

EUROPEAN COMMISSION

DIRECTORATE-GENERAL FOR COMMUNICATIONS NETWORKS, CONTENT AND TECHNOLOGY

Connectivity
Radio Spectrum Policy Group
RSPG Secretariat

Brussels, 15 February 2023

RSPG23-002 FINAL

RADIO SPECTRUM POLICY GROUP

State of play regarding award of 5G pioneer bands

The attached table represents information as of 09/02/2023. 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	2023	Expected 2023 Public consultatio ns on principles in autumn 2022 and public consultatio ns on award procedure planned in 2023
Belgium	July 2017		Band has been awarded in June 2022.	June 2017		Band has been awar ded in June 2022.	June 2019		No award planned due to lack of market demand.
Bulgaria	August 2020		In 2022, a new public consultation is planned.	December 2020 – January 2021		May 2021	January – February 2021		In 2022, a new public consultatio n is planned
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		December 2020	September 2019		December 2020	September 2019		Not expected in 2020

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
									(subject to clear market demand)
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 experiment s 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	June 2022	November 2022	April 2018	January 2022	July 2022	November 2019		Expected in March 2023
Finland			November 2016	May 2018	April 2019	October 2018	February 2020		June 2020
France			November 2015	July 2019	September 2019	October 2020	1st public consultation in Jun 2018 New public consultation of market demand on May- September 2022		On-going process to encourage trials in various sectors
Germany			June 2015			June 2019	October 2018	n.a.	(Individual

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
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 16th December	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	February 2020 August 2020 August — September 2020	May 2021	frequency assignment s: - on application - for 15 years with the possibility of extension - since end of 2020) Completed December 2020 200 MHz (24.250 – 24.450 GHz) have been reserved by the Ministry of Digital Governanc
2020)						projects. A pilot is			e on secondary
						already ongoing			basis for pilot
						with another			project

Country		700 MHz			3.4-3-8 GHz		24	.25-27.5 GHz	2
	Public consultation	Peer review	Award	Public consultation	Peer review	Award	Public consultation	Peer review	Award
						two expected to start by end of 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 broadcastin g company) want to us the band for P-P purposes until the expire date of their licences.
Ireland	Completed December 2020	Complete d 30 June 2020	Completed 12 Jan 2023 ComReg Doc:23/06	Completed: December 2015	Completed: January 2018	Completed: May 2017	Study determined there is no current demand - ComReg doc: 21/07	NA	NA
Italy	March 2018	December	October 2018	3.4-3.6 GHz	December	3.4-3.6 GHz	March 2018	Decembe	October

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
		2018	Spectrum usable nationally from 1 July 2022	January 2018 (for 5G use) 3.6-3.8 GHz March 2018	2018	Extended licenses for 5G use November 2018 3.6-3.8 GHz October 2018		r 2018	2018
Latvia	November 2021		Awarded on 16 December 2021. Available for use form February 2022.	March 2018		September 2018	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 consolation on most optimal use of the band is planned		Before 2024 (depending on results of public consultatio n)
Lithuania	May 2018	22 June	September	May 2018		September	April 2020		1.2 GHz is
	June 2021	2021*	2022	March 2019		2022			available.

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
	October 2021			January 2021 February 2021 March 2022					Waiting for requiremen ts from MNO.
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*	3.5-3.6 GHz: Aug. 2021 3.6-3.7 GHz: May 2021 3.7-3.8 GHz:	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
						Oct. 2021			
						The band 3.4-3.5 GHz remains unassigned due to a lack of market interest.			
Netherlands	December 2019 – February 2020		July 2020	May/June 2021 July/August 2022	24 June 2021*	Award planned for autumn 2023. Band part 3450- 3750 MHz will be auctioned for national use.	New public consultation is planned in 2023 to gauge market demand		TBD, depending on outcome public consultatio n
Poland	Expected 2023		Expected 2024	Preconsultation August 2018 Consultation December 2019/January 2020 Consultation on the block "0" (3410-3480 MHz) December		Expected Q3 2023	Subject of market demand		Subject of 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
				2021-March 2022 Consultation 3480-3800 MHz from 2022-12-20 to 2023-01-31					
Portugal	April 2018 & Oct.2019 (RoU and award procedure) Consultation on the auction rules was launched Q1 2020, it was suspended due to pandemic and ended in July 2020.		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.	April 2018 & Oct.2019 (RoU and award procedure) Consultation on the auction rules was launched Q1 2020, it was suspended due to pandemic and ended in July 2020.		Initially planned for Q2 2020, due to the suspension of the public consultatio n, it started on the Q4 2020. The licences were awarded in 2021.	April 2018 (1st consultation). A second consultation took place between December 2021 and March 2022. By decision of 13 July 2022, ANACOM approved the report of the public consultation.		TBD according to market demand.
Romania	First public consultation:		The auction phase of the	First public consultation:		An amount of 255 MHz	First public consultation (by		In 2019: the 26 GHz

Country		700 MHz			3.4-3-8 GHz		24.25-27.5 GHz			
-	Public	Peer	Award	Public	Peer	Award	Public	Peer	Award	
	consultation	review		consultation	review		consultation	review		
	<u> </u>			<u> </u>			<u>'</u>			
	July-August		2022 selection	May-June		(FDD and	a strategy for a		band was	
	2019 (but the		procedure has	2015.		TDD) in the	multi-band		postponed	
	multi-band		finished on	Second public		3.4-3.8 GHz	auction in		after the	
	auction in		15.11.2022.	consultation:		band has	WAPECS bands,		finalisation	
	WAPECS bands		Three FDD	July-August		already	including the 26		of the	
	was		blocks (2x5	2019 (but the		been	GHz band):		multi-band	
	postponed).		MHz each)	multi-band		allotted by	February-March		auction for	
	Second public		were awarded	auction in		auction	2019.		the rest of	
	consultation:		(valid during	WAPECS		since 2015	Second public		the	
	July-August		2023-2047),	bands was		(valid	consultation		WAPECS	
	2022.		out of six FDD	postponed).		during	(by a dedicated		bands (not	
			blocks and	Third public		2016-	questionnaire		yet	
			three SDL	consultation:		2025).	on market		awarded at	
			blocks, that	July-August		After the	demand in the		that time).	
			were	2021.		refarming	26 GHz band):		In 2022:	
			available.	Fourth public		from FDD	August-		there was	
				consultation:		to TDD, an	September		no interest	
				July-August		amount of	2022.		expressed	
				2022.		90 MHz in			by the	
						the 3.4-3.6			market.	
						GHz band			ANCOM	
						(not			will issue a	
						awarded in			new	
						2015) was			questionnai	
						put to			re during	
						auction in			2024-2025,	
						2021, but			in order to	
						only 5 MHz			assess	
						TDD were			again the	
						allotted			market	
						(valid			demand.	
		1				during				

Country	700 MHz				3.4-3-8 GHz		24.25-27.5 GHz		
- J	Public	Peer	Award	Public	Peer	Award	Public	Peer	Award
	consultation	review		consultation	review		consultation	review	
						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.			
Slovakia	December		December	December		3.4-3.6	August 2022		Public
	2019		2020	2021 –		GHz: May			discussion
				January 2022		2016			result –
									persistent
						3.6-3.8 GHz			disinterest
						July 2017			on the
									market.
						3410 –			Next public
						3800 MHz			discussion
						awarded in			in planned
						May 2022			on the end
						(100 MHz			of 2023.

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
						for three operators, 90 MHz for one operator) Licence validity 09.2025 – 12.2045.			Part of the band (27,1 – 27,5 GHz) is subject of negotiation with military.
Slovenia	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
Spain	2017 and 2019	December 2020	July 2021	2017		July 2018 20 MHz awarded in April 2021	2017, 2019 and 2021	30 Septembe r 2022*	2022
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		Planned award in 2023.

Country		700 MHz			3.4-3-8 GHz		2	4.25-27.5 GI	Hz
_	Public consultation	Peer review	Award	Public consultation	Peer review	Award	Public consultation	Peer review	Award
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 interest		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 expression of interest		Expected in 2023/2024 (depends on the decision of the competent Ministry)			Not expected to be awarded in the upcoming award process
North Macedonia	2020,2021		2022, 2x20 MHz assigned for 5G (two existing mobile operators)	2020, 2021		2022, 3.6-3.8 GHz assigned for 5G (two existing mobile operators) 3.5-3.6 GHz	2020, 2021		No market demand.

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	Public	Peer	Award	Public	Peer	Award	Public	Peer	Award
	consultation	review		consultation	review		consultation	review	
	1		T	1			Γ		
			MHz not			not			
			awarded			awarded			
			(reserved for			(reserved			
			third mobile			for third			
			network			mobile			
			operator)			network			
						operator)			
Liechtenstein	November		December	November		December			No market
	2022		2022	2022		2022			demand at
									this time

^{*}Peer Review Forum held in line with the provisions of Article 35 of the <u>European Electronic Communications Code</u>.