outcome of the auction.

# 2.6 Transfer of spectrum

Art. 56 Par. 1 TKG 2003 permits the transfer of frequency usage rights, on condition of prior approval by the TKK. Transfer refers to both the sale of—all or parts of—the frequency usage rights or the temporary transfer of rights. In accordance with TKG 2003 Art. 55 Par. 5, an option to transfer frequency usage rights assigned in this procedure is expressly envisaged for spectrum winners.

#### 2.7 Joint use under TKG 2003

As set out in Art. 8 Par. 2 TKG 2003, providers of public communications networks are entitled to joint use of antenna masts and high-voltage masts. With regard to other rights of joint use, reference is made here to the rules specified in Articles 8 et seq. TKG 2003. Reference is additionally made in this context to section 5 (on infrastructure sharing).

# 2.8 No secondary usage in accordance with TKG 2003 Art. 54 Par. 6a and Art. 55 Par. 5a

The regulatory authority may make provisions in the tender terms and conditions to ensure that, for the frequencies to be assigned, secondary usage as defined by TKG 2003 Art. 54 Par. 6 is permitted for these frequencies. In the present award procedure, a secondary usage of this kind is expressly not envisaged.



# 3 Goods under auction

# 3.1 Frequency spectrum available

The following spectrum is to be awarded:

- 703–733/758–788 MHz (2 x 30 MHz in the 700 MHz band)
- 1427–1517 MHz (90 MHz in the 1500 MHz band)
- 1920–1980/2110–2170 MHz (2 x 60 MHz in the 2100 MHz band)

Frequency usage rights totalling 270 MHz are therefore to be awarded in this auction.

# 3.2 Purpose

The frequency spectrum available is to be utilised in accordance with the respective and relevant decision as adopted by the European Commission for "terrestrial systems that provide electronic communication services". The following resolutions and decisions of the European Commission are to be applied:

- 700 MHz: Decision (EU) 2017/899 of the European Parliament and of the Council of 17 May 2017 (see appendix F.1), and Commission Implementing Decision (EU) 2016/687 of 28 April 2016 (see appendix F.2)
- 1500 MHz: Commission Implementing Decision (EU) 2015/750 of 8 May 2015 (see appendix F.3), amended by Commission Implementing Decision (EU) 2018/661 of 26 April 2018 (see appendix F.4)
- 2100 MHz: Commission Implementing Decision (EU) 2012/688 of 5 November 2012 (see appendix F.5)

# 3.3 Principal specifications

- (1) The version of the Radio Regulations adopted by the World Radiocommunication Conference (WRC-15) as well as the provisions of the Commission Decision referred to under section 3.7 apply in general to frequency usage.
- (2) The 700 MHz and 2100 MHz bands are to be split into paired frequency blocks of 2 x 5 MHz each (5 MHz in the lower and upper bands respectively), and the 1500 MHz band is to be split into unpaired frequency blocks, each of 1 x 5 MHz.
- (3) The subdivision of the two paired frequency ranges is as follows:
  - 700 MHz: 703–733 MHz (hereinafter '700 MHz lower band') paired with 758–788 MHz (hereinafter '700 MHz upper band')
  - 2100 MHz: 1920–1980 MHz (hereinafter '2100 MHz lower band') paired with 2110–2170 MHz (hereinafter '2100 MHz upper band')



- (4) Spectrum assignments are to be made solely for nationwide use within Austria.
- (5) Spectrum assignments in the 700 MHz and 2100 MHz bands are made in such a way that each successful operator participating in the auction is assigned a contiguous, paired frequency block with a bandwidth of n x  $2 \times 5$  MHz, with the factor n being an integer in each case.
- (6) Spectrum assignments in the 1500 MHz band are made in such a way that, following the expiry of all (legacy) usage rights for a band as assigned before this award procedure, each successful operator participating in the auction is assigned a contiguous, paired frequency block with a bandwidth of n x 5 MHz, with the factor n being an integer in each case. The specific lot sizes in the auction are set out in section 3.9.2.
- (7) In accordance with the appendix to Commission Implementing Decision (EU) 2016/687 of 28 April 2016, frequency assignment and usage are both subject to the condition that the mode of operation for the 700 MHz frequency range is frequency division duplex (FDD) mode. Duplex spacing is 55 MHz, with terminal station transmissions (FDD uplink) located in the lower band and base station transmissions (FDD downlink) located in the upper band.
- (8) In accordance with the appendix to Commission Implementing Decision (EU) 2018/661 of 26 April 2018, the mode of operation in the 1500 MHz frequency range is restricted to base station transmissions ('downlink only').
- (9) In accordance with the appendix to Commission Implementing Decision (EU) 2012/688 of 5 November 2012, frequency assignment and usage are both subject to the condition that the mode of operation for the 2100 MHz frequency range is frequency division duplex (FDD) mode. Duplex spacing is 190 MHz, with terminal station transmissions (FDD uplink) located in the lower band and base station transmissions (FDD downlink) located in the upper band.
- (10) For base station set-up and operation, the specifications in the radio interface descriptions FSB-LM014, FSB-LM030 and FSB-LM031 apply, depending on the specific frequency range and radio application (see appendices F.13 and F.14).

# 3.4 Frequency usage near national borders

(1) To ensure optimum power of the digital mobile broadband access systems used in cross-border areas, providers should, in compliance with the relevant appendix to ECC/REC/(15)01 in the case of the 700 MHz and 1500 MHz bands and with ERC/REC/(01)01 in the case of the 2100 MHz band, implement the code resources given by technology as well as other radio parameters, in particular when signal centre frequencies coincide in border areas.



- (2) The limits specified under this item are potentially subject to change where possible, based on the outcome of any additional coordination procedures conducted by the telecommunications authorities in accordance with specifications that might be issued in future by European bodies and/or with bilateral or multilateral agreements concluded with the telecommunications administrative authorities of the other countries concerned.
- (3) While agreements relating to individual changes affecting areas near international borders are permitted between Austrian providers and similar providers in neighbouring countries, they require the approval of the telecommunications administrative authorities concerned and the regulatory authority must also be subsequently notified. The detailed provisions can be found in the agreements as currently amended (refer to the corresponding appendix).
- (4)When determining field strengths along borders, the calculation program specified in the most recently amended official version of the "Agreement on the coordination of frequencies between 29.7 MHz and 43.5 GHz for the fixed service and the land mobile service" (HCM Agreement) is definitive. This calculation program, which constitutes an integral part of the terms and conditions of use, is available from the website the **HCM** managing administration (http://hcm.bundesnetzagentur.de). The topographical data additionally required for applying the HCM program as well as the HCM Agreement 2018 are also available under that link.

# 3.4.1 700 MHz frequency range

#### 3.4.1.1 Field strengths

Without prior coordination with the neighbouring country or region, stations may be used if the mean field strength produced by the base station does not exceed the values listed below:

- 59 dB $\mu$ V/m/5 MHz at a height of three metres above ground at the borderline and
- 41 dB $\mu$ V/m/5 MHz at a height of three metres above ground at a distance of 6 km within the neighbouring country or region.

#### 3.4.1.2 Protection of existing foreign broadcasting transmitters

(1) In neighbouring countries, the provisioning of spectrum for electronic communications services in the 703-733/758-788 MHz frequency range is not identical in all cases: as a result, this frequency range will be used for terrestrial television broadcasts for the foreseeable future in some countries. Essentially, one may assume a worst-case scenario until the end of 2022 where, as per Decision (EU) 2017/899 (if neighbour countries continue to operate broadcasting transmitters in the 700 MHz band after 30 June 2020), field strength will need to be limited to no more than  $25 \text{ dB}\mu\text{V/m}$  at national borders. This maximum, based on a bandwidth of



8 MHz, an antenna height of 10 m and calculated using the method given in the last version of Recommendation ITU-R P.1546, is seen as an adequate trigger value for avoiding mutually damaging interference.

(2) Note: For details of foreign broadcasting transmitters requiring protection, insofar as relevant after 30 June 2020, please see the respective agreements (see appendices F.6 to F.12). Effects from broadcast transmissions from neighbouring states should be expected until 2022 at the latest, depending on specific national implementation plans.

# 3.4.2 1500 MHz frequency range, field strengths

- (1) Without prior coordination with the neighbouring country or region, stations may be used in the 1452–1492 MHz frequency range if the mean field strength produced by the base station does not exceed the values listed below:
- 65 dB $\mu$ V/m/5 MHz at a height of three metres above ground at the borderline and
- 47 dB $\mu$ V/m/5 MHz at a height of three metres above ground at a distance of 6 km within the neighbouring country or region.
- (2) For the frequency ranges 1427–1452 MHz and 1492–1518 MHz, no final field strength values have been specified in the corresponding CEPT documents. While these values are currently being decided upon, One may assume that similar values will be applied as stated in paragraph (1) above. In some neighbouring countries, these two frequency ranges are not envisaged for use by electronic communications services. In relevant border regions, different/stricter field strength values may apply, in order to protect existing foreign use cases.

#### 3.4.3 2100 MHz frequency range, field strengths

Without prior coordination with the neighbouring country or region, stations may be used if the mean field strength produced by the base station does not exceed the values listed below:

- 65 dBµV/m/5 MHz at a height of three metres above ground at the borderline and
- $37 \text{ dB}\mu\text{V/m/5}$  MHz at a height of three metres above ground at a distance of 6 km within the neighbouring country or region.

# 3.5 Usage restrictions owing to existing frequency use cases

#### 3.5.1 700 MHz band

A number of broadcasting transmitters are still operating in Austria in the 700 MHz band (until 30 June 2020). Accordingly, broadcast reception in the 703–733/758–788 MHz frequency range need no longer be protected against mobile service transmissions from 1 July 2020.



#### 3.5.2 1500 MHz band

(1) For the 1427–1452 MHz and 1492–1518 MHz frequency ranges, no microwave radio links have been approved as yet by telecommunications authorities. Until permits expire (no later than 2027), receivers at the locations listed in appendix F.15 must be protected with a maximum power spectral density of -150 dBW/MHz. Operators have the option of working out a mutual agreement with the affected permit holders. Modifications to existing operating permits must be communicated to the telecommunications office (cf. Art. 84 TKG 2003, in the version cited).

The receivers listed in appendix F.15 are shown in the figure below:



#### 11: Microwave radio locations listed in appendix F.15

- (2) To protect the Earth exploration satellite service in the 1400–1427 MHz frequency range, the conditions in ECC/DEC/(11)01 must be met. RR footnote 5.340 prohibits all transmissions in this frequency band.
- (3) To protect mobile satellite services (MSS) in the frequency range above 1518 MHz, precautions must be taken when setting up base stations near the airports of Vienna, Graz, Innsbruck, Salzburg and Linz, and the inland ports of Vienna, Krems, Enns and Linz. These precautions should comply with ECC Report 299, especially as regards compliance with the power flux density (PFD) values given in tables 12 and 13 in appendix 2.2. Compliance with the PFD limits in the 'Phase 1' column is required by 1 January 2028 and with the less restrictive PFD limits in the 'Phase 2' column from 1 January 2028.



# 3.6 Quarterly report on base stations

The data on the base stations in operation for broadband services are to be reported on a quarterly basis to the telecommunications authorities and the regulatory authority. Once the regulatory authority has awarded the spectrum, the providers will receive details of procedures and of the data format from the Federal Ministry of Transport, Innovation and Technology (BMVIT).

# 3.7 Frequency planning and usage: other international documents

- (1) The documents listed below, issued by the Conférence Européenne des Administrations des Postes et des Télécommunications (CEPT), are also to be considered as a basis for frequency planning and usage:
- ECC Decision ECC/DEC/(17)06
- ECC Decision ECC/DEC/(15)01
- ECC Decision ECC/DEC/(13)03
- ECC Decision ECC/DEC/(11)01
- ECC Decision ECC/DEC/(06)01
- ECC Recommendation ECC/REC/(15)01
- ECC Recommendation ECC/REC/(01)01
- CEPT Report 065
- CEPT Report 060
- CEPT Report 054
- CEPT Report 053
- CEPT Report 039
- ECC Report 299
- ECC Report 269
- ECC Report 266
- ECC Report 263
- ECC Report 249
- ECC Report 239
- ECC Report 233
- ECC Report 227
- ECC Report 221
- ECC Report 202
- ECC Report 197
- ECC Report 188

These documents have been published on the website of the European Communication Office at <a href="http://www.cept.org/eco/deliverables">http://www.cept.org/eco/deliverables</a> (under "ECO Document database") and <a href="http://www.ecodocdb.dk/">http://www.ecodocdb.dk/</a>.

(2) In terms of applicable ETSI standards for radio equipment used, BMVIT assumes that all equipment used meets the provisions of the Austrian Radio Equipment Market Monitoring Act (FMaG) as amended.



# 3.8 Direction finder locations requiring protection

- (1) For the protection of stationary directional receiver systems operated by telecommunications authorities, at such locations the peak field strength of signals transmitted by the base stations must not exceed 105 dB $\mu$ V/m, as measured for the bandwidth of the specific system.
- (2) The list of direction finder locations requiring protection is given in OFB InfoLetter 02/2012 (see appendix F.16).

# 3.9 Frequencies and channels

#### 3.9.1 700 MHz channels

The 700 MHz band is shown in the following figure:

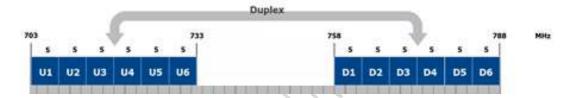


Figure 2: 700 MHz band

The frequencies in the 700 MHz band are awarded abstractly in stage 1 of the spectrum auction. Abstract frequency blocks are defined by their respective bandwidth (2 x 5 MHz) as well as the extended coverage obligations associated with these blocks, as defined by lot categories Aa to Af. The buyer of a block in a lot category undertakes to provide coverage to a specified number of cadastral municipalities chosen from the list of cadastral municipalities associated with the lot category (see section 4.3.1).

Table 1: Extended coverage obligations in stage 1 of the auction

Lot category	List of cadastral municipalities for the extended coverage obligations given in section 4.3.1
Aa	List in appendix G.1
Ab	List in appendix G.2
Ac	List in appendix G.3
Ad	List in appendix G.4
Ae	List in appendix G.5
Af	List in appendix G.6



In the assignment stage (stage 3) of the spectrum auction, winners are assigned specific frequency blocks from lot categories Aa to Af. These are designated as follows in the assignment stage:

Frequency blocks in the 700 MHz band	Uplink/MHz	Downlink/MHz
A01	703–708	758–763
A02	708–713	763–768
A03	713–718	768–773
A04	718–723	773–778
A05	723–728	778–783
A06	728–733	783–788

Table 2: List of 700 MHz band frequency blocks in the assignment stage

#### 3.9.2 1500 MHz channels

The 1500 MHz band is presented in the following figure:



Figure 3: 1500 MHz band

In the principle stage (stage 2) of the spectrum auction, abstract 10 MHz blocks are awarded. In the assignment stage (stage 3) of the spectrum auction, these 10 MHz blocks are specified and designated as follows:



Frequency blocks in the 1500 MHz band	Downlink/MHz
B01*	1427–1437
B02	1437–1447
B03	1447–1457
B04	1457–1467
B05	1467–1477
B06	1477–1487
ВО7	1487–1497
B08	1497–1507
B09	1507–1517

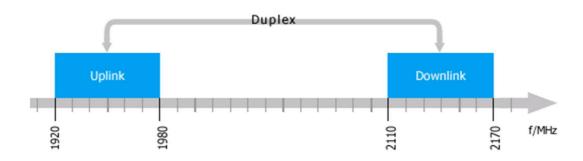
Table 3: List of frequency blocks in 1500 MHz band

The block B01 marked with an asterisk (\*) on the lower edge of the band will not be offered in the principle stage of the auction but is awarded to the winner of the adjacent B02 block in the assignment stage.

As a result, 80 MHz is available in the 1500 MHz band during the principle stage.

#### 3.9.3 2100 MHz channels

The 2100 MHz band is presented in the following figure:



#### 4: 2100 MHz band

The band consists of 2 x 60 MHz.

In stage 1 of the spectrum auction, these channels are awarded as abstract blocks of  $2 \times 5$  MHz (i.e. exactly  $2 \times 5.0$  MHz) in lot category C. In the assignment stage



(stage 3) of the spectrum auction, these frequency blocks are specified and designated as follows:

Frequency blocks in the 2100 MHz band	Uplink/MHz	Downlink/MHz
C01	1920–1925	2110–2115
C02	1925–1930	2115–2120
C03	1930–1935	2120–2125
C04	1935–1940	2125–2130
C05	1940–1945	2130–2135
C06	1945–1950	2135–2140
C07	1950–1955	2140–2145
C08	1955–1960	2145–2150
C09	1960–1965	2150–2155
C10	1965–1970	2155–2160
C11	1970–1975	2160–2165
C12	1975–1980	2165–2170

Table 4: List of frequency blocks in 2100 MHz band

# 3.10 Start and duration of use

Art. 54 Par. 11 TKG 2003 allows spectrum to be awarded only for a specified period.

- Usage rights to the frequency blocks in the 700 MHz range will be assigned for the period of 1 July 2020 to 31 December 2044.
- Usage rights to the frequency blocks in the 1500 MHz range will be assigned for the period from the notification of the assignment decision to 31 December 2044.
- Based on existing usage rights, the licences for frequency blocks within the 2100 MHz range will be awarded for the period of 1 January 2021 to 31 December 2044.

If notification of the assignment decision has not been made by the start of the stated term for the 700 and 2100 MHz ranges, usage rights will apply from the time at which the notice is issued.



# 4 Coverage obligations

Each company that is assigned frequency usage rights by this award procedure undertakes to ensure a certain level of coverage. These coverage obligations are subdivided into the following areas:

- Band-specific coverage obligations
- Basic coverage obligations
- Extended coverage obligations

# 4.1 Band-specific coverage obligations

# 4.1.1 700 MHz frequency range

If a company is assigned one or more frequency packages from the 700 MHz frequency range, it must fulfil the following coverage obligations associated with these frequencies:

- Level 1, from 31 December 2022—operation of 500 locations
- Level 2, from 31 December 2023—operation of a total of 1,500 locations

# 4.1.2 Frequency range 1500 MHz

If a company is assigned one or more frequency packages from the 1500 MHz frequency range, it must fulfil the following coverage obligations associated with these frequencies:

- Level 1, from 31 December 2025—operation of 300 locations
- Level 2, from 31 December 2030—operation of a total of 500 locations

# 4.1.3 Frequency range 2100 MHz

If a company is assigned one or more frequency packages from the 2100 MHz frequency range, it must fulfil the following coverage obligations associated with these frequencies:

• From 31 December 2021—operation of 2,000 locations

The geographical distribution of these 2,000 locations must ensure that at least 75 locations are operated in each province.



# 4.1.4 Definition of a 'location'

A location meeting the requirements listed below qualifies as a location as defined in terms of the band-specific coverage obligation as specified in section 4.1:

- A location that is eligible for meeting the coverage obligation must have a base station capable of transmitting at a minimum level of 20 watts of electrical power per sector. The actual transmission power level can be less.
- A location qualifies as a location within the meaning of the coverage obligation only if the frequencies transmitted there are used to connect end users.
- Only base stations operated outdoors are considered as locations within the meaning of this obligation.
- The spectrum holder must have actual, legal and technical control of any such base station.
- Locations as defined in terms of this coverage obligation are subject to the prohibition of active sharing set out in section 5. Of the exemptions to the prohibition on active sharing listed in section 5.2.2, only the exemption for partnerships involving legacy technologies are applicable. No other exemptions are applicable.
- A location having an antenna system with more than one sector is still considered as only one location.
- Two locations are counted as two separate locations for the purpose of the coverage obligation only if spaced at least 25 metres apart as measured with a straight line.

# 4.2 Basic coverage obligations

These coverage obligations are aimed at companies who are assigned usage rights in the 700 MHz or 2100 MHz frequency ranges in the current procedure. These obligations do not need to be met solely by using frequencies within the 700 MHz or 2100 MHz frequency ranges. Equivalent coverage based on the use of all other frequency ranges assigned to the company beyond these two ranges (e.g. 800 MHz, 900 MHz, 1800 MHz, 3410 to 3800 MHz) will also be recognised here. As regards the 800 MHz, 900 MHz and 1800 MHz ranges, however, only coverage provided by means of a self-operated network and without active sharing will be recognised until the end of the ranges' usage period, on account of Telekom-Control-Kommission decision F 1/11-283 dated 19 November 2013.

Coverage with all types of active sharing with own frequencies will be taken into account for the fulfilment of the basic coverage obligations. In the cadastral municipalities, which are assigned to the respective provider in stages 1 and 4, coverage with active sharing and without own frequencies is also considered for the fulfilment of basic coverage obligations.

This does not affect the evaluation of the admissibility of active sharing (e.g. approval as per section 56 TKG 2003, general competition law).



Also applicable are the rules relating to band-specific coverage obligations as well as those affecting infrastructure sharing (see section 5).

# 4.2.1 700 MHz coverage obligation

If a company is assigned at least  $2 \times 10$  MHz from the 700 MHz frequency range, it must ensure the following coverage (for  $2 \times 5$  MHz, see section 4.2.1.7):

#### 4.2.1.1 General population coverage for Austria

- a. A communications service must be set up for 90% of the population that supplies data to end users at an outdoor rate of 30 Mbps for downloads and 3 Mbps when uploading, as defined in section 0. This coverage obligation must be met from 31 December 2023.
- b. A communications service must be set up for 95% of the population that supplies data to end users at an outdoor rate of 10 Mbps for downloads and 1 Mbps when uploading, as defined in section 0. This coverage obligation must be met from 31 December 2023.
- c. From 31 December 2025, a communications service must be set up for 93% of the population that supplies data to end users at an outdoor rate of 30 Mbps for downloads and 3 Mbps when uploading, as defined in section 0.
- d. From 31 December 2025, a communications service must be set up for 98% of the population that supplies data to end users at an outdoor rate of 10 Mbps for downloads and 1 Mbps when uploading, as defined in section 0.

#### **4.2.1.2** Coverage of urban populations

For each urban area listed in appendix H (defined by the respective cadastral municipalities to which the urban area belongs, as given in appendix H), a communications service must be set up for 95% of the population in each case that supplies data to end users at an outdoor rate of 30 Mbps for downloads and 3 Mbps when uploading, as defined in section 0. This coverage obligation must be met from 31 December 2023.

#### **4.2.1.3** Area coverage in urban areas

For each urban area listed in appendix H (defined by the respective cadastral municipalities to which the urban area belongs, as given in appendix H), a communications service must be set up for 90% of the settlement area that supplies data to end users at an outdoor rate of 30 Mbps for downloads and 3 Mbps when uploading, as defined in section 0. This coverage obligation must be met from 31 December 2023.

#### **4.2.1.4** Traffic routes—B and L roads

a. A communications service must be set up for 90% of the kilometre length of roads given in appendices J.3 and J.4 that supplies data to end users at an



outdoor rate of 10 Mbps for downloads and 1 Mbps when uploading, as defined in section 0. This coverage obligation must be met from 31 December 2023.

- b. Furthermore, 75% of the kilometre length of the road segments given in appendix J.3 (B roads) must be provided with continuous (i.e. uninterrupted) coverage as per section 0. This coverage obligation must be met from 31 December 2025.
- c. Furthermore, 90% of the kilometre length of the road segments given in appendix J.3 (B roads) must be provided with continuous (i.e. uninterrupted) coverage as per section 0 from 31 December 2028.
- d. Furthermore, 70% of the kilometre length of the road segments given in appendix J.4 (L roads) must be provided with continuous (i.e. uninterrupted) coverage as per section 0. This coverage obligation must be met from 31 December 2025.
- e. Furthermore, 80% of the kilometre length of the road segments given in appendix J.4 (L roads) must be provided with continuous (i.e. uninterrupted) coverage as per section 0 from 31 December 2028.

#### **4.2.1.5** Motorways and other limited-access highways

Assuming the road infrastructure operator makes available the locations necessary, a communications service must be set up for 98% of the route length of highways and limited-access highways (see appendix J.5) that supplies data to end users at an outdoor rate of 10 Mbps for downloads and 1 Mbps when uploading. This coverage obligation applies only to those route sections in which the company under obligation already operates mobile network infrastructure on the effective date of 31 December 2019 or the respective road infrastructure operator provided the locations necessary for coverage at least six months earlier.

This coverage obligation must first be fulfilled on 31 December 2023 and applies for the full term of the frequency usage rights.

An infrastructure operator 'making locations available' refers to that party providing non-payable services as follows: connection to a source of electricity, provisioning of an optical fibre connection, provisioning of masts and premises for installation of mobile network equipment.

Running costs for power must be borne by the mobile network operator under obligation, as must costs for active base station components (e.g. radio equipment, antennas etc.). For tunnels, the (distributed) antenna in the tunnel must be made available by the infrastructure provider if such an antenna is needed to provide tunnel coverage.

#### **4.2.1.6** Selected railway lines

Assuming the rail infrastructure operator makes available the locations necessary, a communications service must be set up for 98% of the route length of selected



railway lines (see appendix J.8) that supplies data to end users at an outdoor rate of 10 Mbps for downloads and 1 Mbps when uploading. This coverage obligation applies only to those railway line sections in which the company under obligation already operates mobile network infrastructure on the effective date of 31 December 2019 or the respective rail infrastructure operator provided the locations necessary for coverage at least six months earlier. For railway lines under construction, and for the Semmering Base Tunnel, Brenner Base Tunnel and Koralm Tunnel, this coverage obligation applies one year after these become operational.

This coverage obligation must first be fulfilled on 31 December 2023 and applies for the full term of the frequency usage rights.

An infrastructure operator 'making locations available' refers to that party providing non-payable services as follows: connection to a source of electricity, provisioning of an optical fibre connection, provisioning of masts and premises for installation of mobile network equipment.

Running costs for power must be borne by the mobile network operator under obligation, as must costs for active base station components (e.g. radio equipment, antennas etc.).

## 4.2.1.7 Assignment of only one block in the 700 MHz range

Companies assigned only  $2 \times 5$  MHz in the 700 MHz range must fulfil the coverage obligations as given in sections 4.2.1.1 to 4.2.1.6 at half of the stated data transmission rates for download and upload.

## 4.2.2 2100 MHz coverage obligation

If a company is assigned at least  $2 \times 15$  MHz from the 2100 MHz frequency range, it must ensure the following coverage (for  $2 \times 10$  MHz, see section 4.2.2.4):

# 4.2.2.1 General population coverage for Austria

- a. A communications service must be set up for 75% of the population that supplies data to end users at an outdoor rate of 30 Mbps for downloads and 3 Mbps when uploading, as defined in section 0. This coverage obligation must be met from 31 December 2023.
- b. A communications service must be set up for 90% of the population that supplies data to end users at an outdoor rate of 10 Mbps for downloads and 1 Mbps when uploading, as defined in section 0. This coverage obligation must be met from 31 December 2023.
- c. From 31 December 2025, a communications service must be set up for 80% of the population that supplies data to end users at an outdoor rate of 30 Mbps for downloads and 3 Mbps when uploading, as defined in section 0.



d. From 31 December 2025, a communications service must be set up for 93% of the population that supplies data to end users at an outdoor rate of 10 Mbps for downloads and 1 Mbps when uploading, as defined in section 0.

#### **4.2.2.2** Coverage of urban populations

For each urban area listed in appendix H (defined by the respective cadastral municipalities given in appendix H), a communications service must be set up for 90% of the population in each case that supplies data to end users at an outdoor rate of 30 Mbps for downloads and 3 Mbps when uploading, as defined in section 0. This coverage obligation must be met from 31 December 2023.

#### **4.2.2.3** Area coverage in urban areas

For each urban area listed in appendix H (defined by the respective cadastral municipalities in appendix H), a communications service must be set up for 85% of the settlement area that supplies data to end users at an outdoor rate of 30 Mbps for downloads and 3 Mbps when uploading, as defined in section 0. This coverage obligation must be met from 31 December 2023.

#### 4.2.2.4 Assignment of two blocks in the 2100 MHz range

Companies assigned only 2 x 10 MHz in the 2100 MHz range must fulfil the coverage obligations as given in sections 4.2.2.1 to 4.2.2.3 at half of the stated data transmission rates for downloads and uploads.

#### 4.2.2.5 Assignment of less than two blocks in the 2100 MHz range

The coverage obligations stated in sections 4.2.2.1 to 4.2.2.3 do not apply to any companies assigned less than  $2 \times 10$  MHz in the 2100 MHz range.

# 4.3 Extended coverage obligations

## 4.3.1 Extended coverage obligations in stage 1 of the auction

In stage 1 of the auction, each of the six lot categories in the 700 MHz band (Aa to Af) is associated with a specific 'extended coverage obligation'. The block licensee undertakes to provide coverage to 75 cadastral municipalities from the list of cadastral municipalities associated with the lot category from 31 December 2023 and 150 cadastral municipalities from 31 December 2025 (for the selection of specific cadastral municipalities, see section 4.3.4). At least 100 of the 150 total cadastral municipalities per lot category must be selected from priority category 'P'.



Lot category	List of cadastral municipalities	
Aa	List specified in appendix G.1	
Ab	List specified in appendix G.2	
Ac	List specified in appendix G.3	
Ad	List specified in appendix G.4	
Ae	List specified in appendix G.5	
Af	List specified in appendix G.6	

Table 5: Extended coverage obligations in stage 1

The coverage obligations stated in section 4.3.3 apply for cadastral municipalities whose coverage a company has undertaken to provide in stage 1.

# 4.3.2 Extended coverage obligations in stage 4 of the auction

In stage 4 of the auction, other obligations to provide coverage to cadastral municipalities are auctioned off (see stage 4 of the auction in the auction rules in appendix E).

The coverage obligations stated in section 4.3.3 apply for cadastral municipalities acquired in stage 4.

# 4.3.3 Coverage obligations for cadastral municipalities

The following coverage obligations apply for cadastral municipalities. All types of active sharing (with own and without own frequencies) will be taken into account for the fulfilment of the extended coverage obligations.

Equivalent coverage based on the use of all other frequency ranges assigned to the company outside of the scope of this award procedure (e.g. 800 MHz, 900 MHz, 1800 MHz, 3410 to 3800 MHz) will also be recognised here.

This does not affect the evaluation of the admissibility of active sharing (e.g. approval as per section 56 TKG 2003, general competition law).



#### 4.3.3.1 Population coverage for cadastral municipalities

- 1. Population coverage with at least 2 x 10 MHz: If a company is assigned at least 2 x 10 MHz from the 700 MHz frequency range, a communications service must be set up for each selected cadastral municipality and for 95% of the population, which supplies data to end users at an outdoor rate of 30 Mbps for downloads and 3 Mbps when uploading, as defined in section 0.
- 2. **Population coverage with 2 x 5 MHz:** If a company is assigned 2 x 5 MHz from the 700 MHz frequency range, a communications service must be set up for each selected cadastral municipality and for 95% of the population, which supplies data to end users at an outdoor rate of 15 Mbps for downloads and 1.5 Mbps when uploading, as defined in section 0.

# 4.3.3.2 Area coverage for cadastral municipalities

- 1. Area coverage with at least 2 x 10 MHz: If a company is assigned at least 2 x 10 MHz from the 700 MHz frequency range, it must provide coverage for 90% of the settlement area and 75% of the permanent settlement area for each cadastral municipality selected. For the settlement area, an end-user data rate of 30 Mbps for downloads and 3 Mbps when uploading must be provided, as defined in section 0. For the permanent settlement area, an end-user data rate of 10 Mbps for downloads and 1 Mbps when uploading must be provided, as defined in section 0.
- 2. Area coverage with 2 x 5 MHz: If a company is assigned 2 x 5 MHz from the 700 MHz frequency range, it must provide coverage for 90% of the settlement area and 75% of the permanent settlement area for each cadastral municipality selected. For the settlement area, an end-user data rate of 15 Mbps for downloads and 1.5 Mbps when uploading must be provided, as defined in section 0. For the permanent settlement area, an end-user data rate of 5 Mbps for downloads and 0.5 Mbps when uploading must be provided, as defined in section 0.

#### 4.3.4 Procedure for selecting and exchanging cadastral municipalities

After the completion of stage 1 of the spectrum auction, the winners of frequencies in the 700 MHz band have the option of notifying the auctioneer of the specific cadastral municipalities from the respective list to which they intend to provide coverage in fulfilment of their assigned extended coverage obligation. At the end of the last bidding round in stage 1, the auctioneer informs each winner of frequency blocks in the 700 MHz band about the period (four to seven working days) in which the bidder must nominate the cadastral municipalities to which the bidder will provide coverage. The format to use for this notification will be announced in the rules of procedure. If a bidder does not nominate the cadastral municipalities to which the bidder intends to provide coverage within the specified period, the auctioneer then specifies a list of cadastral municipalities which the bidder must cover. This selection is made randomly. Both the cadastral municipalities nominated



by the bidder and those specified by the auctioneer are binding. The exchange of cadastral municipalities to be provided with coverage is possible only in accordance with the provisions below.

Within three months of notification of the assignment decision, winners of frequencies in the 700 MHz band have the option of informing the regulatory authority of the 75 of the 150 cadastral municipalities selected per frequency block won that they intend to provide with coverage from 31 December 2023. These cadastral municipalities receive a corresponding timestamp ('to be provided with coverage from the end of 2023') for fulfilment of the obligation. The other cadastral municipalities receive the timestamp 'to be provided with coverage from the end of 2025'. If a bidder does not specify enough cadastral municipalities for which the bidder intends to provide coverage from 31 December 2023, the regulatory authority selects the missing cadastral municipalities by a random draw.

The selection of specific cadastral municipalities in the scope of the additional municipalities acquired in stage 4 is a three-phase process:

- Phase 1 (up to three months after adopting the assignment decision): In phase 1, winners of 700 MHz spectrum have the exclusive option of selecting any available cadastral municipalities from the lists that are assigned to the categories acquired by these winners in stage 1. Coverage must be provided by the end of 2025 to all cadastral municipalities selected in phase 1, which receive a corresponding timestamp ('to be provided with coverage from the end of 2025').
- Phase 2 (from three months after notification of the assignment decision to 1 May 2025): In phase 2, assignments are made according to a 'first come, first granted' principle. Winners of additional cadastral municipalities can select from any cadastral municipalities still available at this point in time by sending notification to the regulatory authority at tkfreq@rtr.at. Once selected, a cadastral municipality must be provided with coverage within 18 months after nomination and is given a corresponding time stamp stating when coverage is to be provided to this municipality. Once nomination is accepted by the regulatory authority, the cadastral municipality will no longer be available to other companies under obligation. No further cadastral municipalities may be nominated after 1 May 2025.
- Phase 3 (2 May 2025 to 30 June 2025): In phase 3, all of the cadastral municipalities still remaining for fulfilment of obligations are assigned by a random draw. Coverage for these must be provided from 31 December 2027 and they are given a corresponding timestamp ('to be provided with coverage from the end of 2027').

Winners of cadastral municipalities in stages 1 and 4 may exchange cadastral municipalities at any time:



- Once assigned, a cadastral municipality can be exchanged for another available cadastral municipality at any time, subject to the rule that a cadastral municipality marked with the priority 'P' can only be exchanged for another available cadastral municipality that is also marked with the priority 'P'. The timestamp for fulfilment of the obligation is transferred to the newly selected cadastral municipality. The other cadastral municipality is marked in the list as available and loses its timestamp.
- Companies under obligation can exchange cadastral municipalities already nominated or assigned among themselves at any time. The timestamp for fulfilment of the obligation is reapplied to the cadastral municipality exchanged in each case (and therefore remains with the company under obligation). An exchange is not final until the regulatory authority has been informed in writing of the exchange by both parties and has confirmed this exchange.
- A company can exchange the timestamp for cadastral municipalities already assigned to this company at any time. The exchange is not final until the regulatory authority has been informed in writing of the exchange and has confirmed this exchange.

The regulatory authority will maintain on its website a publicly accessible list of available and assigned cadastral municipalities, including the timestamp and the company under obligation. The number of cadastral municipalities for which a bidder has accepted coverage obligations in stage 1 and 4 can never become smaller, nor can the number of cadastral municipalities for which coverage is to be provided from a point in time.

# 4.3.5 Exchange pool for cadastral municipalities

The regulatory authority will reserve a pool of at least 300 cadastral municipalities for exchange.

If more than 1,800 cadastral municipalities are assigned for extended coverage obligations in stages 1 and 4, additional cadastral municipalities will be nominated after the auction from the list in appendix I and in the order as given. As a result, the municipalities assigned in stages 1 and 4 will be supplemented after the auction by another 300 cadastral municipalities that are then selectable and available for exchange.

# 4.4 Coverage obligations for new entrants

A 'new entrant' within the meaning of this Tender Document is an applicant who, in the period of time between the application to participate in the present award procedure and the assignment of the spectrum that is the subject of this procedure by the regulatory authority, possesses no national usage rights in the frequency ranges of 800 MHz, 900 MHz, 1800 MHz, 2.6 GHz and 3.4–3.8 GHz nor is affiliated



under ownership law with parties holding nationwide usage rights in the stated frequency ranges.

If a new entrant is assigned one or more frequency packages from the frequency ranges 700 MHz, 1500 MHz or 2100 MHz, the prescribed coverage obligations apply with the following deadlines, which are modified in some instances:

Band-specific coverage obligation	Deadline
• 700 MHz: section 4.1.1	Level 1, from 31 December 2027 Level 2, from 31 December 2028
• 1500 MHz: section 4.1.2	Level 1, from 31 December 2030 Level 2, from 31 December 2035
• 2100 MHz: section 4.1.3	From 31 December 2027
Basic coverage obligations	
<ul> <li>General population coverage for Austria</li> <li>Coverage of urban populations</li> <li>Area coverage in urban areas</li> <li>Traffic routes—B and L roads</li> <li>Motorways, limited-access highways</li> <li>Selected railway lines</li> </ul>	Five years after the effective date, as stated in section 4.2
Extended coverage obligations	
Cadastral municipalities from stage 1	Unchanged from section 4.3
Cadastral municipalities from stage 4	Unchanged from section 4.3

**Table 6: Deadlines for new entrants** 



# 4.5 Definition of 'coverage'

The following section defines the conditions to be met in order for a coverage obligation to be considered as fulfilled.

#### 4.5.1 Population coverage

The network must be sized so as to enable the data transmission rate required by sections 4.2 and 4.3 for population coverage in the coverage area relevant for the fulfilment of the coverage obligation to be achieved without overloading the network. The provisions listed below apply for measurements made under load.

A population coverage obligation is based on a grid definition of  $100 \text{ m} \times 100 \text{ m}$  (see appendix J.7) in the regions in which coverage is to be provided (cadastral municipality, urban area, all of Austria). The population supplied with coverage is derived by totalling up the population in all grid cells with coverage. A grid cell is considered to have coverage if an end-user data transmission rate of at least 2 Mbps for downloads and 0.5 Mbps for uploads is available within the grid cell. To calculate the mean and the 25th percentile in the coverage area, a calculation is made for each grid cell i of the relevant data rate  $D_i$  (e.g. by measurements).

The level of coverage is calculated as the ratio of resident population with coverage to the total population in the respective coverage area. The coverage obligation is considered fulfilled if the following are true:

- a. The level of coverage (90%, 93%, 95% or 98%) is achieved in the grid cells with coverage.
- b. The mean of all relevant data transmission rates  $D_i$  for all grid cells with coverage necessary for the fulfilment of the coverage obligation is not less than the required data rate.
- c. The 25th percentile of all relevant data transmission rates  $D_i$  for all grid cells with coverage necessary for the fulfilment of the coverage obligation is not less than the required data rate.<sup>3</sup>

If measurements are made, at least three and no more than five measurements are made at an arbitrary point within a grid cell. A grid cell is considered to have coverage if the required minimum data transmission rate is achieved by at least three measurements.

To calculate the mean and 25th percentile in the coverage area, the relevant data transmission rate  $D_i$  of a grid cell i is the median of the three to five measurements in the grid cell.

 $<sup>^{3}</sup>$  Accordingly, approx. 75% of all relevant data transmission rates  $D_{i}$  for all grid cells with coverage necessary for the fulfilment of the coverage obligation must at least equal the required rate.



#### 4.5.2 Area coverage

The network must be sized so as to enable the data transmission rate required by sections 4.2 and 4.3 for area coverage in the coverage area relevant for the fulfilment of the coverage obligation to be achieved without overloading the network. The provisions listed below apply for measurements made under load.

Area coverage relates to the settlement area (urban areas, cadastral municipalities) and the permanent settlement area (cadastral municipalities). This coverage obligation is based on  $250\,\mathrm{m}\,\mathrm{x}\,250\,\mathrm{m}$  grid cells (see appendix J.6) in the regions requiring coverage (cadastral municipalities, urban areas). The area with coverage is derived by totalling up the area in all grid cells with coverage. A grid cell is considered to have coverage if an end-user data transmission rate of at least 2 Mbps for downloads and 0.5 Mbps for uploads is available within the grid cell. To calculate the mean and the 25th percentile in the coverage area, a calculation is made for each grid cell i of the relevant data rate  $D_i$  (e.g. by measurements).

The level of coverage is calculated as the ratio of area with coverage to the total area in the respective coverage area. The coverage obligation is considered fulfilled if the following are true:

- a. The level of coverage (75%, 90% or 95%) is achieved in the grid cells with coverage.
- b. The arithmetic mean of all relevant data transmission rates  $D_i$  for all grid cells with coverage necessary for the fulfilment of the coverage obligation is not less than the required data rate.
- c. The 25th percentile of all relevant data transmission rates  $D_i$  for all grid cells with coverage necessary for the fulfilment of the coverage obligation is not less than the required data rate.

If measurements are made, at least three and no more than five measurements are made at up to three arbitrary points within each grid cell. A grid cell is considered to have coverage if the required minimum data transmission rate is achieved at each of these points by at least three measurements. To calculate the mean and 25th percentile in the coverage area, the relevant data transmission rate  $D_i$  of a grid cell i is the median of the 3 to 15 measurements in the grid cell.

# 4.5.3 Road coverage

The network must be sized so as to enable the data transmission rate required by section 4.2 for road coverage in the coverage area relevant for the fulfilment of the coverage obligation to be achieved without overloading the network. The provisions listed below apply for measurements made under load.

This coverage obligation must be fulfilled both in stationary operation and during movement along the road (independently of the traffic lane and direction, not exceeding speeds permitted for passenger vehicles).



Tunnels are exempt from the coverage obligation for B and L roads.

This coverage obligation is based on subdividing roads into unconnected units of approx. 200 m in length. If the length of a road is not an exact multiple of 200 m, a unit may also be shorter than 200 m.

The following provisions apply to the coverage obligation according to section 4.2.1.4, a and section 4.2.1.5:

The road length with coverage is derived by totalling up the length of all units with coverage. A unit is considered to have coverage if an end-user data transmission rate of at least 2 Mbps for downloads and 0.5 Mbps when uploading is available on this unit. For each unit i, a relevant data transmission rate  $D_i$  is determined.

The level of coverage is calculated as the ratio of the length of units with coverage to the total length of all of the road units. The coverage obligation is considered fulfilled if the following are true:

- a. The required level of coverage is achieved in the units with coverage.
- b. The arithmetic mean of all relevant data transmission rates  $D_i$  for all units with coverage necessary for the fulfilment of the coverage obligation is not less than the required data rate.
- c. The 25th percentile of all relevant data transmission rates  $D_i$  for all units with coverage necessary for the fulfilment of the coverage obligation is not less than the required data rate.

The following provisions apply to the coverage obligation according to section 4.2.1.4, b to g:

The length with uninterrupted coverage as defined by section 4.2.1.4, b to g, is derived by totalling up the length of all road segments with coverage. A road segment is considered to have coverage if the following are true:

- a. A connection is not interrupted along this road segment (no interruption to the PDP context<sup>4</sup>).
- b. Along each metre of this road segment, an end-user data transmission rate is achieved of at least 2 Mbps for downloads and 0.5 Mbps when uploading.

<sup>&</sup>lt;sup>4</sup> Packet Data Protocol (PDP): network protocol used by an external packet data network interfacing to GPRS.



#### 4.5.4 Coverage for railway lines

The network must be sized so as to enable the data transmission rate required by section 4.2 for coverage for railway lines in the coverage area relevant for the fulfilment of the coverage obligation to be achieved without overloading the network. The provisions listed below apply for measurements made under load.

This coverage obligation must be fulfilled both in stationary operation and during movement along the railway line (regardless of the track system and travel direction, and at least at the permissible speed for the respective railway line according to the Register of Infrastructure (RINF); see http://public:public@rinf.schig.com/).

This coverage obligation is based on subdividing railway lines into unconnected units of 200 m in length. If the length of a railway line is not an exact multiple of 200 m, a unit may also be shorter than 200 m.

The following provisions apply to the coverage obligation according to section 4.2.1.6:

The length of railway line with coverage is derived by totalling up the length of all units with coverage. A unit is considered to have coverage if an end-user data transmission rate of at least 2 Mbps for downloads and 0.5 Mbps when uploading is available on this unit. For each unit i, a relevant data transmission rate  $D_i$  is determined.

The level of coverage is calculated as the ratio of the length of units with coverage to the total length of all of the railway line units. The coverage obligation is considered fulfilled if the following are true:

- a. The required level of coverage is achieved in the units with coverage.
- b. The arithmetic mean of all relevant data transmission rates  $D_i$  for all units with coverage necessary for the fulfilment of the coverage obligation is not less than the required data rate.
- c. The 25th percentile of all relevant data transmission rates  $D_i$  for all units with coverage necessary for the fulfilment of the coverage obligation is not less than the required data rate.



# 4.6 Proof and verification of the coverage level

# 4.6.1 Band-specific coverage obligations

As proof of fulfilment of the band-specific coverage obligations, the spectrum holder is required to submit to the TKK at least the documents listed below in electronic form either on request or by no later than four weeks from the date specified in each case (precise details of data requirements will be announced during the review procedure):

- a. An inventory of all base station locations relevant for the fulfilment of the respective band-specific coverage obligation, including geo-coded data (GIS format or vector graphics), indicating in each case the frequency blocks used (per sector), based on the HCM Agreement, as well as the precise coordinates of each base station location.
- b. Operating permit(s) for the base stations used to fulfil the respective coverage obligation.

The TKK is entitled to verify compliance with coverage obligations at any time by taking measurements. The spectrum holder(s) in each case are obliged to cover the costs of verification.

#### 4.6.2 Basic coverage obligations

As proof of fulfilment of the basic coverage obligations, the spectrum holder is required to submit to the TKK at least the documents listed below in electronic form either on request or by no later than four weeks from the date specified in each case (precise details of data requirements will be announced during the review procedure):

- a. An inventory of all base station locations relevant for the fulfilment of the basic coverage obligations, including geo-coded data (GIS format or vector graphics), indicating in each case the frequency blocks used per cell (sector), based on the HCM Agreement, as well as the precise coordinates of each base station location. If active sharing is in operation at a base station location, corresponding detailed information is to be provided (e.g. sharing partner, own or third-party frequencies used, transmission of a frequency pool [shared and reciprocal frequency usage as defined in section 5], and technical implementation of the partnership).
- b. List of grid cells, road sections and railway lines with coverage, as well as the calculated level of coverage for these using own frequencies. For the grid cells, road sections and railway lines, the respective definitive data transmission rates for the fulfilment of the coverage obligation must be specified, and a map of Austria showing (GIS format or vector graphics) the data transmission rates for coverage (download/upload) must be provided.



- c. List of grid cells, road sections and railway lines with coverage, as well as the calculated level of coverage for these using own and third-party frequencies. For the grid cells, road sections and railway lines, the respective definitive data transmission rates for the fulfilment of the coverage obligation must be specified, and a map of Austria showing (GIS format or vector graphics) the data transmission rates for coverage (download/upload) must be provided.
- d. Operating permit(s) for the base stations used to fulfil the respective coverage obligation.

The TKK is entitled to verify compliance with coverage obligations at any time by taking measurements. The spectrum holder(s) in each case are obliged to cover the costs of verification.

## 4.6.3 Extended coverage obligations

As proof of fulfilment of extended coverage obligations, the spectrum holder must submit to the Telekom-Control-Kommission at least the following documents in an electronically editable format, no later than four weeks after the effective date (timestamp for the respective cadastral municipality) or on request (the specific requirements relating to data will be announced during the review procedure):

- a. An inventory of all base station locations relevant for coverage to the respective cadastral municipalities, including geo-coded data (GIS format, vector graphic), indicating in each case the frequency blocks used per cell (sector), based on the HCM Agreement 2018, as well as the precise coordinates of each base station location. If active sharing is in operation at a base station location, corresponding detailed information is to be provided (e.g. sharing partner, own or third-party frequencies used, transmission of a frequency pool [shared and reciprocal frequency usage as defined in section 5], and technical implementation of the partnership).
- b. A list of grid cells with coverage in the respective cadastral municipalities and the levels of coverage calculated for these with own frequencies. For the grid cells, the respective definitive data transmission rates for the fulfilment of the coverage obligation must be specified, and a map of Austria showing (GIS format or vector graphics) the data transmission rates for coverage (download/upload) must be provided.
- c. A list of grid cells with coverage in the respective cadastral municipalities and the levels of coverage calculated for these with own and third-party frequencies. For the grid cells, the respective definitive data transmission rates for the fulfilment of the coverage obligation must be specified, and a map of Austria showing (GIS format or vector graphics) the data transmission rates for coverage (download/upload) must be provided.



d. Operating permit(s) for the base stations used to fulfil the respective coverage obligation.

The TKK is entitled to verify compliance with coverage obligations at any time by taking measurements. The spectrum holder(s) in each case are obliged to cover the costs of verification.

# 4.7 Penalty payments for failure to meet coverage obligations

#### 4.7.1 Penalty payments for band-specific coverage obligations

A fine of EUR 10,000.00 will apply per location not operated. This applies to all levels of the band-specific coverage obligations and to all frequency ranges. The amount is payable annually from the respective effective date until the provider meets the required minimum number of locations.

If use of the spectrum rights previously awarded is waived before the respective first effective date stipulated for band-specific coverage obligations, the fine is 50 per cent of the fine that would be payable as of this date for failing to meet the respective coverage obligation.

# 4.7.2 Penalty payments for basic coverage obligations

The penalty payments to be paid for non-fulfilment of the basic coverage obligations listed in section 4.2 and the corresponding obligations for new entrants stated in section 4.4 are given in the following table:

Coverage obligation	Actual coverage achieved	Penalty payment
	<70%	EUR 20 million
General population coverage, as per section 4.2.2.1 a (in conjunction with 4.2.2.4)  General population coverage, as per 4.2.1.1 a and section 4.2.2.1 b (in conjunction with 4.2.1.7 and 4.2.2.4)	≥70% and <72.5%	EUR 10 million
	≥72.4% and <75%	EUR 5 million
	<85%	EUR 20 million
	≥85% and <87.5%	EUR 10 million
	≥87.5% and <90%	EUR 5 million
	<75%	EUR 20 million
General population coverage, as per section 4.2.2.1 c (in conjunction with	≥75% and <77.5%	EUR 10 million
4.2.2.4)	≥77.5 and <80	EUR 5 million



Coverage obligation	Actual coverage achieved	Penalty payment
	<90%	EUR 20 million
General population coverage, as per 4.2.1.1 d (in conjunction with 4.2.1.7)	≥90% and <92.5%	EUR 10 million
General population coverage, as per 4.2.1.1 d (in conjunction with 4.2.1.7)  General population coverage, as per 4.2.1.1 c and section 4.2.2.1 d (in conjunction with 4.2.1.7 and 4.2.2.4)  General population coverage, as per section 4.2.1.1 d (in conjunction with 4.2.1.7)  Coverage for urban populations, as per section 4.2.1.2 (in conjunction with 4.2.1.7)  Coverage for urban populations, as per section 4.2.2.2 (in conjunction with 4.2.1.7)  Area coverage for urban areas, as per section 4.2.1.3 (in conjunction with 4.2.1.7)	≥92.5% and <95%	EUR 5 million
Conoral nonulation sources as nor	<88.5%	EUR 20 million
4.2.1.1 c and section 4.2.2.1 d (in	≥88.5% and <91%	EUR 10 million
General population coverage, as per 4.2.1.1 d (in conjunction with 4.2.1.7)  General population coverage, as per 4.2.1.1 c and section 4.2.2.1 d (in conjunction with 4.2.1.7 and 4.2.2.4)  General population coverage, as per section 4.2.1.1 d (in conjunction with 4.2.1.7)  Coverage for urban populations, as per section 4.2.1.2 (in conjunction with 4.2.1.7)  Coverage for urban populations, as per section 4.2.2.2 (in conjunction with 4.2.2.4)  Area coverage for urban areas, as per section 4.2.1.3 (in conjunction with	≥91% and <93%	EUR 5 million
	<90%	EUR 25 million
	≥90% and <95%	EUR 20 million
	≥95% and <96.5%	EUR 10 million
	≥96.5% and <98%	EUR 5 million
	<85%	EUR 25 million
	≥85% and <90%	EUR 20 million
	≥90% and <92.5%	EUR 10 million
	≥92.5% and <95%	EUR 5 million
	<80%	EUR 25 million
	≥80% and <85%	EUR 20 million
	≥85% and <87.5%	EUR 10 million
	≥87.5% and <90%	EUR 5 million
, ,	<85%	EUR 20 million
	≥85% and <87.5%	EUR 10 million
	≥87.5% and <90%	EUR 5 million
Area coverage for urban areas, as per	<80%	EUR 20 million



	T	
Coverage obligation	Actual coverage achieved	Penalty payment
section 4.2.2.3 (in conjunction with 4.2.2.4)	≥80% and <82.5%	EUR 10 million
	≥82.5% and <85%	EUR 5 million
Tooff and the Development	<85%	EUR 20 million
Traffic routes—B and L roads, as per section 4.2.1.4 a (in conjunction with	≥85% and <87.5%	EUR 10 million
section 4.2.1.7)	≥87.5% and <90%	EUR 5 million
Troffic noutes Daniel needs as non	<70%	EUR 20 million
Traffic routes—B and L roads, as per section 4.2.1.4 b (in conjunction with	≥70% and <72.5%	EUR 10 million
section 4.2.1.7)	≥72.4% and <75%	EUR 5 million
Troffic noutes Daniel needs as non	<85%	EUR 20 million
Traffic routes—B and L roads, as per section 4.2.1.4 c (in conjunction with	≥85% and <87.5%	EUR 10 million
section 4.2.1.7)	≥87.5% and <90%	EUR 5 million
Treffic routes Dand I reads at the	<65%	EUR 20 million
Traffic routes—B and L roads, as per section 4.2.1.4 d (in conjunction with section 4.2.1.7)	≥65% and <67.5%	EUR 10 million
	≥67.5% and <70%	EUR 5 million
Traffic routes—B and L roads, as per section 4.2.1.4 e (in conjunction with section 4.2.1.7)	<75%	EUR 20 million
	≥75% and <77.5%	EUR 10 million
	≥77.5% and <80%	EUR 5 million
Motorways and other limited-access highways, as per section 4.2.1.5 (in conjunction with section 4.2.1.7)	<90%	EUR 25 million
	≥90% and <95%	EUR 20 million
	≥95% and <96.5%	EUR 10 million
	≥96.5% and <98%	EUR 5 million
Selected railway lines, as per	<90%	EUR 25 million



Coverage obligation	Actual coverage achieved	Penalty payment
section 4.2.1.6 (in conjunction with section 4.2.1.7)	≥90% and <95%	EUR 20 million
, ,	≥95% and <96.5%	EUR 10 million
	≥96.5% and <98%	EUR 5 million

Table 7: Penalty payment for basic coverage (level of coverage)

If a provider achieves the required level of coverage to meet the coverage obligation but not the required 25th percentile or the required mean, then the separately applicable penalties listed in the following will be imposed if the 25th percentile or mean is not achieved:

Coverage obligation	Actual value (in % of required value)	Penalty payment
The average achieved is only x% of the required value (e.g. 30/3 Mbps), whereby the lower percentage value is applied from the downlink or uplink.	<80%	EUR 10 million
	≥80% and <90%	EUR 5 million
	≥90% and <100%	EUR 2 million
The 25th percentile achieves only x% of the required value (e.g. 30/3 Mbps)	<80%	EUR 10 million
	≥80% and <90%	EUR 5 million
	≥90% and <100%	EUR 2 million

Table 8: Penalty payment for failing to achieve the 25th percentile or mean

If the sum total of fines determined in relation to the coverage obligations to be fulfilled by a company in one calendar year exceeds EUR 25 million, then a fine of EUR 25 million is to be paid. This upper limit encompasses the general population coverage, population coverage in urban areas and area coverage for urban areas (and includes average-value fines and 25th-percentile fines).

As regards coverage obligations affecting traffic routes—B and L roads, the upper limit is set at EUR 20 million.

These upper limits do not encompass the extended coverage obligation.

The penalty payments are due after the respective effective date for the coverage obligation until the spectrum holder has achieved the prescribed level of coverage.



Penalty payments also become due if the provider has met the minimum level of coverage in the past but failed to do so subsequently.

#### 4.7.3 Penalty payments for extended coverage obligations

The penalty payment for non-fulfilment of the extended coverage obligations is set at EUR 40,000 for each cadastral municipality without adequate coverage on the respective effective date. The penalty payment is due after the respective effective date for the coverage obligation until the spectrum holder has achieved the prescribed level of coverage in the affected cadastral municipality as stated in section 0 and 4.3.3.2. The penalty payment also becomes due if the provider has met the minimum level of coverage in the past but failed to do so subsequently. The penalty payment applies equally to cadastral municipalities that were assigned in either stage 1 or stage 4 of the auction.

If fewer cadastral municipalities than the number the provider undertook to provide with coverage (stages 1 and 4) have coverage on 31 December 2027, the proportional price discount must be repaid. The price discount A to be repaid is calculated according to the following formula:

$$A = \frac{P}{K_4} * Min(K_4, (K_1 + K_4 - K))$$

Where P is the price discount for accepting coverage obligations in stage 4 of the auction,  $K_1$  is the number of cadastral municipalities acquired in stage 1 and  $K_4$  the number of cadastral municipalities acquired in stage 4. K ( $\leq K_1 + K_4$ ) is the number of cadastral municipalities actually provided with coverage at the end of 2027, taken from the list of cadastral municipalities selected in accordance with the auction result and the rules in section 4.3.4.

Repaying the price discount does not an exempt a provider from a coverage obligation or the penalty payment.

## 4.8 Obligation to disclose coverage data

Each spectrum holder must publish on the company website a map view of the coverage area showing details relevant for the fulfilment of the coverage obligations from this procedure. Specifically, the map should show, by means of a realistic simulation, the data rates available to end users outdoors, broken down by downlink and uplink rates. The maximum data rate available should also be indicated. In the map view, each area supplied with service must be displayed in sectors of at least 100 m by 100 m, corresponding to the 100 m grid size used by Statistics Austria in projections of regional statistics (ETRS-LAEA grid), and show the bandwidth normally



available<sup>5</sup> as well as the estimated download and upload speeds. Compliance must be given with the specified speed at every point within the particular grid.

The related raw data—at a minimum the grid, speeds and time stamp—are to be additionally made available to the public in the Open Data format (based on the CC BY 4.0 licence).

Data are to be published for the first time by 31 January 2021 at the latest. The data are to be consistently kept up to date, and revised within no more than three months.

# 4.9 Definitions of 'cadastral municipalities', 'urban areas' and 'roads'

The definitive data for this award procedure and for verifying coverage obligations for relevant cadastral municipalities, urban areas of relevant cities, relevant road segments B and L, highways and limited-access highways, the permanent settlement area and micro-grids as well as the relevant railway lines, are defined in a digital (GIS) format in appendices J.1 to J.7.

<sup>&</sup>lt;sup>5</sup> The bandwidth available to end users 95% of the day or per 24 hours; i.e. the bandwidth must not fall below this level for more than 72 minutes on any day.



## 5 Rules for infrastructure sharing

#### 5.1 Core network

No cooperation relating to essential core network functions is permitted between two spectrum holders in the 700, 1500 and 2100 MHz bands, where more than one of the participating companies hold more than a total of 10% of the nationwide usage rights in the 700 MHz, 800 MHz, 900 MHz, 1500 MHz, 1800 MHz, 2100 MHz, 2600 MHz or 3410–3800 MHz frequency ranges or are affiliated under ownership law, as defined in section 7.2.2, with parties holding more than 10% of such usage rights.

### 5.2 Active elements of the access network

The active elements of the access network are defined below for the context of infrastructure sharing. The active elements of the access network are usually operated using electrical energy and are responsible for functions including signal generation, processing and amplification, and control. This includes the transmitter, the receiver, the hardware and software that generate, control and amplify or receive and decode the radio signal, and the electronic control of the antenna tilt. Antennas requiring electrical energy are also active elements, in other words antennas with an electronic amplifier or controller for alignment. Agreements allowing other providers to use active elements (e.g. national roaming agreements) are considered equivalent to active sharing.

Active elements of the access network are considered 'non-replicable' where, viewed objectively, active sharing is necessary for effective competition. To determine objective necessity, an examination is required of whether competitors will be able to replicate those particular active elements of the access network in the foreseeable future and in this way limit competition in the market. In addition, corresponding demand for services must exist, and those particular active elements of the access network must be indispensable for providing those services.

For example, in an individual case statutory provisions could also require compulsory joint use of active elements of the access network. The rules described below apply only to those individual active elements of the access network which qualify as non-replicable.



#### 5.2.1 Access obligation for active sharing: prerequisites

As far as technically and economically feasible, third parties must on request be allowed non-discriminatory access within the entire federal territory to active elements of the access network, in other words to active sharing, under the following conditions:

- 1. The active elements for coverage in the affected area are not replicable.
- 2. Usage involves frequencies in the bands 700, 1500 or 2100 MHz.
- 3. No third party is authorised to access non-replicable infrastructure unless the third-party company holds a licence in a frequency range suitable for supplying complete coverage with mobile services (for example, 700 MHz, 800 MHz, 900 MHz, 1800 or 2100 MHz).

If a requesting third party is not granted access or no agreement on joint usage or on compensation within a period of four weeks from receipt of the request by the party entitled to access, either party involved may call upon the regulatory authority for a decision.

#### 5.2.2 Prohibition on active sharing and exemptions therefrom

In the political municipalities of Vienna, Graz and Linz, the awarded frequency usage rights in the 700 MHz, 1500 MHz and 2100 MHz bands are permitted to be used for outdoor coverage—including the coverage of buildings from outdoor locations—exclusively with an access network and without active sharing.

The prohibition on active sharing also applies to the band-specific coverage obligations in section 4.1. The exemptions to the prohibition given below are not applicable to to the band-specific coverage obligations, with the exception of the exemption for partnerships involving legacy technologies.

An exemption from the prohibition of active sharing in Vienna, Graz and Linz exists where none or only one of the participating spectrum holders holds more than a total of 10% of the nationwide usage rights in the 700 MHz, 800 MHz, 900 MHz, 1500 MHz, 1800 MHz, 2100 MHz, 2600 MHz or 3410–3800 MHz frequency ranges or is affiliated under ownership law, as defined in section 7.2.2, with parties holding more than 10% of such usage rights.

A further exemption from the prohibition on active sharing in Vienna, Graz and Linz exists in the case of non-replicable active elements of the access network. In this case, as far as technically and economically feasible, third parties must on request be allowed non-discriminatory access; this applies when the terms under 1 to 3 of section 0 have been met.

Partnerships involving legacy technologies (such as 2G or 3G, for example) can, as demand declines, allow economies of scale to be achieved, with cost-savings as well as a more efficient use of spectrum resulting. To enable such partnerships, a further



exemption from the prohibition on active sharing in Vienna, Graz and Linz is granted subject to the following conditions. Certain properties of terminal equipment (e.g. GSM-only) may mean that a volume of traffic for a specific service provided by the respective participating company (e.g. voice telephony or data communications) can be handled only by a specific kind of technology. If this volume is less than 10%, the respective participating company is exempt from the prohibition on active sharing with a second company subject to the prohibition for this kind of technology and service provision if the second company is also under the 10% threshold for a specific service and technology. In cases where the respective portion of traffic for the respective service drops to 3%, no prohibition on active sharing is applied to this technology or this service provision regardless of the number of companies involved in the partnership.

A further exemption to the prohibition on active sharing exists for locations in the immediate vicinity of railway lines, limited-access highways and motorways that are set up in order to provide coverage to these traffic routes.

## 5.3 Shared and mutual use of frequencies

Restrictions on the shared and mutual use of frequencies solely affect partnerships between companies who each hold more than a total of 10% of the nationwide usage rights in the 700 MHz, 800 MHz, 900 MHz, 1500 MHz, 1800 MHz, 2100 MHz, 2600 MHz or 3410–3800 MHz frequency ranges or who are affiliated under ownership law, as defined in section 7.2.2, with parties holding more than 10% of these nationwide usage rights. These affected companies are designated as 'companies with a minimum level of frequency usage rights' in the following sections.

Shared and mutual use of frequency in the ranges 700 MHz and 2100 MHz is permitted only to a certain extent. Shared and reciprocal use of frequency at a location is said to occur when shared broadcasts using frequencies for which multiple separate companies hold a usage right are made from a single base station at a location. In contrast, there is no case of shared and mutual use of frequency if one of these companies provides connectivity to its end users only by using its own frequencies. If one company makes sole use of the frequencies of another company and its own frequencies are therefore not used for broadcasts from the base station at a location (e.g. national roaming), this is also not considered to be shared and mutual use of frequency.

For the purposes of this rule (section 5.3), a location is defined as follows:

- A location must have a base station capable of transmitting at a minimum level of 20 watts of electrical power per sector. The actual transmission power level can be less.
- A location qualifies as a location only if the frequencies transmitted there are used to connect end users.



- Only base stations operated outdoors are considered as locations within the meaning of this rule.
- A location having an antenna system with more than one sector is still considered as only one location.
- Locations that are used primarily to provide coverage for cadastral municipalities listed in appendix G are not considered as locations within the meaning of this rule if such locations are situated within those cadastral municipalities or no further than one kilometre from the cadastral municipality border.

For new locations as defined by this rule, the shared and mutual use of frequencies is not prohibited if no other restriction applies (such as band-specific coverage obligations as defined in section 4.1 or the prohibition on active sharing as defined in section 5.2.2). A new location as defined by this rule is a location set up after 30 September 2019. An existing location is defined as one that was reported as operational according to section 3.6 by 30 September 2019. If an existing location is replaced by one or more locations with the primary aim of providing coverage to the coverage area of the former system, these locations are not considered to be new locations.

The following table shows the total maximum share the respective company is permitted to hold in shared and mutual frequency use at its locations operating in the 700 MHz and 2100 MHz bands; the shares for two participating companies include the share for more than two participating companies with a minimum level of frequency usage rights:

	Two participating companies with a minimum level of frequency usage rights	More than two participating companies with a minimum level of frequency usage rights
New locations as defined by section 5.3	100%	100%
Locations that are not new, as defined by section 5.3	30%	10%
All locations (total) as defined by section 5.3	40%	20%

Table 9: Maximum permissible shares for locations with shared and mutual use of frequencies

The exemption for partnerships involving legacy technologies (section 5.2.2) also applies to the shared and mutual use of frequencies. For this purpose—and subject to the preconditions as stated there—the shared and mutual use of frequencies may continue to be practised.



## 5.4 Reporting and information obligation

By 28 February of each year at the latest, every spectrum holder is required to report to the regulatory authority any activities relating to active sharing in the previous year (throughout Austria and inside and outside buildings). Such disclosure must include the following details:

- Sharing partners
- Period
- Frequency ranges used
- Technology (e.g. 2G, 3G, 4G, 5G)
- Volume of traffic correspondingly processed in the previous year (broken down according to gigabytes of uplink and downlink traffic and voice minutes)
- Zone supplied with coverage
- Number of locations
- Number of locations with shared and mutual use of frequencies
- Technical description of the active elements used jointly

For non-replicable infrastructure used for outdoor coverage—including the coverage of buildings from outdoor locations—in Vienna, Graz and Linz, the following items are also required:

- Name and address of the location provider
- Proof of the non-replicability of the location (costs, demand, indispensability)

Spectrum holders are additionally required to make available to the regulatory authority at any time on request all compulsory information on any active sharing in the access network. In particular, any and all contractual agreements relating to active sharing are to be made available to the authority on request.



## 6 Auction procedure

#### 6.1 Fundamentals

Frequencies in the three bands 700 MHz, 1500 MHz and 2100 MHz totalling 270 MHz are to be offered at auction. Extended coverage obligations, some of which are bound to certain frequencies, will also be assigned in the course of the award procedure.

These extended coverage obligations are defined in addition to the obligation to provide coverage for a certain number of cadastral municipalities currently lacking adequate coverage.

- For the extended coverage obligations bound to certain frequency blocks, a list of cadastral municipalities is specified for each block of this kind. The winner of this block is required to provide coverage for a certain number of these communities (some of these also having a higher priority 'P'). Winners are at liberty to state which specific cadastral municipalities they intend to provide coverage to in fulfilment of this obligation. Otherwise, the auctioneer draws lots to determine which specific cadastral municipalities are to be given coverage.
- In addition, other extended coverage obligations not bound to spectrum will be auctioned off at a separate stage. Successful winners of spectrum may undertake to provide coverage to other cadastral municipalities in return for a price discount.

The award procedure is split into a total of four stages.

- In an initial stage, spectrum in the 700 and 2100 MHz bands is awarded as abstract frequency blocks.
- In a second stage, spectrum in the 1500 MHz band is then awarded as abstract frequency blocks.
- A third stage is used to determine which specific frequencies within the bands will be assigned to the winners of spectrum in the first two stages.
- Additional extended coverage obligations not bound to frequencies are then auctioned off in the fourth and final stage.

The auctioning off of abstract frequency blocks during stage 1 and stage 2 utilises the simultaneous multi-round (SMR) auction format. Bidders will not typically bid on specific blocks, however, but will specify the number of blocks they wish to acquire in a lot category for the applicable round price. At the end of a bidding round, the auctioneer determines the provisional winners of the available blocks. If new bids are placed or waivers are used within a round, then a further round of bidding is completed. If all provisional winning bids are held at the current round price, the round price increases for the next bidding round. If there is no further bidding round,



then the provisional winning bids become the actual winning bids and the successful bidders then pay the corresponding prices for the bids that they have won.

The maximum amount of spectrum that a bidder may acquire at auction in stages 1 and 2 is limited by spectrum caps (cf. section 6.4).

Stage 3 is conducted as a single sealed bidding round in which winners of spectrum submit bids for various combinations of specific frequency blocks across all bands, thereby enabling the mutually compatible assignment of contiguous spectrum to the winners of spectrum in each band (assignment options). Winning bids are identified by determining the combination of mutually compatible bids across all bands resulting in the highest total value in each band. The winners receive the actual frequency blocks contained in their respective winning bids at what are termed 'additional prices', which are calculated on the basis of a modified second price rule. The third stage of the auction procedure is open to those applicants who in the preceding stages acquired abstract frequency blocks, where more than one assignment option exists for these blocks.

Stage 4 is conducted as a single sealed bidding round in which the winners of spectrum are invited to indicate their readiness to accept additional coverage obligations in return for a reduction in the price to be paid for the use of their acquired spectrum.

The total price to be paid by a successful bidder is calculated as the sum of the bidder's successful bids during the first two stages, plus the additional price less the deductions determined during the fourth stage as a result of accepting any additional coverage obligations.

Auction rules are provided in Appendix E.

The auctioneer is the TKK or a member as commissioned by that body. The TKK may also entrust the handling of the auction to members of the Telecommunications Division of the Austrian Regulatory Authority for Broadcasting and Telecommunications (RTR).

#### 6.2 Minimum bid

Art. 55 Par. 4 TKG 2003 allows for the tender documentation to include details of the minimum frequency licence fee that may be bid.

These details are required to be based on the frequency assignment fees that are expected to be charged for the assigned spectrum. Where reasons exist, the authority can depart from the rule of defining the minimum bid based on the frequency assignment fees, specifically where this appears justified considering the actual market value of the frequencies. In this case, the minimum bid may not exceed 50% of the lower limit of the market value as determined in accordance with the previous sentence.



The following statement is taken from the explanatory comments on Art. 55 Par. 4 TKG 2003: If the regulatory authority does not set the minimum bid based on the assignment fee, the authority is required in any case to set the bid based on national and international reference values.

Based on the principles for defining the minimum bid that can be derived from Art. 55 Par. 4 TKG 2003, the minimum bid listed below results for the principle stage, per block and lot category:

Band	Lot category	Blocks	MHz per block	Minimum bid per block
700 MHz	Aa	1	2 x 5 MHz	9,500,000€
700 MHz	Ab	1	2 x 5 MHz	2,375,000€
700 MHz	Ac	1	2 x 5 MHz	9,500,000€
700 MHz	Ad	1	2 x 5 MHz	9,500,000€
700 MHz	Ae	1	2 x 5 MHz	7,125,000 €
700 MHz	Af	1	2 x 5 MHz	9,500,000€
1500 MHz	В	8	1 x 10 MHz	3,125,000 €
2100 MHz	С	12	2 x 5 MHz	13,900,000€

Table 10: Minimum bid amount per block and lot category

## 6.3 Participation requirements/bank guarantees

To be allowed to participate in the auction, an applicant is required to provide security in the amount of the lowest minimum bid for one block in the auction (see section 6.2), in compliance with the rules on bank guarantees below and with the Auction Rules.

Applicants must provide security for bids (bid limit) in the auction's principle stage (stages 1 and 2), in accordance with the Auction Rules (appendix E). Such security must be provided by means of an abstract bank guarantee which is callable on first demand and has been issued by a bank with a good credit rating that is established in a signatory country of the European Economic Area (EEA; see Appendix B.1 for a sample bank guarantee as security for the frequency licence fee).

The minimum amount of the bank guarantee is determined based on the minimum bid set for the least costly frequency block (EUR 3,125,000, see Table 10). The original of that bank guarantee must be supplied with the application.



Bank guarantees can also be presented between the submission of the application and the start of the auction. Such additional bank guarantees must be submitted by a point in time to be specified in the rules of procedure.

Beyond this, it is possible to present additional bank guarantees during the auction. In the event that bank guarantees are presented later during the auction, to allow the necessary checks, such guarantees must be presented by no later than 15:00 (local time) of the business day (Monday to Friday) prior to submitting the bid and must have been issued by the same bank that issued the guarantee supplied with the application.

The following rules apply to security for bids submitted in the principle stage (stages 1 and 2) of the auction:

Amount of the bank guarantee	Bid limit
Under EUR 50 million	Bank guarantee x 1.25
Between EUR 50 million and less than EUR 100 million	Bank guarantee x 1.5
Between EUR 100 million and less than EUR 200 million	Bank guarantee x 1.75
Between EUR 200 million and less than EUR 300 million	Bank guarantee x 2
EUR 300 million and over	Unlimited

Table 11: Amount of security for bids in the principle stage

As the sole condition for becoming effective, any bank guarantee must specify the award of the spectrum designated in this tender procedure by official decision to the applicant. The guarantee must designate the Republic of Austria (the federal government) as the beneficiary and be valid for at least the period of 2020-04-01 to 2020-10-31. Any additional bank guarantee provided later must be valid from the date of presentation until at least 2020-10-31.

A bidder may exchange any previously submitted bank guarantees after the end of the auction if their value exceeds the frequency licence fee to be paid. Instead, a bank guarantee of a value matching the frequency licence fee to be paid is to be presented to the regulatory authority.

Within four weeks of notification of the assignment decision, a bidder must submit one bank guarantee of a value matching any price discount that may have been determined for this bidder in stage 4 of the auction (see section 8.1, and see appendix B.2 for a sample bank guarantee for the price discount). Such a bank guarantee must be valid from the point of submission until at least 30 June 2028. Alternatively, the price discount may also be secured by submitting an abstract letter



of comfort (guarantee for a subsidiary from a parent organisation); the rules stated above for a bank guarantee as security apply here *mutatis mutandis*.

No bank guarantee is required as security for the assignment stage.

The TKK reserves the right to demand additional bank guarantees or other security.

On completion of the procedure (notification of the decision), those applicants to whom no spectrum has been awarded will have the bank guarantees that they provided to secure their bids returned to them.

The bank guarantees provided by those applicants who are awarded spectrum will be returned to them after full payment of the frequency licence fee.

The bank guarantees or abstract letters of comfort submitted for the price discount will be returned once it has been verified that the respective decision obligation has been met in full.

## 6.4 Spectrum caps

If companies are mentioned by name in this section, the rule also applies to companies affiliated under ownership law (as defined in section 7.2.2) with these named companies.

#### 6.4.1 Individual spectrum caps

To safeguard competition in downstream markets, there is a limit (spectrum cap) placed on the total number of frequency blocks that a bidder may acquire by auction (individual spectrum caps). The following restrictions are applied:

- In the 700 MHz band, each bidder may acquire a maximum of four blocks (2 x 20 MHz) with the exception of A1 Telekom Austria AG, which is restricted to a maximum of two blocks (2 x 10 MHz).
- In the 2100 MHz band, each bidder may acquire a maximum of eight blocks (2 x 40 MHz) with the exception of A1 Telekom Austria AG, which is restricted to a maximum of six blocks (2 x 30 MHz).
- In the 1500 MHz band, each bidder may acquire a maximum of six blocks (1x 60 MHz); this does not include block B01, which may be assigned during stage 3.
- A1 Telekom Austria AG may acquire a maximum of 130 MHz over all three bands; block B01 is not included when calculating this spectrum assignment.

#### 6.4.2 Joint Spectrum Cap

In addition, A1 Telekom Austria AG and T-Mobile Austria GmbH are subject to the restriction that they may not jointly acquire more than 15 blocks (2 x 75 MHz) in total in the 700 and 2100 MHz bands ('Joint Spectrum Cap').



## 7 Spectrum award procedure

## 7.1 Steps of the procedure and timetable

As mentioned above in section 2.2, the spectrum award procedure is divided into two steps. Pursuant to Article 55 Par. 1 in conjunction with Par. 2 No. 2 TKG 2003, the first step involves verification to determine whether applicants meet the criteria set out in Art. 55 Par. 2 No. 2 TKG 2003. Any applicants not meeting the requirements in Art. 55 Par. 2 No. 2 TKG 2003 are excluded from the spectrum award procedure, as specified in Art. 55 Par. 8 TKG 2003.

The main events in the timetable for the award procedure are presented below.

Activity	Anticipated time period
Publication of the invitation to tender	December 2019
Receipt of questions	January 2020
TKK's responses to questions	February 2020
End of the tender submission period	February/March 2020
Admission to the auction	Within two weeks of the end of the tender
	submission period
Actual auction	March/April 2020
Spectrum assignment decision	Within one month of completion of the
	auction

Table 12: Award procedure timetable

### 7.2 Requirements for the award procedure

#### 7.2.1 Legal personality of the applicant

The applicant must have legal personality and full legal capacity as defined in Art. 9 of the General Administrative Procedure Act.

#### 7.2.2 Affiliated companies

1. Applications are not permitted if submitted by a plurality of companies that are affiliated within a company group as defined in Art. 189a No. 6 to 8 in conjunction with Art. 244 of the Austrian Commercial Code (UGB) or Art. 15 of the Stock Corporation Act (AktG) and Art. 115 of the Limited Liability Companies Act (GmbHG), or in the manner described in Art. 7 of the 2005 Cartel Act (KartG; directly or indirectly).

The same applies where applicants exercise or intend to exercise a significant amount of direct or indirect influence on another applicant in a manner affecting competition (for example through trust or cooperation agreements, takeover agreements or similar), even where such an agreement has not yet been approved). Whether significant influence affecting competition exists is



subject to verification in the specific case. Such influence always exists, however, in the case of major holdings as defined in Articles 130 ff of the 2018 Stock Exchange Act (BörseG).

2. Where several companies currently active in the Austrian mobile market hold shares in one and the same company (for example a joint venture), such a company is only permitted to apply on the condition that, as required by cartel law in the individual case, any documents certifying non-objection under competition law as well as any approvals are presented, whereas the rules set out above (under 1) also apply here.

When evaluating the individual case, consideration is also to be given as to whether the applicants may currently be in the midst of a merger or demerger process. Any previous decisions by competition authorities (either at national or EU level) are especially to be considered in such cases (for example, the conditions for any merger that are specified in the approvals).

In the event that two or more applicants affiliated with one another in the manner described above apply for spectrum, only the first applicant to submit an application will be allowed to participate in the auction. Where the applications are submitted on the same day, the applicant admitted to the spectrum auction will be decided by draw.

#### 7.2.3 Changes in the ownership structure

Regulatory authority approval is required for any change in the legal person of the applicant or any significant change in the participating interest held in the applicant (even indirectly or not immediately), which occurs during the procedure. Approval must only be given if, after completion of the change, the company is fully independent of other applicants for purposes of competition. A significant change is always to be recognised in cases where the percentage thresholds specified in Articles 130 ff of the 2018 BörseG are exceeded or where major holdings, with the exception of mere financial holdings, are initially acquired, in application by analogy of Articles 130 ff of the 2018 Stock Exchange Act. Where any change in the legal person of the applicant or any change in participating interest occurs without the TKK issuing approval, the company or companies concerned will be excluded from the award procedure.

In the application, the applicant must inform the TKK of any and all pending or anticipated procedures by cartel authorities that concern the ownership structure, submitting with the application any and all related decisions in their entirety. Any and all changes in the ownership structure that are carried out in fulfilment of such obligations, even after application is made, are to be reported to the TKK.

Regarding a change in the ownership structure of companies that have been awarded frequency usage rights in a procedure as referred to in Art. 55 TKG 2003, we refer to Art. 56 Par. 2 TKG 2003.



#### 7.2.4 Rights to application documents

When applying for a spectrum award, the applicant irrevocably consents to unlimited use by the TKK of all information disclosed and all documents submitted as part of the application, for the purpose of the procedure and for verification of compliance with the decision as well as for all other procedures relating to frequency awards.

#### 7.2.5 Questions concerning the Tender Document

To prepare their applications, interested parties who have paid EUR 300.00 to cover the expense of being provided with the Tender Document (excluding annexes) are entitled to participate in a question and answer session with the TKK to have any questions answered. The TKK reserves the right to decide whether to respond to any individual question.

Questions may be submitted to the TKK exclusively via the email address tkfreq@rtr.at by 2020-01-09 at 12:00 noon local time (date and time of receipt), giving as the subject "F 1/16 – questions concerning the tender procedure". It is planned to provide written responses to such questions by 2020-02-12.

The questions submitted to the TKK will be collected and forwarded, without details of the parties submitting the questions and together with the responses, to all such interested parties referred to above.

In the event that the TKK finds it necessary or helpful to clarify questions with any applicants, by submitting an application, applicants irrevocably declare their willingness to respond to any such questions within the appropriate period set by the TKK in the individual case and to subsequently submit any information requested.

#### 7.2.6 Information collection—advisors

For the purpose of collecting information and making enquiries for this tender procedure, the TKK can request support from advisors (Art. 55 Par. 11 TKG 2003). This may concern the collection of information related to Tender Document questions as referred to above in section 7.2.5 or related to the verification of eligibility criteria as referred to in Art. 55 Par. 2 No. 2 TKG 2003, as well as support in the auction procedure, while this list is by no means exhaustive.

#### 7.2.7 Examination of files

All applicants are principally to be granted access to files on request. Those parts of files are excluded from the right to examination where disclosure would harm the justified interests of a party to the procedure or a third party or would jeopardise the activities of the authority or interfere with the purpose of the procedure. To refuse the examination of files to a party against which a procedure is pending, a procedural order is issued in accordance with Art. 17 Par. 4 of the General Administrative Procedure Act.



The TKK is aware that a large volume of the information made available in this procedure could, if released for examination, harm the justified interests of a party in the procedure or a third party. Similarly, some of the information contained in the procedure has the potential of jeopardising the activities of the authority or interfering with the purpose of the procedure, were such information to be examined by parties to the procedure. The TKK consequently reserves the right to exclude such parts of files from the right to examination.

Considering the possibility of collusive behaviour, the TKK assumes in particular that disclosure of the applicants prior to completion of the auction could interfere with the purpose of the procedure. The TKK will therefore refrain from disclosing the applicants; not even via the right to examine files will this information be available prior to completion of the auction. After completion of the auction, the applicants will be provided with access to all information, while taking into account any business and trade secrets.

To ensure confidentiality of any sensitive information made available, applicants should indicate in their applications those data that they consider to be business and trade secrets. An additional abridged version of the application, with any business and trade secrets removed and clearly marked as an abridged version, is to be submitted. The TKK additionally reserves the right to exclude any other parts of files from the right to examination, in accordance with Art. 17 Par. 3 of the General Administrative Procedure Act. The TKK also reserves the right to make available for examination any parts of files labelled by applicants as business and trade secrets, if such disclosure is not expected to harm the justified interests of a party to the procedure or of third parties or to jeopardise the activities of the authorities.

Reference is made in this context to Art. 125 TKG 2003 and to ruling No. 2002/03/0273 of 25 February 2004 by the Administrative Court concerning business and trade secrets.

The applicants are obliged to use any information concerning other applicants that is obtained through this procedure only for the purpose of the procedure and to refrain from disclosing such information.

#### 7.2.8 Publication

The TKK will publish the results of the auction on the regulatory authority's website.



## 7.3 Information in the application

Art. 55 Par. 1 TKG 2003 requires the regulatory authority to assign the frequencies entrusted to the authority to that applicant who meets the general requirements set out in Par. 2 No. 2 of that Article.

To evaluate whether the requirements set out in Art. 55 Par. 2 No. 2 TKG 2003 have been met, insight into the applicant's organisation is necessary (among other things). The information provided by the applicant must include details of the legal and financial situation and of the ownership structure.

#### 7.3.1 Information on the applicant

The application documents must include the information on the applicant listed below (where applicable):

- a) name (company name), place of establishment (address), date and place of founding, including current excerpt from the Austrian Commercial Register or from the comparable register of the country of establishment;
- b) type and quantity of capital shares, nominal value of the capital shares, and the voting and dividend rights tied to any and all types of shares;
- c) subscribed capital for each type of capital shares as well as precise information on the shareholders as of the date when the application is submitted, as well as any and all anticipated changes in this regard;
- d) quantity, value and rights (including exchange rights) in relation to any and all options, certificates of entitlement, preferred shares and debt capital, as well as any other securities issued by the applicant;
- e) currently amended version of the articles of association;
- f) description of the business activities;
- g) Name of the person meeting the requirements under Art. 9 of the Service of Documents Act (*Zustellgesetz*) who is authorised by the applicant to accept service of documents, as well as the person's phone and fax numbers and postal and email addresses (see also section 7.3.7);
- h) all other issues that, if disclosed or kept secret, could significantly influence the TKK's decision when carrying out verification as referred to in Art. 55 Par. 2 No. 2 TKG 2003 prior to the assignment of spectrum.

Any details listed above that are not provided in full will be subsequently requested by the TKK, if the authority deems the information necessary for determining the facts relevant for the decision. The TKK will request additional information in this context, if the authority deems the information necessary for determining the facts relevant for the decision.

#### 7.3.2 Information on the applicant's owners, shareholders and similar items

The applicant is required to provide the details listed under section 7.3.1 a) to d) and f) and h) (where applicable) for every owner or shareholder as well as every owner of



options, certificates of entitlement, preferred shares, debt capital or other types of securities issued by the applicant. The following is also to be provided for every such person with an entitlement:

- i) relationship with the applicant (e.g. quantity and type of the capital shares or securities held); any trust or consortium agreements;
- j) where applicable: parent company or companies of the group, higher-level company or companies in the group.

In the event that individuals hold any capital shares or other securities issued by the applicant in a trustee or similar capacity on behalf of a third party, this circumstance must be indicated and the details listed above provided for the actual beneficial owner.

## 7.3.3 Higher-level companies with major holdings: additional description of the ownership structure

In the event that, without directly holding shares in the applicant, several higher-level companies have holdings in the applicant (i.e. owners, shareholders, owners of options, certificates of entitlement, preferred shares, debt capital or other types of securities issued by the applicant) and these companies together hold (based on the ultimate owner) an effective total participating interest of 25% or more in the applicant, a description of such holdings must be provided in the application.

Specifically, the items of information listed in section 7.3.2 of this Tender Document are to be provided for every company that has effective participating interest of at least 25% in the applicant—regardless of the higher level at which these shares are held.

Thus, the information specified under section 7.3.2 of this Tender Document must also be provided for any companies that do not reach participating interest of 25% in the applicant through concrete holdings in a company at a level above the applicant but as a result of adding together the participating interest held in several companies at any level above the applicant.

In the event that individuals hold any capital shares or other securities issued by the applicant that equal a participating interest of at least 25% in a trustee or similar capacity on behalf of a third party—even if held indirectly by means of participating interests at a higher level—this circumstance must be indicated and the details listed above provided for the actual beneficial owner.

The details required under this section can be illustrated using tables or charts showing the participating interests held directly and indirectly as well as the type of control over the applicant, in particular the type of holding. When providing a description of the linked participating interests, care should be taken to ensure that the TKK is able to identify any business interrelationships that would allow one



applicant to directly or indirectly exercise on another applicant a significant amount of influence affecting competition.

Any details listed above that are not provided in full will be subsequently requested by the TKK, if the authority deems the information necessary for determining the facts relevant for the decision. The TKK will request additional information in this context, if the authority deems the information necessary for determining the facts relevant for the decision.

#### 7.3.4 Information on consortia

The additional items of information listed below are required in the case of a consortium or joint venture:

The type of relationship between the members, in addition to precise details of any of the following:

- Trust agreements, consortium agreements
- Joint venture agreements
- Declarations of intent
- Ownership agreements

In addition, the same details as listed under section 7.3.2 are required for the members of the consortium and are to be included with the application.

Any details listed above that are not provided in full will be subsequently requested by the TKK, if the authority deems the information necessary for determining the facts relevant for the decision. The TKK will request additional information in this context, if the authority deems the information necessary for determining the facts relevant for the decision.

#### 7.3.5 Information on technical capabilities, service quality and coverage

As stated in Art. 55 Par. 2 No. 2 TKG 2003, grounds must not exist for assuming that the proposed service will not be provided, in particular with regard to level of quality and fulfilment of the coverage obligation. The applicant must furthermore have the necessary technical capabilities. The information requested in the sections below is intended to allow verification of meeting these requirements.

The applicant is obliged to provide evidence of meeting the necessary requirements.

Evidence must include at least the following details:

- Description of planned spectrum use (e.g. services, technologies, data transmission rates, quality and availability)
- Planned coverage (supply of services) over the entire licence term
- Number of locations over the entire licence term



• Capabilities and expertise in the planning and operation of wireless networks

#### 7.3.6 Information on financial strength

The applicant is required to provide evidence of having the financial resources necessary for setting up and operating a wireless network.

The application documents are to specifically include the information listed below.

#### 7.3.6.1 Business plan/balance sheet

Every applicant is required to prepare a business plan for the field of business (or fields of business) in which the applicant plans to use the requested spectrum, with the plan based on the applicant's strategy, market assessment and forecast of business operations for the three years following initial use of the frequencies in each case.

The applicant is free to structure the business plan. The breakdown should, however, show the following information:

- Which services are to be offered in this frequency range?
- Which technologies will be implemented to provide those services?
- As of which date will the services be offered?

#### **7.3.6.2** Financing

Every applicant is also required to describe how the frequency licence fee is to be funded. This must be in accordance with the operator's financial capabilities. The following details are correspondingly required:

- Equity financing—schedule for and raising of equity capital, including any plans for issuing share capital
- Debt financing—credit lines, security made available, and the repayment terms and borrowers for any and all loans during the first four years after spectrum award

#### 7.3.7 Authorised recipient

When applying for assignment, natural persons not having their main residence in Austria or legal persons not established in Austria are required to designate an authorised recipient as defined in Art. 9 of the Service of Documents Act, Federal Law Gazette (FLG) No. 200/1982 as amended by FLG I No. 104/2018 (see section 7.3.1). The application must include a declaration bearing the authorised company signature which designates a recipient with unlimited authorisation to accept service of documents. A new unlimited authorisation is to be submitted immediately upon any change of recipient.



#### 7.3.8 Application form

The application form (see Appendix A) must also be completed, signed and submitted.

#### 7.3.9 Declaration of completeness

Any duly completed application in writing is required to include the information requested under section 0. A declaration of completeness (Appendix D) is also required to be enclosed with the application, confirming that all information required by this Tender Document as well as all information relevant for evaluation of the case by the TKK is complete and correct as included in the application.

## 7.4 Submission of the spectrum award application

Spectrum award applications are to be addressed to:

Telekom-Control-Kommission Mariahilfer Straße 77–79 1060 Vienna Austria

The TKK must receive the complete spectrum award application, in a sealed package (e.g. envelope or parcel) labelled "F 1/16 — Spectrum Award Application", by 26.02.2020 12:00 noon (local time). Any applications received after that time will not be considered. The spectrum award application can be delivered by postal or courier service or submitted in person. If submitted in person, it is necessary to request an appointment. Appointments can be requested by sending an email to <a href="tkfreq@rtr.at">tkfreq@rtr.at</a> no later than 12:00 noon of the day preceding the requested appointment. Appointment requests as well as submissions can be made only on business days (Monday to Friday).

The original spectrum award application must be submitted in printed form in German and be accompanied by an electronic copy (e.g. on a USB flash drive). Any required supplements such as business reports and maps may also be in English.

Changes to applications or withdrawal of applications are not permitted after expiry of the tender submission period (Art. 55 Par. 6 TKG 2003).

### 7.5 Application document check list

The spectrum award application is to be structured as listed below:

- Application form (see appendix A)
- Information on organisational structure
- Information on technical capabilities, service quality and coverage obligation (see section 7.3.5)
- Information on financial strength (see section 7.3.6)



- Bank guarantee (see sample in appendix B.1)
- Authorisation to accept service (see section 7.3.7, sample in appendix C)
- Declaration of completeness (see section 7.3.9, sample in appendix D)





#### 8 Costs and fees

## 8.1 Frequency licence fee

The frequency licence fee is calculated as the sum of the bidder's successful bids during the first two stages, plus the additional price (stage 3), and less any price discount determined during the fourth stage of the auction as a result of accepting additional coverage obligations.

The successful applicants are required to deposit the frequency licence fee, as determined in the auction procedure, within four weeks of being served the spectrum assignment decision. Applicants must also submit to the regulatory authority a bank guarantee or abstract letter of comfort guaranteeing security (guarantee for a subsidiary from a parent organisation) the value of which matches the price discount determined in each case (see also section 6.3). If the bank guarantee or letter of comfort mentioned above is not submitted within four weeks of notification of the decision, the amount calculated by totalling the successful bids of the bidder in the first two stages and the additional price (stage 3) must be paid as the frequency licence fee.

The frequency licence fee does not include value-added tax.

The spectrum award becomes void if the frequency licence fee is not paid (in full and on schedule). Notwithstanding this circumstance, the Republic of Austria (federal government) is entitled in such a case to call on the bank guarantee or to collect the unpaid portion of the frequency licence fee by administrative execution.

## 8.2 Frequency usage fee

Art. 82 TKG 2003 specifies frequency usage fees for the use of spectrum, among other things. The levels of such fees are set out in the Telecommunications Fee Ordinance (*Telekommunikationsgebührenverordnung*, TKGV), FLG II No. 29/1998 as amended by FLG II no. 108/2011. The fees are prescribed by the telecommunications office as part of issuing operating permits.

#### 8.3 Consulting expenses

The regulatory authority is entitled to consult experts and advisors at any stage of the procedure. The fees for such consultants as well as their additional cash expenses are required to be paid by the applicant awarded the spectrum in the particular case. In the case of more than one applicant, the expenses are divided up on a pro-rated basis among the applicants awarded spectrum.

These expenses are prescribed in the spectrum assignment decision and are due for payment within four weeks of being served the decision.



Telekom-Control-Kommission (TKK) bei der Rundfunk und Telekom Regulierungs-GmbH (RTR-GmbH)

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