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DIRECTORATE-GENERAL FOR COMMUNICATIONS NETWORKS, CONTENT AND
TECHNOLOGY

Digital Decade and Connectivity
Radio Spectrum Policy Group
RSPG Secretariat

Brussels, 14 June 2023

RSPG23-018 FINAL

RADIO SPECTRUM POLICY GROUP

State of play regarding award of 5G pioneer bands

The attached table represents information as of 06/06/2023. 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
Austria	September 2019	May 2019	September 2020	February 2018	April 2019	March 2019	Aug 2019 Public consultations on principles in autumn 2022, public consultations on the award procedure is planned for summer 2023.	2023	<i>The auction is planned for end of 2023 / beginning 2024.</i>
Belgium	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.
Bulgaria	November 2022		<i>In 2023, a new public consultation is planned.</i>	December 2020 – January 2021		May 2021	August 2022		<i>November 2022</i>
Croatia	April 2021	10 th May 2021*	12 August 2021	April 2021	10 May 2021*	12 August 2021	April 2021	10 th May 2021*	12 August 2021
Cyprus	September 2019		<i>December 2020</i>	September 2019		<i>December 2020</i>	September 2019		<i>Not expected in 2020 (subject to clear market</i>

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									<i>demand)</i>
Czechia	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 experiments in October 2020
Denmark	March 2018		March 2019	December 2020		April 2021	August 2018 and December 2020		April 2021
Estonia	July 2014 and November 2019		November 2022	April 2018	January 2022*	July 2022	November 2019		<i>May 2023</i>
Finland			November 2016	May 2018	April 2019	October 2018	February 2020		June 2020
France			November 2015	July 2019	September 2019	October 2020	1 st 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>
Germany			June 2015			June 2019	October 2018 February 2020 August 2020	n.a.	<i>(Individual frequency assignments: - on</i>

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									<i>application - for 15 years with the possibility of extension - since end of 2020)</i>
Greece (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 th 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 – 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

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						August 2022.			
Hungary	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 (4 MNO and 1 broadcasting company) want to use the band for P-P purposes until the expire date of their licences.
Ireland	December 2020	June 2020	Jan 2023 ComReg Document 23/06 refers	December 2015	January 2018	May 2017	No current demand – ComReg document 21/07 refers	NA	NA
Italy	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	March 2018	December 2018	October 2018

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						3.6-3.8 GHz October 2018			
Latvia	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)
Lithuania	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.

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Luxembourg	May 2019		August 2020	May 2019		August 2020	October 2020		Public consultation in Q4-2020 showed no immediate demand from stakeholders; award postponed until demand apparent; possibility to request temporarily licences.
Malta	5 February 2021	23 March 2021*	Subject to market demand	5 February 2021	23 March 2021*	<p>3.5-3.6 GHz: Aug. 2021</p> <p>3.6-3.7 GHz: May 2021</p> <p>3.7-3.8 GHz: Oct. 2021</p> <p>The band 3.4-3.5 GHz</p>	5 February 2021	23 March 2021*	Subject to market demand

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						<i>remains unassigned due to a lack of market interest.</i>			
Netherlands	December 2019 – February 2020		<i>July 2020</i>	May/June 2021 July/August 2022	24 June 2021*	Award date is uncertain due to current legal procedure	Public consultation in 2020 showed limited market demand		Award policy is subject to market demand, which will be investigated again in 2023/2024
Poland	<i>Expected 2023</i>		<i>Expected 2024</i>	Preconsultation August 2018 Consultation December 2019/January 2020 Consultation on the block "0" (3410-3480 MHz) December 2021-March 2022		<i>Expected Q3 2023</i>	Subject of market demand		Subject of market demand

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				<p>Consultation 3480-3800 MHz, first round from 2022-12-20 to 2023-01-31</p> <p>Consultation 3400-3800 MHz, second round from 2023-04-6 to 2023-05-12</p>					
Portugal	<p>April 2018 & 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 & 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</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</p>	<p>April 2018 (1st consultation).</p> <p>A second consultation took place between December 2021 and March 2022.</p> <p>By decision of 13 July 2022, ANACOM</p>		<p>TBD according to market demand.</p>

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	Public consultation	Peer review	Award	Public consultation	Peer review	Award	Public consultation	Peer review	Award
				2020.		2021.	approved the report of the public consultation.		
Romania	First public consultation: July-August 2019 (but the multi-band auction in WAPECS bands was postponed). Second public consultation: July-August 2022.		The auction phase of the 2022 selection procedure has 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.	First public consultation: May-June 2015. 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.		An amount of 255 MHz (FDD and TDD) in the 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	First public consultation (by a strategy for a multi-band 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.		In 2019: the 26 GHz band was postponed 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

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						<p>auction in 2021, but only 5 MHz TDD were allotted (valid during 2022-2025). 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.</p>			2024-2025, in order to assess again the market demand.
Slovakia	December 2019		December 2020	December 2021 – January 2022		<p>3.4-3.6 GHz: May 2016</p> <p>3.6-3.8 GHz</p>	August 2022		Public discussion result – persistent disinterest

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						July 2017 3410 – 3800 MHz awarded in May 2022 (100 MHz for three operators, 90 MHz for one operator) Licence validity 09.2025 – 12.2045.			on the market. Next public discussion in planned on the end of 2023. Part of the band (27,1 – 27,5 GHz) is subject of negotiation with military.
Slovenia	<i>Q3 2020</i>	December 2018 October 2020	<i>June 2021</i>	Q3 2020 (3.42-3.8 GHz) Q2 2022 (3.4-3.42 GHz)	October 2020 <i>June/July 2022</i>	<i>June 2021</i>	Q3 2020	October 2020	<i>June 2021</i>
Spain	2017 and 2019	December 2020	July 2021	2017		July 2018 20 MHz awarded in April 2021	2017, 2019 and 2021	30 September 2022*	December 2022 (450 MHz reserved for verticals, first come-first served approach)

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	Public consultation	Peer review	Award	Public consultation	Peer review	Award	Public consultation	Peer review	Award
Sweden	July 2018	May 2018 February 2019	December 2018	July 2019	April 2019	National licenses January 2021 Local licenses November 2021	December 2019 May 2022		November 2021 Local licences in 24,25 – 25,1 GHz
Norway	2018		June 2019	August 2019		September 2021	September 2022 and May 2023		Planned award in 2023.
Iceland	2015		2017, the lowest 2x10 part assigned 2022	2015		3.5-3.8 GHz already assigned for 5G 3.4 GHz award waiting for a market demand			No clear market demand.
Serbia	Public call for expressions of interest to use radio frequencies from the 700 MHz band – May 2021 – 4 parties submitted their expression of		Expected in 2023/2024 (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 – 4 parties submitted their		Expected in 2023/2024 (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
	interest			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.
Liechtenstein	November 2022		December 2022	November 2022		December 2022			No market demand at this time

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