



EUROPEAN COMMISSION  
DIRECTORATE-GENERAL FOR COMMUNICATIONS NETWORKS, CONTENT AND  
TECHNOLOGY

Connectivity  
**Radio Spectrum Policy Group**  
**RSPG Secretariat**

Brussels, 23 November 2022

**RSPG22-028 FINAL**

## **RADIO SPECTRUM POLICY GROUP**

### **State of play regarding award of 5G pioneer bands**

*The attached table represents information as of 23/11/2022. The information has been provided by the RSPG Members and Observers.*

Country	700 MHz			3.4-3.8 GHz			24.25-27.5 GHz		
	Public consultation	Peer review	Award	Public consultation	Peer review	Award	Public consultation	Peer review	Award
<b>Austria</b>	September 2019	May 2019	September 2020	February 2018	April 2019	March 2019	Aug 2019	2023	<i>Expected 2023</i>
<b>Belgium</b>	July 2017		Band has been awarded in June 2022.	June 2017		Band has been awarded in June 2022.	June 2019		No award planned due to lack of market demand.
<b>Bulgaria</b>	<i>August 2020</i>		<i>In 2022, a new public consultation is planned.</i>	December 2020 – January 2021		May 2021	January – February 2021		<i>In 2022, a new public consultation is planned</i>
<b>Croatia</b>	April 2021	10 <sup>th</sup> May 2021*	12 August 2021	April 2021	10 May 2021*	12 August 2021	April 2021	10 <sup>th</sup> May 2021*	12 August 2021
<b>Cyprus</b>	September 2019		<i>December 2020</i>	September 2019		<i>December 2020</i>	September 2019		<i>Not expected in 2020 (subject to clear market demand)</i>
<b>Czechia</b>	June 2019 March 2020 June 2020		January 2021	3.6-3.8 GHz 2017 3.4-3.6 GHz June 2019 March 2020 June 2020	2017	August 2017  January 2021	December 2019 August 2020		No award planned 26.5-27.5 GHz open for non-commercial

Country	700 MHz			3.4-3-8 GHz			24.25-27.5 GHz		
	Public consultation	Peer review	Award	Public consultation	Peer review	Award	Public consultation	Peer review	Award
									experiments in October 2020
<b>Denmark</b>	March 2018		March 2019	December 2020		April 2021	August 2018 and December 2020		April 2021
<b>Estonia</b>	July 2014 and November 2019	June 2022	November 2022	April 2018	January 2022	July 2022	November 2019		<i>Expected in February 2023</i>
<b>Finland</b>			November 2016	May 2018	April 2019	October 2018	February 2020		June 2020
<b>France</b>			November 2015	July 2019	September 2019	October 2020	1 <sup>st</sup> public consultation in Jun 2018 New public consultation of market demand on May-September 2022		<i>On-going process to encourage trials in various sectors</i>
<b>Germany</b>			June 2015			June 2019	<i>October 2018 February 2020 August 2020</i>	n.a.	<i>(Individual frequency assignments: - on application - for 15 years with the possibility of extension - since end</i>

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	Public consultation	Peer review	Award	Public consultation	Peer review	Award	Public consultation	Peer review	Award
									of 2020)
<b>Greece</b> (Individual frequency rights of use assigned for the three 5G bands for 15 years with the possibility of 5 years extension, starting on the 16 <sup>th</sup> December 2020)	August – September 2020	May 2021	Completed December 2020	August – September 2020	May 2021	Completed December 2020 10 MHz (3.400-3.410 GHz) have been reserved for by the Ministry of Digital Governanc e for pilot projects. A pilot is already ongoing with another two expected to start by end of August 2022.	August – September 2020	May 2021	Completed December 2020 200 MHz (24.250 – 24.450 GHz) have been reserved by the Ministry of Digital Governanc e on secondary basis for pilot project
<b>Hungary</b>	June 2019	December 2018	April 2020	June 2019	December 2018	April 2020	July 2017, December 2019 and March 2022	TBD	There is no market demand for 5G. The existing operators

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	Public consultation	Peer review	Award	Public consultation	Peer review	Award	Public consultation	Peer review	Award
									(4 MNO and 1 broadcasting company) want to use the band for P-P purposes until the expire date of their licences.
<b>Ireland</b>	Completed Dec 2020: ComReg doc: 20/122	Completed- 30 June 2020	<i>Underway: April 2021 ComReg Doc:21/40  Legal Appeal pending: ComReg doc: 21/04R</i>	Completed: December 2015	Completed: January 2018	Completed: May 2017	Study determined there is no current demand – ComReg doc: 21/07	NA	NA
<b>Italy</b>	March 2018	December 2018	October 2018 Spectrum usable nationally from 1 July 2022	3.4-3.6 GHz January 2018 (for 5G use)  3.6-3.8 GHz March 2018	December 2018	3.4-3.6 GHz Extended licenses for 5G use November 2018  3.6-3.8 GHz October 2018	March 2018	December 2018	October 2018

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	Public consultation	Peer review	Award	Public consultation	Peer review	Award	Public consultation	Peer review	Award
<b>Latvia</b>	November 2021		Awarded on 16 December 2021. Available for use from February 2022.	March 2018		September 2018	<i>At the moment no clear market demand. 1 GHz band is made available for operators to carry out pilot projects, testbeds, cooperation initiatives etc. Replanning of the band starting from 2024 is foreseen. During 2021 a consultation on most optimal use of the band is planned</i>		Before 2024 (depending on results of public consultation)
<b>Lithuania</b>	May 2018 June 2021 October 2021	22 June 2021*	September 2022	May 2018 March 2019 January 2021 February 2021 March 2022		September 2022	April 2020		1.2 GHz is available. Waiting for requirements from MNO.
<b>Luxembourg</b>	May 2019		August 2020	May 2019		August 2020	October 2020		Public consultation in Q4-2020 showed no

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	Public consultation	Peer review	Award	Public consultation	Peer review	Award	Public consultation	Peer review	Award
									immediate demand from stakeholders; award postponed until demand apparent; possibility to request temporarily licences.
<b>Malta</b>	5 February 2021	23 March 2021*	Subject to market demand (part of the band is used for 5G trials)	5 February 2021	23 March 2021*	<p>3.5-3.6 GHz: <i>Aug. 2021</i></p> <p>3.6-3.7 GHz: <i>May 2021</i></p> <p>3.7-3.8 GHz: <i>Oct. 2021</i></p> <p><i>The band 3.4-3.5 GHz remains unassigned due to a lack of market</i></p>	5 February 2021	23 March 2021*	Subject to market demand

Country	700 MHz			3.4-3-8 GHz			24.25-27.5 GHz		
	Public consultation	Peer review	Award	Public consultation	Peer review	Award	Public consultation	Peer review	Award
<b>Netherlands</b>	December 2019 – February 2020		<i>July 2020</i>	May/June 2021 July/August 2022	24 June 2021*	<i>interest.</i> Aim is to have national licenses for 300 MHz of spectrum available by Dec 1, 2023. Timeline however depends on final decision concerning band plan and migration of existing users	New public consultation is planned in 2023 to gauge market demand		TBD, depending on outcome public consultation
<b>Poland</b>	Preconsultation August 2018 and 2019 <i>Expected Q1 2022</i>		<i>Before 30 June 2022</i>	Preconsultation August 2018 Consultation December 2019/January 2020 Consultation on the block "0" (3410-3480 MHz)		<i>Expected Q2 2022</i>	August 2018 Q3 2020		<i>Expected 2023 (subject of market demand)</i>



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	Public consultation	Peer review	Award	Public consultation	Peer review	Award	Public consultation	Peer review	Award
				<i>December 2021-March 2022</i>					
<b>Portugal</b>	<p>April 2018 &amp; Oct.2019 (RoU and award procedure)</p> <p>Consultation on the auction rules was launched Q1 2020, it was suspended due to pandemic and ended in July 2020.</p>		<p>Initially planned for Q2 2020, due to the suspension of the public consultation, it started on the Q4 2020. The licences were awarded in 2021.</p>	<p>April 2018 &amp; Oct.2019 (RoU and award procedure)</p> <p>Consultation on the auction rules was launched Q1 2020, it was suspended due to pandemic and ended in July 2020.</p>		<p>Initially planned for Q2 2020, due to the suspension of the public consultation, it started on the Q4 2020. The licences were awarded in 2021.</p>	<p>April 2018 (1<sup>st</sup> consultation).</p> <p>A second consultation took place between December 2021 and March 2022 and the contributions are currently under analysis.</p> <p>By decision of 13 July 2022, ANACOM approved the report of the public consultation</p>		<p>TBD according to market demand.</p>
<b>Romania</b>	<p>First public consultation: July-August 2019 (but the</p>		<p>The auction phase of the 2022 selection procedure has</p>	<p>First public consultation: May-June 2015.</p>		<p>An amount of 255 MHz (FDD and TDD) in the</p>	<p>First public consultation (by a strategy for a multi-band</p>		<p>In 2019: the 26 GHz band was postponed</p>

Country	700 MHz			3.4-3.8 GHz			24.25-27.5 GHz		
	Public consultation	Peer review	Award	Public consultation	Peer review	Award	Public consultation	Peer review	Award
	multi-band auction in WAPECS bands was postponed). Second public consultation: July-August 2022.		finished on 15.11.2022. Three FDD blocks (2x5 MHz each) were awarded (valid during 2023-2047), out of six FDD blocks and three SDL blocks, that were available. The licences will be issued in December 2022.	Second public consultation: July-August 2019 (but the multi-band auction in WAPECS bands was postponed). Third public consultation: July-August 2021. Fourth public consultation: July-August 2022.		3.4-3.8 GHz band has already been allotted by auction since 2015 (valid during 2016-2025). After the refarming from FDD to TDD, an amount of 90 MHz in the 3.4-3.6 GHz band (not awarded in 2015) was put to auction in 2021, but only 5 MHz TDD were allotted (valid during 2022-2025).	auction in WAPECS bands, including the 26 GHz band): February-March 2019. Second public consultation (by a dedicated questionnaire on market demand in the 26 GHz band): August-September 2022.		after the finalisation of the multi-band auction for the rest of the WAPECS bands (not yet awarded at that time). In 2022: there was no interest expressed by the market. ANCOM will issue a new questionnaire during 2024-2025, in order to assess again the market demand.

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	Public consultation	Peer review	Award	Public consultation	Peer review	Award	Public consultation	Peer review	Award
						The auction phase of the 2022 selection procedure has finished on 15.11.2022. An amount of 310 MHz TDD was awarded (valid during 2026-2047), out of 400 MHz available. The licences will be issued in December 2022.			
<b>Slovakia</b>	December 2019		December 2020	3.4-3.6 GHz: October 2014  3.6-3.8 GHz: November 2013 New tender preparation.		3.4-3.6 GHz: May 2016  3.6-3.8 GHz July 2017  3410 –	Public discussion was held in November 2020.		Public discussion result - no interest in the market at a present time. Not

Country	700 MHz			3.4-3.8 GHz			24.25-27.5 GHz		
	Public consultation	Peer review	Award	Public consultation	Peer review	Award	Public consultation	Peer review	Award
				Public consultation started in December 17 <sup>th</sup> 2021. Deadline for submitting contributions or proposals is January 31 <sup>st</sup> 2022.		3800 MHz awarded to four tender participants. Tender has started 01.03.2022. Finished 05.05.2022. Three of them 100 MHz (each one), one of them 90 MHz. Licence validity 09.2025 – 12.2045.			expected to take place before 2023 (subject of negotiation with military).
<b>Slovenia</b>	Q3 2020	December 2018 October 2020	June 2021	Q3 2020 (3.42-3.8 GHz) Q2 2022 (3.4-3.42 GHz)	October 2020 June/July 2022	June 2021	Q3 2020	October 2020	June 2021
<b>Spain</b>	2017 and 2019	December 2020	July 2021	2017		July 2018 20 MHz awarded in April 2021	2017, 2019 and 2021	30 September 2022*	2022
<b>Sweden</b>	July 2018	May 2018 February	December 2018	July 2019	April 2019	National licenses	December 2019		November 2021 Local

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	Public consultation	Peer review	Award	Public consultation	Peer review	Award	Public consultation	Peer review	Award
		2019				January 2021 Local licenses November 2021	May 2022		licences in 24,25 – 25,1 GHz
Norway	2018		June 2019	August 2019		September 2021	September 2022		Planned award in 2023.
Iceland	2015		2017, except the lowest 2x10 part which is planned to be assigned 2021/2022	2015		3.5-3.8 GHz already assigned for 5G  3.4 GHz planned for auction in 2021/2022			No clear market demand.  Not expected to be awarded in the upcoming award process in 2021/2022
Serbia	Public call for expressions of interest to use radio frequencies from the 700 MHz band – May 2021 – 4		Expected in 2023 (depends on the decision of the competent Ministry)	Public call for expressions of interest to use radio frequencies from the 3.4-3.8 GHz band – May 2021 –		Expected in 2023 (depends on the decision of the competent Ministry)			Not expected to be awarded in the upcoming award process

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	Public consultation	Peer review	Award	Public consultation	Peer review	Award	Public consultation	Peer review	Award
	parties submitted their expression of interest			4 parties submitted their expression of interest					
North Macedonia	2020,2021		2022, 2x20 MHz assigned for 5G (two existing mobile operators)  lowest 2x10 MHz not awarded (reserved for third mobile network operator)	2020, 2021		2022, 3.6-3.8 GHz assigned for 5G (two existing mobile operators)  3.5-3.6 GHz not awarded (reserved for third mobile network operator)	2020, 2021		No market demand.

\*Peer Review Forum held in line with the provisions of Article 35 of the [European Electronic Communications Code](#).