REPUBLIKA E SHQIPËRISË

ELECTRONIC AND POSTAL COMMUNICATIONS AUTHORITY

PUBLIC CONSULTATION NOTICE

"ON THE GRANTING OF RIGHTS OF USE OF FREQUENCIES IN THE 2100 MHz BAND (1920–1935 MHz PAIRED WITH 2110–2125 MHz)"

NOVEMBER 2026

Public Consultation Document

Approved by AKEP Steering Council Decision No. 31, dated 6 November 2026.

I. INTRODUCTION

In accordance with the ITU Radio Regulations, the paired frequency bands 1920–1980 MHz and 2110–2170 MHz (hereinafter referred to as the "2100 MHz frequency band") may be used globally for the implementation of International Mobile Telecommunications (IMT).

The ITU Radio Regulations designate the 1920–1980/2110–2170 MHz frequency band (2.1 GHz) in Region 1, which also includes the Member States of the European Union, for fixed and mobile services on the basis of equal primary status. The 1920–1980/2110–2170 MHz frequency band may be used for IMT in accordance with footnote 5.388 of the Radio Regulations: *.388 The frequency band **1 885–2 025 MHz** and the band **2 110–2 200 MHz** are intended for use, on a worldwide basis, by administrations wishing to implement **International Mobile Telecommunications (IMT)**. Such use does not preclude the use of these frequency bands by other services to which they are allocated. These frequency bands should be made available for IMT in accordance with **Resolution 212 (Rev.WRC-15)** (see also **Resolution 223 (Rev.WRC-15)**). (WRC-15)*

In Europe, the 2100 MHz band was initially harmonised for the implementation of networks based on UMTS/IMT-2000 technology, in accordance with the EU regulatory framework adopted in 1999, commonly known as the "UMTS Decision". This framework covered the 1900–1980 MHz, 2010–2025 MHz and 2110–2170 MHz bands, providing for FDD use of the paired 1920–1980 MHz and 2110–2170 MHz bands, as well as TDD use of the unpaired 1900–1920 MHz and 2010–2025 MHz bands.

With the development of technologies and the increasing demand for wireless broadband electronic communications services, the European regulatory framework was adapted in accordance with the principle of technological neutrality. In this context, Commission Decision 2012/688/EU[1] was adopted, harmonising the 1920–1980/2110–2170 MHz band for mobile/fixed communications networks (MFCN) operating in FDD mode. Subsequently, Commission Decision (EU) 2020/667[2], which amended Decision 2012/688/EU, allowed the use of Active Antenna Systems (AAS) for 5G systems in this band.

Pursuant to Decision ECC/DEC/(06)01[3], the 1920–1980/2110–2170 MHz frequency band may be used for mobile/fixed communications networks (MFCN) capable of providing wireless broadband communication services. Decision ECC/DEC/(06)01 establishes harmonised technical conditions for the use of the 1920–1980/2110–2170 MHz frequency band for MFCN, recommended channel separations and emission limits, with a view to ensuring the coexistence of different radio services. This frequency band may also be used to provide Mobile Communication Services on Aircraft (MCA) and on board ships (MCV), in accordance with the provisions of Decisions ECC/DEC/(06)07[4] and ECC/DEC/(08)08[5].

The other relevant CEPT/ECC documents concerning the use of the 2100 MHz frequency band for MFCN include:

[1] https://eur-lex.europa.eu/legal-content/EN/TXT/PDF/?uri=CELEX:32012D0688
[2] https://eur-lex.europa.eu/legal-content/EN/TXT/PDF/?uri=CELEX:32020D0667
[3] https://docdb.cept.org/download/4646
[4] https://docdb.cept.org/download/4203
[5] https://docdb.cept.org/download/3713

- Recommendation ERC/REC/01-01[6], which establishes the requirements for the coordination of MFCN systems operating in the 1920–1980 MHz and 2110–2170 MHz frequency bands;
- CEPT Report 39[7], prepared for the European Commission, which presents the results of technical studies on the technology-neutral use of the 2100 MHz frequency band, including FDD use in the 1920–1980 MHz and 2110–2170 MHz bands, as well as TDD use in the 1900–1920 MHz and 2010–2025 MHz bands.

In its document entitled "*Rapid access to spectrum for wireless electronic communications services through more flexibility*", which addresses, inter alia, the terrestrial 2100 MHz band, the European Commission encouraged more flexible use of radio spectrum and reinforced the principles of technological and service neutrality through Directive 2002/21/EC[8] of the European Parliament and of the Council of 7 March 2002. On 15 June 2009, the Commission issued a mandate to CEPT to define, within the framework of the Wireless Access Policy for Electronic Communications Services (WAPECS), the technical conditions enabling the least restrictive possible use of the 2 GHz frequency bands as well.

Albania has implemented the European framework concerning the use of the 1920–1980/2110–2170 MHz band for MFCN purposes. This frequency band was initially allocated in Albania in 2010, for a period of 15 years, for the provision of UMTS (3G) services. In 2015, AKEP approved the removal of technological restrictions, allowing undertakings the right to use the 2100 MHz band without technological restrictions.

Based on the National Frequency Plan (NFP**)** in force and in line with the ITU Radio Regulations, the paired frequency bands 1920–1980 MHz and 2110–2170 MHz are allocated to mobile services on a primary basis, in accordance with footnote 5.388A.

Furthermore, applications of the space research service may operate in the 2110–2120 MHz sub-band, also on a primary basis. In accordance with harmonised use at European level, the NFP provides that the 1920–1980/2110–2170 MHz frequency band may be assigned on a primary basis to terrestrial systems capable of providing electronic communications services and operating in FDD mode. Meanwhile, civil MCA and MCV systems may operate in the 1920–1980/2110–2170 MHz band within the mobile service, on a secondary basis.

II. Current Status of the Use of the 2100 MHz Band

Based on the analysis of the frequency usage rights in the 2100 MHz band, the spectrum currently assigned to the operators Vodafone Albania sh.a. and One Albania sh.a. is divided between FDD and TDD use, with different validity periods applying to the respective portions of the spectrum.

[6] https://docdb.cept.org/download/4984
[7] https://docdb.cept.org/download/57
[8] https://eur-lex.europa.eu/legal-content/EN/TXT/PDF/?uri=CELEX:32002L0021

The table below presents the current status of the use of the 2100 MHz band for mobile services:

Undertaking	Frequency Band, Uplink (MHz)	Frequency Band, Downlink (MHz)	Technology	Total Spectrum (MHz)	Authorisation Validity Period
Vodafone Albania sh.a.	1920-1950	2110– 2140	FDD	15 MHz paired	For 5 MHz: 06.11.2029 For 5 MHz: 01.04.2031 ***For 5 MHz: 30.10.2026***
One Albania sh.a.	1950-1980	2140-2170	FDD	30 MHz paired	***For 10 MHz: 30.10.2026*** For 15 MHz: 30.11.2027 For 5 MHz: 01.04.2031
	1905 – 1915		TDD	10 MHz paired	***For 5 MHz: 30.10.2026*** For 5 MHz: 30.11.2027

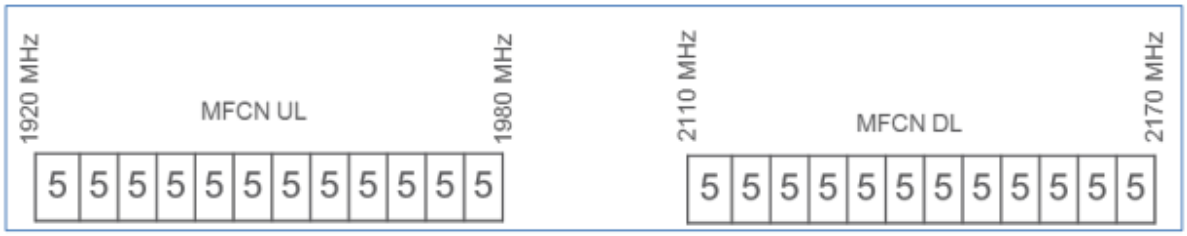
For the undertaking "Vodafone Albania" sh.a., the right to use 2 × 5 MHz of spectrum (FDD) expired on 30 October 2026, and the relevant renewal procedures are currently underway. Meanwhile, the undertaking also holds rights to use 10 MHz of paired spectrum, consisting of two 5 MHz blocks (FDD) with a validity period until 6 November 2029 and 5 MHz (FDD) block with a validity period until 1 April 2031.

For the undertaking "One Albania" sh.a.,within the FDD portion, the right to use 10 MHz of paired spectrum (2 × 10 MHz) expired on 30 October 2026, and the relevant renewal procedures are currently underway. Meanwhile, the undertaking holds rights to use 20 MHz of paired spectrum, comprising two frequency block: 15 MHz (FDD) with a validity period until 30 November 2027 and 5 MHz (FDD) with a validity period until 1 April 2031.

III. MFCN Usage Conditions

The conditions of use and requirements for the management of the radio frequency spectrum for terrestrial systems capable of providing electronic communications services in the 1920–1980/2110–2170 MHz frequency band are set out in Chapter 4 of the Frequency Use Plan.

The available spectrum of 2 × 60 MHz in the 1920–1980/2110–2170 MHz frequency band is divided into 24 units of 5 MHz each, forming, through the application of a duplex spacing of 190 MHz, 12 duplex frequency block units of 5 MHz each, as shown in the table below:



Meanwhile, specific radio frequency spectrum management requirements relating to particular applications are set out below. In particular, for IoT systems, technical requirements are specified concerning nominal channel bandwidth and the manner in which these systems are deployed within the frequency spectrum.

- *Technical requirements for IoT systems* specify that the nominal channel bandwidth varies depending on the technology used.
- *For UMTS systems*, a nominal channel bandwidth of 5 MHz is provided for.
- For *LTE systems, including LTE-MTC and LTE-eMTC*, the nominal channel bandwidth may be 5 MHz, 10 MHz, 15 MHz or 20 MHz.
- For *NB-IoT systems*, a channel bandwidth of 200 kHz is specified, while for
- *NR (5G New Radio)*, nominal channel bandwidths of 5 MHz, 10 MHz, 15 MHz or 20 MHz are provided for.

In addition to specifying the nominal channel bandwidth, the technical requirements also define how IoT systems are deployed within the frequency spectrum. Accordingly, LTE-MTC and LTE-eMTC systems operate in in-band mode, i.e., within the frequency band used by LTE. NB-IoT, on the other hand, may be deployed either in-band (IB-NB-IoT) or in guard-band (GB-NB-IoT), depending on the positioning of the channel within the LTE spectrum structure.

IV. PUBLIC CONSULATATION OBJECTIVE

The Electronic and Postal Communications Authority (AKEP), in exercising its powers as set out in Articles 68 and 75 of Law No. 54/2024, "On Electronic Communications in the Republic of Albania", in accordance with Council of Ministers Decision No. 756, dated 13 December 2024, "On the Approval of the National Frequency Plan", and Council of Ministers Decision No. 70, dated 6 February 2026, "On the Approval of the Rules for the Public Competitive Procedure for Granting Individual Authorisations for Rights of Use of Frequencies", hereby initiates a public consultation concerning the granting of rights of use of frequencies in the 2100 MHz band (1920–1935 MHz paired with 2110–2125 MHz).

This initiative is also undertaken following the preliminary interest expressed by the undertaking "Vodafone Albania" sh.a. in obtaining rights of use of frequencies in the 2100 MHz band, submitted to AKEP under Letter No. 1566, dated 29 June 2026.

The 2100 MHz frequency band constitutes an important resource for the development and expansion of mobile electronic communications networks, enabling the provision of wireless broadband services, increased data transmission capacity, and improved quality of services provided to end users. This band, harmonised at European level for use by mobile communications systems, provides opportunities for the deployment of various technologies, including LTE and 5G NR, in accordance with the applicable technical and regulatory conditions.

In the context of the continuously increasing demand for data transmission services, the expanding use of digital applications and services, and the progressive development of fifth-generation (5G) networks, the effective management of radio frequency spectrum is of particular importance for ensuring the sustainable development of the electronic communications sector.

In this context, AKEP considers that granting rights of use for the available frequencies in the 2100 MHz band may contribute to increasing the capacity of existing networks, improving their performance, supporting investment in new technologies, and creating the conditions for the further development of competition in the electronic communications market.

The objective of this public consultation is to assess market interest and the conditions for granting rights of use for a spectrum allocation of 2 × 15 MHz in the 2100 MHz band, in FDD mode, specifically in the frequency blocks 1920–1935 MHz paired with 2110–2125 MHz.

Through this public consultation, AKEP aims, among other things, to:

- Promote the effective and efficient use of radio frequency spectrum, by creating opportunities for the optimal utilisation of available resources, in line with market needs and technological developments.
- Identify and assess the interest of undertakings in obtaining rights of use of frequencies in the 2100 MHz band, as well as establish the potential demand for the amount of spectrum proposed to be assigned.
- Support the development and expansion of 4G and 5G networks, by creating opportunities to increase the capacity of existing networks, improve service quality and meet the growing demand for data transmission.
- Obtain opinions on the technical and regulatory conditions of the authorisation, including the amount of spectrum that may be assigned, the duration of the rights of use, the obligations that may be attached to the authorisation, and the conditions for the effective use of frequencies.
- Assess the appropriate price level for granting the rights of use, taking into account the characteristics of the frequency band, the conditions of the Albanian market, the economic value of the spectrum, and relevant international experience.

AKEP aims to ensure that the process of granting rights of use of frequencies in the 2100 MHz band is conducted in accordance with the principles of objectivity, transparency, proportionality and equal treatment of undertakings, thereby ensuring the responsible management of a limited public resource, namely radio frequency spectrum.

As part of this process, AKEP will consider the comments, suggestions and proposals submitted by undertakings and other interested parties, with a view to assessing them before determining the final conditions and proceeding with the relevant public competitive procedure.

Ultimately, AKEP aims to ensure that the granting of rights of use of spectrum in the 2100 MHz band contributes to the sustainable development of electronic communications networks, the acceleration of digital transformation, the improvement of service quality and availability, and increased benefits for consumers, businesses and the Albanian economy.

V. ISSUES SUBMITTED FOR PUBLIC CONSULTATION

I. Amount of Spectrum and Structure of the Right of Use

Based on the spectrum allocation presented above, as well as the technical characteristics of the systems that may be deployed in the 2100 MHz band, AKEP proposes granting one (1) right of use for a spectrum allocation of 2 × 15 MHz (FDD).

Question 1: Do you agree with AKEP's proposal to grant a single right of use for the amount of 2 × 15 MHz in the 2100 MHz band?

Please provide your views, together with the relevant technical, economic and regulatory arguments.

II. Public Competitive Procedure

For the granting of the right of use of frequencies in the 2100 MHz band, AKEP proposes conducting the public competitive procedure through an open procedure, in accordance with the applicable legal and regulatory framework, including Council of Ministers Decision No. 70, dated 6 February 2026, "On the Approval of the Rules for the Public Competitive Procedure for Granting Individual Authorisations for Rights of Use of Frequencies".

Question 2: Do you consider the open procedure to be the most appropriate form for conducting the public competitive procedure for granting the right of use of frequencies in the 2100 MHz band?

Please provide your views and, where applicable, reasoned alternative proposals.

III. Economic Valuation of the Right of Use

In the context of determining the economic value of the right of use of frequencies in the 2100 MHz band, AKEP seeks to obtain the views of interested parties on the price level and the factors that should be taken into consideration when assessing the economic value of the spectrum.

Question 3.1: What economic value would you be willing to pay for the right of use of a spectrum allocation of 2 × 15 MHz in the 2100 MHz band?

Question 3.2: Which factors do you consider AKEP should take into consideration when determining the economic value of this right of use?

Where possible, please provide a specific valuation of the economic value of the 2 × 15 MHz spectrum, together with the methodology and supporting arguments.

IV. Possibility of Conducting a Multiband Competitive Procedure for Several Frequency Bands

Taking into consideration the availability of 2 × 10 MHz (FDD) of spectrum in the 800 MHz band for the provision of International Mobile Telecommunications (IMT) services, as well as the possibility of conducting a joint competitive procedure for the 800 MHz and 2100 MHz bands, AKEP seeks the views of interested parties on the following matters.

Question 4.1: Would you be interested in participating in a public competitive procedure covering both the 800 MHz and 2100 MHz bands?

If yes, please specify the amount of spectrum in the 800 MHz band for which you would be interested in applying.

Question 4.2: If granted the right of use of frequencies in the 800 MHz band, for what primary purposes would you use this spectrum?

Please specify whether its use would be intended to expand geographical coverage, improve indoor coverage, provide coverage in rural areas, increase network capacity, or serve other purposes.

Question 4.3: How do you assess the technical and economic importance of spectrum in the 800 MHz band, compared to spectrum in the 2100 MHz band, for the development of your network?

Please identify the main factors influencing this assessment.

Question 4.4: Do you consider that the acquisition of the right of use in one of these frequency bands should be conditional upon the acquisition of the right of use in the other band?

If yes, please provide the technical and economic arguments supporting your position.

Question 4.5: What value would you be willing to pay for the right of use of a spectrum allocation of 2 × 5 MHz in the 800 MHz band, if this right were offered in the same competitive procedure as the 2100 MHz band?

In addition, please clarify whether the availability of spectrum in the 800 MHz band would affect the value you would be willing to pay for spectrum in the 2100 MHz band.

Question 4.6: If a competitive procedure covering several frequency bands were to be conducted, which spectrum offering structure would you consider most appropriate?

Please provide your views on the possibility of offering the spectrum:

- In separate and independent lots for each frequency band;
- In separate lots, with the possibility for the same participant to combine lots;
- Under another structure proposed by you.

Please provide arguments in support of your proposal.

V. Obligations for the Coverage of Electronic Communications Services

Considering that the 2100 MHz band has been used by operators to provide mobile communications services in the Republic of Albania since 2010, as well as the technological developments enabling its use for 4G and 5G networks, AKEP seeks the views of interested parties on the establishment of coverage obligations in the Individual Authorisation.

Question 5: Do you consider that the Individual Authorisation for the use of frequencies in the 2100 MHz band should include specific obligations regarding signal coverage and the provision of electronic communications services?

Please provide your views on population coverage, territorial coverage, national roads and other areas of economic or social importance.

If yes, please propose specific coverage targets and the corresponding implementation deadlines, together with the supporting technical and economic arguments.

VI. Duration of Validity of the Individual Authorisation

The duration of the right of use of frequencies is an important factor for investment planning, infrastructure development and ensuring the effective use of spectrum over the long term.

Question 6: What do you consider should be the validity period of the Individual Authorisation for the use of frequencies in the 2100 MHz band?

Please provide arguments in support of your proposal.

VII. Payment Method for the Right of Use of Frequencies

Council of Ministers Decision No. 70, dated 6 February 2026, "On the Approval of the Rules for the Public Competitive Procedure for Granting Individual Authorisations for Rights of Use of Frequencies", provides for the payment method for the Individual Authorisation to be included in the tender documentation.

Question 7: Which payment method do you consider most appropriate for settling the value of the right of use of frequencies in the 2100 MHz band?

- Full payment at the beginning of the authorisation period;
- Payment in instalments, according to a specified schedule.

If you propose payment in instalments, please specify the number of instalments, their frequency and the payment schedule, while complying with the maximum period of one (1) year for full settlement of the amount, and provide supporting arguments.

VIII. Technology and Manner of Spectrum Utilisation

In accordance with the principle of technological neutrality and the applicable technical conditions for the 2100 MHz band, AKEP aims to assess the intended use of the spectrum by interested undertakings.

Question 8: Which technologies and network architectures do you envisage using for the utilisation of frequencies in the 2100 MHz band?

Please specify whether the spectrum will be used primarily for:

- Increasing the capacity of existing networks;
- Expanding and improving coverage;
- Developing 4G and 5G networks;

- Deploying other IMT technologies;
- Other purposes related to the development of electronic communications services.

In addition, please identify the main technical and economic factors influencing the selection of the technology and the manner in which the spectrum will be utilised.

IX. Other Issues and Additional Proposals

Pyetja 9: Do you have any other comments, suggestions or proposals that you consider AKEP should take into consideration in the context of preparing and conducting the public competitive procedure for granting rights of use of frequencies in the 2100 MHz band?