



**Český telekomunikační úřad**  
**Czech Telecommunication Office**

Sokolovská 219, Praha 9  
Post Box 02, 225 02 Praha 025, Czech Republic

Prague, dd. xxx 2020  
Ref. No.: CTU-XXX/2020-613

**Invitation to Tender for Granting of the Rights to Use Radio  
Frequencies to Provide Electronic Communications Networks  
in the 700 MHz and 3400–3600 MHz Frequency Bands**

# Contents

<b>CONTENTS</b> .....	<b>1</b>
<b>1 BACKGROUND OF THE TENDER</b> .....	<b>4</b>
<b>2 OBJECTIVES OF THE TENDER</b> .....	<b>7</b>
2.1 DEFINED OBJECTIVES OF THE TENDER.....	7
2.2 SUPPORTING THE ENHANCEMENT OF THE COMPETITION ON THE ELECTRONIC COMMUNICATIONS MARKET .....	7
2.2.1 TOOLS FOR SUPPORTING THE ENHANCEMENT OF THE COMPETITION .....	7
2.2.2 RESERVATION OF A BLOCK IN 700 MHz BAND FOR NEW OPERATORS .....	10
2.2.3 NATIONAL ROAMING OBLIGATION .....	10
2.2.4 INCREASED SPECTRAL LIMIT IN THE 3400–3800 MHz FREQUENCY BAND FOR THE OPERATORS, WHO ARE NOT INCUMBENT OPERATORS .....	12
2.2.5 PREVENTING MULTIPLE PARTICIPATION (ENSURING ECONOMIC INDEPENDENCE OF THE APPLICANTS).....	12
2.2.6 COMMITMENT TO PROVIDE WHOLESALE OFFER .....	12
2.3 ENSURING EFFECTIVE USE OF THE FREQUENCY SPECTRUM.....	13
2.3.1 TOOLS FOR ENSURING EFFECTIVE USE OF THE FREQUENCY SPECTRUM .....	13
2.3.2 SPECTRAL LIMITS FOR THE 700 MHz FREQUENCY BAND .....	13
2.3.3 SPECTRAL LIMIT AND MINIMUM SCOPE OF THE BID FOR THE 3400–3600 MHz FREQUENCY BAND.....	13
2.3.4 SPECIFICATION OF THE SIZE OF AUCTION BLOCKS .....	14
2.3.5 SETTING DEADLINES FOR STARTING THE USE OF RADIO FREQUENCIES .....	14
2.3.6 RE-FARMING OBLIGATION IN THE 3400–3800 MHz FREQUENCY BAND.....	14
2.4 DEVELOPMENT OF ELECTRONIC COMMUNICATIONS NETWORKS AND SERVICES, IN PARTICULAR WITH THE ASSUMPTION OF FUTURE DEVELOPMENT OF FIFTH GENERATION NETWORKS (5G) AND THE SERVICES PROVIDED ON THESE NETWORKS.....	14
2.5 SUPPORT FOR FUTURE SOLUTION OF PPDR COMMUNICATION .....	16
2.6 MAINTAINING THE MANAGEMENT OF INFORMATION AND COMMUNICATION SYSTEMS OF THE CRITICAL INFORMATION INFRASTRUCTURE .....	16
<b>3 BASIC PRINCIPLES OF THE TENDER</b> .....	<b>18</b>
<b>4 THE ORGANIZER OF THE TENDER</b> .....	<b>19</b>
<b>5 DATES OF THE TENDER</b> .....	<b>20</b>
5.1 TIME SCHEDULE OF THE TENDER .....	20
5.2 DIAGRAM OF THE FLOW OF THE TENDER, DIVIDED INTO INDIVIDUAL STAGES .....	21
<b>6 SUBJECT OF THE TENDER</b> .....	<b>23</b>
6.1 700 MHz FREQUENCY BAND .....	23
6.2 3400–3600 MHz FREQUENCY BAND .....	24
6.3 PRICE FOR GRANTING OF THE RIGHTS TO USE RADIO FREQUENCIES .....	25
<b>7 CONDITIONS ASSOCIATED WITH GRANTING OF RIGHT TO USE RADIO FREQUENCIES</b> .....	<b>27</b>
7.1 CONDITIONS OF USE OF THE ALLOCATED RADIO FREQUENCIES.....	27
7.1.1 700 MHz BAND.....	27
7.1.2 CONDITIONS FOR PROTECTION OF TERRESTRIAL TELEVISION BROADCASTING WHEN USING THE FREQUENCIES IN THE 700 MHz FREQUENCY BAND.....	28
7.1.3 3400–3600 MHz BAND .....	29
7.2 ISSUING INDIVIDUAL AUTHORISATIONS .....	31
7.2.1 700 MHz BAND.....	31
7.2.2 3400–3600 MHz BAND .....	32
7.3 TECHNOLOGIES AND SERVICES FOR WHICH THE RIGHTS TO USE RADIO FREQUENCIES WILL BE GRANTED .....	33
7.4 CONDITIONS OF EFFECTIVE USE OF RADIO FREQUENCIES.....	33
7.5 DEVELOPMENT CRITERIA.....	34
7.5.1 700 MHz BAND.....	34
7.5.2 3400–3600 MHz BAND .....	36

7.6	MONITORING THE COMPLIANCE WITH THE CONDITIONS OF EFFECTIVE USE OF RADIO FREQUENCIES AND DEVELOPMENT CRITERIA .....	37
7.7	SUBROGATION, TRANSFER, LEASE AND OTHER DISPOSAL OF RIGHTS TO USE RADIO FREQUENCIES	38
7.7.1	RESTRICTIONS FOR INDIVIDUAL AUTHORISATIONS .....	38
7.7.2	TRANSFER OF THE BLOCK ALLOCATION OF RADIO FREQUENCIES .....	38
7.7.3	SUBROGATION AND OTHER DISPOSAL OF RIGHTS TO USE RADIO FREQUENCIES.....	39
7.8	VALIDITY OF BLOCK ALLOCATIONS OF RADIO FREQUENCIES .....	41
7.8.1	700 MHz BAND.....	41
7.8.2	3400–3600 MHz BAND .....	41
7.9	CONDITIONS ENSUING FROM INTERNATIONAL AGREEMENTS ON THE USE OF RADIO FREQUENCIES .	41
<b>8</b>	<b>OBLIGATIONS.....</b>	<b>42</b>
8.1	NATIONAL ROAMING OBLIGATION (700 MHz).....	42
8.2	COMMITMENT TO PROVIDE A WHOLESALE OFFER (700 MHz).....	46
8.3	PPDR OBLIGATIONS (700 MHz).....	49
8.3.1	PRIORITY BB-PPDR OBLIGATION.....	50
8.3.2	OBLIGATION OF NATIONAL ROAMING FOR PPDR .....	52
8.3.3	JOINT PROVISIONS FOR PPDR OBLIGATIONS.....	53
8.4	RE-FARMING OBLIGATION (3400–3600 MHz).....	56
8.4.1	RE-FARMING OF THE 3400–3800 MHz FREQUENCY BAND .....	56
8.4.2	OBLIGATION TO SUBMIT A REQUEST FOR A CHANGE OF ALLOCATION BASED ON THE CALL ...	57
8.4.3	RE-FARMING PROCEDURE .....	57
8.5	COMMITMENT TO LEASE RADIO FREQUENCIES FOR THE PURPOSE OF INDUSTRY 4.0 .....	59
8.5.1	RIGHTS AND OBLIGATIONS OF THE LESSOR OBLIGED TO LEASE RADIO FREQUENCIES.....	60
8.5.2	DURATION RESTRICTION .....	60
8.5.3	PRICE CONDITIONS.....	60
8.5.4	RIGHTS AND OBLIGATIONS OF THE LEGITIMATE APPLICANT FOR LEASE OF RADIO FREQUENCIES .....	61
8.5.5	OTHER CONDITIONS .....	61
8.6	CONSEQUENCES OF A BREACH OF COMMITMENTS .....	62
<b>9</b>	<b>RULES AND CONDITIONS OF PARTICIPATION IN THE TENDER (QUALIFICATION)</b>	<b>63</b>
9.1	QUALIFICATION REQUIREMENTS .....	63
9.1.1	GENERAL RULES OF PROVIDING EVIDENCE OF THE QUALIFICATION.....	63
9.1.2	BASIC CONDITIONS OF PARTICIPATION IN THE TENDER .....	63
9.1.3	PROFESSIONAL AND TECHNICAL CONDITIONS OF PARTICIPATION IN THE TENDER .....	63
9.1.4	ECONOMIC AND FINANCIAL CONDITIONS OF PARTICIPATION IN THE TENDER .....	63
9.2	APPLICATION FOR GRANTING OF THE RIGHTS TO USE RADIO FREQUENCIES .....	64
9.2.1	FORMAL REQUIREMENTS OF THE APPLICATION .....	64
9.2.2	MANDATORY ANNEXES TO THE APPLICATION .....	64
9.2.3	BINDING APPLICATIONS.....	65
9.3	SECURITY .....	65
9.4	DEADLINE FOR THE SUBMISSION OF APPLICATIONS IN THE TENDER .....	67
9.5	MULTIPLE PARTICIPATION IN THE TENDER, PARTICIPATION ON BEHALF OF A BUSINESS GROUP .....	67
9.6	OPENING ENVELOPES CONTAINING APPLICATIONS FOR THE TENDER .....	67
9.7	EVALUATION OF THE APPLICATIONS.....	68
<b>10</b>	<b>AUCTION .....</b>	<b>69</b>
10.1	SUBJECT OF THE AUCTION .....	69
10.2	BASIC INFORMATION .....	69
10.3	CTU'S RIGHT TO CANCEL AND REPEAT THE AUCTION PHASE.....	69
10.4	CLOSING OF THE AUCTION .....	70
<b>11</b>	<b>PROCEDURE FOLLOWED BY CTU AFTER THE CLOSING OF THE AUCTION.....</b>	<b>71</b>
<b>12</b>	<b>CODE OF CONDUCT OF THE APPLICANTS DURING THE TENDER.....</b>	<b>72</b>
<b>13</b>	<b>CANCELLATION OF THE TENDER .....</b>	<b>73</b>
<b>14</b>	<b>COMMUNICATION DURING THE TENDER .....</b>	<b>74</b>
<b>15</b>	<b>LIST OF DEFINITIONS AND ABBREVIATIONS.....</b>	<b>75</b>

**16 LIST OF ANNEXES.....80**

# 1 BACKGROUND OF THE TENDER

When laying down the terms and conditions of the Tender,<sup>1</sup> CTU primarily relied on the harmonisation documents regulating the management and use of radio frequencies issued by the European Commission, the European Parliament and the European Council and also on decisions issued by CEPT (European Conference of Postal & Telecommunications Administrations).

The fundamental harmonisation documents for the use of radio frequencies in the 694–790 MHz frequency band (hereinafter also referred to as “700 MHz frequency band”) are Commission Implementing Decision (EU) 2016/687 of 28 April 2016 on the harmonisation of the 694–790 MHz frequency band for terrestrial systems capable of providing wireless broadband electronic communications services and for flexible national use in the Union<sup>2</sup> and Decision (EU) 2017/899 of the European Parliament and of the Council of 17 May 2017 on the use of the 470–790 MHz frequency band in the Union.<sup>3</sup>

The fundamental harmonisation documents for the 3400–3600 MHz frequency band are Commission Decision 2008/411/EC of 21 May 2008 on the harmonisation of the 3400–3800 MHz frequency band for terrestrial systems capable of providing electronic communications services in the Community<sup>4</sup> as amended by Commission Implementing Decision 2014/276/EU of 2 May 2014 on amending Decision 2008/411/EC on the harmonisation of the 3400–3800 MHz frequency band for terrestrial systems capable of providing electronic communications services in the Community<sup>5</sup> and as amended by Commission Implementing Decision (EU) 2019/235 of 24 January 2019 on amending Decision 2008/411/EC as regards an update of relevant technical conditions applicable to the 3400–3800 MHz frequency band.<sup>6</sup>

In addition, CTU relies on the coordinated approach of the European Union Member States to the creation of conditions for the development of 5<sup>th</sup> generation networks reflected in a document entitled “5G for Europe: An Action Plan” dated 14 September 2016,<sup>7</sup> in the 5G Declaration signed by ministers responsible for telecommunications in Tallinn on 18 July 2017,<sup>8</sup> and in the roadmap for implementation of 5G networks signed by the Council of the European Union on 4 December 2017.<sup>9</sup>

CTU also relies on the national strategic vision “The Implementation and Development of 5G Networks in the Czech Republic – The Way Towards Digital Economy”<sup>10</sup> which the Czech government approved by Resolution No. 35/2020 of 13 January 2020.

At the same time, CTU has taken into account the knowledge gained from its regulatory and analytic activities, including the insights from the process of analyses of the relevant markets

---

<sup>1</sup> Terms starting with capital letters are defined in Chapter 15 of the Invitation to Tender.

<sup>2</sup> <https://eur-lex.europa.eu/legal-content/EN/TXT/PDF/?uri=CELEX:32016D0687&from=EN>

<sup>3</sup> <https://eur-lex.europa.eu/legal-content/EN/TXT/PDF/?uri=CELEX:32017D0899&from=en>

<sup>4</sup> <https://eur-lex.europa.eu/legal-content/EN/TXT/PDF/?uri=CELEX:32008D0411&from=EN>

<sup>5</sup> <https://eur-lex.europa.eu/legal-content/EN/TXT/PDF/?uri=CELEX:32014D0276&from=GA>

<sup>6</sup> <https://eur-lex.europa.eu/legal-content/EN/TXT/PDF/?uri=CELEX:32019D0235&from=EN>

<sup>7</sup> <https://ec.europa.eu/digital-single-market/en/news/communication-5g-europe-action-plan-and-accompanying-staff-working-document>

<sup>8</sup> [https://www.eu2017.ee/sites/default/files/inline-files/Ministerial%20declaration%205G\\_final\\_0.pdf](https://www.eu2017.ee/sites/default/files/inline-files/Ministerial%20declaration%205G_final_0.pdf)

<sup>9</sup> [https://www.mkm.ee/sites/default/files/8.a\\_b\\_aob\\_5g\\_roadmap\\_final.pdf](https://www.mkm.ee/sites/default/files/8.a_b_aob_5g_roadmap_final.pdf)

<sup>10</sup> <https://www.mpo.cz/assets/cz/e-komunikace-a-posta/elektronicke-komunikace/koncepcie-a-strategie/narodni-plan-rozvoje-siti-nga/2020/1/Implementace-a-rozvoj-siti-5G-v-CR-EN.pdf>

pursuant to Section 51 et seq. of the Act. CTU considered the results of the three-criteria test completed for the Mobile Services Market<sup>11</sup> and of the Preliminary Analysis.<sup>12</sup>

Regarding the relationship between the conditions of the Tender and the process of analysis of the wholesale mobile service market, CTU considered that the market analysis is a regulatory tool narrowly focusing on dealing with the impact of the significant market power. The conditions of the Tender take into account the overall market situation, also beyond the impact of the significant market power. Should the conditions of the Tender lead, in line with the objectives of the Tender, to intensification of competition having impact on the existence of the significant market power, CTU will reflect the potentially changed market situation in the process of analyses of the relevant market pursuant to Section 51 et seq. of the Act, including the cancellation or change of the possibly previously imposed of remedial measures. However, it is possible to expect that such impact on the market, in line with the objectives of the Tender, may occur rather in medium term. In the meantime, it may be necessary to address the conclusions of the three-criteria test for the Mobile Services Market<sup>13</sup> with reasonable measures of ex-ante regulation.

Based on Government Decision No. 293/2018 of 16 May 2018, CTU sent to the Government of the Czech Republic in December 2018, via Ministry of Industry and Trade, a notice on the proposed actions and conditions of conducting a tender for granting of the rights to use radio frequencies from the 700 MHz and the 3400–3600 MHz frequency bands. At its meeting on 8 April 2019 the government discussed the material without modification.

CTU, as the state administration body having the jurisdiction pursuant to Sections 108(1)(o) and 108(1)(p) of the Act and pursuant to Section 146 of the Code of Administrative Procedure, launches this Tender pursuant to Section 21 of the Act, with respect to the requirement to ensure effective use of radio frequencies pursuant to Section 15(1) and Section 15(2) of the Act and in accordance with the terms laid down in RSUP 7 and RSUP 10, which define the number of rights to use radio frequencies in the above-specified bands of the radio spectrum.

Prior to the public consultation of the text of the Invitation to Tender pursuant to Section 130 of the Act, CTU consulted (publicly, but not using the procedure pursuant to Section 130 of the Act) with the parties concerned also the basic principles of the Tender as follows:

- (a) On 1 June 2018, CTU published a document entitled “Draft Basic Principles of the Tender for Granting of the Rights to Use Radio Frequencies in the 700 MHz Frequency Band” in order to obtain statements or comments of the parties concerned;
- (b) On 1 August 2018, CTU published a document entitled “Framework Position of the Czech Telecommunication Office on the Comments on the Draft Basic Principles of the Tender for Granting of the Rights to Use Radio Frequencies in the 700 MHz Frequency Band”. This document summarizes the general position of CTU on the statements and comments received by CTU on the draft basic principles of the tender for granting of the rights to use radio frequencies in the 700 MHz frequency band;
- (c) On 2 January 2019, CTU published a document entitled “Draft Basic Principles of the Tender for Granting of the Rights to Use Radio Frequencies in the 700 MHz Frequency Band and Frequencies in the 3440–3600 MHz Frequency Band

---

<sup>11</sup><https://www.ctu.cz/sites/default/files/obsah/stranky/223526/soubory/trhmobilnichsluzebt3k-kezverejneniverejnaverze.pdf> (Czech version only)

<sup>12</sup> <https://www.ctu.eu/notice-consultation-preliminary-analysis-wholesale-mobile-market>

<sup>13</sup> <https://www.ctu.cz/sites/default/files/obsah/stranky/223526/soubory/trhmobilnichsluzebt3k-kezverejneniverejnaverze.pdf> (Czech version only)

(updated version as of 2 January 2019)” in order to obtain statements or comments of all parties concerned;

- (d) On 18 March 2019, CTU published a document entitled “Framework Position of the Czech Telecommunication Office on the Comments on the Draft Basic Principles of the Tender for Granting of the Rights to Use Radio Frequencies in the 700 MHz Frequency Band and Frequencies in the 3400–3600 MHz Frequency Band (updated version as of 2 January 2019)”. This document represents the general position of CTU on the statements and comments received by CTU on the “Draft Basic Principles of the Tender for Granting of the Rights to Use Radio Frequencies in the 700 MHz Frequency Band and Frequencies in the 3400–3600 MHz Frequency Band (updated version of 2 January 2019).” CTU also discussed the above-mentioned basic principles with UOHS. CTU also consulted with the Ministry of the Interior the proposed conditions for enabling and supporting the communication of emergency and law-enforcement services (PPDR communication);
- (e) The terms and conditions of the Invitation to Tender were subject of a public consultation with the parties concerned pursuant to Section 130 of the Act. The [draft text of the Invitation to Tender](#) was submitted for a public consultation on 6 June 2019. The comments received within the public consultation were settled by CTU and published on its [website on 26 August 2019](#). Relevant statements and comments were taken into account by CTU;
- (f) In accordance with the Act, after having incorporated the conclusions from the settlement of the public consultation on 29 August 2019, CTU submitted the modified draft conditions of the Tender to UOHS to react. The Chairman of UOHS stated in his opinion dated 3 October 2019 that on the conditions of the Tender he had no fundamental comments and that it was desirable to realize the Tender, because the potential entry a new operator could positively contribute to the development of competition in the given area. At the same time, he recommended to consider especially the question of network sharing, or other forms of cooperation among competitors, in relation to the fulfilment of development criteria, noting that the deployment of network of the successful Tender participants should be based especially on the use of their own radio frequency block allocations. Also, the Tender conditions should adequately address the non-exceeding of Spectral Limits. The Chairman of UOHS also recommended that the setting of the Tender and of the development criteria should adequately reflect, being one condition of the Tender, the wholesale usage of the frequencies to eliminate potential risks of circumventing the conditions of subrogation, transfer, lease and other dispositions to the use of radio frequencies;
- (g) The CTU Council Chair wrote on 14 November 2019 in his response to UOHS that the comments correspond with CTU’s intentions and were implemented in the conditions of the Invitation to Tender. The wording of Chair’s response was published on CTU’s website;
- (h) The Czech government approved Resolution No. 84/2020 on 27 January 2020 recommending the CTU, when setting the Tender conditions, *“in order to make the electronic communications services accessible, [to] accent the conditions leading to decrease of the mobile data price for end-users comparable to European level, especially through setting attractive conditions for larger number of operators with various range of their own infrastructure and radio spectrum, also reflecting the current, as well as future, needs of the PPDR communication” and “ for the benefit of future development of the 5G networks and of the services provided on these networks to set criteria leading to effective, fast, secure and accessible development of 5G networks, including the geographical accessibility of the services concerned, in line with the government strategy “The Implementation and*

- (i) As a follow-up to this Resolution of the Government of the Czech Republic, CTU prepared amended Tender conditions which were submitted to a public consultation with parties concerned pursuant to Art. 130 of the Act. The [draft Invitation to the Tender](#) was submitted to a public consultation on 16 March 2020. Based on the overall assessment of comments of all 29 contributing entities, CTU decided to amend conditions of the Tender in some of its basic principles. For this reason, CTU decided to end this public consultation and to open another one with these amended conditions of the Tender. In accordance with the principle of efficiency, CTU decided not to settle down individual comments to the original conditions of the Tender in detail and to summarize, within a communication of the Office, selected basic considered amendments of the current conditions of the Tender. The communication was published on Discussion site;
- (j) As a follow-up to communication of CTU about ending the public consultation, CTU prepared the amended conditions of the Tender, which were presented to public consultation pursuant to Art. 130 of the Act on 4 June 2020;

- **[text on further steps to be added].**

## **2 OBJECTIVES OF THE TENDER**

### **2.1 Defined objectives of the Tender**

The purpose of the Tender is to facilitate the use of a comprehensive set of radio frequencies from the 700 MHz and 3400–3600 MHz frequency bands, and thus create conditions under which the following objectives can be effectively achieved:

- Promoting competition in the area of electronic communications services;
- Ensuring effective use of radio frequencies for the benefit of the end-users;
- Development of new electronic communications services by means of wireless high-speed networks and creation of conditions for technological innovation of electronic communications networks and services, keeping in mind in particular the future development of 5G networks and the services provided on these networks.

Furthermore, the objective of the conditions of the Tender is to support the future solution of the PPDR communication.

The defined objectives are based on the scope of powers and responsibilities of CTU in the process of ensuring fulfilment of the basic objectives and principles of regulation (Sections 4 and 5 of the Act) and the legal scope of powers and responsibilities of CTU in the process of ensuring effective management of the radio spectrum in line with the harmonisation plans of the European Union (Section 15 of the Act).

The particular objectives of the Tender are synergic. The effective competition and the tools aiming to its enhancement are an important factor which will ensure the 5G networks development and the effective use of the radio frequencies better than CTU measures aiming to set minimum standards.

### **2.2 Supporting the enhancement of the competition on the electronic communications market**

#### **2.2.1 Tools for supporting the enhancement of the competition**

The current regulatory and analytical practice of CTU shows that competition on the electronic communications market, and particularly on the retail and wholesale market of mobile electronic communication services in the Czech Republic can be further intensified.



The Government of the Czech Republic in its Policy Statement<sup>14</sup> pledged support for competition on the mobile telecommunication market as one of fundamental steps towards fulfilment of the objectives of Digital Czech Republic.<sup>15</sup>

The support for competition also aims to achieve sustainable benefits for the end-users, including provision of mobile electronic communications services at affordable retail prices, by creating conditions which will allow one or more new operators who will cover with their own network, based on access to granted radio frequencies in the 700 MHz and/or 3400-3800 MHz band, and will become significant infrastructural stakeholders to operate on the market. The aim of CTU is to allow the entry of one or more new significant operators regardless of whether they enter the market as holders of radio frequencies in the 700 MHz and/or 3400-3600 MHz band based on this Tender.

It is possible to expect positive effect on end-users namely due to activities of new significant network operators on the market, who will have the allocated radio frequencies. These operators will be forced to invest necessary funds into deployment of their own electronic communications network. With respect to the investments into deployment of their own network, it will be in the new network operators' interest to achieve such market position that will guarantee them the return of the investments. With respect to the fact that the new network operators will not have a sufficient mobile market customer base, they will be forced to provide services in such a quality and under such conditions, including price, that will be attractive enough to attract new customers. Such behaviour of the new network operators will have positive impact on the overall level of prices on the market. The new network operators will also contribute to increased diversity of services and more innovation on the market. The ultimate beneficiary of the entry of other operators will be the end-user. Positive effects of the entry of other network operators can be concluded also from a study entitled "Market Entry and Fighting Brands: The Case of the French Mobile Telecommunications Market."<sup>16</sup> These conclusions are supported also by the experience from other European markets.<sup>17</sup>

When performing the 3K Test 2018, followed by the Preliminary Analysis, CTU found, among other things, that some segments of retail market and wholesale market show signs of ineffective competition. This applies especially to the residential customer segment. In particular, CTU found high level of offer prices in the residential segment of the retail mobile market in comparison with other EU countries. At the same time, CTU stated that commercial wholesale offers of Incumbent Operators do not allow virtual mobile operators to create, for some types of services, retail offers comparable with the offers of Incumbent Operators. CTU confirmed the key conclusions of the 3K test 2018 and of the Preliminary Analysis also within the Measure of General Nature No. OOP/1/12.2019-11 from 18 December 2019, where CTU established new relevant market for *ex-ante* regulation, market No. 5 – Wholesale access to mobile services.

Within the *ex-ante* regulation, CTU is entitled to impose measures defined by the Act including, but not limited to, access to wholesale services, non-discrimination, transparency, or price control. The commitments to provide access to their own network were also accepted by the Incumbent Operators in previous tenders (the so-called "commitments to provide a wholesale offer"). Nevertheless, only these commitments as such cannot lead to enhancement of competition on infrastructure level, i.e. competition between economically independent competitors who are able, based on access to radio frequencies, to make independent decisions on the nature, structure and technological design of their networks, services, and their prices in the scope of the access to own radio frequencies. But the fact is that intensity of

---

<sup>14</sup> <https://www.vlada.cz/en/jednani-vlady/policy-statement-of-the-government-of-the-czech-republic-168237/>

<sup>15</sup> <https://www.mpo.cz/en/business/digital-society/digital-czech-republic--243601/>

<sup>16</sup> [https://www.cresse.info/uploadfiles/2017\\_pa15\\_pa3.pdf](https://www.cresse.info/uploadfiles/2017_pa15_pa3.pdf)

<sup>17</sup> [http://research.rewheel.fi/insights/2018\\_may\\_pro\\_1h2018\\_release/](http://research.rewheel.fi/insights/2018_may_pro_1h2018_release/)

competition will constitute a key factor in the creation of new (innovative) services necessary for successful development of 5G services.

It follows from comments received in the public consultation of this Tender that there exist a significant number of parties on the market, who are interested in obtaining the radio frequencies in 700 MHz band with the aim to become a nationwide new operator (see comments of the companies ČEZ, Nordic Telekom, České radiokomunikace, Sazka). It follows also from a number of other comments that the access to frequencies in 700 MHz band suitable for nationwide coverage is significant for the potential new operator. Also, from comments provided by Ministry of Industry and Trade follows recommendation to designate radio frequencies in 700 MHz band for new nationwide operator. CTU is convinced that despite conflicting business interests of individual actors, the consensus is that the potential new operator should have the possibility to obtain radio frequencies in 700 MHz band allowing a nationwide coverage. With respect to the above, CTU considers that it is important to encourage competition on the infrastructure level, i.e., competition between economically independent competitors who are able, based on access to own radio frequencies, to make decisions on the nature, structure and technological design of their networks and services. Therefore, when laying down the conditions of the Tender, CTU aim, inter alia, to support enhancing such competition via presence of one or more operators with various range of their own infrastructure and of the radio spectrum; nevertheless it must always be a significant network operator who will cover a significant part of the population of the Czech Republic through its own network, using own frequency block allocations.

The Tender is an occasion to support entrance of another operator or operators with the potential to compete effectively with Incumbent Operators, which will not repeat in following ten years because from the viewpoint of radio frequencies suitable for the development of 5G mobile networks – especially from the viewpoint of frequency bands under 1 GHz – it is a unique possibility to obtain similar scope of frequencies suitable for this purpose.

Decision No. 243/2012/EU of the European Parliament and of the Council of 14 March 2012 establishing a multiannual radio spectrum policy programme<sup>18</sup> foresees a number of tools for support and maintenance of effective competition on the electronic communications market, such as reserving radio frequencies for the entering actors, laying down conditions tied to the granting of rights to use radio frequencies in a form of national roaming or wholesale offer.

CTU applied the following tools in the Tender to allow acquisition of radio frequencies in the Tender by new network operators, who are not Incumbent Operators, and to create conditions to enable subsequent competitiveness of these new network operators on the market aiming towards the effective and sustainable competition:

- reserving radio frequencies in 700 MHz band for New Operators,
- National roaming obligation for the benefit of new network operators, who are not Incumbent Operators;
- Increased Spectral Limit in the 3400–3800 MHz frequency band for new operators, who are not Incumbent Operators;
- Prevention of multiple participation (ensuring economic independence of the Applicants); and
- Prolonging the term to fulfil selected development criteria in the 700 MHz frequency band for new network operators, who are not Incumbent Operators.

In order to enhance competition and to maintain continuity of the previously accepted commitments to the maximum possible extent, CTU included a commitment to provide also a wholesale offer in the conditions of the Tender.

---

<sup>18</sup> <https://eur-lex.europa.eu/legal-content/EN/TXT/PDF/?uri=CELEX:32012D0243&from=EN>

### 2.2.2 Reservation of a block in 700 MHz band for new operators

There will be one Auction Block of 2 x 10 MHz in the 700 MHz band reserved only for applicants who are not Incumbent Operators. In the first Auction Round, only Auction Participants, who are not Incumbent Operators, will have the possibility to bid for the reserved block. If no Auction Participant, who is not Incumbent Operator, will bid for the reserved Auction Block in the first Auction Round, the reserved block will be offered to all Auction Participants under conditions laid down in this Invitation to Tender.

CTU considers the reservation of the block in 700 MHz band as a necessary measure allowing obtaining radio frequencies in 700 MHz band by at least one new operator.

The Incumbent Operators have radio frequencies in 800 MHz and 900 MHz bands through which they operate their networks and electronic communications services through which they reach the coverage of almost whole population of the Czech Republic and thus they will also in the future benefit on the market of electronic communications from this existing coverage and from utilisation of their radio frequencies in 800 MHz and 900 MHz bands and from the existing infrastructure. Conditions of the current block allocations do not set administrative obstacles which would prevent the Incumbent Operators to utilize them for technological development of their networks in e.g. for 5G networks deployment with the use of these frequencies.

Currently, the following Incumbent Operators are holders of block allocations for operation of networks and electronic communications services in relevant bands under 1 GHz:

<b>Company</b>	<b>800 MHz band</b>	<b>900 MHz band</b>
O2 Czech Republic a.s.	2×10 MHz	2×12,4 MHz
T-Mobile Czech Republic a.s.	2×10 MHz	2×12,4 MHz
Vodafone Czech Republic a.s.	2×10 MHz	2×10 MHz

### 2.2.3 National roaming obligation

The purpose of the imposition of the national roaming obligation in this Tender is (i) to allow the Legitimate Applicant Interested in National Roaming with significant coverage pursuant to criteria and conditions of this Invitation to Tender to replicate the current offer of mobile communication services of the Incumbent Operators (in particular in the scope of offered calls, SMS and Internet access services) that these operators will not be able to provide by their own network built on the basis of radio frequencies in the 700 MHz and/or 3400 – 3800 MHz frequency bands, in particular to customers who do not have terminal equipment enabling the use of services provided using the frequencies in the 700 MHz and/or 3400 – 3800 MHz frequency bands, and, at the same time, (ii) to allow the Legitimate Applicants Interested in National Roaming to provide their customers with nationwide availability of the service for a limited amount of time until they are able to provide the nationwide coverage by their own electronic communications network (especially if they acquire a block allocation of radio frequencies in the 700 MHz frequency band) or by a commercial agreement.

The national roaming obligation creates an opportunity for the Legitimate Applicants Interested in National Roaming to provide services that will be competitive in comparison with the services offered by the Incumbent Operators who currently, thanks to the use of radio frequencies in the frequency bands below 1 GHz, provide voice and data services which are a substantial source of their revenues and profits. Without the possibility to provide these services, the services offered by the new network operators, who are not Incumbent Operators, would not be competitive and they would not be able to establish themselves on the market and their investments in the acquisition of the frequencies and deploying their own network would not have any significant positive effect on the development of competition.

Ultimately, without the national roaming obligation, either the opportunity to create conditions for the entry of new network operators, who are not Incumbent Operators, on the mobile Invitation to Tender

market, or the effect of their entry, would be frustrated, which would also frustrate the objectives of the Tender.

The national roaming obligation is an important tool to promote enhancing the competition based on the infrastructure, which creates conditions to increase the diversity of services and the technological innovation of electronic communications networks and services, mainly with regards to the future development of 5G networks and services provided on these networks and to ensure effective use of radio frequencies to the benefit of the end users.

National roaming will be provided, in both cases, by the Incumbent Operators under the conditions that the effectively spent costs, incurred by the Incumbent Operators as a result of provision of this service, will be not only fully covered, but the provision of the service will also ensure that they can make reasonable profit reflecting the return of the capital invested, and the national roaming price will also take into account the related business risk.

CTU does not consider it necessary that the national roaming obligation was taken over by all Incumbent Operators. To limit the impact of the national roaming obligation as much as possible, and still to keep the necessary measure of the obligation needed to remove entry barriers for new operators, CTU designed the obligation in options as follows:

- If any of Incumbent Operators will acquire the Auction Block A3, the National Roaming Obligation will be connected only with acquiring of this Auction Block A3. In such case, other overtaken National Roaming Obligations will not apply;
- If none of Incumbent Operators will acquire the Auction Block A3, National Roaming Obligations overtaken by all Incumbent Operators, who will become Block Allocation Holders in 700 MHz band based on this Tender, will apply.

This mitigation of the National Roaming Obligation will, on one hand, allow Incumbent Operators to choose auction strategy, which will significantly limit the possibility, that the National Roaming Obligation will be applied on them, on the other hand, it keeps highest possible predictability of the obligation for Legitimate Applicants Interested in National Roaming.

The national roaming obligation is laid down only for the benefit of the Legitimate Applicants Interested in National Roaming who meet the conditions for coverage ensuring that they will, through their own publicly available electronic communications network, cover with publicly available electronic communications services in 5G Standard a significant part of population of the Czech Republic. Above the framework of covering the population, CTU at the same time set conditions to ensure sufficient quality of services offered by Legitimate Applicants for National Roaming through their own network with utilisation of their own frequencies. These operators will thus be significant network actors fundamentally contributing to the overall level of infrastructure-based competition. The radio frequencies used by these operators to ensure the required coverage are not considered by CTU as a decisive criterion for the national roaming claim. With regard to the limited amount of radio frequencies in the 700 MHz band also significant operators reaching required coverage parameters through radio frequencies in 3400-3800 MHz band will therefore qualify for national roaming. The legitimate applicants will be only the new operators, who are not Incumbent Operators, who meet the condition of coverage of at least 10 % of the population of the Czech Republic by means of an electronic communications networks operated by them not later than by commencement of the national roaming usage, while the publicly available electronic communications service provided through their own network must be operated through at least 500 outdoor base stations sites. To keep national roaming, the Legitimate Applicants Interested in National Roaming must fulfil a condition of coverage of at least 30 % of the population of the Czech Republic via electronic communications network operated by them not later than by 30.6.2025, while the publicly available electronic communications service provided through their own network must be operated through at least 1.000 outdoor base stations sites. CTU considers that the Legitimate Applicant for National Roaming, who will with their own network utilizing their own frequencies cover at least 30 % of the population of the Czech Republic, i.e. equivalent to the population of all cities above 50.000 inhabitants, with the service with required parameters, is enough

significant infrastructural actor whose activity on the market will lead to fulfilling the aims of the Tender..

#### **2.2.4 Increased Spectral Limit in the 3400–3800 MHz frequency band for the operators, who are not Incumbent Operators**

By setting different Spectral Limits for the Incumbent Operators and the new operators, CTU reflects the significant differences in the overall spectral equipment of the Incumbent Operators and the new operators. The purpose of the increase of the Spectral Limit in the 3400–3800 MHz frequency band for the new operators, who are not the Incumbent Operators, compared to the Incumbent Operators is to allow the new operators to ensure sufficient capacity coverage with service parameters potentially comparable to the parameters of the services which could be provided by the Incumbent Operators, with respect to their general spectral equipment.

The Incumbent Operators have radio frequencies in capacity bands, e.g. in bands 1800 MHz, 210 MHz, 2600 MHz and 3600-3800 MHz, through which they operate networks and electronic communications services, and thus will also in the future benefit on the electronic communications market from this existing capacity coverage using radio frequencies in these bands and from the existing infrastructure. Conditions of the current block allocations do not set administrative obstacles which would prevent the Incumbent Operators to utilize them for technological development of their networks in e.g. for 5G networks deployment with the use of these frequencies.

#### **2.2.5 Preventing multiple participation (ensuring economic independence of the Applicants)**

In order to mitigate the potential risks resulting from the possible multiple participation of several entities from one Business Group, and with respect to the limited scope of the spectrum available, the risks of adverse effect on the market competition and the defined objectives of the Tender, CTU (i) does not allow participation of multiple entities from one Business Group in the Tender, (ii) sets additional restrictions for the disposal of the spectrum, that would lead to spectral limit disruption for the given time period, and (iii) sets restrictions for transactions, that could lead to limitations in economic independence of the new operators, who will acquire block allocations in the 700 MHz and/or 3400–3800 MHz frequency bands, from the Incumbent Operators.

In this respect, CTU also lays down conditions for providing evidence of the ownership structure allowing CTU to verify effectively that there will be no undesirable accumulation of the spectrum within one Business Group.

#### **2.2.6 Commitment to provide wholesale offer**

In order to ensure fulfilment of the foreseen objectives of the Tender, in particular the objective of support to enhance the competition on wholesale level, and also to maintain continuity of the previously accepted commitments to the maximum possible extent (the commitment to provide wholesale offer accepted within the tender for granting of the rights to use radio frequencies to provide electronic communications networks in the 800 MHz, 1800 MHz and 2600 MHz frequency bands), the commitment to provide a wholesale offer will be preserved also for the provision of relevant electronic communications services by means of frequencies in the 700 MHz frequency band.

The commitment to provide wholesale offer applies to all Allocation Holders in the 700 MHz frequency band, irrespective of whether they are new operators or Incumbent Operators. Applicants Interested in Access can be, like in the upper mentioned tender, entities operating as MVNE, Full MVNO, as well as MVNO, with lesser share of their own infrastructure and operation systems. To increase transparency of prices on the wholesale market, this commitment is supplemented by an obligation to publish a reference offer for actors with a minimal share of own infrastructure and operating systems (Light MVNO).

## 2.3 Ensuring effective use of the frequency spectrum

### 2.3.1 Tools for ensuring effective use of the frequency spectrum

The objective of CTU is to ensure effective utilisation of radio frequencies allocated on the basis of this Tender.

The basic tools for ensuring the effective use of the frequency spectrum applied by CTU in this Tender, with respect to the objectives of the Tender, are:

- Specification of the Spectral Limits and the Minimum Scope of the Bid;
- Specification of the size of the Auction Blocks;
- Laying down the conditions of use of the allocated radio frequencies;
- Re-farming obligation.

### 2.3.2 Spectral Limits for the 700 MHz frequency band

The Spectral Limits for the distribution of frequencies in the 700 MHz frequency band are set such as to reflect the relevant recommendations of the Commission. The Spectral Limits for the 700 MHz frequency band are set such as to allow effective utilisation of radio frequencies in this frequency band by as many Allocation Holders as possible and, at the same time, to increase the likelihood that all Auction Blocks in the 700 MHz frequency band, are allocated based on the results of the Tender, with respect to the objectives of the Tender.

### 2.3.3 Spectral Limit and Minimum Scope of the Bid for the 3400–3600 MHz frequency band

Based on the foundations of the Tender described in Chapter 1 of the Invitation to Tender, the offer of radio frequencies in the 3400–3600 MHz frequency band is specified to allow, in the event of sufficient interest, to allocate radio frequencies that are subject of this Tender, in a way that it would be possible to operate as many independent electronic communications networks using these frequencies as possible, with respect to the objectives of the Tender.

The Spectral Limit in the 3400–3600 MHz frequency band is set as a limit for the entire frequency band of 3400 to 3800 MHz, i.e. also considering the (possible) block allocation of radio frequencies of each Applicant in the 3600–3800 MHz frequency band. The current holders of the block allocation of radio frequencies in the 3600–3800 MHz frequency band are Nordic Telecom 5G a.s. (frequency segments of 3720–3800 MHz), O2 Czech Republic a.s. (frequency segment of 3680–3720 MHz), PODA a.s. (frequency segment of 3640–3680 MHz), and Vodafone Czech Republic a.s. (frequency segment of 3600–3640 MHz). All these block allocations are valid until 30 June 2032.

The setting of the Spectral Limits remains consistent with setting of the Spectral Limits in the tender for radio frequencies in the 3600–3800 MHz band, with the fact, that the spectral limit for the whole 3400–3800 MHz band will be increased by 20 MHz for every Applicant.

The Spectral Limit is set to be as close to the recommendations of the Commission Implementing Decision<sup>19</sup> with respect to the limited amount of radio frequencies in this band and to differences among the overall spectral equipment of the Incumbent Operators and the new operators, and to allow every Allocation Holder in the 3400–3800 MHz frequency band to use continuous segments.

On the other hand, the Minimum Scope of the Bid is set such as to ensure that the minimum amount of the block allocation in the 3400–3800 MHz frequency band of one Allocation Holder

---

<sup>19</sup> Commission Implementing Decision (EU) 2019/235 of 24 January 2019 on amending Decision 2008/411/EC as regards an update of relevant technical conditions applicable to the 3400-3800 MHz frequency band, section B of the annex

cannot be below 40 MHz. The block allocation of the minimum amount of 40 MHz is a basic condition for effective utilisation of this frequency band.

In order to increase the likelihood that all Auction Blocks in the 3400–3600 MHz frequency band, that are subject of the Tender, are allocated based on the results of the Tender, CTU will allow, under the conditions laid down in the Auction Rules, to increase the Spectral Limit in this frequency band in case of insufficient Activity.

#### **2.3.4 Specification of the size of Auction Blocks**

The size of Auction Blocks in the 700 MHz frequency band amounting to 2x5 MHz or 2x10 MHz was determined with respect to the need to ensure the PPDR communication in this frequency band, and also with respect to creating conditions ensuring that the radio frequencies in this frequency band can be acquired by as many Allocation Holders as possible in order to ensure effective use of the radio frequencies and to create conditions to support effective infrastructure-based competition.

By structured offer of the Auction Blocks in the 3400–3600 MHz frequency band with the size of 20 MHz, CTU creates conditions for the incumbent and new holders of block allocations of radio frequencies in the 3400–3800 MHz frequency band to create continuous frequency segments with the size of 60 to 100 MHz (or 80 and 120 MHz in case of increasing the spectral limits). The objective of CTU is to approximate the recommendation of the Commission Implementing Decision<sup>20</sup> as much as possible with respect to other objectives of the Tender.

#### **2.3.5 Setting deadlines for starting the use of radio frequencies**

In order to ensure effective use of radio frequencies, deadlines were set for each frequency band for launching the use of a part of the allocated radio frequencies, or, for launching the use of all allocated radio frequencies.

The purpose of this measure is to ensure that the networks using the respective radio frequencies were built within the set time limits and, at the same time, that electronic communications services were provided through these networks, what creates conditions for the development of innovative services and for improvement of the geographic availability and quality thereof.

#### **2.3.6 Re-farming obligation in the 3400–3800 MHz frequency band**

The existing allocations of radio frequencies and the Individual Authorisations for the use of frequencies in the 3600–3800 MHz frequency band include re-farming obligation. This Invitation to Tender includes the same obligation.

The purpose of this obligation is to allow redistribution of the radio frequencies allocated in both parts of this frequency band such as to ensure maximum possible integrity of the radio frequencies allocated to one Allocation Holder in this frequency band for the sake of creating conditions for maximum effectiveness of the use of radio frequencies.

### **2.4 Development of electronic communications networks and services, in particular with the assumption of future development of fifth generation networks (5G) and the services provided on these networks**

In order to achieve the objective of the Tender, namely the support for development of the electronic communications networks and services, including in particular with the assumption of future development of fifth generation networks (5G) and the services provided on these networks, CTU laid down development criteria focusing on the following goals:

---

<sup>20</sup> Commission Implementing Decision (EU) 2019/235 of 24 January 2019 on amending Decision 2008/411/EC as regards an update of relevant technical conditions applicable to the 3400-3800 MHz frequency band, section B of the annex

- Improvement of the availability of electronic communications services in selected municipalities with insufficient population coverage;
- Development of networks using the radio frequencies allocated in this Tender;
- Development of 5G networks including the coverage of major road and railway corridors with these networks;
- General improvement of geographic availability of electronic communications services, both in terms of coverage of the population and in terms of coverage of the territory;
- Obligation to lease radio frequencies for non-public local electronic communications networks within Industry 4.0, which will be connected with two abstract blocks in the 3400-3600 MHz band.

The development criteria are set so that they lead to the most effective use of the allocated radio frequencies and – at the same time – allow the Allocation Holders to invest gradually, in an economically reasonable way, in the development of networks and services with the possibility to respond to the expected development of technologies and demand for the relevant services.

The objective of the Tender is to improve the geographic availability of the relevant electronic communications services with the emphasis on ensuring availability in the area where they are currently not available at all or with very low quality.

CTU's objective is to allow the parties interested to acquire the rights to use a comprehensive set of radio frequencies from the frequency bands which are harmonized for fifth generation mobile electronic communications networks at European level, and to ensure the development thereof in accordance with the government programme of digitisation of the Czech Republic 2018+ "Digital Czech Republic" ("Digitální Česko"), mainly the part entitled "Digital Economy and Society" ("Digitální ekonomika a společnost")<sup>21</sup> and with the national strategic vision "Implementation and Development of 5G Networks in the Czech Republic – The Way Towards Digital Economy,"<sup>22</sup> in which the objectives for the development of 5G networks are laid down. In addition to the specific requirements for the coverage of large cities and backbone linear transport structures (motorways and railway corridors), conditions will be laid down also for ensuring geographic availability approximating nationwide coverage. The fact, that the availability of completely new services will be ensured first in the area of major urban agglomerations and backbone infrastructure and subsequently also nationwide, will support effective competition in the area of electronic communications, which will have positive impact also on the development of the economy of the Czech Republic.

With regard to the expected development of 5G services and networks and to their usability for needs of the Industry 4.0 in accordance with strategic documents of the Czech republic (see previous paragraph), CTU will connect two abstract blocks in 3400-3600 MHz band with the commitment to provide wholesale offer to lease all frequencies, which the Allocation Holder of this block is authorized to use in 3400-3800 MHz band, for specific utilisation for non-public local electronic communications networks within local areas. This solution will allow utilisation of all radio frequencies in this band for the needs of public electronic communications networks from the side of the Allocation Holder and, at the same time, will make accessible these frequencies to local non-public 5G networks in a constant block of at least 40 MHz range, but probably even more, especially when these blocks will be obtained by an operator (or up to two operators), who is currently an Allocation Holder of frequencies in the 3600-3800 MHz band. If these blocks are not obtained by anyone within the Tender, CTU will, according to

---

<sup>21</sup> <https://www.mvcr.cz/soubor/vladni-program-digitalizace-ceske-republiky-2018-digitalni-cesko-digitalni-ekonomika-a-spolecnost.aspx> (Czech version only)

<sup>22</sup> <https://www.mpo.cz/assets/cz/e-komunikace-a-posta/elektronicke-komunikace/koncepce-a-strategie/narodni-plan-rozvoje-siti-nga/2020/1/Implementace-a-rozvoj-siti-5G-v-CR-EN.pdf>



rules of non-discrimination and transparency, subsequently make the radio frequencies in these blocks directly accessible for needs of the Industry 4.0.

The development criteria associated with granting of the right to use radio frequencies in the 700 MHz frequency band are laid down such as to contribute to nationwide coverage of the territory of the Czech Republic by 5G networks with use of these radio frequencies. In addition, there are development criteria designated to a holder of a specific Auction Block A3 from the 700 MHz frequency band, which are designed to improve the availability of electronic communications services in selected municipalities with identified insufficient coverage of the population with mobile services, specifically the Internet access service provided in a quality conforming to the conditions defined for the use of frequencies in the 800 MHz frequency band. The objective of CTU is to ensure nationally available electronic communications services provided using the latest technological standards, and thus ensure the most effective use of the radio frequencies which are the subject of this Tender.

The development criteria for the frequencies in the 3400–3600 MHz frequency band have been laid down to ensure development of the networks using these radio frequencies such as to ensure that the use of these frequencies for the provision of electronic communications services is guaranteed in most districts of the Czech Republic. At the same time, the aforesaid development criteria are related to the development criteria laid down in the tender in the 3600–3800 MHz frequency band in a manner that if the holders of frequencies in the 3600–3800 MHz frequency band will become also holders of frequencies in the 3400–3600 MHz frequency band, there is no duplicity of the obligations imposed and the fulfilment of the respective development criteria could be set off against each other. At the same time, however, the development criteria for the frequencies in the 3400–3600 MHz frequency band have been laid down without a link to a specific list of municipalities because CTU believes that in this context the coverage of the said categories of municipalities in the tender for frequencies in the 3600–3800 MHz frequency band is ensured sufficiently by the future development conditions of the previous tender.

To avoid any doubts, CTU states, that the Invitation to Tender has no effect on lawful duties of access to infrastructure pursuant to the Act or to the Act No. 194/2017 Coll., on measures to reduce the costs of deploying high-speed electronic communications networks and on the amendment to some other acts.

## **2.5 Support for future solution of PPDR communication**

According to the Government Decision No. 293 of 16 May 2018 and the Government Decision No. 84 of 27 January 2020, CTU considered in the conditions of this Tender the current situation and the future needs for PPDR communication.

In the Invitation to Tender, CTU laid down conditions for ensuring PPDR communication in commercial mobile communications networks 4G/5G using primarily radio frequencies in the 700 MHz frequency band, by means of the national roaming obligation (National roaming for the PPDR) and of the obligation to ensure the services of priority BB-PPDR (Priority BB-PPDR).

In addition to ensuring PPDR communication itself, an objective of the Tender is also to improve geographic availability of the communication network intended for the provision of the services of Priority BB-PPDR, in particular through ensuring coverage of defined border crossings, and the possibility of future expansion of this network to include other areas that are relevant in terms of provision of PPDR communication.

## **2.6 Maintaining the management of information and communication systems of the critical information infrastructure**

The current holders of frequencies in 800 MHz, 900 MHz, 1800 MHz, 2100 MHz, and 2600 MHz bands have been designated as administrators of information and communication systems of the critical information infrastructure and are obliged to comply with obligations stipulated by the Act No. 181/2014 Coll. on cybersecurity and on amendment of certain related

acts (hereinafter “the Cybersecurity Act”), as amended. With regard to the electronic communications services, which represent the essential platform for maintenance of state security, maintenance of vital needs of people, health of people and economy, CTU presumes that also future holders of frequencies in 700 MHz band designated on the basis of this Tender will be, upon fulfilling the criteria stipulated by the Government Regulation No. 432/2010 Coll. on criteria for designation of critical infrastructure elements as amended by Government Regulation No. 315/2014 Coll., designated by National Cyber and Information Security Agency as the administrators of information and communications infrastructure using public electronic communications network operated on frequencies from 700 MHz band, which are subject of this Tender, and will be obliged to comply with relevant obligations stipulated by the Cybersecurity Act.

CTU also presumes that potential users of the services provided via public electronic communications networks operated on frequencies from 700 MHz band, designated as liable persons in accordance with the Cybersecurity Act, will require that compliance with the requirements of the Cybersecurity Act is subject to contractual arrangements.

CTU further presumes that relevant recommendations of the European Union relating to the 5G networks security will be implemented into the valid legal order, including necessary mitigating measures or recommendations of the Commission.<sup>23</sup>

---

<sup>23</sup> <https://ec.europa.eu/digital-single-market/en/news/cybersecurity-5g-networks-eu-toolbox-risk-mitigating-measures>

### 3 BASIC PRINCIPLES OF THE TENDER

- a) The Tender shall take the form of an auction. The selected auction format is a simultaneous multi-round auction (SMRA), which will be conducted by the Electronic Auction System. The principles of the Auction are described in Chapter 10 of the Invitation to Tender and in the Auction Rules which constitute Annex 3 to the Invitation to Tender. The sole criterion for the evaluation of the Applications, which comply with the requirements for participation according to Chapter 9 of the Invitation to Tender, shall be the results of the Auction.
- b) Only potential bidders, who meet the qualification requirements for participation specified in Chapter 9 of the Invitation to Tender, may register as bidders in the Tender. In order to participate in the Tender, it is necessary to file an Application, which meets unconditionally the requirements according to this Invitation to Tender. The Applicant is not entitled to modify or condition the requirements laid down in this Invitation to Tender in any way.
- c) The Tender will take place in three stages: (1) Qualification, (2) Auction, and (3) Actions of CTU after conclusion of the Auction. In the first stage, CTU will consider whether the Applicants, who submitted their Applications within the time limit set for the submission of the Applications specified in Chapter 3 of the Invitation to Tender, met the requirements for participation in the Tender laid down in Chapter 9 of the Invitation to Tender. Should an Applicant fail to meet those requirements or cease to meet them at any time during the Tender, CTU will decide to exclude such Applicant from further participation in the Tender. The act of filing an appeal against the decision to exclude the Applicant from further participation in the Tender does not have suspensory effect. In the second stage of the Tender, all qualified Applicants will take part in the Auction. The full wording of the rules of the auction is provided in the Auction Rules, which constitute Annex 3 to the Invitation to Tender. In the third stage, CTU will proceed in accordance with Chapter 10 of the Invitation to Tender.
- d) Every Applicant shall bear its own costs of participation in the Tender.
- e) CTU will answer in writing questions sent to the contact electronic mail address [aukce@ctu.cz](mailto:aukce@ctu.cz) within the time limit set out in Chapter 3 of the Invitation to Tender. The answers will be published by CTU in anonymized form.
- f) CTU is entitled to cancel this Tender, even after the expiration of the time limit set for the submission of the Applications. For more details regarding the cancellation of the Tender refer to Chapter 13 of the Invitation to Tender.
- g) CTU shall bear no financial or other obligations ensuing from the cancellation of the Tender.

## 4 THE ORGANIZER OF THE TENDER

<b>Name of the Authority:</b>	Czech Telecommunication Office
<b>Represented by:</b>	Ms Hana Továrková
<b>Registered office:</b>	Sokolovská 58/219 190 00 Praha 9
<b>Mailing address for receiving documents in paper form:</b>	Český telekomunikační úřad (Czech Telecommunication Office) P.O. Box 02 225 02 Praha 025
<b>Address for receiving documents in electronic form:</b>	E-mail : <a href="mailto:podatelna@ctu.cz">podatelna@ctu.cz</a> Data mailbox: a9qaats
<b>Company Identification No. (IČO):</b>	70106975
<b>Tax Registration No. (DIČ):</b>	CZ70106975
<b>No. of the bank account for depositing the Security according to Chapter 8.3 of the Invitation to Tender:</b>	6015-725001/0710 maintained by Czech National Bank (ČNB), Prague branch
<b>No. of the bank account for the payment of the difference between the Total Price and deposited Security according to Chapter 11 of Tender:</b>	19-725001/0710 maintained by Czech National Bank (ČNB), Prague branch

## 5 DATES OF THE TENDER

### 5.1 Time Schedule of the Tender

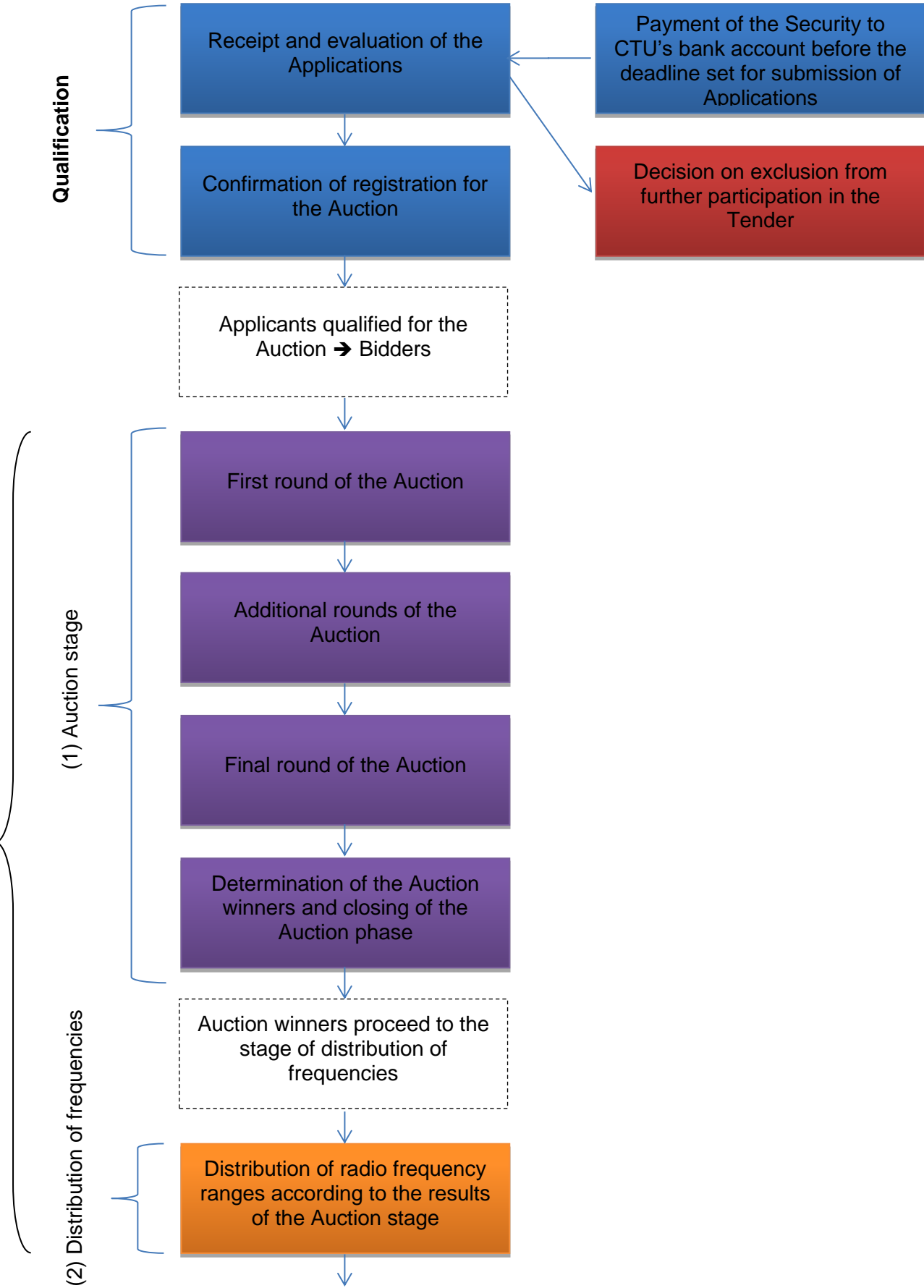
ID	Activity	Date <sup>24</sup>
a.	Invitation to Tender	[x]
b.	Submission of questions according to Chapter 2(e) of the Invitation to Tender	[a. + 15 days]
c.	Publication of answers according to Chapter 2(e) of the Invitation to Tender	[b. + 7 days]
d.	Submission of the Applications for Granting the Rights to Use Radio Frequencies according to Chapter 9.2 of the Invitation to Tender	[a. + 45 days]
e.	Opening envelopes containing submitted Applications	[d. + 1 day]

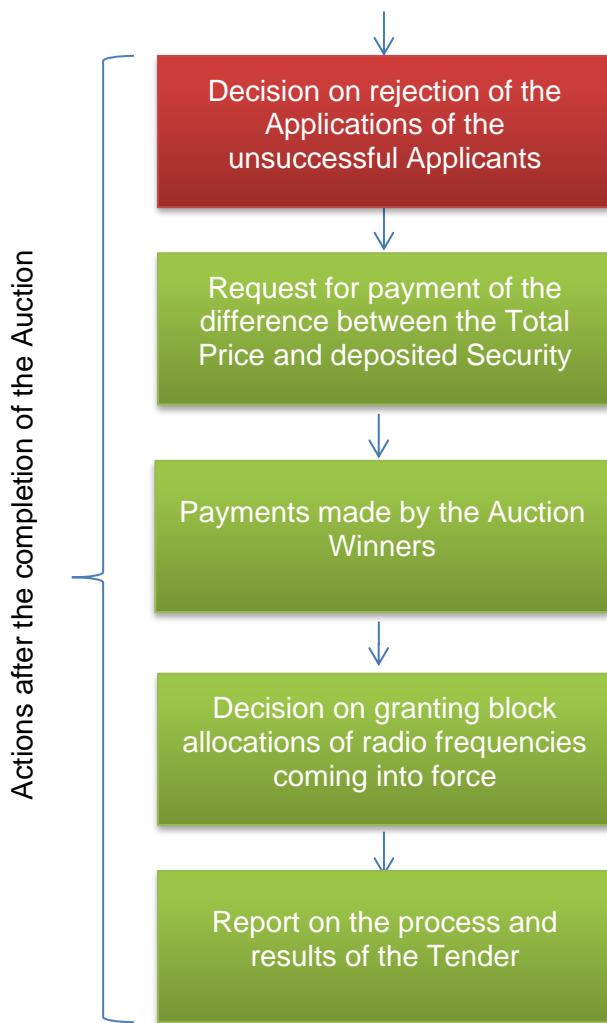
The current time schedule of the Tender will be published on the website of CTU ([www.ctu.eu](http://www.ctu.eu)). Unless provided otherwise, Section 40 of the Code of Administrative Procedure will apply to the calculation of the time limits during the Tender. In particular, the day when the event, which determines the commencement of a time limit, occurs is not included in the time limit itself. If the end of a time limit should fall on a Saturday, Sunday or public holiday, the next business day will be considered the last day of the time limit. Unless provided otherwise, time limits are specified in calendar days.

---

<sup>24</sup> The final version of the Invitation to Tender will specify the dates.

5.2 Diagram of the flow of the Tender, divided into individual stages





## 6 SUBJECT OF THE TENDER

### 6.1 700 MHz frequency band

The 700 MHz band is a band defined by the 694–790 MHz radio frequencies which was harmonized by the Commission Implementing Decision (EU) 2016/687<sup>25</sup> for terrestrial systems capable of providing wireless broadband electronic communications services and for flexible national use. The conditions for the use of the 700 MHz band within the Czech Republic are laid down in RSUP 10.

The subject of this Tender is paired frequencies 703–733 MHz and 758–788 MHz which will be divided, for the purpose of this Tender, into the following Auction Blocks:

- 1 separate abstract Auction Block with the size of 2×10 MHz reserved for new operator who is not Incumbent Operator (A1);
- 2 separate abstract Auction Blocks, each with the size of 2×5 MHz (A2.1 and A2.2) and
- 1 separate abstract Auction Block with the size on 2x10 MHz (A3).

The following categories of Auction Blocks will be allocated within the Tender:

<b>Auction Block Category</b>	<b>Auction Block Identifier</b>	<b>Size in MHz</b>
A1	A1	2×10.0
A2	A2.1	2×5.0
	A2.2	2×5.0
A3	A3	2×10.0

There is an initial Spectral Limit set for Bids for radio frequencies from the 700 MHz band so the total quantity of radio frequencies allocated to one Applicant based on this Tender may not exceed 2×10 MHz. In accordance with Chapter 4.4.9 of the Auction Rules, the fulfilment of the conditions can cause an increase of this Spectral Limit to 2x20 MHz.

The Auction Block A1 with the size of 2x10 MHz is reserved for new operator, who is not Incumbent Operator. The new operator is authorized to submit a Bid for the reserved Auction Block A1 in the first Auction Round. If no new operator, who is not Incumbent Operator, will submit a Bid for reserved Auction Block A1 in the first Auction Round, the reservation will not be applied and also Incumbent Operators will be allowed to submit Bids for this Auction Block. Other conditions for submitting Bids for Auction Block A1 are laid down in Chapter 4.4.6 of the Auction Rules.

Only Incumbent Operators, who took over the national roaming obligation in option A can apply for Auction Block A3 with the size of 2x10 MHz. If no Incumbent Operator takes over the national roaming obligation in option A, all Auction Participants will be able to submit Bids for this Auction Block A3. Other conditions for submitting Bids for the Auction Block A3 are laid down in Chapter 4.4.6 of the Auction Rules.

The minimum scope of the Bid in the 700 MHz band has not been set.

---

<sup>25</sup> Commission Implementing Decision (EU) 2016/687 of 28 April 2016 on the harmonisation of the 694-790 MHz frequency band for terrestrial systems capable of providing wireless broadband electronic communications services and for flexible national use in the Union



The conditions and obligations associated with granting the right to use radio frequencies are specified in greater detail in Chapters 7 and 8 of the Invitation to Tender.

## 6.2 3400–3600 MHz frequency band

The 3400–3600 MHz band is an unpaired band delineated by radio frequencies of 3400 MHz and 3600 MHz. Commission Decision 2008/411/EC<sup>26</sup> as amended by the Commission Implementing Decision 2014/276/EU as amended by the Commission Implementing Decision (EU) 2019/235 of 24 January 2019 on amending Decision 2008/411/EC as regards an update of relevant technical conditions applicable to the 3400–3800 MHz frequency band harmonized the technical conditions for the use of the spectrum in the 3400–3800 MHz frequency band for terrestrial provision of electronic communications services within the entire Union, with primary focus on wireless broadband services for end-users. The conditions for the use of the 3400–3800 MHz band within the Czech Republic are laid down in RSUP 7.

The subject of this Tender is unpaired frequencies 3400–3600 MHz which will be divided, for the purpose of this Tender, into following Auction Blocks:

- 2 separate reserved abstract Auction Blocks with the size of 20 MHz (B1.1 and B1.2);
- 8 separate abstract Auction Blocks, each with the size of 20 MHz (B2.1 to B2.8).

The following categories of Auction Blocks will be allocated within the Tender:

Auction Block category	Auction Block Identifier	Frequency range in MHz	Size in MHz
B1	B1.1	3400-3600	20.0
	B1.2		20.0
B2	B2.1		20.0
	B2.2		20.0
	B2.3		20.0
	B2.4		20.0
	B2.5		20.0
	B2.6		20.0
	B2.7		20.0
	B2.8		20.0

There is a Spectral Limit set for Bids for radio frequencies from the 3400–3600 MHz band so the total quantity of radio frequencies allocated to one Applicant, based on this Tender, together with the radio frequencies, which the Applicant or a member of the Applicant's Business Group is authorized to use under its block allocations of radio frequencies in the 3600–3800 MHz band, may not exceed 60 MHz if the Applicant is an Incumbent Operator and 100 MHz if the Applicant is a new operator, who is not Incumbent Operator. Pursuant to chapter 4.4.10 of the Auction Rules, the fulfilment of the conditions can cause an increase of this Spectral Limit by 20 MHz for both Applicant categories.

The minimum scope of the bid in the 3400–3600 MHz frequency band is defined so the minimum quantity of radio frequencies allocated to one Applicant, based on this Tender,

<sup>26</sup> Commission Decision 2008/411/EC of 21 May 2008 on the harmonisation of the 3400–3800 MHz frequency band for terrestrial systems capable of providing electronic communications services in the Community.

together with the radio frequencies, which the Applicant is authorized to use under its block allocations of radio frequencies in the 3600–3800 MHz band, is 40 MHz.

Only Auction Participants, who overtook commitment to lease radio frequencies for purposes of the Industry 4.0 pursuant to Chapter 8.5 of the Invitation to Tender, will be allowed to apply for Auction Blocks of B category.

The conditions and commitments associated with granting of the right to use radio frequencies are specified in more detail in Chapters 7 and 8 of the Invitation to Tender.

### 6.3 Price for granting of the rights to use radio frequencies

The price for granting of the rights to use radio frequencies, which every Applicant will be obliged to pay, based on this Tender, shall equal the sum of the Applicant's Winning Bids.

The amount of the Bids in the Auction stage must not be lower than the minimum price of the Auction Blocks specified in this Chapter 6.3 of the Invitation to Tender.

The minimum price for each Auction Block category is set as follows:

<b>Auction Block category</b>	<b>Minimum price per Auction Block in CZK</b>
A1	1,400,000,000
A2	700,000,000
A3	1,120,000,000
B1	110,000,000
B2	140,000,000

The minimum price has been determined based on a benchmark analysis of the prices obtained for granting of rights to use radio frequencies. The minimal prices have been rounded to the whole millions.

For the 700 MHz frequency band, the minimum price has been determined based on a benchmark analysis of the prices obtained in the frequency bands of 700 MHz and 800 MHz<sup>27</sup> in relevant European countries. The benchmark analysis took into account the auctions, which took place between the years 2009 and 2020.

For the 3400–3600 MHz frequency band, the minimum price has been determined based on a benchmark analysis of the prices obtained in the 3400–3800 MHz frequency band in relevant European countries.

The benchmark analysis was made to 2 June 2020.<sup>28</sup>

When determining the minimum price, CTU used as a basis the auctions which took place in the following countries:

- 700 MHz Frequency Band: Italy, France, Sweden, Iceland, Germany, Finland, Norway;
- 800 MHz Frequency Band: Italy, Germany, Czech Republic, Portugal, Croatia, France, Ireland, Spain, Belgium, Sweden, Switzerland, Finland, United Kingdom;
- 3400–3800 MHz Frequency Band: United Kingdom, Latvia, Spain, Austria (nationwide block allocation), Ireland, Finland, Czech Republic, Hungary.

---

<sup>27</sup> The 800 MHz frequency band is a paired band defined by the radio frequencies of 791–821 MHz and 832–862 MHz.

<sup>28</sup> The benchmark analysis will be updated as of the date of the Invitation to Tender.

The auctions in which the price obtained significantly exceeded or was significantly lower than the prices obtained in auctions in other countries included in the benchmark were excluded from the benchmark. Specifically, the following countries were excluded from the benchmark: Hungary (700 MHz), Netherlands (800 MHz), Denmark (800 MHz), Romania (800 MHz), Italy (3400–3800 MHz), Slovakia (3400–3800 MHz), Hungary (3400–3800 MHz), Latvia (3400–3800 MHz), Austria (regional block allocation) (3400–3800 MHz), Germany (3400–3800 MHz), Bulgaria (3400–3800 MHz).

The price benchmark is based on a comparison of prices considering the purchasing power parity of the population of the different countries as of the date of the auction. The prices thereby obtained were then converted according to the block allocation validity period, population of the country concerned, and the scope of the spectrum allocated. Subsequently, the extreme values were excluded, and arithmetic mean was calculated. The arithmetic mean was rounded and used as the minimum price for 1 MHz of the spectrum. The achieved value was used for the calculation of the minimum price of the auction blocks in the Auction Block categories A1, A2 and B2, taking into account the block allocation validity periods, population of the Czech Republic, and the scope of the spectrum in each Auction Block.

The minimal price for Auction Block category A3 in 700 MHz band, to which specific development criteria according to Chapter 7.5.1 Point (a) and (e) of the Invitation to Tender are related, was lowered by 20 % with respect to the costs required by the compliance with these obligations.

The minimal price for Auction Block category B1 in 3400-3600 MHz band, to which commitment to lease radio frequencies for purposes of the Industry 4.0 pursuant to Chapter 8.5 of the Invitation is related, was lowered by 25 % with respect to the costs required by the compliance with this commitment.

The fixed increase of the price for each Auction Block category in the 700 MHz frequency band is set as 5% of the minimum price of each Auction Block. The fixed increase in the 3400–3600 MHz frequency band is set as 10% of the minimum price of each Auction Block.

The fixed increase of the price for each Auction Block category was set as follows:

<b>Auction Block category</b>	<b>Absolute amount of the fixed price increase in CZK</b>
A1	70,000,000
A2	35,000,000
A3	70,000,000
B1	14,000,000
B2	14,000,000

## **7 CONDITIONS ASSOCIATED WITH GRANTING OF RIGHT TO USE RADIO FREQUENCIES**

The conditions associated with the granting of the right to use radio frequencies, including the conditions of effective use of the radio frequencies and the obligations accepted by the Applicant during the Tender will be laid down by CTU in a decision on a block allocation of radio frequencies issued on the basis of the results of the Tender and, where necessary, in other documents issued under the Act.

### **7.1 Conditions of use of the allocated radio frequencies**

#### **7.1.1 700 MHz band**

The radio frequencies offered in the Tender are intended for use on the entire territory of the Czech Republic.

The conditions for the use of the radio frequencies in the 700 MHz frequency band, including the conditions laid down in RSUP 10, will be projected in the Individual Authorisation and, where appropriate, in other documents issued under the Act.

A public communications network operated with the use of frequencies in the 700 MHz frequency band must meet, from the technical point of view, the conditions laid down in the Commission Implementing Decision (EU) 2016/687 of 28 April 2016 on the harmonisation of the 694–790 MHz frequency band for terrestrial systems capable of providing wireless broadband electronic communications services and for flexible national use in the Union and in the Decision CEPT/ECC/DEC(15)01 and, concerning the standard chosen by the Applicant, the conditions laid down in ETSI standards or, where appropriate, in other related Commission, CEPT or ITU documents.

The procedure for laying down the conditions for the use of the radio frequencies concerned will be in accordance with RSUP 10.

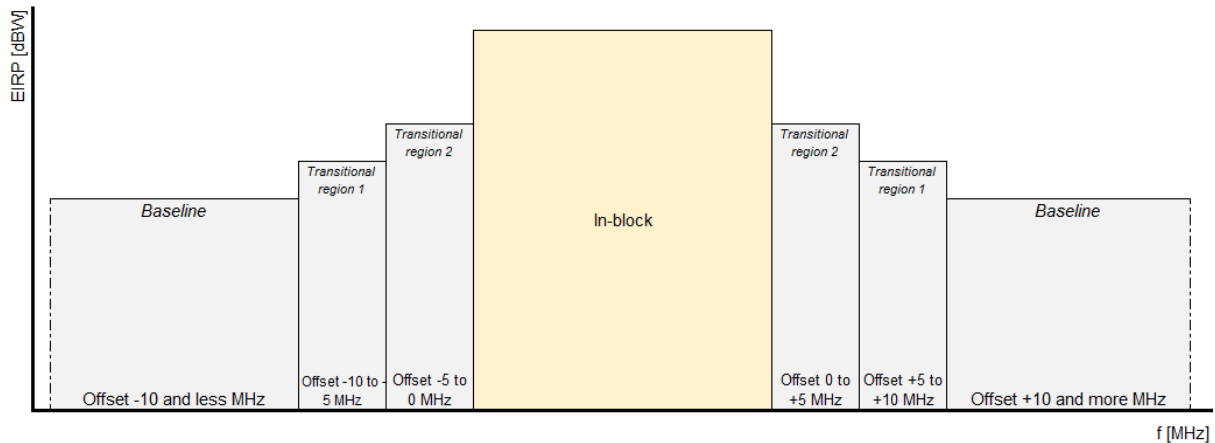
The basic condition of the Tender will be to use the radio frequencies for publicly available electronic communications services in a manner that will reflect the principles laid down in this Invitation to Tender.

With regard to the European harmonisation, the radio frequencies are intended solely for nationwide provision of electronic communications services assuming a flexible management of the granted rights in order to ensure effective use of the radio spectrum and access to it also for other potential interested parties on commercial basis in accordance with the conditions laid down in the Invitation to Tender.

The following additional conditions are set for the use of radio frequencies in the 700 MHz frequency band in the Czech Republic:

- The duplex mode of operation shall be frequency division duplex (FDD);
- In addition to the technical parameters set in the Commission Implementing Decision (EU) 2016/687, there is an in-block EIRP limit set for base stations as +62 dBm/(5 MHz);
- The basic technical parameters for base stations, known as block edge mask (BEM), have been specified based on the Commission Implementing Decision (EU) 2016/687 as follows:

Technical parameters specified for the base stations (BEM):



1) In-block power limit for the base stations

BEM element	EIRP limit
In-block	+62 dBm/(5 MHz) per antenna

2) Power limits for the base stations

BEM element	EIRP limit mean value
Baseline in the frequency band below 694 MHz	-23 dBm/(8 MHz) per cell
Baseline in the frequency segment 698-736 MHz	-50 dBm/(5 MHz) per cell -52 dBm/(3 MHz) per cell -64 dBm/(200 kHz) per cell
Baseline in the frequency segment 738-791 MHz	+16 dBm/(5 MHz) per antenna +14 dBm/(3 MHz) per antenna +2 dBm/(200 kHz) per antenna
Baseline in the frequency segment 791-821 MHz	+16 dBm/(5 MHz) per antenna
Baseline in the frequency segment 832-862 MHz	-49 dBm/(5 MHz) per cell
Transitional region 1	+18 dBm/(5 MHz) per antenna
Transitional region 2	+22 dBm/(5 MHz) per antenna

Technical parameters set for terminals:

BEM element	In-block TRP limit
In-block	+23 dBm

### 7.1.2 Conditions for protection of terrestrial television broadcasting when using the frequencies in the 700 MHz frequency band

The following conditions have been laid down for the protection of terrestrial television broadcasting:

- a) Before launching the permanent operation of each new base station, the Allocation Holder shall ensure running a pilot operation for at least 60 days with a continuous load of at least 80 %.
- b) The Allocation Holder is obliged to do the following in case of an investigation of interference with terrestrial television broadcasting carried out by CTU:

- 1) Upon a telephone request by an authorized employee of CTU, the Allocation Holder shall switch off the base station concerned for a short time;
- 2) Upon a written request by an authorized employee of CTU (by electronic mail) in the event of interference with more than ten locations of television signal reception or at least one device for joint television signal reception, the Allocation Holder shall switch off the base station concerned for a period required for elimination of the interference until the continuation of the pilot operation has been approved by an authorized employee of CTU;
- c) Before launching the permanent operation of the base station, all legitimate requests related to interference with the terrestrial television broadcasting signal must be settled by implementing protective measures either on the part of the television signal reception, or on the part of the base station.
- d) The pilot operation of the base station shall not be terminated before CTU has settled and closed all legitimate requests for investigation of interference with the terrestrial television broadcasting signal pertaining to the base station concerned. The Allocation Holder shall, without any delay, report the settlement of all cases of interference during the pilot operation to CTU in writing. After termination of the pilot operation and settlement of legitimate claims of interference, the Allocation Holder shall file an application for transition of the base stations concerned to permanent operation.
- e) The Allocation Holder is obliged to provide CTU with a list of base stations running in pilot operation under the conditions laid down in chapter 7.2.1(a) of the Invitation to Tender.
- f) Prior to the start of pilot operation of the newly installed base stations, the Allocation Holder is obliged to notify the relevant local municipal authorities or city districts covered by such base station under the conditions laid down in chapter 7.2.1(a) of the Invitation to Tender.
- g) If a new terrestrial television broadcasting network is launched and subsequently interference occurs due to an existing base station which is already in permanent operation, the Allocation Holder is obliged to implement appropriate protective measures either on the part of the television signal reception, or on the part of the base station concerned upon a request issued by CTU for elimination of the interference.

### 7.1.3 3400–3600 MHz band

The radio frequencies offered in the Tender are intended for use on the entire territory of the Czech Republic.

The conditions of use of the radio frequencies in the 3400–3600 MHz frequency band are laid down in RSUP 7 and will be projected in the Individual Authorisation and, where appropriate, in other documents issued under the Act.

A public communications network which is operated with the use of frequencies in the 3400–3600 MHz frequency band must meet, from the technical point of view, the conditions laid down in Commission Decision 2008/411/EC as amended by the Commission Implementing Decision 2014/276/EU and Commission Implementing Decision (EU) 2019/235 of 24 January 2019 on amending Decision 2008/411/EC as regards an update of relevant technical conditions applicable to the 3400–3800 MHz frequency band, in the updated Decision CEPT/ECC/DEC/(11)06 dated 26 October 2018,<sup>29</sup> and, concerning the standard chosen by the Applicant, the conditions laid down in ETSI standards or, where appropriate, in other related Commission, CEPT or ITU documents.

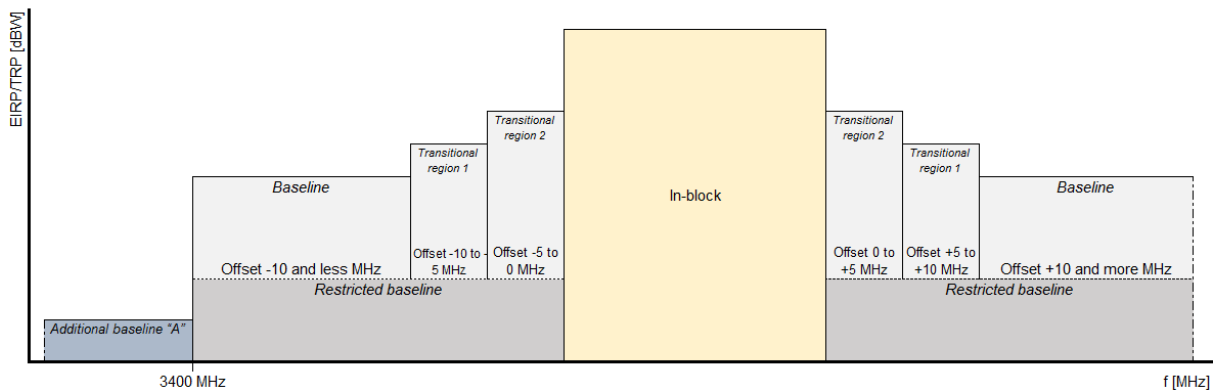
---

<sup>29</sup> <https://www.ecodocdb.dk/download/34f57e2a-1c04/ECCDEC1106.PDF>

The conditions for the use of the 3400–3600 MHz frequency band are coordinated in the Czech Republic according to the above-mentioned documents which are used as a basis for definition of the following conditions of use:

- The duplex mode of operation shall be time division duplex (TDD);
- In addition to the requirements laid down in the Commission Implementing Decision (EU) 2019/235, an in-block EIRP limit is set for base stations to preserve the same conditions with the 3600–3800 MHz frequency band for the future re-farming, namely as +68 dBm/(5 MHz) per antenna for base stations without active antenna systems (non-AAS base stations). The corresponding limit of +47 dBm/(5 MHz) per cell was set for base stations with active antenna systems (AAS base stations).
- The basic technical parameters for base stations, known as block edge mask (BEM) have been specified based on the Commission Implementing Decision (EU) 2019/235. The particular restricting requirements for synchronised and unsynchronised networks are laid down as follows.

Technical parameters specified for the base stations (BEM):



In-block power limit for base stations without active antenna systems (non-AAS base stations) and base stations with active antenna systems (AAS base stations)

BEM element	EIRP limit for non-AAS	TRP limit for AAS
In-block	+68 dBm/(5 MHz) per antenna	+47 dBm/(5 MHz) per cell

Power limits for the non-AAS and AAS base stations with synchronised network operation

BEM element	EIRP limit for non-AAS	TRP limit for AAS
Baseline	+13 dBm/(5 MHz) per antenna	+1 dBm/(5 MHz) per cell
Transitional region 1	+15 dBm/(5 MHz) per antenna	+4 dBm/(5 MHz) per cell
Transitional region 2	+21 dBm/(5 MHz) per antenna	+7 dBm/(5 MHz) per cell

Power limits for the non-AAS and AAS base stations with unsynchronised and semi-synchronised operation

BEM element	EIRP limit for non-AAS	TRP limit for AAS
Restricted baseline	-34 dBm/(5MHz) per cell	-43 dBm/(5MHz) per cell

Additional basic power limit for non-AAS and AAS base stations under 3400 MHz

BEM element	EIRP limit for non-AAS	TRP limit for AAS
-------------	------------------------	-------------------

Additional level "A"	-59 dBm/MHz per antenna	-52 dBm/MHz per cell
----------------------	-------------------------	----------------------

Technical parameters set for terminals:

BEM element	In-block TRP limit
In-block	+28 dBm

When laying down the conditions for the use of the radio frequencies in question, CTU respects the technological neutrality of the networks. CTU will proceed in accordance with RSUP 7.

The basic condition of the Tender is to use radio frequencies for publicly available electronic communications services in a manner that will reflect the principles laid down in this Tender. With regard to the European harmonisation, the radio frequencies are intended solely for nationwide provision of electronic communications services assuming a flexible management of the granted rights in order to ensure effective use of the radio spectrum and access to it also for other potential interested parties on commercial basis.

## 7.2 Issuing Individual Authorisations

Initiation of the use of radio frequencies allocated based on the results of this Tender is conditional upon the issuance of Individual Authorisations. The Individual Authorisations shall be issued individually for each of the frequency bands allocated.

### 7.2.1 700 MHz band

The following additional conditions shall be set in the Individual Authorisation:

- a) A condition requiring the Allocation Holders to provide CTU at least 10 days before starting the pilot operation of each base station with a list containing technical parameters of all stations which are currently running in pilot operation or will be put into pilot operation within the specified time period, and the date of the estimated start of permanent operation of the base station. The list shall be submitted to CTU in electronic form in a defined spreadsheet format.<sup>30</sup> CTU will provide the Individual Authorisation holder with the spreadsheet template. The Allocation Holder is obliged to inform respective municipality authorities and respective authorities of city districts respectively about the intention to launch operation of a base station in the 700 MHz frequency band, about the possible impact of the operation of the newly installed base stations on reception of the terrestrial television broadcasting in the area, and about the possibilities of quick resolution of the cases of interference with the terrestrial television broadcasting reception at least 30 calendar days before the start of the pilot operation of the station.
- b) A condition requiring the Allocation Holders to provide CTU always as of the first day of each calendar month with a list of all base stations in permanent operation in a format suitable for batch calculation of the coverage.<sup>30</sup> This list shall also take into account all changes to the technical parameters of the base stations which were put into permanent operation in the past. CTU will provide the Individual Authorisation holder with the spreadsheet template. Only the base stations, the pilot operation of which has been completed pursuant to paragraph c), i.e., stations where all reported interferences with the signal of the terrestrial digital television broadcasting have been resolved, may be put into permanent operation.

The list shall contain the following information for each base station (sector):

---

<sup>30</sup> In Microsoft Excel 97-2004 workbook format (.xls).



- 1) Unique name of the site/sector (This name must be maintained even if there is a change in the technical parameters of the station);
  - 2) Identifier of the station sector (CELL ID);
  - 3) Area identification number (LAC/TAC);
  - 4) Site address;
  - 5) Geographic coordinates of the site using the WGS 84 system using the format: degree-minute-second or only degree (decimal number);
  - 6) Altitude of the site (m);
  - 7) Radio frequency of the transmitter and the receiver (mean frequency of the block in MHz);
  - 8) Height of the centre of the antenna system above the ground surface (m);
  - 9) Radiation characteristics of the antenna system (code description according to the HCM Agreement, annex 6;<sup>31</sup>)
  - 10) Azimuth of maximum radiation in each sector (°);
  - 11) Mechanically set elevation in the maximum radiation azimuth in each sector (°);
  - 12) Maximum radiated power EIRP in the sector (W).
- c) Conditions requiring the Allocation Holder to verify the impact on the adjacent frequency bands and to ensure seamless reception of the terrestrial television broadcasting by the pilot operation of each base station as per the conditions laid down in chapter 7.1.2 of the Invitation to Tender;
- d) Restriction according to chapter 7.7 of the Invitation to Tender;
- e) A condition requiring the Allocation Holder to respect the coexistence of the operation of the base stations with the base stations operated by other Allocation Holders in the 700 MHz frequency band which may be related, for example, to the limitation of the maximum radiated power or placement of the antenna systems;
- f) Conditions ensuing from international agreements which are binding upon the Czech Republic;
- g) Conditions allowing CTU to perform the necessary investigations and measurements in order to verify the mutual compatibility of operation of the transmission radio equipment;
- h) Conditions requiring the Allocation Holder to eliminate incompatibilities, if any, of the operation of the transmission radio equipment such as to prevent negative impact on the operation of other permitted transmission radio equipment.

### 7.2.2 3400–3600 MHz band

The following additional conditions shall be set in the Individual Authorisation:

- a) A condition requiring the Allocation Holder to provide CTU always as of the first day of each calendar month with a list of all base stations in operation in a format suitable for batch calculation of the coverage.<sup>30</sup> This list shall also take into account all changes to the technical parameters of the base stations which were put into operation in the past. CTU will provide the Individual Authorisation holder with the spreadsheet template. The list shall contain the following information for each base station (sector):
- 1) Unique name of the site/sector (This name must be maintained even if there is a change in the technical parameters of the station);
  - 2) Cell identifier (CELL ID);
  - 3) Area identification number (LAC/TAC);
  - 4) Site address;
  - 5) Geographic coordinates of the site using the WGS 84 system in a format: degree-minute-second or only degree (decimal number);

---

<sup>31</sup> [http://www.hcm-agreement.eu/http/englisch/verwaltung/index\\_berliner\\_vereinbarung.htm](http://www.hcm-agreement.eu/http/englisch/verwaltung/index_berliner_vereinbarung.htm)

- 6) Altitude of the site (m);
  - 7) Radio frequency of the transmitter and the receiver (mean frequency of the block in MHz);
  - 8) Height of the centre of the antenna system above the ground surface (m);
  - 9) Radiation characteristics of the antenna system (code description according the HCM Agreement, annex 6<sup>31</sup>);
  - 10) Azimuth of maximum radiation in each sector (°);
  - 11) Mechanically set elevation in the maximum radiation azimuth in each sector (°);
  - 12) Maximum radiated power EIRP in the sector (W).
- b) A condition requiring the Allocation Holder to respect the coexistence of the operation of the base stations with the base stations operated by other Allocation Holders in the 3400–3800 MHz frequency band which may be related, for example, to the limitation of the maximum radiated power or placement of the antenna systems;
  - c) Conditions ensuing from international agreements which are binding upon the Czech Republic;
  - d) Conditions allowing CTU to perform necessary investigations and measurements in order to verify mutual compatibility of operation of the transmission radio equipment;
  - e) Conditions requiring the Allocation Holder to eliminate incompatibilities, if any, of the operation of the transmission radio equipment such as to prevent negative impact on the operation of other permitted transmission radio equipment;
  - f) Condition to ensure effective use of allocated radio frequencies.

### **7.3 Technologies and services for which the rights to use radio frequencies will be granted**

In accordance with the principle of technological neutrality, CTU does not lay down, on top of the conditions for the use of the allocated radio frequencies specified in chapter 0 of the Invitation to Tender, any conditions or limitations in terms of the technologies which the Applicant intends to use for the provision of publicly available electronic communications services using the allocated radio frequencies. This is without prejudice to the provisions of the particular RSUPs and the development criteria according to chapter 7.5 of the Invitation to Tender.

All equipment which is operated using the frequencies that are subject of this Tender must meet all applicable technical standards and other generally binding legal or other regulations in force at that time for the entire duration of operation thereof.

### **7.4 Conditions of effective use of radio frequencies**

The criteria which are binding on the Allocation Holder in terms of fulfilment of the conditions of effective use of the radio frequencies acquired in this Tender are specified for the purpose of using the radio frequencies which are subject of the Tender:

- Commencement of effective use of the radio frequencies, i.e. launch of the provision of commercial services using the public communication networks operated on the allocated radio frequencies, in the 700 MHz frequency band within 18 months and in the 3400–3600 MHz frequency band within 24 months of the date of entry into force of the decision granting the block allocation of the radio frequencies. The obligation to begin provision of the commercial services applies independently to each of the frequency bands acquired by the Applicant in the Tender. In order to fulfil this condition, the Allocation Holder does not have to use the entire width of the allocated radio frequencies in the particular frequency band – the Allocation Holder may only use a portion of the allocated radio frequencies;
- Commencement of use of the radio frequencies pursuant to Section 22b(2) of the Act, i.e. provision of the electronic communications services via public communications

networks using the full range of radio frequencies allocated in the 700 MHz frequency band within 24 months and in the 3400–3600 MHz frequency band within 48 months of the date of entering into force of decision granting the block allocation of the radio frequencies;

- Ensuring coverage of the territory and the population with an offer of commercial publicly available electronic communications services via public communications networks using the radio frequencies allocated in this Tender to the extent defined for each frequency band in chapter 7.5 of the Invitation to Tender.

If the Applicant fails to meet this coverage condition it shall be deemed not to have fulfilled the condition for all radio frequencies within the same frequency band which the Applicant acquired in the Tender.

For the purpose of verification of the fulfilment of the conditions of efficient use of the radio frequencies, the Allocation Holder shall provide, for all stations with which the Allocation Holder proves the fulfilment of the coverage condition, i.e. stations in the frequency bands of 700 MHz, 800 MHz, 900 MHz, 1800 MHz, 2100 MHz, 2600 MHz, and 3400–3800 MHz, the technical parameters of the stations corresponding to the scope of the technical parameters specified in chapter 7.2.1 point (b) and 7.2.2 point (a) respectively of the Invitation to Tender. The information shall be provided in a format suitable for batch calculation of the coverage.<sup>32</sup> It is possible to include in the frequency bands of 700 MHz and 800 MHz only the stations where pilot operation has ended according to the conditions of this Tender or, more precisely, tender based on which the block allocations of radio frequencies in the 800 MHz band were granted.

The Allocation Holder shall provide this information at least as of the moment of fulfilment of the development criteria according to chapters 7.5.1 and 7.5.2 of the Invitation to Tender.

## 7.5 Development criteria

### 7.5.1 700 MHz band

The following development criteria are binding on the Allocation Holder who has been allocated at least one Auction Block in the 700 MHz frequency band:

- a) Within 3 years after the date of entering into force of the decision granting the block allocation of the radio frequencies, the Allocation Holder shall ensure coverage of 95% of the population of all municipalities identified as white spots, listed in chapter 1 of Annex 4 to the Invitation to Tender. This obligation does not apply to the white spots, where the coverage can be achieved only under the condition of disproportionately high investment costs, if the Allocation Holder provides CTU with an evidence of fulfilment of this condition by non-covered white spots. This obligation applies only to the Allocation Holder of the Auction Block Category A3.
- b) Within 4 years after the date of entering into force of the decision granting the block allocation of the radio frequencies, the Allocation Holder shall ensure coverage of 100% of core corridors and 98% of side corridors of railway and road corridors sections within the Trans-European Transport Network (TEN-T) in the “Core Network” and “Comprehensive Network” categories<sup>33</sup>. Within 6 years after the date of entering into force of the decision granting the block allocation of the radio frequencies, the Allocation Holder shall ensure coverage of 100% of core corridors and 100% of side corridors of railway and road corridors section within TEN-T in the “Core Network” and “Comprehensive Network” categories.<sup>34</sup> The individual road and railway sections are

---

<sup>32</sup> In Microsoft Excel 97-2004 worksheet format (.xls).

<sup>33</sup> <http://ec.europa.eu/transport/infrastructure/tentec/tentec-portal/map/maps.html>

<sup>34</sup> <http://ec.europa.eu/transport/infrastructure/tentec/tentec-portal/map/maps.html>

specified in chapters 2 and 3 of Annex 4 to the Invitation to Tender alongside with the definition of core and side corridors. The aforesaid obligation shall not apply to the parts of tunnels and other sections, where the coverage can be achieved only under the condition of disproportionately high investment costs, if the Allocation Holder provides CTU with an evidence of fulfilment of this condition in the non-covered sections. For the newly opened sections of road and railway corridors, the Allocation Holder is obliged to ensure the required level of coverage subsequently, namely within 3 years of the opening thereof for regular transport service. The above stated deadlines according to this point b) apply to the Incumbent Operator. For an operator, who is not an Incumbent Operator and who is granted a block allocation of radio frequencies in the 700 MHz band in this Tender, this development criterion is postponed by one year.

- c) Within 4 years after the date of entering into force of the decision granting the block allocation of the radio frequencies, the Incumbent Operator shall ensure coverage of 95% of the cadastral area of each town with population exceeding 50,000 according to chapter 4 of Annex 4 to the Invitation to Tender. For other operator than the Incumbent Operator, who is granted a block allocation of radio frequencies in the 700 MHz frequency band in this Tender, this development criterion is postponed by one year.
- d) Within 5 years after the date of entering into force of the decision granting the block allocation of the radio frequencies, the Allocation Holder shall ensure coverage of 70% of the population of the Czech Republic. For an operator who is not an Incumbent Operator, who is granted a block allocation of radio frequencies in the 700 MHz frequency band in this Tender, this development criterion is postponed by one year.
- e) Within 5 years after the date of entering into force of the decision granting the block allocation of the radio frequencies, the Allocation Holder shall ensure coverage of 80% of the territory of the Czech Republic. This obligation applies only to the Allocation Holder of the Auction Block Category A3.
- f) Within 7 years after the date of entering into force of the decision granting the block allocation of the radio frequencies, the Allocation Holder shall ensure coverage of 90% of the population of each district of the Czech Republic and 70% of the area of each district of the Czech Republic. For an operator who is not an Incumbent Operator, who is granted a block allocation of radio frequencies in the 700 MHz frequency band in this Tender, this development criterion is postponed by one year.
- g) Within 10 years after the date of entering into force of the decision granting the block allocation of the radio frequencies, the Incumbent Operator shall ensure coverage of 99% of the population of each district of the Czech Republic and 90% of the area of each district of the Czech Republic. For an operator who is not an Incumbent Operator, who is granted a block allocation of radio frequencies in the 700 MHz frequency band in this Tender, this development criterion is postponed by one year.
- h) Within 3 years after the date of entering into force of the decision granting the block allocation of the radio frequencies, the Allocation Holder shall ensure coverage of at least 30% of the population of the Czech Republic. This obligation applies only to the Allocation Holders in the Auction Block Category A1.

The coverage according to point a) means operation of a public electronic communications network using own radio frequency block allocations in the frequency bands of 700 MHz, 800 MHz, 900 MHz, 1800 MHz, 2100 MHz, 2600 MHz and/or 3400–3800 MHz. The 75% probability of indoor signal reception is required for the coverage of the population.

The coverage according to points b) and c) means operation of a public electronic communications network using own radio frequency block allocations in the 700 MHz and 3400–3800 MHz frequency bands according to 5G Standard. Continuous (uninterrupted)

outdoor signal reception with a latency of maximum 10 ms between terminal and base station is required for the coverage of the area and linear structures according to these points.<sup>35</sup>

The coverage according to points d), e) and h) means operation of a public electronic communications network using own radio frequency block allocation solely in the 700 MHz frequency band according to 5G Standard. The 75% probability of indoor signal reception is required for the coverage of the population.

The coverage according to point f) and g) means operation of a public electronic communications network using own radio frequency block allocations in the frequency bands of 700 MHz, 800 MHz, 900 MHz, 1800 MHz, 2100 MHz, 2600 MHz and/or 3400–3800 MHz according to 5G Standard. The 75% probability of indoor signal reception is required for the coverage of the population; outdoor signal reception is required for the coverage of the area.

The coverage according to points e), f) and g) does not apply to military territorial administrative units which are excluded from the area coverage calculation.

The disproportionally high investment costs according to points a) and b) mean investment costs on construction of base stations and related network elements more than 50% higher compared to the average cost on construction of the base stations and related network elements in this or similar frequency band and used for similar coverage purpose.

#### 7.5.2 3400–3600 MHz band

The following development criteria are binding upon each Allocation Holder who has been allocated at least one Auction Block in the 3400–3600 MHz frequency band:

Development criteria valid in the period as of 3 years after the date of entry into force of the decision granting the block allocation of the radio frequencies until 5 years after the date of entry into force of that decision	Development criteria valid in the period as of 5 years after the date of entry into force of the decision granting the block allocation of the radio frequencies for the remaining period of validity of the block allocation	
Minimum number of base stations using the frequencies in the 3400–3800 MHz frequency band in 5G Standard	Minimum number of base stations using the frequencies in the 3400–3800 MHz frequency band in 5G Standard	Minimum number of covered districts in the Czech Republic
15	230	30

Coverage of a district means operation of at least one base station using the Allocation Holder’s own radio frequencies in the 3400–3800 MHz frequency band in that district under a valid Individual Authorisation.

At the same time, a high-speed Internet access service shall be provided throughout the period of fulfilment of the development criteria by means of a public electronic communications network using own radio frequencies in the 3400–3800 MHz frequency band offered as a public electronic communications service. Such public electronic communications service must be provided using the Allocation Holder’s own radio frequencies in the 3400–3800 MHz frequency band either by the Allocation Holders themselves, or by their direct wholesale partner with

<sup>35</sup> Maximal speed of the movement is limited to 110 km/h for reasons of the measuring.

whom the Allocation Holder concluded a wholesale agreement including any type of wholesale cooperation on commercial basis. These conditions can be fulfilled also on the basis of lease of own frequencies in the 3400–3800 MHz frequency band.

## **7.6 Monitoring the compliance with the conditions of effective use of radio frequencies and development criteria**

CTU shall monitor compliance with the conditions of effective use of the radio frequencies and development criteria based on the information submitted by the Allocation Holder. This information shall be submitted by the Allocation Holder always at least as of the moment of fulfilment of the particular condition of effective use of the radio frequencies or the above-mentioned development criteria. CTU is entitled to verify the information by means of its own inspection procedures according to this chapter 7.6 of the Invitation to Tender. In the case of inconsistencies between the information provided by the Allocation Holder and the information acquired by CTU own inspection procedures, CTU shall rely on the information acquired by its own inspection procedures.

The monitoring of the conditions of effective use of the radio frequencies according to chapters 7.1.1 and 7.1.3 of the Invitation to Tender and the development criteria according to chapter 7.5 of the Invitation to Tender shall be performed by CTU based on the technical parameters of the base stations submitted by the Allocation Holder according to chapters 0 and 7.5 of the Invitation to Tender or, more precisely, based on the technical parameters of the base stations which the Applicant is obliged to submit on regular basis under the terms and conditions of this Tender or, as the case may be, under the terms and conditions of the previously completed tenders.

CTU shall monitor the effective use of the frequencies and the fulfilment of the development criteria using the methodologies specified in the documents entitled *Measurement of Network Data Parameters Using a TCP Protocol* and *Methodology for Measurement and Evaluation of Data Parameters of Mobile Electronic Communications Networks*<sup>36</sup>. CTU shall inform the Allocation Holder about the monitoring results. The monitoring of compliance with the conditions of effective use of the radio frequencies will be in accordance with Act No. 255/2012 Coll., on inspection (The Inspection Code). CTU shall monitor compliance with the conditions of effective use of the radio frequencies according to chapter 7.4 of the Invitation to Tender and the fulfilment of the development criteria according to chapter 7.5 of the Invitation to Tender also upon the Allocation Holder's request.

The information on the process of fulfilment of the set development criteria in the form of the coverage achieved will be published on CTU website.

For the purpose of monitoring the fulfilment of the development criteria, the Allocation Holder shall provide CTU, no later than 3 months before the first date of fulfilment of the development criteria applicable to the Allocation Holder according to chapter 7.5 of the Invitation to Tender, 100 SIM cards or, as the case may be, 100 profiles for eSIM which will not be restricted by any data volume or speed limit and, at the same time, will not be treated preferentially relative to the other users.

---

<sup>36</sup> <https://www.ctu.eu/measuring-transfer-data-speed>

## **7.7 Subrogation, transfer, lease and other disposal of rights to use radio frequencies**

### **7.7.1 Restrictions for Individual Authorisations**

A holder of an Individual Authorisation to use radio frequencies which are subject of this Tender may always be only the Allocation Holder of these radio frequencies.

In the Individual Authorisation to use radio frequencies which are subject of this Tender, change of the Individual Authorisation holder or lease of the rights under the Individual Authorisation will be conditioned, in accordance with Section 18(1)(h) of the Act, by prior consent of CTU. The conditions for giving a consent are specified in chapters 7.7.1.1 and 7.7.1.2 of this Invitation to Tender. The consent is not required after expiration of the period for which the condition is specified.

#### **7.7.1.1 700 MHz band**

CTU will give its consent to lease the rights under the Individual Authorisation to use radio frequencies in the 700 MHz frequency band, which are subject of this Tender, only if the lease of rights under the Individual Authorisation will not cause, within 7 years after the date of entering into force of the decision granting the block allocation of the radio frequencies, excess over the Spectral Limit, specified in chapter 6.1 of the Invitation to Tender, which would apply to the lessee, if he was an Applicant, while taking into account the conditions of participation in the Tender according to chapter 9.5 of the Invitation to Tender.

If the lessee is a member of a Business Group, the Spectral Limits specified in chapter 6.1 of the Invitation to Tender, shall not be exceeded within this Business Group.

CTU will give its consent even if the purpose of the lease was a dynamic sharing of radio frequencies should it be found out that none of sharing Allocation Holders will use the range of radio frequencies above their Spectral limit laid down in chapter 6.1 of the Invitation to Tender, and only in the case (i) of using existing base stations in areas where an effective infrastructure competition cannot be reasonably expected and/or (ii) of using new base stations anywhere.

Change of Individual Authorisation holder, or lease of rights arising from the Individual Authorisation to designated radio frequencies by new operator in favour of any Incumbent operator or a member of their Business Group, except lease of frequencies according to the previous paragraph, is not allowed for 11 years after the date of entering into force of the decision granting the block allocation of the radio frequencies.

#### **7.7.1.2 3400–3600 MHz band**

CTU will give its consent to lease the rights under the Individual Authorisation to use radio frequencies in the 3400–3600 MHz frequency band, which are subject of this Tender, only if the lease of the rights under the Individual Authorisation will not cause, until 24 November 2022, excess over the Spectral Limit, specified in chapter 6.2 of the Invitation to Tender, by the lessee, which would apply to the lessee, if he was an Applicant, while taking into account the conditions of participation in the Tender according to chapter 9.5 of the Invitation to Tender.

If the lessee is a member of a Business Group, the Spectral Limits specified in chapter 6.2 of the Invitation to Tender shall not be exceeded within this Business Group. If the lease of authorisation is requested only for a specific geographical area, the Spectral Limits specified in chapter 6.2 of the Invitation to Tender will be assessed individually for each of these geographical areas.

### **7.7.2 Transfer of the block allocation of radio frequencies**

Transfer of the block allocation of radio frequencies is regulated by Section 23 of the Act.

To avoid disruption of competition or of effective use of radio spectrum by a potential transfer of the block allocation of radio frequencies, the transfer thereof under conditions in the Section 23(1)(a) and (c) of the Act will not be allowed if the following conditions are not met:

Invitation to Tender

- A segment with the size of 2×5 MHz will be considered the smallest transferrable unit in the 700 MHz frequency band and a segment with the size of 5 MHz will be considered the smallest transferrable unit in the 3400–3600 MHz frequency band;
- The Spectral Limits specified in chapter 6.1 of the Invitation to Tender will be complied with at least within 7 years after the date of entering into force of the decision granting the block allocation of the radio frequencies;
- The Spectral Limits specified in chapter 6.2 of the Invitation to Tender will be complied with at least until 24 November 2022;
- The conditions of economic independence of Allocation Holders specified as condition of participation in chapter 9.5 of the Invitation to Tender, which applied to them as the Applicants, will be complied with throughout the entire duration of the block allocation;
- The condition specifying that the Business Group of which the Incumbent Operator is member can hold a block allocation of radio frequency granted in this Tender only via the Incumbent Operator, which was granted the block allocation in this Tender, will be complied with throughout the entire duration of the block allocation;
- Within 11 years after the date of entering into force of the decision granting the block allocation of the radio frequencies, the new operator shall not transfer block allocation which includes designated radio frequencies according to chapter 6.1 of the Invitation to Tender or its part to the Incumbent Operator or a member of their Business Group

The CTU's actions pursuant to Section 23(5) of the Act are not affected by the terms and conditions according to this chapter 7.7 of the Invitation to Tender.

### **7.7.3 Subrogation and other disposal of rights to use radio frequencies**

With respect to Section 19(4)(a) and Section 22b(1) of the Act, it is necessary that the Allocation Holder (the Applicant and/or their successor or other party to whom the radio frequency block allocation may be transferred) does not cease to fulfil, over the below specified period, any of the conditions under which the radio frequencies had been allocated to the Applicant. This concern:

- Adherence to the obligations accepted in accordance with chapters 8.1 (national roaming), 8.2 (wholesale offer) and 8.3 (PPDR communication) of the Invitation to Tender regardless of the disposal of the rights to use radio frequencies to which the obligations pertain, for the entire duration of the block allocations of radio frequencies, if the obligation is not limited for a shorter period;
- Adherence to the Spectral Limits specified in chapter 6.1 of the Invitation to Tender, which applied to him as an Applicant, within 7 years after the date of entering into force of the decision granting the block allocation of the radio frequencies;
- Adherence to the Spectral Limits specified in chapter 6.2 of the Invitation to Tender, which applied to him as an Applicant, until 24 November 2022;
- For the entire duration of the block allocation of radio frequencies, the Allocation Holders must meet the condition of economic independence laid down as a condition for participation in chapter 9.5 of the Invitation to Tender, which applied to them as Applicants;
- For the entire duration of the block allocation of radio frequencies, the Business Group of which the Incumbent Operator is a member, must meet the condition, that it may hold the block allocation granted in this Tender only via the Incumbent Operator, who gained the block allocation in this Tender;
- Adherence to the condition by the Incumbent Operators who are Allocation Holders in 700MHz band, that the Legitimate Applicant Interested in National Roaming shall not become a member of the Incumbent Operator's Business Group until 31 December



2025. This is without prejudice to the restriction according to the following point which applies to the Holder of designated radio frequencies according to chapter 6.1;

- Adherence to the condition, that the Incumbent Operator or a member of their Business Group shall not within 11 years after the date of entering into force of the decision granting the block allocation of the radio frequencies acquire rights to use block allocation which includes designated radio frequencies according to chapter 6.1 of the Invitation of Tender or its part.

The Business Group of which the Allocation Holder is a member shall not directly or indirectly acquire rights to use radio frequencies which are subject of this Tender in the range exceeding the Spectral Limits specified in chapter 6.1 of the Invitation to Tender within 7 years after the date of entering into force of the decision granting the block allocation of the radio frequencies, and the Spectral Limits specified in chapter 6.2 of the Invitation to Tender until 24 November 2022. By breaching this restriction, the Allocation Holder of such Business Group will cease to fulfil conditions based on which the block allocation of radio frequencies was granted as well as to the radio frequencies which are used under the Spectral Limit specified in chapters 6.1 or 6.2 of the Invitation to Tender.

To acquire, grant or permit, directly or indirectly, the right to use radio frequencies, as mentioned in the previous paragraph, means to acquire, grant or permit the use of rights under the block allocation of radio frequencies or Individual Authorisation, either directly by transfer, lease or other transaction or disposal with these rights, block allocation or Individual Authorisation, or indirectly by subrogation, change of ownership structure or other change of the Business Group, or based on an agreement or other transaction providing contractual or actual rights to radio frequencies. To acquire, grant or permit, directly or indirectly, the right to use radio frequencies also means to acquire, grant or permit the use of rights under the block allocation of radio frequencies or Individual Authorisation as well as under an agreement or other transaction providing contractual or actual rights to access a network using radio frequencies or services provided on such network, should a subject, purpose or consequence of such agreement or transaction be a circumvention of Spectral Limits specified in chapters 6.1 and 6.2 of the Invitation to Tender in deadlines according to this chapter 7.7.3 of the Invitation to Tender

CTU will assess individual forms of (wholesale) cooperation between Business Groups, of which the Allocation Holder of radio frequencies is a member, whose range will exceed Spectral Limits laid down in chapters 6.1 and 6.2 of the participating Allocation Holders in deadlines laid down in this chapter 7.7.3 of the Invitation to Tender, and will assess specific factual circumstances whether the subject, purpose or consequence of such (wholesale) cooperation is not circumvention of Spectral Limits according to chapters 6.1 and 6.2 or of a prohibition to acquire access to designated radio frequencies according to chapter 6.1 of the Invitation to Tender by the Business Group, of which the Incumbent Operator is a member. Wholesale services offered in a non-discriminatory way and under non-discriminatory conditions in a form of published wholesale offer will not be considered a cooperation, the subject, purpose or consequence of which is circumvention of Spectral Limits or a ban to acquire access to radio frequencies designated by chapter 6.1 of the Invitation to Tender by the Business Group, of which the Incumbent Operator is a member.

To avoid any doubts, CTU confirms, that it will grant consent with lease of radio frequencies if the commitment to lease radio frequencies laid down in chapter 8.5 of the Invitation to tender is fulfilled.

By breaching any restriction specified in this chapter 7.7.3, the Allocation Holder will cease to meet the conditions based on which the block allocation of radio frequencies was granted pursuant to Section 19(4)(a) and Section 22b(1) of the Act, which applied to all radio frequencies allocated in this Tender.

## **7.8 Validity of block allocations of radio frequencies**

### **7.8.1 700 MHz band**

The block allocations of radio frequencies in the 700 MHz frequency band which are subject of the Tender will be granted with validity until 30 June 2036.

### **7.8.2 3400–3600 MHz band**

The block allocations of radio frequencies in the 3400–3600 MHz frequency band which are subject of the Tender will be granted with validity until 30 June 2032.

## **7.9 Conditions ensuing from international agreements on the use of radio frequencies**

The use of radio frequencies is conditional upon compliance with the terms and conditions laid down in binding international and bilateral agreements which coordinate the technical parameters of transmitters at the borders of the Czech Republic. International coordination of the radio frequencies of terrestrial mobile service and fixed service is governed by the HCM Agreement, as amended<sup>37</sup>. In addition to the HCM Agreement, an agreement is signed for the 700 MHz frequency band on the mutual coordination of radio frequencies between the Czech Republic and Germany. Other agreements, if any, on the mutual coordination of radio frequencies between the Czech Republic and neighbouring countries entered into in the future for the 700 MHz and the 3400–3800 MHz frequency bands shall take precedence over the HCM Agreement.

---

<sup>37</sup> [http://www.hcm-agreement.eu/http/englisch/verwaltung/index\\_berliner\\_vereinbarung.htm](http://www.hcm-agreement.eu/http/englisch/verwaltung/index_berliner_vereinbarung.htm)

## 8 OBLIGATIONS

### 8.1 National Roaming Obligation (700 MHz)

The national roaming obligation applies solely to Allocation Holders in the 700 MHz frequency band who are also Incumbent Operators, and will be applied as follows:

- If any of the Incumbent Operators become an Allocation Holder with a block allocation, which includes Auction Block A3, the national roaming obligation will apply only to such Allocation Holder with a block allocation, which includes the Auction Block A3. In such case, the national roaming obligations accepted by other Applicants will not apply;
- If none of the Incumbent Operators become an Allocation Holder with a block allocation, which includes Auction Block A3, the national roaming obligations accepted by all Incumbent Operators, who become Allocation Holders in the 700 MHz band, will apply.

The purpose of the national roaming obligation is to create conditions which will allow all Legitimate Applicants Interested in National Roaming, who are Allocation Holders in the 700 MHz and/or Allocation Holders in the 3400–3800 MHz frequency band, and at the same time are not Incumbent Operators and who will conclude with the Allocation Holder an agreement on provision of national roaming, to provide electronic communication services in the scope and under the conditions of this chapter 8.1 of the Invitation to Tender.

The Allocation Holder in the 700 MHz frequency band who is also an Incumbent Operator shall take on an obligation to provide national roaming under the national roaming agreement under the terms and conditions laid down in this chapter 8.1 of the Invitation to Tender to the benefit of the Legitimate Applicants Interested in National Roaming.

For the purpose of this obligation, national roaming means access to the public communications network operated by the Allocation Holder, who has been granted a block allocation in the 700 MHz frequency band in this Tender and is also an Incumbent Operator, used for the provision of publicly available electronic communications services by means of (i) 2G, 3G and 4G technologies in the entire scope of services (including data, voice and SMS) and (ii) 5G technologies in the scope of the Internet access service EBB and data services in quality not preventing provision of the equivalents to voice services and SMS, both with the use of radio frequencies in the frequency bands of 800 MHz, 900 MHz, 1800 MHz, 2100 MHz and/or 2600 MHz.

This national roaming obligation is limited in time, i.e. until 30 June 2029. The Incumbent Operator, who is the national roaming provider may restrict the provision of services under the national roaming obligation during duration of the obligation until 30 June 2029 only to the extent to which it cannot provide services under this national roaming obligation due to limitation or termination of provision of electronic communications services to all customers.

Based on the national roaming obligation, the Allocation Holder in the 700 MHz frequency band who is also an Incumbent Operator shall allow Legitimate Applicants Interested in National Roaming, in accordance with their requirements and technical capabilities of the network on which national roaming is provided, to provide independent electronic communications services in the scope, quality and with geographic coverage of the territory and population of the Czech Republic which are not worse than the scope, quality and geographic coverage of the territory and population of the Czech Republic in services provided by the hosting Incumbent Operator or, upon the request of the Legitimate Applicant Interested in National Roaming, with lower scope of services and/or lower geographic coverage of the territory and population of the Czech Republic.

Within the national roaming under this national roaming obligation, the Allocation Holder in the 700 MHz frequency band who is also an Incumbent Operator shall not restrict the purpose, scope, quality and composition of services provided by the Legitimate Applicant Interested in National Roaming. To avoid any doubts, the Incumbent Operator providing national roaming shall not limit the Legitimate Applicant Interested in National Roaming in terms of provision of services to a certain market segment (e.g. business sector) or provision of wholesale services

(e.g. services for MVNO). To be entitled to use national roaming, the Legitimate Applicant Interested in National Roaming shall provide retail services; i.e. if the Legitimate Applicant Interested in National Roaming provides wholesale services (e.g. services for MVNO) under national roaming, they are also obliged to provide retail services under national roaming.

In the event that, for objectively demonstrable capacity reasons, it is impossible to fulfil the national roaming obligation in the entire geographic scope of the host network, the Allocation Holder in the 700 MHz frequency band who is also an Incumbent Operator shall fulfil this national roaming obligation with the geographic scope defined in advance by an agreement with which the fulfilment of the national roaming obligation is not prevented by the objective capacity limitation, unless the parties to the national roaming agreement agree otherwise.

The price for the provision of the national roaming under this national roaming obligation charged by the Allocation Holder in the 700 MHz frequency band, who is also an Incumbent Operator, must not exceed the price determined according to the principle of cost-oriented wholesale unit prices of the services, which are subject of the national roaming obligation. The cost-oriented wholesale unit prices of the services must be based on the methodology of long-run average incremental cost (LRAIC+) taking into account a return on the capital invested according to the current pre-tax value of WACC, which is laid down by CTU in the Measure of General Nature No. OOP/4, as amended,<sup>38</sup> and also based on the following principles:

- The optimisation shall be of the “Scorched Node” type, i.e., the actual topology of the network of the Incumbent Operator in given year (actual number of nodes and technological equipment thereof) will be taken into account;
- The addition of the incremental cost related to the active technology in sites with high use of capacity for 4G and 5G technology will be enabled;
- If relevant, the cost calculation must take into account, in addition to the functionality of the national roaming, also a functionality of the national roaming for PPDR and functionality of the required coverage within the Priority BB-PPDR obligation. The Incumbent Operator (provider of national roaming services) shall take into account sharing and cost allocation into BB-PPDR service in following cases: the service is already provided or the service will be provided in a time for which the prices are being calculated, or the price of the Priority BB-PPDR service is to be calculated for offering this service;
- Total costs (corresponding to current technological equipment of the network, increased by the incremental costs for sites with high use of capacity for 4G and 5G technology and taking into account the PPDR functionality) will be calculated taking into account the expected development in the following period (at least one year);
- The capacity optimisation on backhaul level will be taken into account;
- The assets necessary for the provision of the service will be defined using the MEA method (Modern Equivalent Asset), using the current purchase value thereof for evaluation (if the current purchase value is not available, the average value from last three years accounts, or the shortest possible period longer than three years with data available, will be used);
- Economic depreciation will be determined using the method of modified tilted annuity, which is defined by a formula, where:
  - $C_{t=1}$  means annual capital costs;
  - $I_{t=0}$  means asset value at the beginning of the period;
  - $r$  means cost of capital (WACC);
  - $i$  means annual change of the asset price;
  - $u$  means average time needed for creation of an asset;

$$C_{t=1} = I_{t=0} * \left(\frac{1+r}{1+i}\right)^u * \frac{(r-i)}{1 - \left(\frac{1+i}{1+r}\right)^n}$$

---

<sup>38</sup> <https://www.ctu.eu/measures-general-nature>

- n means life of an asset;
- Costs will be allocated using the methodology of ABC (Activity Based Costing) which takes into account the causal relationship between the occurrence of the cost and the target cost object (i.e., ultimately the service provided);
- The wholesale process costs, and the corresponding share of the general and administrative costs will be allocated using the so-called Equi-Proportional Mark-Up (EPMU);
- The costing will take into account MORAN/MOCN sharing (if implemented in the network of the Incumbent Operator or if considered for the purpose of calculation of unit prices in the national roaming obligation and the PPDR obligation), including the consideration of cost allocation to the service of Priority BB-PPDR (if relevant);
- The resulting unit costs calculated in the national roaming obligation and the PPDR obligation must take into account the required representation of different technologies (2G, 3G, 4G, 5G);
- No duplicate counting of any operation or cost may occur within the costing.

In addition to the unit prices, the Incumbent Operator is entitled to charge for the services included in the national roaming obligation also a lump sum for a set-up of the service in the amount corresponding to the actually incurred costs.

Provision of national roaming by the Incumbent Operators will be done under conditions, that the effectively incurred costs, which will be registered by the Incumbent Operators due to the provision of this service, will not only be fully covered, but also the provision of this service will provide them with a reasonable profit considering return of the transferred capital including related business risk.

The wholesale unit prices for the provision of national roaming based on this national roaming obligation must be re-calculated after conclusion of the national roaming agreement by the Allocation Holder in the 700 MHz frequency band who is also an Incumbent Operator, in accordance with the above-described methodology of Long-Run Average Incremental Cost (LRAIC+) as follows, unless the parties agree otherwise: The Legitimate Applicant Interested in National Roaming will submit by 30 July of the respective calendar year an updated operation plan for the next calendar year. The Allocation Holder in the 700 MHz frequency band who is also an Incumbent Operator will re-calculate the wholesale unit prices taking into account the updated operation plan of the Legitimate Applicant Interested in National Roaming and taking into account the update of the values of other inputs to the costing, and submit the proposed amendment to the national roaming agreement updating the wholesale unit prices of the national roaming to the Legitimate Applicant Interested in National Roaming by 30 September of the respective calendar year, provided that the updated prices will apply from 1 January of the following calendar year.

The Allocation Holder in the 700 MHz frequency band, who is also an Incumbent Operator, will undertake, within the national roaming obligation immediately after receiving the request for submission of the draft agreement, to commence and conduct in good faith negotiations aimed at conclusion of the national roaming agreement with each Legitimate Applicant Interested in National Roaming, irrespective of whether this Legitimate Applicant Interested in National Roaming has already met the condition of coverage of at least 10% of the population of the Czech Republic by means of the electronic communication network operated by this Legitimate Applicant Interested in National Roaming using own frequencies solely in the 700 MHz and/or 3400–3800 MHz frequency bands in the technological 5G Standard, while the electronic communications service provided through own network must be operated at least on 500 outdoor base stations sites according to the valid Individual Authorisation. This coverage condition may be agreed-upon as a condition precedent for the national roaming agreement to take effect.

The Allocation Holder in the 700 MHz frequency band commit, under the national roaming obligation, to not cease provision of national roaming to the Legitimate Applicant Interested in National Roaming earlier than is the duration of the agreement if it is not proved that the Legitimate Applicant Interested in National Roaming did not met the coverage condition of at

least 30% of the population of the Czech Republic by means of their own electronic communications network using own frequencies solely in the 700 MHz and/or 3400–3800 MHz frequency bands in the technological 5G Standard not later than by 30 June 2025, while the electronic communications service provided through own network must be operated at least on 1.000 outdoor base stations sites according to the valid Individual Authorisation.

To evaluate the fulfilment of coverage conditions of the Legitimate Applicant Interested in National Roaming, the fulfilment or failure to fulfil the conditions will be certified by CTU upon the request of the Legitimate Applicant Interested in National Roaming, or the Allocation Holder in the 700 MHz frequency band.

In order to fulfil the national roaming obligation, the Allocation Holder in the 700 MHz frequency band who is also an Incumbent Operator shall submit to the Legitimate Applicant Interested in National Roaming a binding full draft version of the national roaming agreement which will meet the conditions of the accepted national roaming obligation according to this chapter 8.1 of the Invitation to Tender, within 3 months of receiving the request of the Legitimate Applicant Interested in National Roaming for submission of the draft agreement, under the condition that the Legitimate Applicant Interested in National Roaming provides, upon request, necessary assistance and cooperation for the preparation of this draft agreement.

The request of the Legitimate Applicant Interested in National Roaming for submission of the draft national roaming agreement must contain at least the following information:

- The expected operation plan at least for the period of 24 months from planned commencement of service provision;
- Required scope of the services;
- Required term of the agreement (not shorter than two years).

The Allocation Holder in the 700 MHz frequency band who is also an Incumbent Operator shall take on an unconditional commitment not to put any administrative, legal or other impediments in the way of the Legitimate Applicants Interested in National Roaming in the process of negotiating the agreement based on the national roaming obligation and not to require fulfilment of conditions which are not absolutely necessary for conclusion of the agreement, not necessary for proper provision of electronic communications services by means of the national roaming, and not common for entering into commercial agreements.

Unless the parties to the national roaming agreement expressly agree otherwise, the agreement entered into on the basis of the national roaming obligation must meet at least the following conditions:

- The agreement must ensure that the customers of the Legitimate Applicant Interested in National Roaming will have access to the services to the same extent as they are provided by the Allocation Holder in the 700 MHz frequency band who is also an Incumbent Operator using 2G, 3G, 4G and/or 5G technologies;
- The agreement must allow for gradual reduction of the national roaming in terms of geographic scope and/or scope of the services, initiated by the Legitimate Applicant Interested in National Roaming;
- The agreement must not include penalties, including penalties for a failure to comply with the operation plan, on top of the scope and amount of penalties usually exercised in wholesale relationships on the electronic communications market;
- The agreement must be concluded with a term covering at least the period until the end of the national roaming obligation, provided that the Legitimate Applicant meet the coverage condition of at least 30% of the population of the Czech Republic by means of their own electronic communications network using own frequencies solely in the 700 MHz and/or 3400–3800 MHz frequency bands in the technological 5G Standard not later than by 30 June 2025, while the electronic communications service provided through own network must be operated at least on 1.000 outdoor base stations sites according to the valid Individual Authorisation, unless the Legitimate Applicant Interested in National Roaming requests a shorter term, but not less than two years.

- The Allocation Holder in the 700 MHz frequency band who is also an Incumbent Operator must not unilaterally change the terms and conditions of the national roaming agreement, other than the option to reduce the provision of services under this national roaming obligation due to the reduction or termination of the provision of electronic communications services to all of his customers in accordance with the terms and conditions of that obligation.

The Allocation Holder in the 700 MHz frequency band who is also an Incumbent Operator shall undertake to inform CTU in writing about every request for submission of a draft of the national roaming agreement which it receives from the Legitimate Applicant Interested in National Roaming, within 15 working days of the date of receiving the request. The Allocation Holder in the 700 MHz frequency band who is also an Incumbent Operator undertakes to inform CTU in writing on continuous basis, but at least once a month, about the development of the negotiations concerning the conclusion of the national roaming agreement. This obligation is without prejudice to other notification obligations of these parties with respect to CTU. This information may not be denied to CTU by reason of confidential nature thereof.

CTU prefers that the agreements based on the national roaming obligation be concluded on the basis of commercial negotiations, complying with the requirements according to this national roaming obligation.

CTU is prepared to settle, upon the parties' request, a dispute, if any, about the consistency of the draft agreement or an amendment to the national roaming agreement with the conditions of the national roaming obligation using the procedure pursuant to Section 127 of the Act.

A breach of this national roaming obligation will be considered a failure to comply with the obligations laid down by the decision to grant block allocation pursuant to Section 22b(1)(b) of the Act. If CTU finds a breach of the national roaming obligation, it will ask the respective Allocation Holder in the 700 MHz frequency band who is also an Incumbent Operator to provide remedy pursuant to Section 114 of the Act.

If the respective Allocation Holder in the 700 MHz frequency band who is also an Incumbent Operator fails to provide remedy of the breach of the National Roaming Obligation within the time limit set by CTU according to Section 114 of the Act, the CTU Council Chair will proceed according to Section 22b of the Act.

For the purpose of dispute resolution according to Section 127 of the Act and for the purpose of verification of compliance with the obligations stipulated by the decision on granting block allocations of radio frequencies according to Section 114 and 22b(1)(a) or (b) of the Act related to compliance of wholesale unit prices offered or charged for provision of national roaming including updates of this prices with the above-mentioned principles of cost orientation, CTU will act in accordance with the issued methodology for determination of cost oriented wholesale unit prices for the purpose of national roaming obligation and PPDR obligation.<sup>39</sup>

The provisions of this chapter 8.1 of the Invitation to Tender are without prejudice to the rights of CTU to apply other tools available under the law.

## **8.2 Commitment to provide a wholesale offer (700 MHz)**

The commitment to provide a wholesale offer applies to the Allocation Holder in the 700 MHz frequency band.

The purpose of the commitment to provide a wholesale offer is to create conditions which will allow all Applicants Interested in Access who are not holders of frequencies in the 700 MHz frequency band and who enter into an agreement on access with the Allocation Holder in the 700 MHz frequency band to provide electronic communications services by means of electronic communication networks operated with the use of radio frequencies from the 700

---

<sup>39</sup> The methodology was subject to a separate public consultation.

MHz band. CTU aims to maintain and support the commitments to provide a wholesale offer imposed in previous tenders as well as their effects.

This commitment to provide a wholesale offer is limited to the period from the date of enter into force of the decision to allocate radio frequencies in the 700 MHz frequency band until 24 February 2026.

To comply with the commitment to provide a wholesale offer, the Allocation Holder in the 700 MHz frequency band shall undertake to negotiate, upon request, in good faith with every Applicant Interested in Access an agreement on access to the public communication network operated using radio frequencies in the 700 MHz frequency band acquired on the basis of this Tender for the purpose of provision of a high-speed Internet access service by the Applicant Interested in Access.

Allocation Holder in the 700 MHz frequency band shall take on an unconditional commitment not to place any administrative, legal or other impediments in the way of the Applicants Interested in Access in the process of negotiating the agreement on access and not to require fulfilment of conditions which are not absolutely necessary for the conclusion of the agreement on access, not necessary for proper provision of electronic communication services under the agreement on access, and not common when concluding a commercial agreement.

The Allocation Holder in the 700 MHz frequency band shall undertake to provide an access allowing the Applicant Interested in Access to provide independent and nationwide electronic communications services in the scope, quality and with geographic coverage of the territory and population of the Czech Republic which are not worse than the scope, quality and geographic coverage of the territory and population of the Czech Republic of high-speed Internet access services provided by the respective Allocation Holder in the 700 MHz frequency band or in a lower scope, quality and with lower geographic coverage of the territory and population of the Czech Republic if the services are specified and required as such by the Applicant Interested in Access. The Allocation Holder in the 700 MHz frequency band undertakes to negotiate with the Applicants Interested in Access regardless of the scope of its own infrastructure and operating systems of the Applicants Interested in Access operated for the purpose of the access and for the purpose of provision of retail and/or wholesale services provided by the Applicant Interested in Access under the agreement on access, among others, with (potential) mobile virtual network operators (MVNO), either mobile virtual network enablers (MVNE), Full MVNOs, or MVNOs with lower share of own infrastructure and operating systems.

The Allocation Holder in the 700 MHz frequency band shall undertake to set wholesale prices of the service provided in the 700 MHz frequency band under the agreement on access in accordance with the methodology for determination of prices based on the principle of prohibition of margin squeeze<sup>40</sup> published by CTU. The purpose of determination of prices based on the methodology mentioned in the previous sentence is that they correspond with the scope of the infrastructure operated by the Allocation Holder in the 700 MHz frequency band and used by the Applicant Interested in Access for the purpose of the services provided by it and that they do not act as an impediment to the development of competition and allow the Applicants Interested in Access who are equally effective as the respective Allocation Holder in the 700 MHz frequency band to provide services which are subject of the wholesale offer in the downstream market(s) under similar conditions as the respective Allocation Holder in the 700 MHz frequency band.

In order to fulfil the commitment to provide a wholesale offer, the Allocation Holder in the 700 MHz frequency band shall undertake to prepare and appropriately publish two binding

---

<sup>40</sup> The current version of this methodology is available at [http://www.ctu.cz/cs/download/ostatni/cenove\\_vyhodnocovani\\_postup\\_ctu\\_cj\\_ctu-43738\\_2011-611.pdf](http://www.ctu.cz/cs/download/ostatni/cenove_vyhodnocovani_postup_ctu_cj_ctu-43738_2011-611.pdf) (Czech version only).



reference offers for access to the network in the form, scope and with essential elements laid down in Section 82(4) of the Act.<sup>41</sup>

The Allocation Holder in the 700 MHz frequency band undertakes to prepare the reference offer in the scope of the wholesale services provided by the Allocation Holder in the 700 MHz frequency band to an Applicant Interested in Access being a provider corresponding to a provider of Full MVNO type.

The Allocation Holder in the 700 MHz frequency band further undertakes to prepare the second reference offer in the scope of the wholesale services provided by the Allocation Holder in the 700 MHz frequency band to an Applicant Interested in Access being a provider corresponding to a provider of a so-called Light MVNO type, with a minimal scope of own infrastructure. This reference offer will include service provided via associated network infrastructure incl. relevant service platforms and operating systems, roaming service, and VAS, SIM card management, customer billing (post-paid) including self-care tools and communication interface (API).

The scope and conditions of the provision of wholesale services included in the reference offers must enable the Applicants Interested in Access to provide high-speed internet access services in the same scale as is the scale of such services provided by the Allocation Holder in the 700 MHz frequency band.

Regardless of the scope of the reference offers, the Applicants Interested in Access may also request a different (incl. broader) scope of wholesale services requiring various share of own infrastructure and operating systems on the part of the Applicant Interested in Access.

The Allocation Holder in the 700 MHz frequency band shall undertake to publish the reference offer in the required scope no later than the date when the Allocation Holder in the 700 MHz frequency band starts providing commercial services through the networks in the 700 MHz frequency band.

If, within the above-mentioned time period, the Allocation Holder in the 700 MHz frequency band is not yet aware of some technical parameters of the reference offers, the Allocation Holder in the 700 MHz frequency band undertakes to publish the reference offer based on reasonable assumptions. The Allocation Holder in the 700 MHz frequency band shall undertake to provide in the reference offers a full list of the information which the Applicant Interested in Access must submit together with the request for conclusion of the agreement based on the reference offers so that the Allocation Holder in the 700 MHz frequency band could amend the reference offers to make it a complete draft agreement respecting the parameters specified by the Applicant Interested in Access. The Allocation Holder in the 700 MHz frequency band shall undertake to submit such complete draft agreement to each Applicant Interested in Access no later than 3 months after the submission of the request of the Applicant Interested in Access containing all information required in the reference offers. Should the request of the Applicant Interested in Access not include all essential information required in the relevant reference offer, the Allocation Holder in the 700 MHz frequency band shall ask the Applicant Interested in Access to provide missing information. In such case, the three-month time limit will be stopped upon the delivery of the call to the Applicant Interested in Access and will start running again from the time of delivery of the amended request to the Allocation Holder in the 700 MHz frequency band.

If the Applicant Interested in Access submit a request for access in a scope which does not comply to neither reference offer (Full MVNO and Light MVNO, see above), the Allocation Holder in the 700 MHz frequency band undertakes to submit a complete draft agreement to such Applicant Interested in Access not later than 3 months after the submission of the request of the Applicant Interested in Access. The scope of the required information, which must be

---

<sup>41</sup> Specific terms of the reference offer are laid down in Measure of General Nature No. OOP/7/07.2005-12 as amended by the Measures of General Nature No. OOP/7/01.2006-1 and No. OOP/7/07.2011-10.

submitted by the Applicant Interested in Access in the request, corresponds to a reasonable scope of the information required in the reference offers for Full MVNO and Light MVNO.

The Allocation Holder in the 700 MHz frequency band shall undertake to conclude an agreement on access with duration of at least 2 years, unless the Applicant and the Allocation Holder agree on a shorter term. Should this minimum term of the agreement exceed the period of validity of the commitment of the Allocation Holder in the 700 MHz frequency band, the Allocation Holder in the 700 MHz frequency band undertakes to conclude the agreement with duration at least until the end of validity of its commitment, unless the parties agree on a longer term.

The Allocation Holder in the 700 MHz frequency band shall undertake to ensure that the reference offers and the agreements on access signed on the basis thereof meet the conditions and requirements (including price requirements) of the commitment to provide a wholesale offer according to this chapter 8.2 of the Invitation to Tender throughout the contractual term.

The Allocation Holder in the 700 MHz frequency band shall undertake not to discriminate without reason, i.e., without objectively justifiable reasons, between individual Applicants Interested in Access according to this commitment.

The Allocation Holder in the 700 MHz frequency band shall undertake to inform CTU in writing about each request for access in the form of a wholesale offer, and about the basic parameters of each request, within 15 business days of the date of receiving the request. The Allocation Holder in the 700 MHz frequency band shall undertake to inform CTU in writing on continuous basis, but at least once a month, about the development of the negotiations concerning the provision of access. This obligation is without prejudice to other notification obligations of these parties with respect to CTU. The information provided according to this paragraph may not be denied to CTU by reason of confidential nature thereof.

CTU prefers that the agreements on access be concluded based on commercial negotiations. CTU is prepared to settle, upon the parties' request, a dispute, if any, about the consistency of the draft agreement on access with the relevant reference offer or the conditions of the commitment to provide a wholesale offer using the procedure pursuant to Section 127 of the Act. If the dispute settled by CTU is related to the consistency of the amount of the wholesale prices with the conditions of the commitment to provide a wholesale offer, CTU will proceed according to the methodology<sup>42</sup> for determination of prices based on the principle of prohibition of margin squeeze.

A breach of the commitment to provide a wholesale offer will be considered a failure to comply with the obligations laid down by the decision to grant the block allocation pursuant to Section 22b(1)(b) of the Act. If CTU finds a breach of the commitment to provide a wholesale offer it will ask the respective Allocation Holder in the 700 MHz frequency band to provide remedy pursuant to Section 114 of the Act. If the respective Allocation Holder in the 700 MHz frequency band fails to provide remedy within the time limit set by CTU according to Section 114 of the Act, the CTU Council Chair will proceed according to Section 22b of the Act. This is without prejudice to the rights of CTU to use other tools available under the law.

### **8.3 PPDR Obligations (700 MHz)**

CTU lays down the following obligations for the PPDR communication needs:

- a) Priority BB-PPDR obligation according to chapter 8.3.1 of the Invitation to Tender, and
- b) National Roaming obligation for PPDR according to chapter 8.3.2 of the Invitation to Tender.

---

<sup>42</sup> The current version of this methodology is available at <https://www.ctu.cz/postup-ceskeho-telekomunikacniho-uradu-pri-vyhodnocovani-nabidek-vertikalne-integrovanych-operatoru> (Czech version only).

Joint provisions for the PPDR obligations are provided in chapter 8.3.3 of the Invitation to Tender.

### 8.3.1 Priority BB-PPDR Obligation

#### 8.3.1.1 Content of the Priority BB-PPDR Obligation

Provider Obligated to Provide Priority BB-PPDR shall comply with the following obligations ("Priority BB-PPDR") specified in chapter 8.3.3.1 of the Invitation to Tender during the validity of the block allocation of radio frequencies in the 700 MHz frequency band:

- a) Upon a request of the Legitimate Applicant Interested in PPDR, provide the Legitimate Applicant Interested in PPDR with access to networks operated by the Provider Obligated to Provide Priority BB-PPDR using radio frequencies in the 700 MHz frequency band in order to ensure the Priority BB-PPDR services at least to the extent defined in chapters 8.3.1.3 and 8.3.1.4 of the Invitation to Tender while ensuring interoperability with the core of the BB-PPDR network of the Legitimate Applicant Interested in PPDR and operation management support by the Legitimate Applicant Interested in PPDR. The Provider Obligated to Provide Priority BB-PPDR is entitled to expand access to the network also to networks operated on radio frequencies in the 800 MHz frequency band provided that the use of such network will not limit the compatibility of the Legitimate Applicant's terminal equipment;
- b) Upon a request of the Legitimate Applicant Interested in PPDR, ensure coverage of the border crossings defined in chapter 5 of Annex 4 to the Invitation to Tender; and
- c) Negotiate in good faith about the coverage of other areas, sites and buildings which are not explicitly listed in chapter 5 of Annex 4 of the Invitation to Tender. An act, where the Provider Obligated to Provide Priority BB-PPDR refuses the request of the Legitimate Applicant Interested in PPDR for coverage of other areas, sites and buildings which are not explicitly listed in chapter 5 of Annex 4 of the Invitation to Tender without a reasonable justification of such refusal, will not be considered negotiation in good faith for the purpose of compliance with the obligation.

Access for the purposes of the Priority BB-PPDR obligation means access to the electronic communications networks with an architectural model with S1/S1 flex interface according to the technical specification of 3GPP/ETSI<sup>43</sup> within the scenario of MOCN, e.g., GWCN according to the technical specification of 3GPP/ETSI<sup>44</sup> or any equivalent model according to later technical specification.

Coverage for the purposes of the Priority BB-PPDR obligation means operation of public electronic communications networks using radio frequencies specified in point a) above.

Coverage near state borders and border crossings is subject to conditions and rules and is limited according to international agreements which are binding upon the Czech Republic, and following agreements entered into by and between CTU and the telecommunication administrations of the neighbouring countries on coordination of radio frequencies on state border, in particular with respect to harmful interference and output in the border regions. The scope of the coverage may be limited with respect to the requirements and limitations under these international agreements, covenants and other related documents.

The commitment of coverage of border crossings defined in chapter 5 of Annex 4 of the Invitation to Tender shall not apply if:

---

<sup>43</sup> [https://www.etsi.org/deliver/etsi\\_ts/123500\\_123599/123501/15.08.00\\_60/ts\\_123501v150800p.pdf](https://www.etsi.org/deliver/etsi_ts/123500_123599/123501/15.08.00_60/ts_123501v150800p.pdf)

<sup>44</sup> [https://www.etsi.org/deliver/etsi\\_ts/138400\\_138499/138401/15.07.00\\_60/ts\\_138401v150700p.pdf](https://www.etsi.org/deliver/etsi_ts/138400_138499/138401/15.07.00_60/ts_138401v150700p.pdf)

- a) the network deployment in the area in question is inconsistent with the applicable laws and regulations (e.g., protection zones) or inconsistent with the applicable administrative decision of another administrative act; and/or
- b) the fulfilment of the coverage requirement requires cooperation or consent of a third party (e.g., owners of the land or other properties) and the third-party refuses to grant such cooperation or consent.

In the cases according to point a) above, the Provider Obligated to Provide Priority BB-PPDR is obliged to submit to the Legitimate Applicant Interested in PPDR administrative decision or administrative act based on which it is impossible to comply with the coverage requirement or, as the case may be, prove an analysis demonstrating the inconsistency with the applicable laws and regulations. In the cases according to point b) above, the Provider Obligated to Provide Priority BB-PPDR is obliged to prove that it has asked the relevant third party for cooperation or consent and the third party did not respond to the request for the period of at least 30 days or refused to grant or provide the cooperation or consent. In both cases according to points a) and b) above, the Provider Obligated to Provide Priority BB-PPDR is obliged to provide the Legitimate Applicant Interested in PPDR with an analysis of the impact on the coverage requirement and a proposal of alternative solution with which the coverage requirement will be fulfilled fully or at least partially.

### 8.3.1.2 Verification of Coverage

Compliance with the commitment to ensure coverage of border crossings defined in chapter 5 of Annex 4 to the Invitation to Tender will be verified by CTU according to the documents entitled *Measurement of Network Data Parameters Using a TCP Protocol and Methodology for Measurement and Evaluation of Data Parameters of Mobile Electronic Communications Networks*.<sup>45</sup>

### 8.3.1.3 Scope of the Priority BB-PPDR Services

The Provider Obligated to Provide Priority BB-PPDR shall enable, through its radio access network, the Legitimate Applicant Interested in PPDR to provide the following services and functionalities in the scope and under technical conditions based on the version of the 3GPP standard implemented in the network of the Provider Obligated to Provide Priority BB-PPDR, but at least with the technological 5G Standard, including but not limited to the relevant parts of the standard defining the standards of PPDR and related services:

- a) Broadband data services for emergency communication and voice services provided by means of broadband connection for emergency communication, including but not limited to
  - 1) Mission Critical Push to Talk (MCPTT),
  - 2) Mission Critical Video (MCV),
  - 3) Mission Critical Data (MCD),
  - 4) Mission Critical Common Functionalities (MCX) including evolved Multimedia Broadcast Multicast Services (eMBMS),
  - 5) Isolated E-UTRAN Operation for Public Safety (IOPS),
  - 6) QPP (QoS, priority, pre-emption, access-class barring) and eMPS (enhanced Multimedia Priority Service),
  - 7) Location Based Services (LCS),
  - 8) Public Warning System (PWS) using Cell Broadcast Service (CBS),
  - 9) High Power User Equipment (HPUE),
  - 10) Communication in the direct mode of ProSe (Proximity Services), and

---

<sup>45</sup> <https://www.ctu.eu/measuring-transfer-data-speed>

- b) Standard scope of services provided by the Provider Obligated to Provide Priority BB-PPDR to its commercial users by means of networks which are available through the Priority BB-PPDR obligation.

The Provider Obligated to Provide Priority BB-PPDR shall not limit the purpose, scope (including area), quality and composition of the services provided to the Legitimate Applicant Interested in PPDR through the access in any way in comparison with the services offered to other users based on 4G and/or 5G technologies.

The Provider Obligated to Provide Priority BB-PPDR is entitled to reduce the scope of a certain service if the full provision thereof is inconsistent with the applicable laws and regulations.

#### **8.3.1.4 Priority Operation**

The Provider Obligated to Provide Priority BB-PPDR shall ensure priority operation of the PPDR communication in the electronic communications network to which the Legitimate Applicant Interested in PPDR gains access by means of the Priority BB-PPDR obligation. Within the priority operation, the Provider Obligated to Provide Priority BB-PPDR shall provide all services according to chapter 8.3.1.3 of the Invitation to Tender to the Legitimate Applicant Interested in PPDR with the highest priority in accordance with the QPP concept, such that these services would have priority for users specified by the Legitimate Applicant Interested in PPDR under all circumstances over provision of commercial services provided to other users. In case the Legitimate Applicant Interested in PPDR specifies different levels of priority of operation for different groups of users defined by the Legitimate Applicant Interested in PPDR, the level of priority of provision of the services under the Priority BB-PPDR obligation will be determined in accordance with the specification of the Legitimate Applicant Interested in PPDR. The Provider Obligated to Provide Priority BB-PPDR shall comply with other obligations in connection with the prioritisation of the operation under the applicable laws and regulations.

#### **8.3.2 Obligation of National Roaming for PPDR**

The Allocation Holder in the 700 MHz frequency band shall take on a national roaming obligation for the purpose stipulated by chapter 8.3.3.1 according to the conditions laid down in this chapter 8.3.2 of the Invitation to Tender ("**National Roaming for PPDR**").

The Allocation Holder in the 700 MHz frequency band shall provide the Legitimate Applicant Interested in PPDR over validity of the block allocation with access to public communications networks operated by the Allocation Holder in the 700 MHz frequency band in a form of National Roaming for PPDR using at least all radio frequencies in the frequency bands of 700 MHz and 800 MHz which the Allocation Holder in the 700 MHz frequency band is or will be authorised to use at any time during validity of its block allocation of radio frequencies in the 700 MHz frequency band.

The Allocation Holder in the 700 MHz frequency band shall provide, under the National Roaming for PPDR, access to these public communications networks in the scope of so-called "Full-MVNO" with an architectonic roaming model with S8 interface, Home Routed Roaming defined by the technical specification 3GPP/ETSI or any equivalent model according to possible later technical specification.

The Allocation Holder in the 700 MHz frequency band shall provide National Roaming for PPDR on its electronic communications networks without any area or quality restrictions. The Allocation Holder in the 700 MHz frequency band shall not limit the purpose, scope, quality and composition of the services provided to the Legitimate Applicant Interested in PPDR in comparison with the services offered to other users based on 4G and/or 5G technologies.

The obligation of National Roaming for PPDR shall not apply to the Provider Obligated to Provide Priority BB-PPDR according to chapter 8.3.1 of the Invitation to Tender for the period when the Provider Obligated to Provide Priority BB-PPDR provides Priority BB-PPDR.

### **8.3.3 Joint Provisions for PPDR Obligations**

The joint provisions in this chapter 8.3.3 of the Invitation to Tender apply to the Priority BB-PPDR obligation according to chapter 8.3.1 of the Invitation to Tender as well as to the obligation of National Roaming for PPDR according to chapter 8.3.2 of the Invitation to Tender.

#### **8.3.3.1 Purpose of PPDR Obligations**

The purpose of the PPDR obligations according to this chapter 8.3.3 of the Invitation to Tender is to ensure mobile emergency communication of the PPDR Services.

Mobile emergency communication means communication via a non-public mobile electronic communications network for the purposes defined in Section 3 of Act No. 239/2000 Coll., on Integrated Rescue System and on amendment of certain acts (Act on IRS), Section 1(1) of Act No. 240/2000 Coll., on Crisis Management and on amendment of certain acts (Crisis Management Act), Section 2 of Act No. 273/2008 Coll., on Police of the Czech Republic, Section 1(2) of Act No. 553/1991 Coll., on Municipal Police, Section 4 of Act No. 300/2013 Coll., on Military Police, Section 2 of Act No. 341/2011 Coll., on General Inspection of Law-Enforcement Services, and Section 2 of Act No. 153/1994 Coll., on Intelligence Services of the Czech Republic.

The maximum number of active terminals of the Legitimate Applicant Interested in PPDR must not exceed 200,000, unless the agreement with the Provider Obligated to Provide Priority BB-PPDR and/or the Allocation Holder in the 700 MHz frequency band provides otherwise.

The Legitimate Applicant Interested in PPDR must not use the PPDR obligations according to chapter 8.3 of the Invitation to Tender to a different purpose or for higher number of active terminals, unless the agreement with the Provider Obligated to Provide Priority BB-PPDR and/or the Allocation Holder in the 700 MHz frequency band provides otherwise.

#### **8.3.3.2 Method of Fulfilment of PPDR Obligations**

To fulfil the PPDR obligations, the Provider Obligated to Provide Priority BB-PPDR and the Allocation Holder in the 700 MHz frequency band commit, inter alia, to submit an offer in a tender published by the Legitimate Applicant Interested in PPDR and to provide services based on the PPDR obligations.

a) Obligation to submit an offer

PPDR obligations include an obligation of the Provider Obligated to Provide Priority BB-PPDR and of the Allocation Holder in the 700 MHz frequency band to participate in good faith

- (i) within the Priority BB-PPDR obligation, in a tender based on a public contract called by the Legitimate Applicant Interested in PPDR for the provision of Priority BB-PPDR, and
- (ii) within the obligation of National Roaming for PPDR, in a tender based on a public contract called by the Legitimate Applicant Interested in PPDR for the provision of National Roaming for PPDR,

and in particular to submit a bid in both tenders at least in the scope of and under the conditions laid down in the Invitation to Tender, negotiate in good faith with the Legitimate Applicant Interested in PPDR about the conclusion of the agreement, and sign with the Legitimate Applicant Interested in PPDR an agreement on provision of Priority BB-PPDR and an agreement on provision of National Roaming for PPDR under the conditions laid down in this Invitation to Tender or, as the case may be, under conditions which are more favourable for the Legitimate Applicant Interested in PPDR approved in writing by the Provider Obligated to Provide Priority BB-PPDR and/or by the Allocation Holder in the 700 MHz frequency band as well as the Legitimate Applicant Interested in PPDR as an admissible variation from the Invitation to Tender.

The obligation to submit a bid in the tender for the provision of Priority BB-PPDR lasts until 30.6.2027.

The offers according to the PPDR obligations must allow the parties to enter into an agreement at least for a term corresponding to the block allocation in the 700 MHz frequency band acquired in this Tender by the Provider Obligated to Provide Priority BB-PPDR and/or by the Allocation Holder in the 700 MHz frequency band with respect to the obligation of National Roaming for PPDR.

Unless the Legitimate Applicant Interested in PPDR provides otherwise in the tender documentation for the public contract, the Provider Obligated to Provide Priority BB-PPDR and/or the Allocation Holder in the 700 MHz frequency band shall make a binding offer to the Legitimate Applicant Interested in PPDR for access to the network in similar form, scope and with similar essential elements as defined for the reference offer by Measure of General Nature No. OOP/7/07.2005-12, as amended, which was issued by CTU under Section 82(4) of the Act.

The binding offers for the fulfilment of the PPDR obligations according to chapter 8.3 of the Invitation to Tender shall be made within the time limits according to the tender documentation of the public contracts called by the Legitimate Applicant Interested in PPDR.

If some technical parameters are not yet known at the time of submission of the offer, the Provider Obligated to Provide Priority BB-PPDR and/or the Allocation Holder in the 700 MHz frequency band shall submit an offer based on reasonable assumptions.

The Provider Obligated to Provide Priority BB-PPDR and/or the Allocation Holder in the 700 MHz frequency band shall not put any administrative, legal or other impediments in the way of the Legitimate Applicant Interested in PPDR in a process of public procurement, negotiating an agreement, or a subsequent performance of the agreement based on the PPDR obligations and not to require fulfilment of conditions which are not absolutely necessary for conclusion of an agreement or fulfilment of the obligation, not necessary for proper provision of electronic communications services under the agreement, and not common for entering into commercial agreements.

b) Obligation to provide services based on the PPDR obligations

If an agreement or agreements are signed for the purpose of provision of Priority BB-PPDR and/or National Roaming for PPDR between the Legitimate Applicant Interested in PPDR and the Provider Obligated to Provide Priority BB-PPDR and/or by the Allocation Holder in the 700 MHz frequency band, the Provider Obligated to Provide Priority BB-PPDR and/or the Allocation Holder in the 700 MHz frequency band shall fulfil the Priority BB-PPDR obligation and/or the obligation of National Roaming for PPDR according to the agreement(s) signed, to the extent to which this agreement(s) regulates the obligations according to the conditions of this Tender. A breach of the obligation to fulfil the PPDR obligations will be enforced in accordance with applicable laws and regulations, as specified in chapter 8.3 of the Invitation to Tender.

The Provider Obligated to Provide Priority BB-PPDR and the Allocation Holder in the 700 MHz frequency band shall commence the provision of services according to the PPDR obligations within one year of signing of the agreement with the Legitimate Applicant Interested in PPDR regulating fulfilment of the obligations according to individual commitments. The time limit for fulfilment of the obligations of coverage according to chapter 8.3.1.1(b) is two years from signing of the agreement with the Legitimate Applicant Interested in PPDR containing coverage requirement, unless it has been agreed otherwise with the Legitimate Applicant Interested in PPDR.

The fulfilment of the PPDR obligations does not include and CTU will not assess performance of the contractual arrangements between the Provider Obligated to Provide Priority BB-PPDR and/or the Allocation Holder in the 700 MHz frequency band and the

Legitimate Applicant Interested in PPDR differently from or beyond the contents of the PPDR obligations according to this chapter 8.3 of the Invitation to Tender.

### 8.3.3.3 Pricing terms

Price for the provision of services specified in chapters 8.3.1 and 8.3.2 of the Invitation to Tender under the PPDR obligations must not exceed the price determined according to the principle of cost-oriented wholesale unit prices of the services which are subject of the PPDR obligations. The cost-oriented wholesale unit prices of the services must be based on the methodology of long-run average incremental cost LRAIC+ taking into account the return of the capital invested according to the current value of pre-tax WACC determined by CTU in Measure of General Nature No. OOP/4, as amended,<sup>46</sup> and also based on the following principles:

- The optimisation shall be of the “Scorched Node” type, i.e., the actual topology of the network of the Incumbent Operator in the given year (actual number of nodes and technological equipment thereof) will be taken into account;
- The addition of the incremental cost related to the active technology in sites with high use of the capacity for 4G and 5G technology will be enabled;
- If relevant, the costing must take into account, in addition to the functionality of the national roaming, also a functionality of the national roaming for PPDR and functionality of the required coverage within the Priority BB-PPDR obligation;
- Total costs (corresponding to the current technological equipment of the network, increased by the incremental costs for sites with high use of capacity for 4G and 5G technology and taking into account the PPDR functionality) will be calculated taking into account the expected development in the following period (i.e. at least one year);
- The capacity optimisation on backhaul level will be taken into account;
- The assets necessary for the provision of the service will be defined using the MEA method (Modern Equivalent Asset), using the current purchase value thereof for evaluation (if the current purchase value is not available, the average value from last three years accounts, or the shortest possible period longer than three years with data available, will be used);
- Economic depreciation will be determined using the method of modified tilted annuity, which is defined by a formula, where:
  - $C_{t=1}$  means annual capital costs;
  - $I_{t=0}$  means asset value at the beginning of the period;
  - $r$  means cost of capital (WACC);
  - $i$  means annual change of the asset price;
  - $u$  means average time needed for creation of an asset;
  - $n$  means life of an asset;
$$C_{t=1} = I_{t=0} * \left(\frac{1+r}{1+i}\right)^u * \frac{(r-i)}{1 - \left(\frac{1+i}{1+r}\right)^n}$$
- Costs will be allocated using the methodology of ABC (Activity Based Costing) which takes into account the causal relationship between the occurrence of the cost and the target cost object (i.e., ultimately the service provided);
- The wholesale process costs, and the corresponding share of the common and overhead costs will be allocated using Equi-Proportional Mark-Up (EPMU);
- The costing will take into account MORAN/MOCN sharing (if implemented in the network of the Incumbent Operator or if considered for the purpose of calculation of unit prices in the national roaming obligation and the PPDR obligation), including the consideration of the cost allocation to the service of Priority BB-PPDR (if relevant);

---

<sup>46</sup> <https://www.ctu.eu/measures-general-nature>



- The resulting unit costs calculated in the national roaming obligation and the PPDR obligation must take into account the required representation of the different technologies (2G, 3G, 4G, 5G);
- No duplicate counting of any operation or cost may occur within the costing.

In addition to the unit prices, the Provider Obligated to Provide Priority BB-PPDR and the Allocation Holder in the 700 MHz frequency band are entitled to charge for the services included in the PPDR obligation also a lump sum for the set-up of the service in the amount corresponding to actually incurred costs.

The wholesale unit prices for the provision of services under these PPDR obligations must be re-calculated after the conclusion of the agreement on regular basis in accordance with the above-described methodology of Long-Run Average Incremental Cost (LRAIC+) as follows, unless the parties agree otherwise: The Legitimate Applicant Interested in PPDR will submit by 30 July of the respective calendar year an updated operation plan for the next calendar year. The Provider Obligated to Provide Priority BB-PPDR and/or the Allocation Holder in the 700 MHz frequency band will re-calculate the wholesale unit prices taking into account the updated operation plan of the Legitimate Applicant Interested in PPDR and taking into account the updated values of other inputs to the costing, and submit the proposed amendment to the agreement updating the wholesale unit prices to the Legitimate Applicant Interested in PPDR by 30 September of the respective calendar year, provided that the updated prices will apply from 1 January of the following calendar year.

The Provider Obligated to Provide Priority BB-PPDR and Allocation Holder in the 700 MHz frequency band will prove to the Legitimate Applicant Interested in PPDR the cost orientation of the price in the offer according to chapter 8.3.3.2(a) of the Invitation to Tender and the subsequently updated prices according to the principles laid down in this chapter 8.3.3.3 of the Invitation to Tender.

In the event of a dispute regarding the prices between the Legitimate Applicant Interested in PPDR and the Provider Obligated to Provide Priority BB-PPDR and/or the Allocation Holder in the 700 MHz frequency band, each party may contact CTU that will determine the maximum cost-oriented price for the services according to the PPDR obligations according to the principles laid down in this chapter 8.3.3.3 of the Invitation to Tender.

For the purpose of dispute resolution according to Section 127 of the Act and for the purpose of verification of compliance with the obligations stipulated by the decision on granting block allocations of radio frequencies according to Section 114 and 22b(1)(a) or )b) of the Act related to compliance of wholesale unit prices offered or charged for provision of services under the PPDR obligations including updates of these prices with the above-mentioned principles of cost orientation CTU will act in accordance with the issued methodology for determination of cost-oriented wholesale unit prices for the purpose of national roaming obligation and PPDR obligation<sup>47</sup>.

## **8.4 Re-farming Obligation (3400–3600 MHz)**

### **8.4.1 Re-farming of the 3400–3800 MHz Frequency Band**

The Applicants acknowledge that the objective of CTU within this Tender is to ensure effective use of radio frequencies not only in the 3400–3600 MHz frequency band but also in the entire 3400–3800 MHz frequency band by allowing unification of the radio frequencies allocations of individual Allocation Holders within the entire 3400–3800 MHz frequency band.

In order to achieve this objective, CTU laid down a re-farming obligation for Allocation Holders holding block allocations issued based on the Tender for the Purpose of Granting of the Rights to Use Radio Frequencies to Provide Electronic Communications Networks in the 3600–3800

---

<sup>47</sup> The methodology was subject to a separate public consultation.

MHz Frequency Band of 27 March 2017, so that, after the allocations in the 3600–3800 MHz frequency band have been issued and based on this Tender the entire 3400–3800 MHz frequency band could be re-farmed, i.e., that the radio frequencies allocated in this frequency band could be redistributed such that the integrity of the radio frequency allocations issued to a single Allocation Holder in this frequency band is ensured to the maximum possible extent.

#### **8.4.2 Obligation to Submit a Request for a Change of Allocation Based on the Call**

Each Applicant undertakes to submit to CTU, upon the Call of CTU in accordance with Section 22a of the Act or a similar provision of the Act in effect at the time of issue of the Call which allows the Allocation Holder to request a change to the block allocation, within 60 days of receiving the Call a full request for change of its allocation of radio frequencies issued on the basis of this Tender meeting all legal requirements and content requirements described below in this chapter 8.4 of the Invitation to Tender.

CTU permits the possibility of an agreement between all Allocation Holders holding block allocations in the 3400–3800 MHz frequency band on a specific location of their undivided radio frequency segments. In such case, all Allocation Holders in the 3400–3800 MHz frequency band must submit a joint Agreement on Final Distribution to CTU as an attachment to each request for a change of block allocation according to this chapter 8.4 of the Invitation to Tender. This shall be without prejudice to the time limit for submitting the request according to this obligation.

The requests according to this obligation shall include the change of specification of radio frequencies such that the specification of the radio frequencies corresponds to the Agreement on Final Distribution or information on the final distribution of radio frequencies in the 3400–3800 MHz frequency band specified by CTU in the Call, unless the Agreement on Final Distribution is concluded within the sixty-day time limit for the submission of requests for a change of the allocations starting on the date of receiving the Call.

In addition, the Applicants undertake to take all steps and measures within the procedure concerning their requests according to this obligation and to provide all assistance and cooperation necessary to ensure that CTU is able to comply with the requests by way of a final decision and change the block allocations of radio frequencies of the individual Allocation Holders in the 3400–3800 MHz frequency band, as mentioned above.

The Applicants undertake to discontinue the use of radio frequencies which are no longer allocated to them after the decision of CTU on the change of the allocation of radio frequencies has entered into force. Further use for a period necessary for re-tuning of the radio network is possible only with a consent of the new holder of a block allocation of the radio frequencies concerned.

#### **8.4.3 Re-farming Procedure**

CTU is entitled to call on the Allocation Holder in the 3400–3800 MHz frequency band to submit the request according to chapter 8.4.2 of the Invitation to Tender if the following conditions are met:

- Use of the 3400–3800 MHz frequency band is subject to the European Union harmonisation plans for the use of radio spectrum; and
- CTU has issued all final decisions granting block allocations of radio frequencies in the 3400–3600 MHz frequency band allocated within this Tender.

CTU may issue the Call at any time within sixty days of the date of entering into force of the last allocation of radio frequencies in the 3400–3600 MHz frequency band based on the results of the Tender. CTU may issue the Call following the fulfilment of the conditions according to this chapter 8.4.3 of the Invitation to Tender by posting it on its website and subsequently delivering it to all Allocation Holders in the 3400–3800 MHz frequency band. The time limit for the submission of the requests starts, with respect to a particular Allocation Holder, on the date of receiving the CTU's Call by this Allocation Holder.

The Call will also include information on the final distribution of radio frequencies showing the change of specification of radio frequencies which the Allocation Holder should request. If the Allocation Holder based on this Tender is not a holder of any block allocation in the 3600–3800 MHz frequency segment as of the date of delivery of the CTU's Call, the information on the final distribution of radio frequencies cannot determine that the specification of radio frequencies within the block allocation of such Allocation Holder acquired in the Tender will be outside of the scope of the 3400–3600 MHz frequency segment which is the subject of the Tender.

Allocation Holders in the 3400–3800 MHz frequency band have the option to agree among themselves within the sixty-day period for the submission of the requests for a change of the block allocations starting from the date receiving the Call on the final distribution of the segments of radio frequencies in the 3400–3800 MHz frequency band. Such Agreement on Final Distribution must be made by all Allocation Holders holding block allocations in the 3400–3800 MHz frequency band freely and solely for the purpose of distributing effectively the segments of radio frequencies in this frequency band. The Agreement on Final Distribution must respect the requirement of integrity of the allocations.

The Allocation Holder is obliged to do the following within the period of sixty days of receiving the Call:

- 1) Submit to CTU a request for a change of its block allocations of radio frequencies in accordance with the re-farming obligation and with the specification of the radio frequencies according to the Agreement on Final Distribution, together with one counterpart of the Agreement on Final Distribution; or
- 2) In the event of a failure to submit the Agreement on Final Distribution, submit a request for a change of the block allocations of radio frequencies in accordance with the re-farming obligation and with the specification of the radio frequencies according to the information on the final distribution of radio frequencies in the 3400–3800 MHz frequency band provided by CTU in the Call.

The Allocation Holders must submit their requests according to this chapter 8.4.3 of the Invitation to Tender on a form constituting Annex 6 to the Invitation to Tender.

To avoid any doubts, should any Allocation Holder submit a request according to point (i) above and others according to point (ii) above or should the requests for a change of the block allocation be mutually incompatible for any other reason, CTU is entitled to issue a new call on some or all of the Allocation Holder to change their requests for a change of the block allocation, rectify the defects of the requests or submit new requests in order to fulfil the re-farming goal.

The Allocation Holders are obliged to comply with this second call of CTU within 10 days of receiving thereof.

If the Agreement on Final Distribution is not concluded, CTU will determine the final distribution of radio frequencies in the 3400–3800 MHz frequency band according to the following rules:

- 1) Auction Blocks in part of the 3400–3600 MHz band, which were subject of this Tender, but were not allocated to any Auction Participant in this Tender, will be placed from frequency band 3400 MHz above;
- 2) CTU will subsequently place the block allocations of radio frequencies in the 3400–3600 MHz frequency band of Allocation Holders who are not holders of block allocations of radio frequencies in the 3600–3800 MHz frequency band, namely in a way that these allocations are connected with the allocation(s) of radio frequencies placed according to point 1) above as follows:
  - i. Continuous frequency block of Allocation Holder, who at the same time obtained both Auction Blocks in Auction Blocks category B1 with the commitment to lease frequencies for purposes of the Industry 4.0 will be placed as first. If each Auction Block from the Auction Block category

- B1 will be obtained by a different Allocation Holder, CTU will decide on the order of their allocation by a ballot;
- ii. CTU will followingly place continuous sections of radio frequencies of other Allocation Holders, who hold frequency allocations exclusively in the 3400-3600 MHz band. If there will be more such Allocation Holders, CTU will decide on the order of their allocation by a lot;
- 3) CTU will subsequently place the Allocation Holders' block allocations of radio frequencies in an order based on their choice, from the end of the 3600–3800 MHz frequency band, allowing the Allocation Holders to make a choice in the following order:
- i. The first group will constitute of Allocation Holders who were granted a block allocation solely in the 3600–3800 MHz frequency band in a descending order based on the number of base station sectors operated in the 3600–3800 MHz frequency band registered by CTU by the end of calendar month preceding to the date of sending of CTU's Call. The Allocation Holders with a higher number of base station sectors will decide on their order first. In the case of an equal number of base station sectors, the decision on the order of these Allocation Holders will be made by a lot;
  - ii. Allocation Holders in both parts of 3400-3800 MHz frequency band, who are at the same time Allocation Holders containing both Auction Blocks from Auction Block category B1 with the commitment to lease frequencies for purposes of the Industry 4.0 will be the second group. If such Allocation Holders with Auction Block from Auction Block category B1 will be two, CTU will decide on the order of their allocation by a lot;
  - iii. Finally, the order choice according to point 3) above will be possible for the Allocation Holders who acquired a block allocation of radio frequencies in both parts of the 3400–3800 MHz frequency band, i.e., both in the 3400–3600 MHz part and in the 3600–3800 MHz part, namely in a descending order according to the number of base station sectors operated in the 3600–3800 MHz frequency band registered by CTU by the end of the calendar month preceding the date of sending of CTU's Call. The Allocation Holders with a higher number of base station sectors will decide on their order first. In the case of equal number of base station sectors, the decision on the order of these Allocation Holders will be made by a lot.

By completing the final distribution according to the above-mentioned procedure, CTU will notify all respective Allocation Holders and will allow them to make an agreement on a change of positions, provided that positions of other Allocation Holders will not be violated under a so-called partial agreement regime. The Allocation Holders are obliged to submit within five working days after receiving CTU's notification according to the previous sentence a request to make changes in accordance with the partial agreement. If CTU receives within five days a notification from the Allocation Holders on the partial agreement, it will review it and if CTU reaches a conclusion, that this agreement does not violate the positions of other Allocation Holders, it will change the final distribution in the sense of the agreement.

Each Allocation Holder shall bear the costs related to the fulfilment of the re-farming obligation and any other following implementation within its own communication network.

## 8.5 Commitment to Lease Radio Frequencies for the Purpose of Industry 4.0

The commitment to lease radio frequencies applies to the Allocation Holders with block allocation in the 3400–3800 MHz band, who are at the same time Allocation Holders of the Auction Block Category B1 (hereinafter "**Lessor Obligated to Lease Radio Frequencies**").

The commitment to lease radio frequencies is laid down in favour of any natural person in business or legal person, who request the lease of radio frequencies to operate non-public electronic communications network for own purposes or for the purpose of a Business Group, of which it is a member, limited to its own land estate, or, with a consent from the land estate

owner, on a land estate which it is entitled to use, e.g. based on a lease contract (hereinafter **“Legitimate Applicant for Lease of Radio Frequencies”**).

This commitment should create conditions, which will allow the Legitimate Applicants for Lease of Radio Frequencies, who will conclude a contract to lease radio frequencies with the Lessor Obligated to Lease Radio Frequencies, access to radio frequencies for the purpose of operating local non-public electronic communications network within private industry or similar sites under the conditions defined below in this chapter 8.5 of the Invitation to Tender (hereinafter **“Commitment to Lease Radio Frequencies”**).

### **8.5.1 Rights and Obligations of the Lessor Obligated to Lease Radio Frequencies**

To fulfil the Commitment to Lease Radio Frequencies, the Lessor Obligated to Lease Radio Frequencies shall commit, upon the request of the Legitimate Applicant for Lease of Radio Frequencies, to negotiate in good faith on the conclusion of a contract to lease radio frequencies pursuant to this Commitment to Lease Radio Frequencies, and, based upon the concluded contract, to give consent with Individual Authorisation granted by CTU to the Legitimate Applicant for Lease of Radio Frequencies according to the Act.

The Lessor Obligated to Lease Radio Frequencies shall assume an unconditional commitment not to lay down any administrative, legal or other obstacles during the negotiation with the Legitimate Applicant for Lease of Radio Frequencies about the conclusion of the contract to lease radio frequencies or during the process of granting an Individual Authorisation by CTU as well as to require fulfilment of conditions, which are not absolutely necessary for conclusion of a contract or granting an Individual Authorisation and which are not common when concluding commercial agreements.

Within 6 months after the date of entering into force of the decision granting the block allocation of the radio frequencies with Auction Blocks in the Auction Block Category B1, the Lessor Obligated to Lease Radio Frequencies shall publish non-discriminatory offer to lease frequencies pursuant to this chapter 8.5 and, upon the request of the Legitimate Applicant for Lease of Radio Frequencies, to conclude a contract to lease radio frequencies without undue delay in accordance with the conditions of this Commitment to Lease Radio Frequencies, and based on that contract to grant the Legitimate Applicant for Lease of Radio Frequencies rights (in the form of a lease) to all radio frequencies in the 3400–3800 MHz band included in their block allocation(s).

The Commitment will be implemented as a lease of frequencies in accordance with chapter 7.7.3 of the Invitation to Tender.

### **8.5.2 Duration Restriction**

This commitment to lease radio frequencies is limited to the duration of the validity of the block allocation.

### **8.5.3 Price Conditions**

Price for the lease of radio frequencies based on this Commitment to Lease Radio Frequencies charged by the Lessor Obligated to Lease Radio Frequencies will be set as follows:

1. One-off price for establishment of a services is CZK 50,000 (excl. VAT);
2. Annual price for the lease will be calculated as follows:

$$\text{Annual price for a service (CZK)} = \frac{m}{12} \times 1000 \times V \times a$$

where:

- *m* means number of months of lease per calendar year;
- *V* means leased width of a spectrum range in MHz;
- *a* means actual surface area of the land estate in square kilometres.

The Legitimate Applicant shall request a channel with a minimum width of 10 MHz, the maximum width is limited by the Lessor's Obligated to Lease Radio Frequencies block allocation in the 3400–3800 MHz band, while the required channel width must be in a multiple of 10 MHz.

The actual surface area means the size of land estates in square kilometres, while the area for the purpose of calculating the price is the size of land estates, considered for lease of frequencies, stated in the land registry.

#### **8.5.4 Rights and Obligations of the Legitimate Applicant for Lease of Radio Frequencies**

The lease of radio frequencies according to this Commitment to Lease Radio Frequencies must be limited to a land estate owned by the Legitimate Applicant for Lease of Radio Frequencies (or to an estate, which the Legitimate Applicant is entitled to use). The given land estates shall not be public spaces<sup>48</sup>.

The Legitimate Applicant for Lease of Radio Frequencies is entitled to operate on the leased frequencies pursuant to this Commitment to Lease Radio Frequencies solely a non-public electronic communications network only for own purposes or for purposes of the members of the Business Group, of which it is a member. The Legitimate Applicant for Lease of Radio Frequencies is obliged to ensure compliance with legal and technical conditions laid down by the Act, defined by the Lessor Obligated to Lease Radio Frequencies in the contract (especially conditions of mutual coordination of networks and synchronisation of networks), operation conditions applied for the 3400–3800 MHz frequency band laid down in chapter 7 of the Invitation to Tender and in relevant RSUP and conditions defined by this chapter 8.5 of the Invitation to Tender. Unless both parties agree otherwise or the nature of the surrounding area and coordination of networks allow different limit setting, the limits for electromagnetic field intensity at the edge of given frequency band set by an international agreement concluded by the Czech Republic on the Coordination of frequencies between 29.7 MHz and 43.5 GHz for fixed service and land mobile service (HCM Agreement) as amended<sup>49</sup> shall apply for operation of a local non-public network of the Legitimate Applicant for Lease of Radio Frequencies on the border of their own land estate or the estate, which they are entitled to use.

Based on the contract to lease radio frequencies concluded with the Lessor Obligated to Lease Radio Frequencies, the Legitimate Applicant for Lease of Radio Frequencies shall ask CTU to grant them an Individual Authorisation to operate their local non-public electronic communications network. All documents required for issuance of the Individual Authorisation shall be attached to the application.

#### **8.5.5 Other Conditions**

Unless the parties agree otherwise in the contract on lease of frequencies according to this Commitment to Lease Radio Frequencies, the contract concluded on the basis of this Commitment to Lease Radio Frequencies shall fulfil at least the following conditions:

- The Lessor Obligated to Lease Radio Frequencies shall not limit the Legitimate Applicant for Lease of Radio Frequencies in their decision which services will be provided within their local non-public electronic communications network for own purposes or for the purposes of the members of the Business Group, of which it is a member, while ensuring uninterrupted operation and respecting the setting of the Lessor's Obligated to Lease Radio Frequencies network;
- For the entire duration of the Commitment to Lease Radio Frequencies, the contract must allow the option to extend the lease without a condition to pay one-off price for establishment of a service, should the Legitimate Applicant for Lease of Radio

---

<sup>48</sup> Section 34 of the Act No. 128/2000 Coll., on municipalities, as amended.

<sup>49</sup> [http://www.hcm-agreement.eu/http/englisch/verwaltung/index\\_europakarte.htm](http://www.hcm-agreement.eu/http/englisch/verwaltung/index_europakarte.htm)

Frequencies request the extension in writing at least 6 months before the date of expiry of the contract;

- The Lessor Obligated to Lease Radio Frequencies shall not change the contractual conditions unilaterally.

The Lessor Obligated to Lease Radio Frequencies shall commit to inform CTU in writing about every request to provide lease of radio frequencies according to this Commitment to lease Radio Frequencies, which they receive from the Legitimate Applicant for Lease of Radio Frequencies, within 15 working days after receiving the request. The Lessor Obligated to Lease Radio Frequencies commits to regularly, but at least once per month, inform CTU in writing about the progress in negotiations about conclusion of the contract. This commitment shall be without prejudice to other notification obligations of the Lessor Obligated to Lease Radio Frequencies or the Legitimate Applicant for Lease of Radio Frequencies to CTU. CTU shall not be denied the information due to their confidentiality.

CTU prefers the contracts based on this Commitment to Lease Radio Frequencies to be concluded on the basis of commercial negotiations while ensuring compliance with the requirements of the lease of radio frequencies for the purposes described in this Commitment to Lease Radio Frequencies.

CTU is prepared to resolve any dispute related to the conformity of the draft contract or an amendment to the contract on this Commitment to Lease Radio Frequencies with the conditions of this Commitment to Lease Radio Frequencies pursuant to the process laid down in Section 127 of the Act, upon a request of dispute parties.

Provision of this chapter 8.5 of the Invitation to Tender are without prejudice to CTU's rights to use other legal instruments.

## **8.6 Consequences of a Breach of Commitments**

A breach of any obligation according to the commitment accepted by the Applicant in this Tender will be considered by CTU a failure to comply with the conditions of the decision granting the block allocation of radio frequencies based on the Tender.

If the Allocation Holder fails to provide remedy of the breach of the obligations according to the commitment accepted in this Tender within a time limit specified by CTU according to Section 114 of the Act, the CTU Council Chair will proceed according to Section 22b(1)(b) of the Act.

The provisions of this Article are without prejudice to the rights of CTU to use other tools available under the law.

## 9 RULES AND CONDITIONS OF PARTICIPATION IN THE TENDER (QUALIFICATION)

### 9.1 Qualification requirements

#### 9.1.1 General rules of providing evidence of the qualification

In accordance with Section 21(2) of the Act, CTU lays down terms and conditions of participation in the Tender, taking into account compliance with the targets included in Section 5(2) to Section 5(4) of the Act and in accordance with the principles laid down in Section 6 of the Act.

All terms and conditions of participation in the Tender laid down in chapter 9 of the Invitation to Tender must have been satisfied at the moment of expiry of the time limit for the submission of the Applications laid down in chapter 9.4 of the Invitation to Tender. Should the qualification of the Applicant change during this Tender, and the change results, or could result, in failure to satisfy the rules and conditions for participation according to chapter 9 of the Invitation to Tender, the Applicant concerned must notify CTU of this in writing without delay, within 7 days at the latest. If the Applicant ceases to comply with the rules and conditions of participation in the Tender at any time during the Tender, CTU will decide to exclude such Applicant from the Tender.

An Applicant that fails to provide evidence of having met the conditions for participating in the Tender within the time limit for the submission of the Applications or that ceases to meet these conditions during the Tender shall be asked by CTU to rectify the defects identified, and if such defects are not rectified within a reasonable time limit set by CTU, the Applicant will be excluded from taking any further part in the Tender.

#### 9.1.2 Basic conditions of participation in the Tender

The basic conditions of participation in the Tender are satisfied by an Applicant:

- a) whose assets are not as of the date of submission of the Application or have not been in the last three years subject to insolvency proceedings in which a decision on insolvency was issued or where the insolvency petition was not rejected due to the fact that the assets are insufficient to cover the costs of the insolvency proceedings or the bankruptcy was not cancelled due to the fact that the assets were absolutely insufficient, or it was not subject to receivership pursuant to separate laws and regulations; the Applicant shall prove this by means of a **solemn declaration**;
- b) who is not in liquidation as of the date of submission of the Application; the Applicant shall prove this by means of a **solemn declaration**; and
- c) who is not listed in the register of persons banned from performing public contracts as of the date of submission of the Application; the Applicant shall prove this by means of a **solemn declaration**.

#### 9.1.3 Professional and technical conditions of participation in the Tender

The professional and technical conditions of participation in the Tender are satisfied by an Applicant that, as of the date of submission of the Application, is authorised to carry out business activities in electronic communications pursuant to Sections 8 and 13 of the Act; the Applicant shall prove this by means of a **solemn declaration**.

#### 9.1.4 Economic and financial conditions of participation in the Tender

The economic and financial conditions of participation in the Tender are satisfied by an Applicant that, no later than the last day of the deadline for submission of Applications according to chapter 9.4 of the Invitation to Tender, deposits the Security to the CTU's bank account opened for the purpose of depositing the Security and specified in chapter 4 of the Invitation to Tender in the amount according to chapter 9.3 of the Invitation to Tender and proves this by means of a **confirmation from a bank** of transfer of the corresponding amount



to the specified bank account of CTU. The confirmation must clearly indicate that the Security amount has been irrevocably debited from the Applicant's account and sent to the specified bank account of CTU. The Security must be credited in full to the specified bank account of CTU no later than the last day of the deadline for submission of Applications according to chapter 9.4 of the Invitation to Tender.

## 9.2 Application for granting of the rights to use radio frequencies

### 9.2.1 Formal requirements of the Application

Applications must be submitted in writing in 2 (two) counterparts, one of which may be marked as the original and the other as a copy. The Applicant is responsible for consistency of the two counterparts. Originals of relevant documents, or officially authenticated copies thereof, must be attached to the original Application. Ordinary unauthenticated copies of such documents may be attached to the copy of the Application. The original Application must be secured against removal or addition of any sheets. Together with printed documents, the Applicant shall also submit a full electronic version of the Application in PDF format on a physical data carrier which is write-protected (e.g., CD-R, DVD-R).

The Applicant shall also attach to its Application another specific copy of the Application which does not contain information the disclosure of which to third parties could harm the Applicant's legitimate interests or jeopardize or frustrate the result of the Tender (e.g., information on the amount of the Security paid and the number of Eligibility points, or information about the option of national roaming obligation it took over), such that CTU may use such version of the Application for the purposes of access to file pursuant to Section 21(7) of the Act. CTU is not obliged to check whether this copy contains the above-mentioned information and may make it accessible for examining the file. In addition, the Applicant shall also attach to the Application a report containing a clearly-arranged list of information which is to be precluded from access to the file according to Section 21(7) of the Act and a brief justification of the preclusion of the particular parts of the Application. The definition of the information which is, in the Applicant's view, to be excluded from access to file according to this chapter 9.2.1 of the Invitation to Tender is not binding upon CTU.

The Applications must be submitted in Czech; pieces of evidence and other documents attached to the Application may be in a different language with an official translation into Czech. Documents attached to the Application which are in Slovak need not be translated.

The Applications must be delivered to the address of the registered office of CTU specified in chapter 4 of the Invitation to Tender before the expiration of the deadline for the delivery of the Applications laid down in chapter 9.4 of the Invitation to Tender. The original and the copies of the Application must be delivered to CTU together in one sealed or otherwise suitably-closed envelope marked with the identification number (IČO) of the Applicant, file number of this Invitation to Tender, and clearly written text: "*NEOTVÍRAT – VÝBĚROVÉ ŘÍZENÍ 700 MHz a 3400–3600 MHz*".

The template of the Application and its annexes are provided in Annexes 1, 2A and 2B to the Invitation to Tender.

### 9.2.2 Mandatory annexes to the Application

The Applicant shall attach to the Application all documents required to satisfy the conditions of participation in the Tender according to chapter 9.1 of the Invitation to Tender, plus:

- a) legal entities must submit a **copy of an entry in the Commercial Register** or another similar register, whereas the copy shall not be older than 90 days before the last day of the deadline for the submission of Applications according to chapter 3 of the Invitation to Tender;
- b) legal entities whose Application is not signed by the person(s) authorised to do so according to the entry in the Czech Commercial Register must submit a **power of attorney** proving the authorisation of the undersigned natural persons to sign the Application;

- c) Applicants who are members of a Business Group must submit a clearly arranged graphic representation of the Business Group of which the Applicant is a member and information on the controlling persons and the amounts of the individual shares (ownership interests) of all members of the Business Group in Applicant exceeding 10%, irrespective of whether the share in the Applicant is held directly or indirectly. If the share in the Applicant is held directly or indirectly also by means of one or more trusts (trust funds)<sup>50</sup> or other similar construct of the Czech or foreign law (e.g., foundation) such holding or ownership will be included in the above-specified 10% limit, and the Applicant shall provide not only information on the trustee but primarily on the person(s) to whose benefit the trust has been created or who is (are) the trust beneficiary (beneficiaries) and who also hold directly or indirectly through such trust beneficiary a share in the Applicant which exceeds aggregately the 10% limit. If the asset structure of the Applicant or the company holding a share in the Applicant which exceeds the 10% limit includes a company listed on the stock exchange, the Applicant shall provide the most recent data on the shares in this company, e.g., from the most recent general meeting or the report filed with the stock exchange. In addition, the Applicant shall submit a **solemn declaration** stating that the materials provided according to this paragraph are true;
- d) statement of consent to the CTU's right to use any and all information provided in the Application and the annexes thereto for the purposes of this Tender, signed by the person(s) authorised to act on behalf of or represent the Applicant;
- e) statement of acceptance of the obligations which the Applicant accepts during the Tender, specified in chapter 8 of the Invitation to Tender, in the form of Annex 2A to the Invitation to Tender if the Applicants is are Incumbent Operators, and Annex 2B of the Invitation to Tender for other Applicants, signed by the person(s) authorised to act on behalf of or represent the Applicant.

### 9.2.3 Binding Applications

The Applicant may change or withdraw its Application at any time before the expiration of the deadline for the submission of Applications according to chapter 9.4 of the Invitation to Tender. The Application must be signed by a person or persons authorised to act on behalf of or represent the Applicant and must be delivered to CTU at its registered office specified in chapter 4 of the Invitation to Tender before the set deadline expires.

No amendment of the Application initiated by the Applicant or withdrawal of the Application is permitted after the expiration of the deadline for the submission of Applications according to chapter 9.4 of the Invitation to Tender and a failure to perform an act cannot be excused.

### 9.3 Security

Participation in the Tender according to chapter 9.1.4 of the Invitation to Tender is conditional upon payment (deposition) of a financial Security. The purpose of the Security is to ensure proper process of the Tender and payment of the Total Price for the radio frequencies acquired by the Applicant and to secure the Applicant's obligation according to chapter 12 of the Invitation to Tender to refrain from any action which would jeopardize or frustrate the process or result of the Tender pursuant to Section 21(6) of the Act.

The amount of the Security of the Applicant corresponds to the number of Eligibility points stated by the Applicant in the Application. The total amount of the Security will be calculated as **CZK 20,000,000** (in words: twenty million Czech crowns) multiplied by the number of Eligibility points stated in the Application.

---

<sup>50</sup> Trust means a structure according to foreign legislation (trust pursuant to Act No. 89/2012 Coll., the Civil Code) and other funds of similar type managed by a trustee to the benefit of a beneficiary / beneficial owner.

For the sake of reasonability of the amount of the Security with respect to the secured obligations of the Applicant within the Tender, CTU set the minimum amount of the Security as **CZK 40,000,000** (in words: forty million Czech crowns).

CTU also set the maximum number of Eligibility points limiting the total amount of radio frequencies acquired within the Tender, and this maximum number is 25 points which corresponds to the maximum amount of the Security of **CZK 500,000,000** (in words: five hundred million Czech crowns).

CTU will set off the Security paid by the Auction Winner against the payment of the Total Price resulting from the Tender.

The Security must be paid by way of credit transfer and must be credited to CTU's bank account for the purpose of deposition of the Security specified in chapter 4 of the Invitation to Tender before the expiration of the deadline for the submission of Applications according to chapter 9.4 of the Invitation to Tender. As the payment identification number (variabilní symbol) for the payment of the Security, the Applicant shall use its identification No. (IČO) or another identifier for Applicants who do not have an identification No. (IČO)). All bank charges and other costs associated with the payment of the Security shall be borne by the Applicant. The Applicant is responsible for ensuring that the Security is credited to specified CTU's bank account in full and on time.

Failure to deposit the Security for an Application on time will be considered failure to comply with the conditions of participation in the Tender and CTU will decide to exclude the Applicant from taking any further part in the Tender. Filing an appeal against such decision does not have suspensory effect.

The account used for the deposition of the Security bears no interest.

The Security is forfeited in the following cases:

- a) CTU calls on the Auction Winner, based on the results of the Auction, to pay the Total Price and the Auction Winner fails to pay the Total Price, of a part thereof, within the time limit specified in chapter 10 of the Invitation to Tender; or
- b) The Applicant commits any act according to chapter 12 of the Invitation to Tender.

Security forfeited in accordance with this chapter 9.3 of the Invitation to Tender is treated as income of the state budget of the Czech Republic.

Unless there are reasons for the Security to be forfeited, the Security will be returned to the Applicants as follows:

- a) the entire Security after the date of entering into force of the decision to exclude the Applicant from further participation in the Tender pursuant to Section 21(2) of the Act, Section 21(6) of the Act or according to chapter 9.5 of the Invitation to Tender;
- b) the entire Security after the date of entering into force of the decision to reject an Application of an unsuccessful Applicant pursuant to Section 21(8) of the Act;
- c) the entire Security after the date of entering into force of the decision of CTU to cancel the Tender; or
- d) a portion of the Security corresponding to the difference between the Security and the Total Price after the date of entering into force of the decision to allocate radio frequencies based on this Tender in cases where the Security is higher than the Total Price;
- e) A portion of the Security corresponding to the difference between prices of Withdrawn Highest Bids (see definition in the Auction Rules) and prices of Winning Bids (ibidem), which are to be paid by the Auction Participant based on the rules for Withdrawal of Highest Bids specified in chapter 4.4.6 of the Auction Rules, if the Security is higher than the difference of the mentioned prices.

The Security or a part thereof will be returned to the Applicants on the bank account from which it was sent to CTU, within 14 days of the date on which any of the foregoing events occurs.

The costs associated with the return of the Security or any part thereof will be borne by CTU.  
Invitation to Tender

#### 9.4 Deadline for the submission of Applications in the Tender

Applications must be delivered to CTU by [•].

Applicants may deliver their Applications to the address of the registered office of CTU according to chapter 4 of the Invitation to Tender or deliver them in person at the registered office of CTU on business days from 9:00 a.m. to 3:00 p.m.

#### 9.5 Multiple participation in the Tender, participation on behalf of a Business Group

Only entities that are economically independent of each other may take part in the Tender. Business Groups may submit only one Application for this Tender and may do so through only one entity.

If an Incumbent Operator is a member of a Business Group, this Business Group may only participate in the Tender through that Incumbent Operator.

If a Business Group whose member is a holder of block allocation in the 3600–3800 MHz frequency band participates in the Tender, it may only participate in the Tender through the respective member of the Business Group who is a holder of the block allocation of frequencies in the 3600–3800 MHz frequency band.

If Applications are submitted for this Tender by more than one member of a Business Group or with respect to a Business Groups whose member is an Incumbent Operator by a member of the Business Group other than the Incumbent Operator, or with respect to a Business Group whose member is a holder of the block allocation in the 3600–3800 MHz frequency band by a member of the Business Group other than the holder of the block allocation in the 3600–3800 MHz frequency band, CTU will decide to exclude all Applicants who are members of that Business Group from the Tender.

#### 9.6 Opening envelopes containing Applications for the Tender

All envelopes containing Applications that have been submitted on time will be opened on the working day which follows the date specified as the deadline for the submission of Applications for the Tender according to chapter 9.4 of the Invitation to Tender, i.e., on [•] at the CTU address.

The opening of envelopes will be attended by a notary, who will take minutes of the entire process, and members of the Selection Committee. All Applicants who submitted their Applications on time may attend the opening of envelopes, whereby each Applicant may be represented by only one person authorised for such representation under a written power of attorney. CTU will open the envelopes one by one according to their serial numbers in the presence of the Selection Committee and will check each for compliance with the **following requirements set for the Applications**, namely:

- a) Whether the Application is in Czech and the annexes to the Application, which may also be in different languages, are accompanied by an official translation (not applicable to annexes in Slovak);
- b) Whether the Application and all relevant annexes are signed by authorised persons;
- c) Whether the Application contains all parts and annexes required by this Invitation to Tender; and
- d) Whether the Application is secured from inserting or removing any of its parts.

After having checked each Application whether it meets the above-mentioned requirements, CTU will announce to the Applicants present the identification data of the Applicant whose Application has been checked and whether it meets the above-mentioned requirements.

CTU may ask the Applicant to clarify, correct or amend in writing the information submitted or the documents which serve as evidence of compliance with the above-mentioned requirements for the Applications.

The Applicant undertakes to comply with such request within a reasonable period of time determined by CTU. The Applicant's further participation in the Tender is conditional upon the compliance with such a request.

CTU will decide to exclude from participation in the Tender the Applicants who have submitted an Application which CTU finds, based on the recommendation of the Selection Committee, as failing to meet the above-mentioned requirements for the Applications if the Applicant fails to clarify, correct or amend the information submitted or the documents which serve as evidence of compliance with the above-mentioned requirements for the Applications within the time limit even after having been requested by CTU to do so.

CTU will subsequently publish on its website a list of the Applicants whose Applications were found to meet the above-mentioned requirements for the Applications.

## 9.7 Evaluation of the Applications

CTU will evaluate, based on the recommendations of the Selection Committee, whether the Applications, that have not been excluded according to the preceding chapter 9.6 of the Invitation to Tender, meet the set conditions of participation in the Tender according to chapter 9.1 of the Invitation to Tender.

CTU may ask the Applicant to clarify, correct or amend in writing the information submitted or the documents which serve as evidence of compliance with the conditions of participation in the Tender according to chapter 9.1 of the Invitation to Tender.

The Applicant undertakes to comply with such request within a reasonable period of time determined by CTU. The Applicant's further participation in the Tender is conditional upon the compliance with such a request.

Depending on the results of the evaluation, CTU will subsequently deliver to each Applicant a **certificate of admission to the Auction** or a **decision on exclusion from further participation in the Tender** according to Section 21(2) of the Act. The decision on exclusion from further participation in the Tender according to the previous sentence will always state the reason given by CTU why the Application was excluded. Filing an appeal against such decision does not have suspensory effect according to Section 21(2) of the Act.

CTU will subsequently publish a list of the Applicants who may participate in the Auction (Auction Participants). At the same time, CTU will publish, whether at least one the Applicants took over the option A of the national roaming obligation pursuant to chapter 8.1.2 of the Invitation to Tender. In cases of doubt, CTU reserves the right to postpone the publication of the list of the Applicants until such doubts have been resolved.

## 10 AUCTION

### 10.1 Subject of the Auction

Auction Block category	Frequency band	Frequencies [MHz]	Auction Blocks	Spectral Limit	Minimum price [CZK million per Auction Block]	Activity points [points per Auction Block]
A1	700 MHz paired spectrum	703–733/ 758–788	1 abstract block 2×10 MHz	2×10 MHz  (2×20 MHz) <sup>51</sup>	1,400	20
A2			2 abstract blocks 2×5 MHz		700	10
A3			1 abstract block 2×10MHz		1,120	20
B1	3400–3600 MHz unpaired spectrum	3400–3600	2 abstract blocks 20 MHz	60 or 100 MHz <sup>52</sup>	110	1
B2			8 abstract blocks 20 MHz	(80 or 120 MHz) <sup>53</sup>	140	

### 10.2 Basic information

The Auction is a part of the Tender and its purpose is to determine the price and the Auction Winners that, after having complied with all the requirements of the Tender, may become the Allocation Holders of the individual radio frequency segments which are the subject of this Tender.

The Auction is divided into 2 phases:

1. Auction phase – the phase in which Auction Blocks are distributed (using the SMRA auction method) among the Auction Participants that offered the highest price for individual Auction Blocks (Auction Winners) in the final round of the Auction Phase;
2. Distribution of Frequencies – the phase in which specific segments of the radio spectrum being offered are distributed to Auction Winners to an extent and in a structure that corresponds to the Auction Blocks they acquired in the Auction Phase.

The full terms and conditions of the Auction are defined in the Auction Rules which are attached to the Invitation to Tender as Annex 3.

### 10.3 CTU's right to cancel and repeat the Auction Phase

CTU reserves the right to cancel and repeat the Auction Phase according to chapter 4.2 of the Auction Rules. The provisions of chapter 3(d) of the Invitation to Tender will not be affected by this.

---

<sup>51</sup> Increased Spectral Limit in the case that in the first Auction round is not reached enough Activity according to chapter 4.4.8 of the Auction Rules

<sup>52</sup> Spectral Limit set as a total amount of radio frequencies allocated to one Applicant based on this Tender together with the allocation of radio frequencies in the 3600–3800 MHz frequency band of which the Applicant is a holder.

<sup>53</sup> Increased Spectral Limit according to chapter 4.4.9 of the Auction Rules

#### **10.4 Closing of the Auction**

CTU will inform all Applicants about the closing of the Auction and the distribution of the radio frequencies acquired in the Auction to the Auction Winners using the procedure according to chapter 7 of the Auction Rules.

## 11 PROCEDURE FOLLOWED BY CTU AFTER THE CLOSING OF THE AUCTION

CTU will decide on the result of the Tender based on the recommendations submitted by the Selection Committee in the form of a report on the process and results of the Auction. The report will contain an overview of all the Applications received, the result of the Auction, and the justification of the result. The report must be approved by a majority of votes of the members of the Selection Committee, certified with their signatures, and delivered to CTU within 30 days of the closing of the Auction together with all materials and document serving as a basis for the report.

CTU will decide on the result of the Tender using the procedure according to Section 21(8) of the Act after the Selection Committee's report has been delivered.

CTU will reject the Applications of unsuccessful Applicants based on the result of the Auction stated in the report of the Selection Committee within two months of the closing of the Auction. CTU will then request that the successful Applicants pay the outstanding balance of the Total Price corresponding to the difference between the Security and the Total Price following the date on which the decision to reject the Applications of unsuccessful Applicants enters into force. After the payment of the outstanding balance of the Total Price, the CTU Council Chair will decide, within 30 days, on the granting of the allocation of radio frequencies according to Section 22 of the Act.

The outstanding balance of the Total Price must be paid in Czech crowns (CZK) to CTU's account specified for payment of the price for the granting of the right to use radio frequencies specified in chapter 4 of the Invitation to Tender. The payment shall include as the payment identification number (*variabilní symbol*) the company identification number (IČO) of the Auction Winner. The amount must be paid within 15 days of the date of receiving the request for payment. The amount shall be deemed to have been paid when credited to the CTU's bank account specified in the request for payment.

If the Auction Winner fails to pay the outstanding balance of the Total Price within 15 days of the date of receipt of the request for payment the radio frequencies which were to be allocated to that Auction Winner will not be allocated within the Tender.

If the Auction Winner has only paid a portion of the outstanding balance of the Total Price within the 15 days of the date of receiving the request for payment, CTU will ask the Auction Winner to pay the remaining part of the outstanding balance of the Total Price within an additional period of three days. If the Auction Winner fails to pay the remaining part of the outstanding balance of the Total Price within this additional period CTU will proceed as if the Auction Winner did not pay the Total Price and will return the portion of the price which has been paid to the Auction Winner on the bank account from which this portion of the price was paid. CTU will reject the Application if the outstanding balance of the Total Price or any part thereof is not paid within this additional period provided. This is without prejudice to the provisions regarding the forfeiture of the Security and other penalties which CTU may apply in such cases.

CTU will publish a report on the process and results of the Tender within one month of the closing of the Tender and the granting of block allocations of radio frequencies to all Auction Winners, including a list of commitments applies to each Allocation Holder. If one or more radio frequency block allocations is/are issued based on the Tender, CTU will publish the comprehensive Auction Log created by the Electronic Auction System within the same time period.



## **12 CODE OF CONDUCT OF THE APPLICANTS DURING THE TENDER**

The Applicants must refrain from any actions that jeopardise or frustrate the process or result of the Tender throughout the entire Tender process. Such actions include but are not limited to:

- a) Coordination of actions and other sharing of information within the Tender or before the commencement thereof with another Applicant, in particular in matters concerning the amount of the Security paid and Eligibility points, amount of the bids within the Auction or the distribution thereof and the number of Activity points (except for actions foreseen in chapter 5 of the Auction Rules within the Frequency Distribution Phase);
- b) Delay or disruption of the Tender process;
- c) Actions which prevent or jeopardise the participation of another party in the Tender;
- d) Public disclosure of any information on the Tender process before the closing thereof;
- e) Breach of the obligations and rules laid down by this Invitation to Tender and, in particular, the Auction Rules.

An example of actions which CTU would consider to be a breach of the code of conduct according to this chapter 12 of the Invitation to Tender would be actions which result in any Auction Participant submitting a Bid without being prepared to acquire the requested combination of Auction Blocks that are the subject of the Bid for the price offered (and thus in violation of the principle of the binding nature of a Bid required by the Invitation to Tender), e.g., for the purpose of prolonging the auction, preventing another Auction Participant from obtaining Auction Blocks, or otherwise jeopardising or frustrating the process or result of the auction. In this regard, CTU would treat a failure to submit the identical scope of a Bid for a price which is the same as or a lower than the price for which that Auction Participant has already submitted a Bid in previous Auction Rounds, if the submission of such a Bid is possible as a breach of the code of conduct by the Auction Participant according to this chapter 12 of the Invitation to Tender.

CTU would consider actions where any Auction Participant would submit a Bid within the Auction Phase the amount of which is evidently economically unsubstantiated to be also an indication of a breach of the code of conduct according to this chapter 12 of the Invitation to Tender; this includes in particular a situation where the Auction Participant submits, without an objective reason, a Bid within the Auction Round for an Auction Block in a specific Auction Block Category for a higher price although it could have submitted a Bid for the Auction Block in the same Auction Block Category within the Auction Round at a lower price.

In the case of actions inconsistent with the rules according to this chapter 12 of the Invitation to Tender, CTU will decide, in accordance with Section 21(6) of the Act, to exclude the Applicant from further participation in the Tender. If the Applicant commits any acts according to this chapter 12 of the Invitation to Tender the Security of the Applicant deposited by the Applicant according to chapter 9.3 of the Invitation to Tender will be forfeited.

### **13 CANCELLATION OF THE TENDER**

CTU is entitled to cancel and discontinue this Tender in accordance with the provisions of Section 21(6) of the Act. CTU may take such a step at any time, at its own discretion. The Tender may be cancelled, among other reasons, in a situation where the Tender cannot take place due to a technical error or any other circumstances or where the Tender is frustrated due to the actions of the Applicants or other parties, etc. This is without prejudice to the provisions of chapter 3(d) of the Invitation to Tender.

## 14 COMMUNICATION DURING THE TENDER

Within the Tender, CTU defines the options of mutual communication in matters concerning the Tender in the following cases:

- General communication during the Tender – CTU will provide regular information on its website about the process and deadlines of the different acts within the Tender.
- Communication during the different phases of the Tender:
  - 1) Prior to the submission of the Application – possibility to communicate with CTU according to chapter 3(e) of the Invitation to Tender in the form of questions and answers concerning the interpretation of this Invitation to Tender and the essential elements of the Application;
  - 2) Submission of the Application – delivery of the document entitled “*Žádost o udělení práv k využívání rádiových kmitočtů*” (“Application for Granting of the Rights to Use Radio Frequencies”) according to chapter 9.2 of the Invitation to Tender to CTU and the possibility to be present at the opening of envelopes. Upon CTU’s request, the Applicant is obliged to provide additional explanation or amendment of the Application in the case of any ambiguities;
  - 3) Completion of a training of the Electronic Auction System and a pilot auction including the possibility to submit questions about the training completed and the pilot auctions;
  - 4) Auction Phase – information as defined in the Auction Rules;
  - 5) Discussions regarding the distribution of the radio spectrum segments.
- Information provided by CTU during the Tender concerning the closing of the different phases of the Tender and the results thereof:
  - 1) Information on the commencement of the Tender;
  - 2) Information on the evaluation of the qualification part of the Tender and on the results of the qualification process;
  - 3) Information on the commencement of the Auction Phase of the Tender;
  - 4) Information on the closing of the Auction Phase of the Tender and information on the results of the Auction Phase
  - 5) Information on the closing of the Auction and on distribution of radio frequencies to the Auction Winners.

The Applicants are obliged to maintain confidentiality with respect to all facts related to their participation in this Tender.

According to chapter 5 of the Auction Rules, CTU only permits Auction Winners to coordinate their actions before the negotiations concerning the distribution of the radio frequencies based on the results of the Auction and to make an agreement on the final distribution of radio frequencies based on the results of the Auction.

This chapter 14 of the Invitation to Tender is without prejudice to the provisions of the Code of Administrative Procedure and the Act regulating the requirements for the submission and the methods of delivery thereof.

## 15 LIST OF DEFINITIONS AND ABBREVIATIONS

**2G** – second generation of wireless cellular (mobile) technology using digital transmission of radio signal. Primarily voice and mobile data services are provided under 2G networks. In the Czech Republic, second generation of mobile networks was built using GSM standard; for mobile data services modern technologies, such as GPRS and EDGE, are also used in the Czech Republic.

**3G** – third generation of wireless cellular (mobile) technology complying with IMT-2000 specification (International Mobile Telecommunications-2000) specified by the International Telecommunication Union (ITU). In the Czech Republic, third generation is built mainly on UMTS standard (in HSDPA, HSUPA, HSPA, HSPA+ etc. version) and on CDMA2000 standard.

**3K Test 2018** – three-criteria test for mobile services market performed in 2018<sup>54</sup>.

**4G** – fourth generation of wireless cellular (mobile) technology. In the Czech Republic, fourth generation is provided using 3GPP LTE standard (Release 8 and higher), or IEEE 802.16m standard.

**5G** – fifth generation of wireless cellular (mobile) technology complying with IMT-2020 specification (International Mobile Telecommunications-2020) specified by the International Telecommunication Union (ITU).

**5G Standard** – means a standard of electronic communications networks according to 3GPP/ETSI specification including mainly a standard of 5G NR (New Radio) access radio network in an architecture which complies with the requirements of the ETSI TS 123 501 (3GPP TS 23.501) specification and the ETSI TS 138 401 (3GPP TS 38.401) specification or newer.

**Act** – Act No. 127/2005 Sb., on Electronic Communications and on amendment of certain related acts (Electronic Communications Act), as amended. References to specific provisions of the Act may be obsolete after issuing the block allocation of radio frequencies in this Tender due to anticipated Act amendment. If some references to specific provisions of the Act stated in this Invitation to Tender are, after issuing block allocations of radio frequencies in this Tender, obsolete, these references shall be considered as referring to the provision of the Act identical to the provision of the current references.

**Activity** – a scope of Bid of Auction Participant in Auction Round calculates as a sum of active points of all Auction Blocks included in the Bid.

**Agreement on Final Distribution** – a written agreement of all block allocation holders of radio frequencies in the 3400–3800 MHz frequency band on final distribution of radio frequency segments in the 3400–3800 MHz frequency band.

**Allocation Holder** – an Auction Winner who satisfied all terms and conditions of the Tender and to whom a Block Allocation of radio frequencies, which are subject matter of this Tender, was granted.

**Applicant** – a person or entity submitting an Application.

**Applicant Interested in Access** – a provider of electronic communications services who is not a Block Allocation Holder in the 700 MHz frequency band but is interested in provision of retail or wholesale service of high-speed Internet connection by means of electronic communications networks operating in the 700 MHz frequency band.

---

<sup>54</sup><https://www.ctu.cz/sites/default/files/obsah/stranky/223526/soubory/trhmobilnichsluzebt3k-kezverejniverejnaverze.pdf> (Czech version only).

**Application** – an application for granting of rights to use radio frequencies according to Section 21 of the Act.

**Auction** – a form of evaluation of Applications for the granting of rights to use radio frequencies. The Auction is a part of the Tender. Its objective is to determine the price and the holder of individual radio frequency segments. The Auction is held in two phases: the Auction and the Frequency Distribution.

**Auction Block** – a radio spectrum block offered in the Auction. Radio frequency segments, which are a subject matter of the Tender, correspond to individual radio spectrum blocks. Auction Blocks offered under this Tender are defined as specific on one hand, and as abstract on the other hand. A specific Auction Block is defined by a specific radio frequency segment. Any specific radio frequency segment is allocated to abstract Auction Blocks; a specific radio frequency segment will be allocated to such a block based on the second Auction Phase – Frequency Distribution.

**Auction Blocks Categories** – a set of Auction Blocks of the same size and technological specification from one frequency band.

**Auction Categories** – see Auction Blocks Categories.

**Auction Participant** – an Applicant who has fulfilled the qualification requirements indicated in chapter 9.1 of the Invitation to Tender and has received a confirmation of registration in the Auction from CTU.

**Auction Phase** – a phase of the Auction in which the Auction Blocks are distributed among the Auction Participants using the SMRA method. Auction Phase is divided into several Auction Rounds.

**Auction Round** – within an Auction Round, Auction Participants may offer a price bid for individual Auction Blocks offered in the Auction. Each Auction Participant may submit only one Bid in an Auction Round. At the end of each Auction Round, the Electronic Auction System will define, in accordance with rules set out in Annex 3, the Highest Bid Holder and the amount of the Highest Bid for all Auction Block offered.

**Auction Rules** – a document defining rules of an Auction Phase and a Frequency Distribution Phase. This document constitutes Annex 3 to the Invitation to Tender.

**Auction Winner** – an Auction Participant who is the Highest Bid Holder for the Auction Block after the final round of Auction Phase according to terms and conditions defined in the Auction Rules.

**Bid** – a binding price offer submitted by an Auction Participant in an Auction Round for a selected combination of Auction Blocks.

**Business Grouping** – complies with the definition of Business Grouping in Section 71 et seq. of Act No. 90/2012 Coll., on commercial companies and cooperatives (Act on Business Corporations), i.e. in particular controlling and controlled person, persons controlled by a common controlling person, parent company and subsidiary constituting a concern, influenced persons or persons acting in concert. Persons to the benefit of which a trust (trust fund)<sup>14</sup> or any similar construct was established under foreign legal order (e.g. a foundation) or who are to receive performance from the trust are considered members of the Business Grouping.

**Call** – a call of CTU to submit an application for a change of block allocation of radio frequencies as defined in chapter 8.4.3 of the Invitation to Tender.

**CEPT** – European Conference of Postal and Telecommunications Administrations.

**Code of Administrative Procedure** – Act No. 500/2004 Coll., Code of Administrative Procedure, as amended.

**Commission** – the European Commission is one of the main bodies of the European Union. The Commission represents and promotes the general interest of the EU as a whole by proposing and enforcing legislation as well as by implementing policies and the EU budget.

**Commitment to Lease Radio Frequencies** - is defined in chapter 8.5 of the Invitation to Tender.

**CTU** – Czech Telecommunication Office.

**Digital Czech Republic** – a document “Digital Czech Republic” which is a compilation of concepts ensuring requirements for a long-term prosperity in the Czech Republic in the environment of ongoing digital revolution. The concept covers three main pillars (sub-concepts/strategies) which creates one logical unit connected through variety of inter-linkages, but also reflects its aim on various recipients and a diversity given by current legislative: Czech Republic in Digital Europe, Information Strategy of the Czech Republic, Digital Economy and Society. The document was approved by the Government of the Czech Republic based on Government Resolution No. 629 of 3 October 2018.

**Electronic Auction System / EAS** – an information system that enables organisation of the Auction Phase and securing its proper course via a remote access.

**Eligibility** – an authorisation of Auction Participant to submit Bids in an Auction Round. The number of Eligibility points determines the maximum amount of activity points which can be used to submit a Bid in an Auction Round.

**ETSI** – European Telecommunications Standards Institute.

**EU** – European Union.

**Frequency Distribution** – a phase of the Auction with an objective to allocate specific radio frequency segments to Auction Winners.

**Full MVNO** – the term Full MVNO represents a type of virtual mobile operator who uses its own infrastructure for the provision of services to its customers, with an exception concerning radio access network which they rent on the basis of wholesale contract with a host operator. The remaining part of the infrastructure and operation systems, as e.g. network infrastructure including GMSC and HLR and service provisioning systems (SMSC, MMSC, GGSN, IN, etc.) and all following processes (billing, customer care, marketing, sales) are provided by the Full MVNO by their own means, which are out of the scope of the wholesale contract. A Full MVNO thus has in practical terms a full control over the quality of their own services and issues its own SIM cards with their own mobile network code (MNC).

**Highest Bid** – a bid with the highest price for an Auction Block in a relevant Auction Round.

**Highest Bid Holder** – Auction Participant who submits the Highest Bid for an Auction Block in Auction Round, and who is, based on the evaluation of Auction Round and in accordance with the rules set out in Auction Rules, identified as the Highest Bid Holder for the relevant Auction Block.

**Incumbent Operator** – a legal or natural person who is a block allocation holder of radio frequencies in the 800 MHz and/or 900 MHz frequency band as of the last day of the deadline to submit Applications defined in chapter 9.4 of the Invitation to Tender.

**Invitation to Tender** – this document entitled “Invitation to Tender for Granting of the Rights to Use Radio Frequencies to Provide Electronic Communications Networks in the 700 MHz and 3400–3600 MHz Frequency Bands”.

**Individual Authorization** – an individual authorisation to use radio frequencies.

**ITU** – International Telecommunication Union.

**Legitimate Applicant for Lease of Radio Frequencies** - is defined in chapter 8.5 of the Invitation to Tender.

**Legitimate Applicant Interested in National Roaming** – an operator, who is not an Incumbent Operator and who is an Allocation Holder holding block allocation in the 700 MHz and/or 3400–3800 MHz frequency band and who complies with the condition of a coverage of at least 10% of the population of the Czech Republic by means of its own operated electronic communications network using own frequencies solely in the 700 MHz and/or 3400–3800 MHz

frequency band in a technological 5G standard as of the day of initiation of provision of the services under the national roaming agreement, while the electronic communications service provided by its own network shall be operated on at least 500 outdoor sites of base stations pursuant to valid Individual Authorisation. To preserve national roaming right, the Legitimate Applicant Interested in National Roaming is obliged to fulfil a condition of coverage of at least 30% of the population of the Czech Republic by means of its own operated electronic communications network using own frequencies solely in the 700 MHz and/or 3400–3800 MHz frequency band in a technological 5G Standard by 30 June 2025, while the electronic communications services provided by its own networks shall be operated on at least 1,000 outdoor sites of base stations pursuant to valid Individual Authorisation.

**Legitimate Applicant Interested in PPDR** – the Ministry of Interior of the Czech Republic or a person authorized by the Ministry to secure BB-PPDR services for a mobile crisis communication of the crisis communication bodies. There can be only one Legitimate Applicant Interested in PPDR, however, this can be changed based on a written declaration by the Ministry of Interior of the Czech Republic.

**Lessor Obligated to Lease Radio Frequencies** - is defined in chapter 8.5 of the Invitation to Tender.

**Minimum Scope of Bid** – a minimum number of Auction Blocks in one frequency band which must be included in a Bid of individual Auction Participant in each Auction Round, compliance with which will be automatically monitored by the Electronic Auction System.

**National Roaming for PPDR** – is defined in chapter 8.3.2 of the Invitation to Tender.

**PPDR Communication** – a crisis communication of security and emergency bodies through electronic communications network.

**PPDR Services** – security and emergency bodies and providers of crisis management defined in Section 4 of Act No. 239/2000 Coll., on the Integrated Rescue System and on amendment of certain acts (Act on IRS), and in Head II and III of Act No. 240/2000 Coll., on Crisis Management and on amendment of certain acts (Crisis Management Act), or in future legal rules supplementing or amending these definitions.

**Preliminary Analysis** – a document entitled “Analysis of wholesale mobile market” published by CTU<sup>55</sup>.

**Priority BB-PPDR** – is defined in chapter 8.3.1 of the Invitation to Tender.

**Provider Obligated to Provide Priority BB-PPDR** – an Allocation Holder holding block allocation in the 700 MHz frequency band who was granted a block allocation of radio frequencies in the 700 MHz frequency band based on the Tender with a minimum size of 2×10 MHz.

**Qualification** – a phase of the Tender which evaluates whether the Applicants comply with terms and conditions of participation in the Tender defined in chapter 9.1 of the Invitation to Tender.

**RSUP 7** – a part of radio spectrum utilization plan determining terms and conditions to use radio frequencies in the 2700–4200 MHz frequency band. Radio Spectrum Utilization Plan is issued by CTU as the competent body of state administration under Section 108(1)(b) of the Act based on the results of a public consultation conducted under Section 130 of the Act and Decision of the Council of CTU under Section 107(9)(b)(2) of the Act, and for the implementation of Section 16(2) of the Act by means of Measures of General Nature.

**RSUP 10** – a part of radio spectrum utilization plan determining terms and conditions to use radio frequencies in the 470–960 MHz frequency band. Radio Spectrum Utilization Plan is issued by CTU as the competent body of state administration under Section 108(1)(b) of the

---

<sup>55</sup> <https://www.ctu.eu/notice-consultation-preliminary-analysis-wholesale-mobile-market>

Act based on the results of a public consultation conducted under Section 130 of the Act and Decision of the Council of CTU under Section 107(9)(b)(2) of the Act, and for the implementation of Section 16(2) of the Act by means of Measures of General Nature

**Security** – a financial guarantee lodged by the Applicant according to conditions defined in chapter 9.3 of the Invitation to Tender.

**Selection Committee** – a three-membered advisory body of CTU appointed by the Chairman of the Council of CTU for the purpose of recommendation of an appropriate procedure to be followed by CTU in accordance with Section 146(6) of the Code of Administrative Procedure. Selection Committee is appointed before the announcement of the Tender.

**SMRA** – Simultaneous Multiple Round Auction (SMRA) is a form of auction based on simultaneous multiple round auction.

**Spectral Limit** – spectral limits are specified in chapter 6.1 (for the 700 MHz frequency band) and 6.2 (for the 3400–3800 MHz frequency band) of this Invitation to Tender.

**Tender** – a tender for granting of rights to use radio frequencies to provide electronic communications networks in the 700 MHz and 3400–3600 MHz frequency bands announced by this Invitation to Tender.

**Total Price** – a sum of Winning Bids of an Applicant.

**UOHS** – Office for the Protection of Competition.

**Winning Bid** – a Bid submitted by the Auction Winner in the final Auction Round.



## **16 LIST OF ANNEXES**

Annex 1 – Template of the “Application for Granting of the Rights to Use Radio Frequencies”

Annex 2A – Declaration of Acceptance of Commitments by the Applicant (Incumbent Operators)

Annex 2B – Declaration of Acceptance of Commitments by the Applicant (other Applicants)

Annex 3 – Auction Rules

Annex 4 – Tables for Fulfilment of Development Criteria and PPDR Obligations

Annex 5 – Calculations and Measurements for the Purpose of Checking the Coverage of Territory and of Population

Annex 6 – Application for Change of Block Allocation of Radio Frequencies (refarming)

Ms. Hana Továrková  
Chair of the Czech Telecommunication Office Council