

5G

5G Auctions in CEE

November 2021

Q1: Are any frequencies suitable for 5G already allocated?

Q2: Are auctions for any frequencies suitable for 5G currently announced or expected?

Q3: What is the stage of current 5G auctions? What will be the auction method?

Q4: Have any operators already launched commercial 5G?

 Czech Republic	
Q1	700 MHz; 3.4–3.6 GHz; and 3.6–3.8 GHz
Q2	All frequencies have been allocated.
Q3	<p>The auction of 700 MHz and 3.4–3.6 GHz frequencies has been completed. The auctioned frequencies were distributed between five participants (auction terms; auction results):</p> <ul style="list-style-type: none">• T-Mobile Czech Republic a.s. was awarded the 2x10 MHz auction block in the 700 MHz band, reserved for a new market entrant, as well as three 20 MHz blocks in the 3.4–3.6 GHz band;• O2 Czech Republic a.s. was awarded the 2x10 MHz auction block in the 700 MHz band, with a proviso of adhering to national roaming stipulations and the provision of PPDR services, as well as one 20 MHz auction block in the 3.4–3.6 GHz band;• Vodafone was awarded two 2x5 MHz blocks in the 700 MHz frequency band and one 20 MHz block in the 3.4–3.6 GHz band;• CentroNet, a.s. was awarded four 20 MHz auction blocks in the 3.4–3.6 GHz band; and• Nordic Telecom 5G a.s. was awarded one 20 MHz block in the 3.4–3.6 GHz band. <p>The proceeds from the auction totalled approximately EUR 212 million.</p> <p>Additionally, on 16 March 2021, the Czech Telecommunication Office amended its frequency utilisation plan for the 2200–2700 MHz band, enabling the use of 2.6 GHz frequencies for 5G operation.</p>
Q4	Commercial 5G launched by all three major mobile operators – O2, Vodafone and T-Mobile.
 Slovakia	
Q1	700 MHz, 900 MHz; 1800 MHz; 3.4–3.8 GHz
Q2	Additional auction of 1500 MHz and 2.6 GHz frequencies is envisioned.
Q3	<p>The auction of 700 MHz, 900 MHz and 1800 MHz frequencies has been completed. The auctioned frequencies were distributed between four participants (auction terms for 700 MHz and 900 MHz; auction terms for 1800 MHz):</p> <ul style="list-style-type: none">• Orange Slovensko, O2 Slovakia and Slovak Telekom were awarded the 2x10 MHz auction block in the 700 MHz band;• O2 Slovakia was awarded the 2x4,2 MHz auction block in the 900 MHz band; and• O2 Slovakia, Slovak Telekom and SWAN Mobile, were awarded the 2x3 MHz auction block in the 1800 MHz band. <p>The total amount that the state received for the tendered frequencies is EUR 100,229,000.</p> <p>The Slovak regulating authority has revealed its plans to auction off frequencies in the 1500 MHz and 2.6 GHz band within the first half of 2022. However, an official auction invitation has not yet been published.</p>
Q4	Commercial 5G launched by all major mobile operators – O2, 4ka, Orange and Slovak Telekom.

Hungary

Q1	700 MHz, 2100 MHz, 2600 MHz and 3600 MHz
Q2	All frequencies have been allocated.
Q3	<p>The sale has been completed. In the 700 MHz frequency band, intense competition developed between service providers, while in the 2600 MHz band, no service provider submitted a bid.</p> <p>The frequencies have been allocated as follows:</p> <ul style="list-style-type: none">• Telekom Hungary received 2x10 MHz at frequency 700 MHz, 2x10 MHz at frequency 2100 MHz, 120 MHz at frequency 3600 MHz.• Telenor received 2x5 MHz at frequency 700 MHz, 140 MHz at frequency 3600 MHz.• Vodafone received 2x10 MHz at frequency 700 MHz, 2x5 MHz at frequency 2100 MHz, 50 MHz at frequency 3600 MHz.
Q4	Commercial 5G launched by all three major mobile operators.

Romania

Q1	None yet.
Q2	800 MHz, 2600 MHz and 3.4-3.8 GHz
Q3	<p>The auction for frequency usage rights for the allocation of 195 MHz available in the 800 MHz, 2600 MHz and 3400-3600 MHz bands has been announced by the Romanian regulating authority, ANCOM. Initial bids may be submitted by 15 November 2021, 17:00 EET.</p> <p>Moreover (ANCOM) has launched the competitive selection procedure in view of awarding certain frequency usage rights in the 800 MHz, 2600 MHz and 3400-3600 MHz bands.</p> <p>The auction will be organised as a competitive selection procedure and the minimum amount of the license fee is the RON equivalent of:</p> <ul style="list-style-type: none">• EUR 22,000,000, for a block size of 2x5 MHz in the radio frequency sub-bands 791-796 MHz / 832-837 MHz;• EUR 4,300,000 for a block size of 2x5 MHz in the radio frequency sub-bands 2530-2570 MHz /2650-2690 MHz;• EUR 3,500,000 for a block size of 15 MHz in the radio frequency sub-bands 2600-2615 MHz;• EUR: 700,000, for a block size of 1x5 MHz in the radio frequency sub-band 3400-3490 MHz. <p>Additionally, in the past six months, the following important documents have been adopted:</p> <ul style="list-style-type: none">— Law 163/2021 on the conditions for the deployment of 5G networks (the “5G Law”) – published on 11 June, 2021;— The Government Decision establishing the minimum starting prices of the auction and the payment schedule – published on 11 October, 2021;— The Decision issued by ANCOM on the selection procedure for the granting of rights to use radio frequencies – published on 8 October, 2021
Q4	None yet.

Bulgaria

Q1	3.6 GHz
Q2	The 700 MHz, 800 MHz, and 2600 MHz (potential) frequencies have not yet been allocated and auctions for them are currently not envisioned.
Q3	<p>The auction of 3.6 GHz frequencies has been completed. The auctioned frequencies were distributed between three participants (auction results):</p> <ul style="list-style-type: none">• A1 Bulgaria was awarded a 100 MHz auction block in the 3.6-3.7 GHz band;• Bulgarian Telecommunications Company (BTC) (commercial name: Vivacom) was awarded a 100 MHz auction block in the 3.7-3.8 GHz band; and• Telenor Bulgaria was awarded a 100 MHz block in the 3.5-3.6 GHz frequency band. <p>The proceeds from the auction totalled approximately BGN 13 million (approximately EUR 6.8 million).</p> <p>Additionally, the Bulgarian regulating authority has drafted a set of bills concerning new rules for the use of the radio frequency spectrum.</p>
Q4	Commercial 5G launched by all three major mobile operators.



Serbia

Q1	None yet.
Q2	2500–2690 MHz; 3.4–3.8 GHz; 694–790 MHz (expected soon)
Q3	5G auctions are yet to be announced. According to the latest statements of the Ministry of Trade, Tourism and Telecommunications, it is expected that the auction will be held in the first half of 2022.
Q4	None yet.



Ukraine

Q1	None yet.
Q2	700 MHz and 3.4–3.8 GHz bands.
Q3	The Government has postponed the announcement of tenders for 700 MHz and 3.4–3.8 GHz bands from October 2021 to June 2022. Parliament has adopted a new Bill on Electronic Communications that permits the leases of frequency spectrum and shared use of frequencies and equipment in line with EU practices. The Bill enters into force on 1 January 2022.
Q4	None yet.



Turkey

Q1	None yet.
Q2	The suitable frequencies are currently being tested.
Q3	5G auctions are expected to be held in 2022. The regulatory body has granted permission for 5G testing to the 4G operators in the three largest cities in Turkey. In this respect, Turkcell will conduct tests in Istanbul and Izmir within the 3.5 and 2.6 GHz frequency bands, Vodafone will conduct tests in Istanbul and Ankara within the 3.5 and 3.7 GHz frequency bands, while Turk Telekom Mobile will conduct tests in Istanbul within the 3.5 GHz frequency band. According to the announcements made by government officials, Turkey aims to develop its domestic infrastructure for 5G technology before launching an auction for 5G.
Q4	Testing operation only.



Kazakhstan

Q1	None yet.
Q2	3.6–3.9 GHz
Q3	A draft law regulating 5G-related matters is being prepared in parliament, and the use of auctions or other methods for the commercialisation of 5G will be decided after the adoption of the law.
Q4	5G was tested in certain areas in the cities of Nur-Sultan and Almaty. It will also be tested in the city of Shymkent.