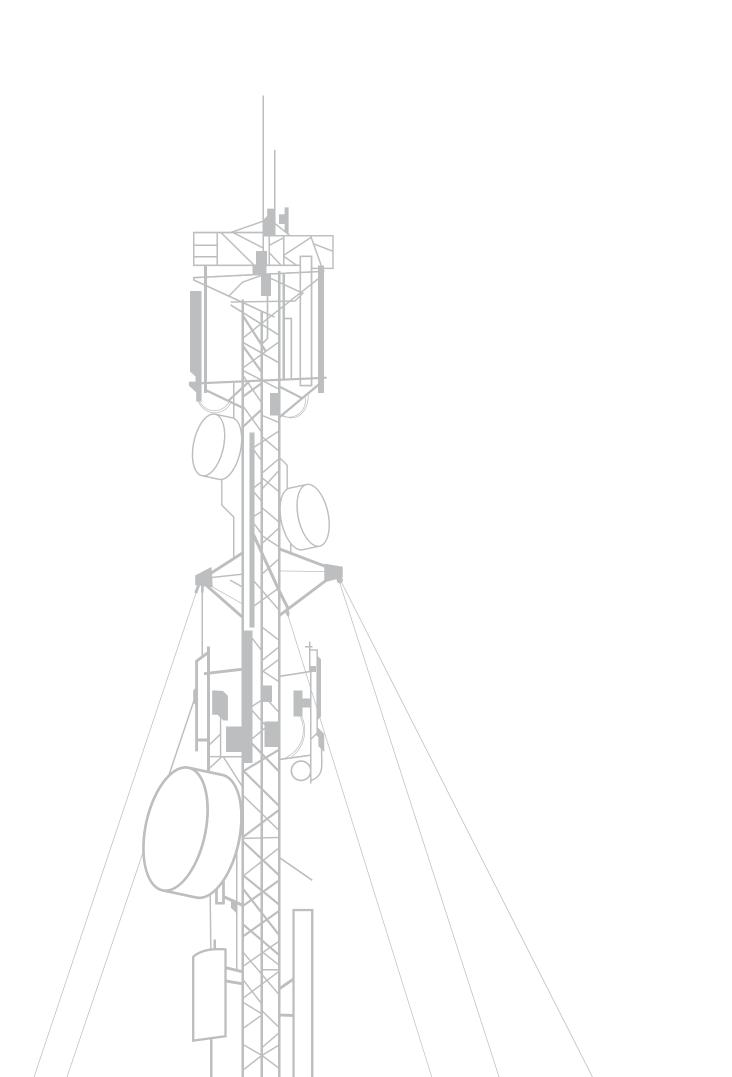


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Activity Report of the Electronic and Postal Communications Authority for **2021**

TIRANË 2022



PREAMBLE

A few words from the AKEP Chairman

The Electronic and Post Communications Authority has presented to the Parliament of Albania its annual



Tomi Frashëri - AKEP Chairman

report, with the twofold goal of being accountable to the elected representatives of the nation with regard to the activities and obligations of the organization in the quality of an independent authority, and to present the citizens, sector actors, international regulatory circles and the public opinion at large the facts and analysis of the electronic communications and postal services market developments in our country.

Even though the 2021 annual Report does not include, from a format perspective, any special features compared to previous reports, its content speaks of structural dynamics that are heavily impacting the veteran telecommunications sector, accelerating at a surprising pace its amalgamation into an increasingly digital interfaces, applications and OTT (Over

the Top Services) system. Commercial exchanges and technological innovations are increasingly converging from this system, in a multitude of decentralized and deregulated capillary forms, towards a digital ecosystem mega-market¹ that thrives with the broadband network traffic and the limitless potential provided by Open RAN in the 5G era². After long rounds of negotiations, on March 24 of this year the European Union (EU) was finally able to set interoperability obligations for Big Tech³ giants with regard to messaging platforms and thus bringing to an end the mobile device manufacturer monopolies in virtual app markets with the Digital Markets Act (DMA). ⁴ This new reality of network coverage and range of services is not only fading the differences of classic definitions of telecommunications (fixed and mobile), but it also expected to fundamentally change the fabric of postal services, user behavior and the use of personal data that is generated with every interaction with the unlimited network of profitable applications and services online.

Is this a glorious digital revolution or the irresistible pressure of a comprehensive commercial cycle that has matured globally? In any case, the presence of the large digital ecosystems market is a reality, the impact of which is increasingly noted throughout the world, even though its dynamics vary in intensity in line with the local contexts. Albania is also a good case for observation. Strongly promoted by the Government, supported by the industry and moderated from a regulatory aspect by the AKEP mainly, the "digital society" has experienced such an unprecedented growth

¹ See also A. SPIKES, Interview: ACM's Sipkes takes over as Berec chair in 2022, https://www.telecompaper.com/background/interview-acmssipkes-takes-over-as-berec-chair-in-2022--1409786

² Open RAN to Strengthen its Position in 2022, COMARCH, 2022 Telco Trends Alert: Predictions for the telecom industry in 2022 and beyond, 10.

³ Also known as GAFAM: Google (Alphabet), Apple, Facebook (Meta), Amazon dhe Microsoft.

⁴ A. DUCARRE, Digital Markets Act : Les Smartphones libérés des GAFAM ?, 01NET, no. 971, 6-19 April 2022, p. 10.

with regard to network development and the multifold increase of public access to the internet, that statistical data are completely shocking. The excellent stability of fixed and mobile networks during the two-year pressure of the pandemic pushed the digital ecosystem entrepreneurs in the country to invest even more in their modernization.⁵

The 4G LTE coverage reached an almost complete territory coverage with 95.90% last year, compared to 75% in 2019. Of note is the increasing share of investment in fiber optic, which has a direct impact on the broadband network access provision in fixed networks. The main technology for the provision of broadband access in fixed networks in 2021 is fiber (FTTH/FTTB) with more than 56% of the total connections, and a considerable growth over 2020, where fiber optic was used in just 46% of connections. It is also of note that companies providing fixed network broadband services are switching from DSL connections - and combinations thereof - to the provision of services through fiber optic FTTH/FTTB, which enable much faster transfer speeds than before.⁶

The network stability which was tested by the multiplied need for quality and fast internet services during the pandemic led to an increased trust in digital media on the side of the end user, whose daily activities can hardly be imagined without digital interactions. Thus, the digital divide is increasingly narrowing in Albania as well. This is shown by the volume of data transfers through mobile networks in 2021, which reached some 155 GB, marking a 74.9% increase compared to 2020. As a result, the average internet consumption per subscriber has grown by 64% to approximately 6.39 GB monthly.

In parallel to the exponential growth of mobile network internet volume use, the broadband traffic on fixed networks has grown to some 952 million GB or 56% more than 2020. There was an increase of 10% in subscribers with fixed access to broadband internet services in the fourth quarter of 2021 compared to the previous year. In 2021, the fixed network broadband access penetration rate was estimated at over 77% for households and approximately 20% of the population, marking a considerable growth of 7% and 2% respectively over the last 12-month period. The subscriber segment using fixed internet speeds higher that 10 Mbps has reached 83%, compared to some 67% in 2020. Of special relevance is also the considerable growth of high-speed connections over 100 Mbps, which have reached a total 55,065 in 2021 compared to 15,406 such connections in 2020. In addition the number of subscribers with broadband connections of 1 Gbps and over has increased five fold compared to 2020. The considerable increase of subscribers with access to fixed networks at speeds higher than 100 Mbps is a very positive indicator for the achievement of the National Broadband Plan objectives, concerning high and very high speed digital broadband infrastructure in the country, thus consolidating the foundations of a sustainable Gigabit society.

All these developments which are further detailed in the Report have been part of the AKEP forecasts and a driver for the long term perspective that must consider a decade of reforming and projections for the future. While Albania is progressing, due to a clear development policy and a very robust private telecommunication

industrial complex, towards increasingly optimal conditions for the implementation of a stable digital ecosystem, AKEP has undertaken a series of processes to revitalize functional and regulatory instruments.

⁵ For stable networks during the COVID-19 pandemic, see AKEP's 2020 Annual Report, 2021, pp. 5-8; 27-33.

⁶ See also E. BEGU, B. NEZHA, Broadband Networks and their planning, Albanian world, Tirana, 2017, pp. 155-156; 213.

⁶ AKEP - RAPORTI VJETOR 2021

For a number of years now, in its wisdom and in line with the European Commission (EC) recommendations, the Parliament of the Republic of Albania has adopted a series of resolutions expressing legitimate interest in reviewing the material electronic communications law focusing especially in strengthening the functional independence of the regulatory authority. The path for this revision was opened by the work for the transposition of the European Union Electronic Communications Code, a directive that will leave a substantial mark on the current legal framework and will create the conditions for a deeper reflection on the need and size of structural reforms of the regulatory authority. The transposition of the abovementioned directive is benefiting from the best expertise in the country for the best development possible, thanks to the proactive coordination of the Ministry of Infrastructure and Energy, the international consultant selected to assist in the process and the AKEP contribution.

In line with the legislative reform process, AKEP has undertaken internal operation strategic initiatives to more sustainably adapt to the to the digital ecosystems conditions. In addition to a modern cost model for future market analysis, a complete package of systems for internal tele-interaction and process digitalization was implemented in 2021. In this context, information technology infrastructure development continued and improvement were made to existing applications over the past year. AKEP has employed the most innovative methods in developing information systems, based also on the duties assigned in the Parliament of the Republic of Albania Resolution and relevant secondary legislation. Developments over the last year mainly include important investments which are detailed in the following pages and sections, such as the construction of the service quality monitoring system "Nett test for QOS"; the complete automation of AKEP processes; the implementation of the Redundant IT system infrastructure and network upgrade, etj. The professional execution of all investments planned for 2021, the adequate fund management and the rigorous budget implementation led to a lower unspent amounts returning to the state budget, for the second year running. From 61 million ALL in 2019, the 2021 unspent budget fell to its lowest level in years at some 34 million ALL.

In addition to these developments, in 2021 AKEP undertook the first national level new band network development capacities analysis with the aim of anticipating vital process in the digital ecosystems currently under development in the country, among which of note is the administration and start of operation of the 700MhZ band to be used by 5G technologies. This assessment was conducted in close partnership with the JohnsInternational American company, which in January 2022 became the main Albanian Government partner for the implementation of a cybersecurity package in public information systems and networks. The relevant public consultation included the main electronic communication entrepreneurs holding individual authorization to use the respective frequency bands, and who may potentially be interested in using the 700Mhz and 3.5 Ghz bands for the implementation of 5G technologies.

This introductory summary is not the place to provide the findings of this assessment and the proposed innovations, and these elements are addressed in detail in the relevant portion of this report. However, it should be noted that this important assessment came at a moment when

digital literacy has become an emergency throughout the globe, because the number of operators providing 5G services has grown by 40% over the last year, while another 200 operators around the world

are expected to launch 5G services over the first four months of the current year.⁷ What are 5G network and technologies and how are they related to the empowerment of the individual in the framework of the digital society? The national assessment conducted last year provides answers while not neglecting to address a challenge expressed back in the 1970s through Efrem Lipkin's idee-force:

"The public should be equipped with the tools to gain advantage over the fragmentation and isolation tendencies that are ever present in the society today. Individuals should gain understanding and control of the system as a tool. Computer intelligence should be directed towards the development of the user demystifying and presenting its true nature, so as to give people active control and direction".⁸

2021 was a good and successful year for AKEP in regard to cooperation and multilateral activities. The process to zero roaming charges in the Western Balkan 6 (WB6) was concluded on 1 July 2021. AKEP monitored and continues to systematically monitor this process in cooperation with the regulators around the region and the Regional Cooperation Council (RCC). The fruitful experience of this cooperation has now created opportunities for a greater ambition, the realization of which would radically integrate Western Balkan populations with EU populations through electronic connectivity. This ambition is the long-term abolition of all roaming charges between the WB and the EU, a process which is taking its first steps under the patronage of the RCC, the EC, BEREC, the relevant governments, industry, and of course national regulators. Among other things, this process strengthens the dialogue between regulators and the industry and drives regional coordination between the regulators. In this aspect, AKEP has engaged in updating cooperation agreements with the regulatory authorities in Northern Macedonia and Kosovo.

Lastly, the AKEP monitoring and inspection activities, the broad range of which has been reported in detail in the relevant chapters of this report, bears mentioning. The fight against informality in the postal sector and the continuous user protection in the electronic communications sector have required that AKEP be unwavering in the enforcement of the law, including taking substantial and proportional administrative measures against a series of entrepreneurs.

In conclusion of this general overview, which is by no means exhaustive, AKEP is proud to present the 2021 Annual Report, because it has implemented almost all the recommendations of the Parliament Resolution for last year, which for the institution is the first and main priority.

The credit for all the work and efforts and for the development of the 2021 Annual Report goes to the AKEP staff as a team and to each of them individually.

⁷ K. MASSELOS, 5G Fixed Wireless Access, Green Issues and Real Economy related KPIs, European 5G Conference, Panel session: Deliveringdigital equality – Meeting the target of 5G connectivity for all by 2030, 26 January 2022, p. 1.

⁸ See F. TURNER, From Counterculture to Cyberculture. Stewart Brand, the Whole Earth Network, and the Rise of Digital Utopianism, The University of Chicago Press, Chicago & London, 2006, p. 115.

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GENERAL OVERVIEW

 Fundamental legal and regulatory principles in the electronic and post communications sector

In the quality of the only regulator in telecommunications and postal markets, and pursuant to a complete and consolidated legal and regulatory framework, AKEP is constantly committed to promoting an increasingly favorable environment for entrepreneurs, and services of better quality and price for all telecommunications and postal service users in Albania.

In order to better meet its regulatory role and functions in the electronic communications and postal services sector, the activity of the organization is led by the strict observation of the principle of legitimacy. In this context responsibilities are exercised in complete compliance with the applicable legislation and in line with the institutional rights and obligations provided in the sector legal and regulatory framework, for the successful achievement of the objectives and completion of duties provided in the legislation regulating electronic and postal communications and also guided by the principles of the European Electronic Communications Code.

Compliance with the fundamental principles of legitimacy, objectivity, transparency, fairness and impartiality are at the core of AKEP's activity and bring to bear its fundamental values of integrity, impartiality, transparency, professionalism, and effectiveness, which are best expressed through:

The electronic communications market regulation, oversight and monitoring of the electronic communications network operators activities and services, determination of the significant market power operator, the administration and monitoring of frequency band use, while always being led by the principle of fairness and impartiality

in the resolution of disputes between electronic communications network operators and disputes between subscribers and operators.

The AKEP activity is also shaped by the entirety of the secondary legislation that provides for the sector development policies, and the regulatory acts adopted by the AKEP Steering Board, in the quality of the leadership body of the institution, the recommendations of the Parliament of the Republic of Albania, the European Commission and Parliament Directives, BEREC, ITU, ERPG acts, etc.

The legal framework concerning AKEP was not amended in the course of 2021.

2. Progress in implementing the European Electronic Communications Code

Changes in the information technology and the radical development of the electronic communications market provide an opportunity to consider the current regulatory framework and to enact reforms that could make regulating more adequate in the new internet era. Considering the dynamics and the great changes in this sector, and stressing the fact that the latter should contribute to meeting the ever growing user demand, and the need for socio-economic development that stems from the higher online data communication volume, the European Union undertook the initiative to amend the European legal framework in the sector, and adopted the European Electronic Communications Code in December 2018.

The new European level regulatory framework aims at overcoming new challenges in the sector, in light of the ever increasing importance of this sector in the digital economy area as the actual driver of this economy, because all commercial activities currently undertaken online are supported by electronic communication networks.

The new electronic communications code goal is to provide norms for all sector activities, thus adding another pillar in its regulation (the new connectivity objective), promoting high speed networks, ensuring maximum expansion and access to high speed infrastructure networks, with one of the main implementation goal being the implementation of the 5G generation (high speed networks that is available and penetrates everywhere), and strengthening the role and independence of the national regulatory authorities and the European regulatory body BEREC.

Currently, Albania is being supported by the European Commission on the implementation of the Electronic

Communications Code in the domestic legislation, which fully align the latter with the European Union policies.

This project is being implemented by the European Union, which is directly managing the project as the first project supporting the telecommunications sector.

In more concrete terms, the consultant selected is assisting the Ministry of Infrastructure and Energy (MIE), including regulatory authorities, the Electronic and Post Communications Authority (AKEP), and the Audiovisual Media Authority (AMA) for the implementation of the new European Electronic Communications Code (EECC) and for the migration of the 700 MHz frequency band in accordance with the EU acquis.

The inception report developed by the consultant provides the findings of the preliminary phase and detailed information on the implementation of this report, and also includes an overview on how its objectives will be achieved and how its tasks will be completed, while also providing the main issues that may arise. In addition, the proposed comprehensive and coordinated project implementation approach has also been described.

Law No. 9918/2008 "On Electronic Communications in the RoA", includes all EU conditions for the establishment of an effective regulatory framework for the development of telecommunication network and services. However, as noted above, the should be reviewed with the initiative of the Ministry of Infrastructure and Energy for the purposes of approximation with the new European Electronic

Communications Code of 2018 (EECC), a mission that is currently nearing its completion.

Thus, meeting the objective of this project and aligning the Albanian legislation with the EU acquis in the Electronic Communications area and vacating the 700 MHz band are very important actions to complete with regard to Albania's membership in the EU.

3. The Universal Service Status

The Status of Universal Services for electronic communications

Pursuant to Law No. 9918/2008, the services included in the universal communications services for electronic communications should be available to users across the territory of the Republic of Albania regardless of geographic location, at a quality and under the conditions provided for in the regulatory acts adopted by AKEP, at affordable prices, and in line with national specific conditions.

An important element of the universal service is ensuring equitable access and the use of electronic communications for disabled final users.

The main universal service element is ensuring access to a public electronic communication network from fixed locations and enabling users to complete telephone calls, to use data at reasonable speeds allowing functional internet access regardless of their geographical location, taking into account the dominating technology in use by the majority of subscribers and the possibilities for technological deployment.

Law 9918/2008 on internet access as part of the universal service provides for the concept of functional access to satisfactory speed internet.⁹ On the other hand the new electronic communications code aims at norming the entire sector activity for the purposes of promoting high speed networks, and ensuring maximum coverage of and access to high speed networks and infrastructure, in the context of which, the implementation of the 5G network remains one of the main objectives.

The electronic communications code also emphasizes that the universal service concept should evolve to reflect technological advancement, market developments and changes in user requirements. Based on these factors, the EU has adopted a series of important changes in universal service compared to the previous regulatory framework. These changes comprise the inclusion of the adequate speed broadband access to internet in the scope of the universal service.

As regards the adequate speed of the broadband access, the EECC provides that it may be defined by the relevant member state based on the national context and the maximum speed used by the majority

⁹ These principles are in line with Directive 2002/22/EC, amended with Directive 2009/136/EC.

of consumers, while also considering the BEREC reports and best practice, with the goal of ensuring the level of speed required for social and economic participation in the society.

Addressing whether the broadband access should be included in the Universal Service as provided by the EECC, is one of the objectives under the "National Plan for sustainable digital broadband infrastructure development 2020-2025", adopted with DCM No. 434, dated 3.06.2021.

In 2021, AKEP has cooperated with MIE in the implementation of a technical assistance project on the universal service and the state funding/aid scheme regarding broadband access in Albania.

The analysis found that the number of subscribers with broadband access at the end of 2021 reached 560 thousand, marking a considerable increase over 2020 and previous years. The number of users with mobile broadband access in 2021 was approximately 2.8 million or some 13% higher than in 2020.

The mobile GSM coverage that enables access to public telephony networks and use of functional internet covered 99.86% of the population and 96.7% of the territory by the end of 2021. In addition, coverage with 3G/4G network providing broadband access to internet reached 99.2% of the population and 95.9% of the territory.

The considerable growth of internet use from fixed and mobile networks is also confirmed by the statistics published by INSTAT. The Survey on the Use of Information and Communication Technology (ICT) published by INSTAT for 2021¹⁰ found the following:

- 79.3% of the population (16-74 years of age) use the internet, of which 91.7% use it daily;
- 88.3% of Albanian families have access to the internet, compared with 83.3% the previous year.
- 78.3% of Albanian families have internet access to fixed broadband networks (fiber optic, cable ADSL, etc.), with an increase of 9.6% compared to the previous year.
- 99.1% of Albanian families have internet access through "mobile broadband" connections (3G/4G, tablet, etc.), compared to 90.7% of the previous year.

The data processed by INSTAT and the data reported by the electronic communications operators to AKEP show how the territory and population coverage with mobile and fixed networks enables broadband internet access to almost all families and the entire population in Albania, regardless of the user's geographic location.

Even though coverage with fixed networks is mainly concentrated in urban areas, mobile networks enable broadband internet access to almost the entire territory and almost all residents in Albania.

¹⁰ http://www.instat.gov.al/al/temat/kushtet-sociale/teknologjis%C3%AB-s%C3%AB-informacionit-dhe-komunikimit-tik-n%C3%AB-famil- je-dhenga-individ%C3%ABt/

According to the latest ITU data¹¹ on ICT price affordability in 2021, Albania ranks in good position in regard to service fee affordability for fixed broadband access and mobile services, especially as regard fixed broadband access.

In 2021, expenses as a percentage of the gross national income per capita (GNI p.c.) were as follows:

- 1.51% of the GNI/capita for the fixed broadband bundle (5GB internet traffic);
- 1.72% of the GNI/capita for the low consumption bundle of minutes, sms and internet (70 min + 20 SMS +500 MB);
- this indicator is at 2.16% and 3.45% of the GNI/capita respectively for the high consumption minutes and
- internet bundles (140 min + 70 SMS + 2 GB) for 2021.

The ITU/UNESCO Broadband Commission for Sustainable Development has set an affordability objective for broadband access, whereby prices for access to basic broadband services (to achieve universal connectivity) in developing countries (low and medium income) should be less than 2% of the monthly GNI per capita by 2025.

In Albania, the fixed broadband access bundles and the mobile low consumption minutes, SMS, and internet bundles are valued at lower prices than the 2% affordability objective for broadband access. In the meantime, for the mobile broadband bundle (2 GB traffic), this indicator was 2.16% in 2021 or 0.16 percentage points higher than the affordability goal.

Operators continue to provide fixed and mobile network telephony and broadband internet services at reasonable prices.

All three mobile operators provide a series of bundles for their subscribers, which provide payment modality choices of payment, such as prepaid services (PAYG or daily, weekly and 30 day offers/ bundles), post pay or hybrid (combination of pre-paid and postpaid) services. In 2021, mobile operators have continued to offer affordable bundles, such as 30-day prepaid bundles priced at 500-600 ALL (VAT included) with minutes/SMS/internet.

¹¹ https://www.itu.int/en/ITU-D/Statistics/Pages/ICTprices/default.aspx

The universal postal service status

Law No. 46/2015 "On postal services in the Republic of Albania" has a special focus on the provision of universal postal services throughout the territory of the RoA, in line with the specific requirements provided by the law, the secondary legislation and the relevant rules for the provision of the postal and universal postal services. In its quality as the regulatory body regarding postal services, among other things, AKEP has the obligation to determine the universal postal service provider and to oversee the compliance with the obligations of this service.

The assessments conducted during 2020 found that the Posta Shqiptare sh.a. postal services operator is the only operator meeting all legal conditions to provide universal postal services throughout the territory of the Republic of Albania. AKEP has issued the new individual authorization with a validity expiring in July 2025 so that the provision of this service may continue uninterrupted.

For the purposes of providing the universal postal services, the Posta Shqiptare sh.a. postal service provider has a postal network organized in offices open to the public, which provide universal postal services and non-universal/postal services, and in offices that undertake processing center functions.

In the context of universal service provision, over 2021 Posta Shqiptare sh.a. made available the following for the public:

- 536 post offices open to the public;
- 704 windows, of which 525 automated/computerized windows;
- 579 post boxes accepting post objects available to users;
- 667 post boxes for the delivery of post objects available to users;

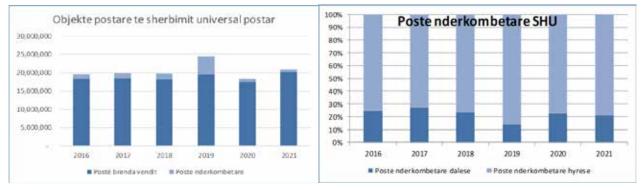
Based on reported data, Posta Shqiptare sh.a. has met the indicators for universal service coverage pursuant to the requirements provided for in the Order of the Minister of Infrastructure and Energy No. 6174, dated 16.12.2019.

With regard to the postal vehicle infrastructure, the Posta Shqiptare sh.a. is currently using a total of 474 vehicles. The transport vehicles include trucks, vans, automobiles, motorcycles and bicycles.

The total number of universal postal services objects grew by 13.5% in 2021, marking a growth of some 20.8 million objects.

In 2021, universal postal service objects comprise 95% of the total postal service objects of the Posta Shqiptare sh.a. postal service and 77% of the total postal objects in Albania.

The number of post objects in the country rose by 15.6%, with the number of registered mail recording the highest increase.¹²



Source: Data from Posta Shqiptare sh.a.

According to the data, Posta Shqiptare has fully met the indicators on time of delivery for post objects within the country to the three destinations and for all periods.

Indicators have improved in 2021 and the share of objects delivered in D+1 (1 day after being received) has increased by 2 percentage points compared to 2020.

On day 1 - D+1, the Posta Shqiptare completes delivery of 97% of post objects within the city and 96% of intercity objects.

In 2021, delivery of post objects to villages has continued to improve with delivery being completed on day 2 - D+2 for 84% of the objects, compared to 80% in 2020.

^{12 12} For more details see the table in the statistics portion



Pursuant to the recommendations made by the Parliament of the Republic of Albania in its Resolution of 1.7.2021 "On assessing the activity of the Electronic and Postal Communications Authority in 2020", AKEP is led by the outmost commitment to fulfill these recommendations and is working with diligence and professionalism to this end.

Of the 16 recommendations made in the Parliament Resolution for 2021:

- a) 14 recommendations have been fulfilled in full.
- b) 2 recommendations are currently in the process of being fulfilled.



AKEP Chairman Mr. Tomi Frashëri in the Albanian Parliament plenary session in July 2021 during which the Parliament Resolution for Figure 1: 2022 was adopted (photograph provided by the Parliament press office) Source: Parliament of Albania 2021

Recommendation fulfillment has been translated into the following measures and actions:

- 1. From 1 January 2021 the Posta Shqiptare sh.a. no longer applies a fee for the delivery of postal objects, small parcels, or packages coming from abroad in the framework of consumer protection and after the inspection undertaken, and in line with recommendations made by AKEP. With regard to the recommendation for separating accounts, implementation has started in a number of post offices, and implementation throughout the postal system is expected.
- 2. After the AKEP inspection of the three mobile network operators, monitoring regarding their fulfillment of recommendations to remedy violations found regarding compliance with the number portability regulation has continued, in order to enable subscribers to exercise their right to port their mobile numbers in line with the timeframes and procedures provided in the regulatory acts. In 2021, AKEP structures have undertaken two inspection procedures in the three mobile network operators, and have made relevant recommendations.
- 3. AKEP has cooperated with the Competition Authority to avoid disorienting and aggressive commercial practices and below cost offers that lead to market disruptions. In 2021, AKEP has made available complete information on the packages and fees for mobile services announced by mobile operators. In addition, AKEP has notified the Competition Authority on the measures take to resolve technical issues with number portability, with the aim of ensuring effective competition among operators in the market.
- 4. After the adoption of the Electronic Communications and Public Services Consumer and User Protection regulation, AKEP has cooperated and organized meetings with the Ministry of Health and Social Protection (MoHSP) and disabled persons rights protection associations, regarding the development of tailored contracts for these categories. Regular meetings have also be held with mobile operators in the framework of technological developments required in their systems to enable benefits for specific groups. Following the input collected during the discussions of the disabled persons rights protection associations and the mobile network operators, AKEP will continue to cooperate with the MoHSP and all other relevant stakeholders to identify the best operational, technical and financial solution for the provision of useful services providing the most equitable access to this category of public electronic communications users, and to inform and raise awareness among disabled users on the measures taken to ensure complete social inclusion and equal access to public electronic communications networks and services.
- 5. Along with the consultant selected through the public procurement procedure, AKEP has conducted the "Study/analysis of the new mobile broadband technologies in Albania".

AKEP started conducting this study, including an overall assessment considering relevant technology, safety, affordability, and implementing capacities in the country. The meetings with mobile operators and a review of their attitude towards the measures that should be taken to encourage investment in the 5G network in the future, were of special importance for the development of the document. Telecommunication sector operators in Albania have made

important contribution to this study and will be the main 5G implementation actors in the country.

Among other things, this study includes a use rights granting process that should be as objective and transparent as possible in order to ensure benefits for the Albanian consumers and economy and for the sustainable development of a competitive market.

6. Throughout 2021, AKEP cooperated with mobile operators to increase the service coverage and quality in the GMS, UMTS and LTE frequencies in the main cities, main national roads, urban and rural areas, especially in tourist sites where issues in coverage and services have been identified.

The following service improvements have been noted in 2021:

- LTE technology data transfer speeds have been considerably increased in high user density areas in the cities of Durrës, Shijak, Elbasan, Peqin, Cërrik, Peshkopi, Klos, Burrel.
- Mobile telephony coverage has been provided and service quality has been improved along new road segments that have been completed or are nearing completion, in cooperation with mobile operators, the Ministry of Infrastructure and Energy and the Albanian Road Authority. During the 2021 tourist season measures were taken along the Vlora Bypass segment - the construction works for which are expected to be completed soon - to improve coverage and to provide services of reasonable technical quality. AKEP has requested operators to achieve maximum quality coverage and quality along this road segment and to provide services before the start of the new 2022 summer season. Monitoring has also be conducted along the Rruga e Arbrit segment and issues have been identified in specific areas. The operators have been requested to plan measures for service provision when this road segment becomes operational.
- 7. In regard to the unallocated 800 MHz (1x10 MHz, coupled) band, and after the conclusion of the relevant consultancy at the end of 2020, AKEP has been waiting for an expression of interest by the mobile operators for this band. In the context of the cooperation on vacating the 700 MHz band, the Audiovisual Media Authority and the Electronic and Postal Communications Authority signed a Memorandum of Cooperation on 03.11.2021 to ensure and provide operational, technical, and legal support in the areas of mutual interest. Both institutions will cooperate among other things for AMA to vacate the 700 MHz band (also known as DD2) and for AKEP to take over the band, complying with the deadlines defined by the EU and ITU.

AKEP has expressed its readiness to take this band under administration after it has been vacated by AMA.

8. AKEP has been closely cooperating with MIE on the approximation of electronic communications legislation with the new European Electronics Communication Code, a requirement stressed in the EC progress report.

AKEP is part of the working group established by MIE, which is closely working with the consultant selected by the European Union Delegation in the framework of the IPA technical assistance, on

the approximation of Directive 2018/1972/EU Electronic Communications Code into the national legislation by the end of 2022.

- 9. AKEP has cooperated with MIE and the selected consultant on the "Development of the Albanian Broadband Atlas and its use in the public and private sector" project, which Albania has benefited under the 23rd call of the Wester Balkans Investment Framework (WBIF). This project aims at developing the Atlas system, updating this system with information down to the end user, information on the use of broadband internet in Albania, service providers in specific areas, information on white areas and mobile services coverage, based on the best international practice and models.
- 10. In meeting the obligations defined in the RoA Parliament Resolution, AKEP and AMA have coordinated in developing a unified frequency inventory, based on the provisions of the Spectrum Policy, which serves for the following:

Identification of frequency bands with room for efficiency improvement in the current radio spectrum use, considering also the possibility of allocating/reallocating frequencies.

Identification of free frequency bands that will ensure a more effective use promoting innovation and increasing market competition within the country.

Identification of frequency bands where joint radio spectrum use is possible considering at the same time the demand for new services.

Analysis of different radio spectrum use typologies by the users and the public and private sector.

The Electronic and Postal Communications Authority (AKEP) and the Audiovisual Media Authority (AMA) have met bilaterally recognizing and appreciating the cooperation over the years, and stressing the intensification of relations between the institutions and more cooperation in the areas of common interest.

Following the meetings, the authorities signed on 03.11.2021 a Memorandum of Cooperation to ensure and provide operational, technical, and legal support in the areas of mutual interest.

Under this Memorandum, the institutions undertake to cooperate in implementing the Memorandum and in the quickest and most efficient manner and to ensure the highest quality possible during implementation.

In meeting its obligations provided under the "National Plan for Sustainable Digital Broadband Infrastructure 2020-2025", AKEP has provided citizens with the opportunity to file complaints regarding internet services, related to quality of services among other things, by developing a measuring tool.

The platform is accessible on AKEP's website https://nettest.akep.al/sq/test and all final users may use it to measure and compare current internet speeds with what has been agreed in the contract. After the measurement, results can be automatically submitted to AKEP and can be used for end user complaints.

The AKEP Steering Board, with its Decision No. 10 dated 22.07.2021, adopted the final document on the "Wholesale services costing model results in mobile networks". This document describes and explains the main modelling principles and parameters used to estimate mobile services costs, taking under the closest consideration possible European Commission recommendations and international best practice. It also addresses the results of wholesale services costs provided by the mobile operators in Albania, based the LRIC+ and the Pure LRIC methodology.

AKEP has continued to work for the implementation of the Regional Roaming Agreement to ensure "Roaming like at home" starting 1 July 2021 in the Western Balkan Countries.

In 2021, operators have reported data on the number of subscribers and traffic volumes for their mobile services (voice, SMS, and data). The data submitted by the operators have been collected and aggregated by the WB regulators and have then been submitted to BEREC, which has prepared periodic reports on the roaming services indicators in the WB6 and other parts of the EEA and the 'Rest of the World'.

The data reported by the operators in Albania for relevant periods show that the effects roaming services price reduction policy in the WB and the implementation of the RLAH regime have been very positive for final users.

PILLARS OF STRATEGIC ACTION FOR 2022

1

NE

- 1. Meeting strategic commitments to the European Union in the framework of the effective and complete 700 MHz band administration take over from AMA within 2022;
 -
- 2. Signing the cross-border agreement with the Republic of Northern Macedonia on defining administrative rules and technical procedures for frequency planning and coordination, with the aim of preventing mutual interference in the fixed radio service networks and mobile terrestrial services, and for the most optimal use of the radio spectrum;
- 3. Conducting a detailed and long-term impact assessment of the AKEP critical systems and network safety legal and technical parameters, capacities and instruments with the aim of preventing and eliminating cyberattacks;

.....

- 4. Focusing on starting the broadband internet access wholesale market analysis process based on the latest recommendations, methodologies and standards of the European Union with the aim of meeting regulatory objectives and driving digital society progress;
-
- 5. Under the leadership of the Ministry of Infrastructure and Energy, developing proactive approaches for broadband infrastructure development and wider access to broadband services based on the National Plan for Sustainable Broadband Infrastructure Development 2020-2025.
- 6. Updating rules for the registration, use and, administration of cc.TLD.al domain names and its sub-domains, and reviewing Regulation no. 2, dated 21 February 2008, on the "Registration and Administration of Domain Names under. AL and under the .gov.al, .mil.al, .edu.al, .com.al, .org.al and .net.al domains";

7. Continuously improving universal and non-universal post services through

a national survey open to all end users, with the aim of processing a series of recommendations for a responsible and efficient postal service.

2021 A PROMISING YEAR FOR MORE CONNECTIVITY AND INTEGRATION: FROM REGIONAL ROAMING TO THE PROGRESSIVE LOWERING OF ROAMING CHARGES WITH EUROPEAN UNION MEMBER STATES

IBringing down
roaming charge
barriers in the
Western Balkans

As noted in previous reports for the 2018-2020 period, AKEP has contributed to and supported government initiatives to reduce and ultimately lift roaming charges with the Republic of Kosovo and the Wester Balkan Countries (hereinafter WB).

The Western Balkans digital agenda is a joint commitment of the Western Balkans countries and the European Commission, recognizing it as one of the main pillars of the enlargement perspective and the integration of these countries in the European Union.

Western Balkan governments signed an agreement for the elimination of the roaming service charges in the region in a meeting organized in Sofia on 17 May 2018, and expressed their support for lowering these costs between WB and EU countries.

Among other things, the aim of the agreement also includes business climate improvement in the area of digitalization, through ensuring sustainability, predictability, and driving competition in the electronic communications sector.

In the framework of this process, ministries responsible for electronic communications in the Western Balkan countries, signed on 4 April 2019 in Belgrade, the regional agreement on roaming charge reduction in the WB, in line with the principles of the Roam Like at Home (RLAH) model implemented by the EU member states.

After the signing of the "Agreement for the lowering of roaming services prices in public mobile communication networks in the Western Balkans region" (hereinafter the RRA), pursuant to the provisions of law 9918/2008 and Steering Committee Decisions No. 21-24, dated 24.6.2019, AKEP adopted the "Regulation on international roaming services fees between Albania and the Western Balkans" document.

In 2019 and 2020, AKEP took appropriate measures to adopt decisions to put in place and implement the regional roaming agreement with the WB countries. The roaming service fee regulation with the WB countries was completed in phases starting from 1 July 2019. During the first phase from 1.6.2019 to 30.6.2021 the retail roaming charges with WB countries were regulated in line with the RLAH+ principles (same fees as in country and applying an addition over these fees, with maximum price ceilings provided for in agreement with and adopted by AKEP).

In 2021 AKEP focused on adopting the relevant secondary legislation to start the

elimination of the RLAH roaming charges, starting from 1.7.2021 for all Albanian citizens and subscribers during their travel in WB countries.

In the framework of this process and after the completion of the public consultation procedure and the administration of the feedback from the interested stakeholders, the AKEP Steering Committee approved with Decision No. 9, dated 9.6.2021 the relevant Fair Use Policy (FUP) and the RLAH and FUP Guidance documentation¹³ for implementation by the operators, as follows:

- "Regulation on the implementation of the Fair Use Policy and the Methodology for the Elimination of Retail roaming charges (RLAH) Sustainability Assessment for the Western Balkans";
- "Guidance on the RLAH and FUP implementation for the roaming services with the Western Balkans".

The abovementioned documents adopted by AKEP provide the following:

- rules to ensure sustainable implementation of the fair use policies (FUP) that Albanian mobile
 operators can apply for the consumption of regulated retail roaming services provided to subscribers at the retail fee applicable in the country according to the RLAH model, with the aim of
 preventing abusive and abnormal use of retail roaming services;
- rules on the procedure and documents that mobile operators should file with AKEP to obtain the relevant authorization for the application of a roaming surcharge, for the purposes of ensuring the sustainability of their domestic fee models, and the methodology to be applied by AKEP in reviewing these requests/applications.

The adoption of these acts by AKEP fulfills all commitments that Albania has made for the implementation of the RRA roaming agreement signed by the Government in the framework of the Berlin process, and the recommendations of the Albanian Parliament for AKEP made in recent years for the elimination of roaming charges with the Republic of Kosovo and other Western Balkan countries.

The roaming charge reduction process in the WB has been dynamic and has been an on going process for over two years. Continuous discussion and meetings have been held during this process with the Regional Cooperation Council (RCC) in the quality of the roaming charge reduction process in the WB coordinator, the EU, regional regulatory bodies, and domestic and regional mobile operators.

The successful implementation of RLAH with WB countries in Albania starting from 1.7.2021 is one of the most important achievements not only in the framework of the regional cooperation and the cooperation with the EC, but especially because for the benefits

¹³ These documents have been developed in line with the provisions of law 9918/2018 (article 7, paragraph 1 and article 55, paragraph 2/c) and with the RRA agreement, based on the European Commission Implementing Regulation 2016/2286 of 15 December 2016, which provides detailed rules for sustainability assessment and the lowering of roaming charges in the EU countries, and in line with the relevant BEREC Guidance.

afforded to citizens and business in the RoA when using these mobile services. This fee model for mobile subscribers using the RLAH roaming services is in place for all following users starting 1.7.2021:

- prepaid and postpaid users (or users combining payment modalities);
- users using or not using operator offers;
- users with active bundles or not;
- users with units remaining in their services or not.

In line with the RLAH model, from 1.7.2021 all mobile subscribers are charged for all mobile services used in roaming in the WB in line with the relevant fees/tarif methodology applied in Albania for active packages for mobile services such as:

- inbound, outbound calls (0 ALL);
- inbound, outbound SMS (0 ALL);
- Data/Internet (according to the fair use policy FUP).

Subscribers using postpaid or prepaid bundles/ofers will have the opportunity to use the service units included in the fixed period (monthly) fee or in prepaid packages (daily, weekly, 30-day, etc.) while in roaming in the WB the same as if they were in Albania, i.e. without additional fees or the need to purchase additional roaming services in the WB.

2. Monitoring the implementation of the roaming services commitments, unified and balanced since 1 July 2021

After the adoption of the abovementioned acts, AKEP cooperated closely with the three mobile operators organizing meetings and providing relevant clarifications, including assistance and counseling for the improvement of public information posted on the operator websites on RLAH with the WB.

The RLAH implementation was a challenge because of the short timeframe for its complete implementation and the large number of plans and bundles the mobile operators needed to include in their billing systems according to the RLAH model.

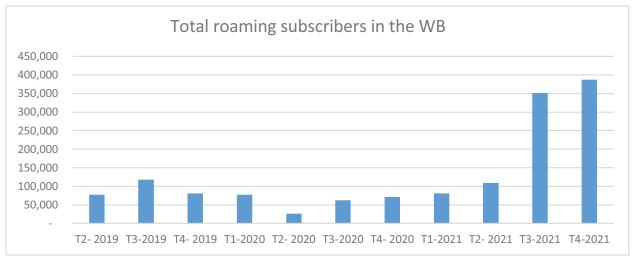
In line with the above and under the direct oversight of AKEP, starting from 1 July 2021 the three Albanian mobile operators have announced the roaming service charges in WB countries to be the same as domestic fees, and in accordance with the fair use policy (FUP).

During this period operators have periodically reported data on the number of subscribers and traffic volumes for their mobile services (voice, SMS, and data). The data submitted by the operators have been collected and aggregated with the data provided by the WB country regulators and have then been submitted to BEREC structures, which have prepared periodic reports on the roaming services indicators in the WB countries.

In addition, for the purposes of periodic report development, AKEP has provided RCC structures on 24.12.2021 information on the current fees and unit volume consumed while in roaming by Albanian citizens during their stay in WB countries.

The data reported by the operators in Albania for these periods show that the effects roaming services price reduction policy in the WB and the implementation of the RLAH regime have been very positive for the users of these services.

The following are some comparative data on the mobile services volumes and subscribers that have used roaming in the WB.



Number of subscribers using roaming at least once during the quarter while in the WB.

Source: Data provided by mobile operators. Processed by AKEP.

As shown in the chart, the growth has been more pronounced during the third and fourth quarters of 2021, which coincide with the entry into effect of the full RLAH service.

The considerable growth of subscribers using roaming services in the WB occurred in the third quarter of 2021, with a fivefold increase compared to the same period of the previous year.

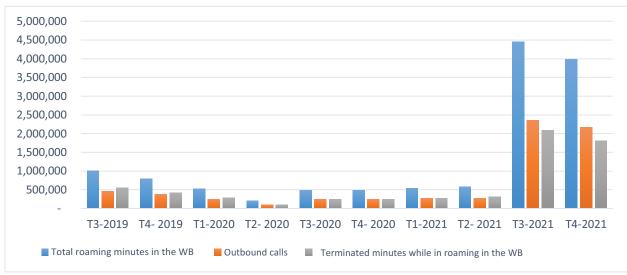


Table: Volume of calls initiated and accepted while in roaming in the WB.

Source: Data provided by mobile operators. Processed by AKEP.

The outbound calls volume while roaming in the WB reached 2.4 million calls during the third quarter in 2021, compared to 266 thousand minutes reported for the previous quarter.

Furthermore, the comparison of the fourth quarter 2021 data with the periods before the start of the RLAH shows a considerable growth of the outbound calls volume.

The same positive progress has been true for calls received by Albanian subscribers while in roaming in the WB countries, especially during the third and fourth quarter of 2021 (should be noted that all inbound calls under the implementation of the RLAH are free of charge).

The positive effects in the lowering of roaming service charges have also been reflected in the increased use of internet services while roaming in the WB countries.

In more concrete terms, in the third quarter of 2021, the data used while roaming exceeded 103 thousand GB, which translates to an increase of 11 times compared to Q3 of 2019 and an increase of 14 times compared to Q3 of 2020.

Furthermore the data volume consumed during Q4 of 2021 was considerably higher than the respective quarters of previous years.

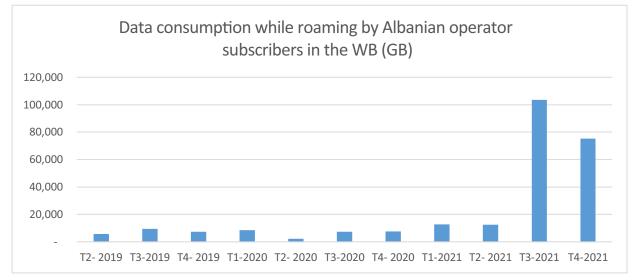
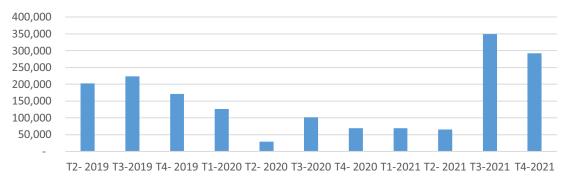


Table: Data volume used by subscribers while roaming in the WB

Source: Data provided by mobile operators. Processed by AKEP.

The number of text messages sent and received by Albanian operator subscribers while roaming has also increased. However, this increase is not at the same levels as those for minutes and data volumes, because of the lower use of text messages and the increased and broader use of OTT applications.

Tabela: Volumi i SMS-ve të dërguara gjatë qëndrimit në roaming në BP



Total SMS while roaming in WB

Source: Data provided by mobile operators. Processed by AKEP.

Based on the above, it is clear that Republic of Albania citizens have benefited from the reduced roaming service charges with the WB, especially during the third and fourth quarter of 2021 when the RLAH entered into effect (in line with the fair use policy).

There has also been growth in the RLAH+ application periods, but this growth was more moderated, caused also because of the pandemic caused by COVID-19.

Field monitoring of the agreement implementation by operators

AKEP has undertaken field monitoring during the period between November and December regarding the implementation of the agreement with Albanian operators for the lowering of roaming prices in the Western Balkans.

Verifications were conducted in the territory and along the border with neighboring countries such as Republic of Montenegro, Republic of Kosovo, and the Republic of Northern Macedonia with regard to the use of GSM, UMTS, and LTE technologies. The verification of the Albanian operator roaming services in public mobile communication networks in the Western Balkans focused in three directions:

Figura 2:Mobile quality monitoring station (QOS)Source:AKEPBurimi: AKEP



8. Roaming service provision based on service fees.

9. Provision of roaming services based on active user packages.

10. The provision of inbound calls and SMS services free of charge by operators.

After these verifications, the working group established by AKEP to check the implementation of the Agreement for the lowering of roaming Services Prices in the Public Mobile Communication Networks in the Western Balkans, found the following:

- 11. Roaming services provision is based on the service fees as provided by the operators in their websites.
- 12. The provision of roaming services in based on the active packages and package units provided by the operators on their websites.
- 13. Call and SMS service provision is free of charge for the three mobile operators in Albania.

3. Regional roadmap and cooperation in the context of removing roaming charges between Western Balkans and European Union countries

The signing of the RRA agreement by the WB governments and its implementation by the regulators and mobile operators were achieved thanks to the regional cooperation of policy making bodies and regulatory authorities in the WB with the EC and the Regional Cooperation Council (RCC). The start of roaming charge elimination in the WB marks an important milestone for EU integration and especially for WB citizens benefits in relation to mobile services.

The lowering of roaming charges between the EU and the WB countries is the next step after the successful implementation of the Regional Roaming Agreement for the roam like at home (RLAH) starting 1 July 2021 in the framework of the cooperation among the WB regulators and operators.

In the context of this process and based on the commitments of the Western Balkans leaders to the Digital Agenda and the Plan for the Common Regional Market (CRM 2021-2024) adopted in the Sofia Summit in November 2020, and after continuous consultation with the stakeholders (regulatory bodies, line ministries, EC structures), the RCC has developed a roadmap for the lowering of roaming charges between the EU and the Wester Balkans countries.



Figure 3: High level meeting between the Ministry of Infrastructure and Energy, AKEP and the main electronic communications operators on the implementation of the regional roadmap, September 2021

Source: Photograph provided by the MIE press office

AKEP structures have actively participated in this process and have continuously encouraged the participation of EU and WB operators, and the participation of BEREC structures, stressing that their technical perspective and expertise are very important for the entire process and that their suggestions should be taken into account and reflected in the Roadmap.

Due to continuous insistence by AKEP¹⁴ and the successful coordination of RCC with European decisionmaking instances, the European Commission requested BEREC during the plenary session of the European regulators held in Stokholm on 8 December 2021, to be more actively involved in this process:

"It should be noted that the EU-WB summit held in Brdo on 6 October welcomed the roadmap for lowering roaming charges between the EU and the WB, which will lead to clear conditions and goals for lowering costs between the EU and the WB. In October, the ministers globally adopted the roadmap approach on the occasion of the digital WB summit, stressing the need for continued business environment improvement for mobile operators across the region. BEREC support and expertise will be valuable for the progress of the process".¹⁵

The roadmap developed by the RCC notes that the lowering of roaming service charges between the WB and EU countries is not foreseen on the basis of agreements between countries, but through voluntary implementation by mobile operators in each country.



Figure 4: The BEREC plenary session of 10 December 2021 in Stokholm during which the European Commission called on the European regulators to be more engaged in the implementation of the Roaming between the EU and the WB Source: AKEP photographs 2021

- 14 See the remarks of the AKEP Chairman in the meeting of 23.11.2021 held in Sarajevo, BiH.
- 15 "Note that the EU-Western Balkans summit in Brdo on 6 October welcomed the roadmap for lowering roaming charges between the EU and Western Balkans, which should create the conditions and set clear targets for lowering roaming costs between the EU and the Western Balkans. Later on, in October, ministers endorsed the overall vision of the roadmap at the WB Digital Summit, while stressing the necessity for continuous improvement of business environment for mobile operators across the region. BEREC's support and expertise will be valuable for the onward process". (EC Info Update 7 December 2021, f. 3)

The document presented for the lowering of roaming charges between the WB and EU countries was developed based on 4 main pillars aiming to establish the necessary conditions for the lowering of roaming charges between the EU and WB, such as:

- 14. The continuous implementation of the Regional Roaming Agreement (RRA);
- 15. Improved transparency and monitoring;
- 16. Approximation of EU acquis on electronic communications;
- 17. Improved investment environment.

Some of the policy making measures and reforms proposed in the roadmap as part of the four abovementioned pillars are projected with a completion timeframe between 2022 and 2024. These measures include:

- The transposition of the European Electronic Communications Code in the national legislation of the Western Balkan countries by the end of 2023;
- The development and implementation of National Broadband Plans in WB countries by the end of 2023;
- The establishment of Broadband Competent Offices (BCO) for broadband and 5G investments in each WB country by the end of 2022;
- The simplification of procedures for network permit granting by competent domestic authorities by the end of 2023;
- Adequate fees for permits and transfer rights by the end of 2023;
- Ensuring access to physical infrastructure owned by public institutions;
- Ensuring timely access to the 5G spectrum;
- Ensuring a friendly approach to investments in the 5G spectrum;
- Ensuring financial resources for the WB countries as additional help to stimulate investment.

The implementation of the reforms above in the context of also lowering the roaming services charges, requires measures and the commitment of governments and telecommunications regulators in the Wester Balkan countries, European Commission structures (including BEREC), mobile operators, and other stakeholders in this process.

The main roles and duties for the relevant structures are as follows:

The WB governments will have the duty to:

- Directly engage in and support this process;
- Transpose the European Electronic Communications Code in the national legislation of the Western Balkan countries by the end of 2023;
- Lift legal and administrative barriers to stimulate future investment.

Regulatory Authorities responsible for electronic communications in the WB will:

- Coordinate data collection and submission by the operators;
- Follow up and review the implementation of the 'glide-path' and the fulfillment of obligations they are responsible for;
- Provide expertise and support for the implementation of other measures and required policy reforms.

European Commission structures (RCC, DG CONNECT, BEREC):

- RCC will coordinate dialog between the parties involved in the process with the support and expertise of DG CONNECT and BEREC as required;
- Organizing regular meetings to review the progress of the 'Roadmap' implementation process and to make relevant proposals;
- Consulting periodically with operators in the EU and WB.

Mobile service provision operators in the WB and EU countries should:

- negotiate effective commercial agreements for the following calendar year, aiming to agree on conditions, in line with the provisions of the 'Roadmap'.
- commit to further lower retail charges for these services to levels no higher than those proposed in the 'glide-path'.

Throughout this period, AKEP has been highly committed to create the adequate conditions for the successful implementation of the agreement to eliminate roaming service charges in the Western Balkan countries, and to expand this initiative to the European Union member states in cooperation with the abovementioned structures.

These initiates aim at lowering the costs that Albanian citizens face when traveling to these countries, coupled with higher quality roaming services during their stay in these countries.

Currently, AKEP is working closely with the Ministry of Infrastructure and Energy to achieve the objectives set in the roadmap in a timely and quality manner, stimulating the engagement participation of Albanian mobile operators in this important process.

In 2021, electronic communication services have continued to be important facilitators of communication between different end consumer categories with the Government, business and other interconnecting actors in the economic and social areas. The adaptation of the electronic communications market actors to the need to be of supports in the new situation created during the COVID-19 pandemic, have to a large extent enabled electronic communication services to continue to be provided at the same professional standards as in 2020.

Periodic electronic market developments are not only conditioned by its tendency to develop efficient competition regardless of the challenges created by the pandemic and the internal market dynamics, but also come as an internal need for coherence with the ever growing demand brought by innovation and technology in relevant fields, which impacts the need of the mobile operators and fixed networks to invest in capacity improvement, mainly related to the provision of internet services.

ELECTRONIC AND POSTAL COMMUNICATION MARKETS UNDER THE INFLUENCE OF DIGITAL GLOBALIZATION:

X

A NATIONAL LEVEL ASSESSMENT FOR 2021

Ι



1. Developments in relevant markets and regulatory oversight

1.1 The consequences of the ever increasing disproportional division between telephony and broadband services

Main mobile and fixed network services indicators

Subscribers

The number of active subscribers using mobile SIM card-based internet services reached 2 million by the end of 2021, with an increase of some 3% compared to the previous year. Thus, some 78% of the active mobile telephony subscribers use internet on their smart phones.

The tendency of changing the subscriber structure continued in 2021, with a decrease of the prepaid subscribers (72% from 77% in 2020), which shows the tendency of moving towards a postpaid service contract.

The data reviewed by AKEP show that the total number of SIM cards reached some 3.4 million in 2021, or in other words, every resident in Albania has some 1.23 SIM cards, which is higher than the European region and global average of 1.18 and 1.11 SIM cards per resident respectively.¹⁶

At the same time, the number of active SIM cards (the number of cards used to complete electronic communications over the last three months) reached some 2.6 million, a slight increase of some 0.63% compared to 2020.

Internet service provision from fixed networks grew considerably when considering the number of new subscribers, while there was also growth with regard capacity and speed.

The number of subscribers with fixed broadband access by the end of 2021 neared for the first time the figure of 560 thousand, with a growth of some 10% compared to 2020.¹⁷

The fixed network broadband access rate for 2021 was over 77% for households and some 20% when compared to the population number, marking a considerable growth of 7 percentage and 2 percentage

¹⁶ https://www.itu.int/en/ITU-D/Statistics/Documents/facts/FactsFigures2021.pdf

¹⁷ ITU data for 2021 can be found at this link https://www.statista.com/statistics/370681/fixed-broadband-internet-penetra-tion-region/

points respectively compared to the 2020 rate.

Based on regional data, the regions with the highest urban penetration in 2021 are Tirana and Korça with 43.55% and 30.42% respectively.

On the other hand, Durrës is the region with the highest rural penetration rate of some 23%, followed by Tirana, Shkodra and Lezha with 10% each. The average urban penetration norm for 2021 is approximately 30%, while the average for rural regions in approximately 8%.

The number of fixed telephony subscribers in Albania in 2021 declined by some 12% from 223,496 at the end of 2020 to 197,690 at the end of 2021.

Volume of units used

In 2021, the situation caused by the continued pandemic, remote work and online education have more than ever stressed the need not only for access to internet services, but also for access to high speed and stable internet services.

The data volume transmitted through mobile internet networks peaked at some 155 million GB. Compared to 2020 this is a growth of approximately 74.9%.

Increased internet use through mobile phones points at the fact that SIM card equipped mobile phones have not a re-dimensioned role transitioning from the traditional voice call use, to providing access to a virtual world (information browsing, data transmission, audio and video calls, sms, etc.).

The increased internet use was accompanied by a decline of:

- - number of SMS-s sent;
 - inbound international call volume.

As also noted in previous AKEP reports, the decline of these indicators is also a consequence of the massive use of OTT applications (*Whatsapp, Viber, Messenger, Skype, etc.*), which are used for text messaging and audio and video calls. Communicating through these applications has been increasing due to the improvement of services provided by 4G and 4G + network operators that enable better quality of both messaging and calling (audio and video) through these applications.

It should be noted that in 2021, when compared to 2020:

- - the average calls volume per user was 5% higher, totaling 360 inbound and outbound call minutes,
 - average monthly internet use has increased by some 64%, to some 6.39 GB per month.

.....

As a result of the measures taken by AKEP for tariff non-discrimination within the network or towards other national mobile networks, in 2021 some 44% of the outbound calls were placed towards other operators 'off-net', while 55% were on-net, thus marking a slight difference of 1 percentage point for both indicators when compared to the previous year.

In 2021, broadband internet traffic from fixed networks reached some 952 million GB, or approximately 56% more than 2020, which shows that subscribers to these services have used the network to systematically and sustainably access their financial, information, social, health and other services.

The total number of calls originating from fixed telephony networks has increased, along with the use of fixed telephony services. The call volume generated by Albtelecom fixed telephony network subscribers, in the quality of the largest market operator in 2021, increased by 5% compared to 2020, while the average number of call minutes per month per user of the Albtelecom fixed network, which is the largest and most important fixed network operator in the country, increased from 33 minutes in 2020 to 37 minutes in 2021.

Service provision technologies and 3G and 4G coverage

The increased number of internet service subscribers and other technological developments have led to increased demand for quality in the provision of these services. As a result of the tendencies and the need to work remotely, internet users have dictated the demand for higher speed and better stability connections, along with the need for coverage in uncovered rural areas, especially in areas with the tourism services provision potential.

All three mobile services operators have reported 3G coverage at a rate of 90-99% of the population in 2021.

With regard to territory and population coverage with LTE (4G) network, the following was reported by providers for 2021:

- The Vodafone Albania sh.a. is the operator with the widest coverage with this technology, covering 95.9% of the territory with 4G and 98.9% of the population.
- The One Telecommunications sh.a reported 4G territory coverage at 95.1% and population at 98.5%.

• Albtelecom sh.a has the lowest 4G territory coverage with 42% and lowest population coverage with 81%, marking however considerable growth compared to 2020.

The improved internet service provision quality is confirmed also by the Opensignal (international independent body) report, which aims at showing the real mobile network situation around the world based on the experience of network users themselves.¹⁸ According to this report, two of the operators have achieved very good indicators in regard to \$G coverage and speeds, providing users with quality mobile internet networks for voice calls and OTT applications, download/upload speeds, video quality and other digital services.

An improvement in internet service provision quality is also noted in the broadband services market provided from fixed networks. In 2021, the largest growth came in the subscriber segment with broadband connections of 1 Gbps and higher, with the number of subscribers increasing five fold compared to 2020.

In 2021, the subscriber segment using speeds higher than 10 Mbps reached 83%, compared to 67% in 2020. The subscriber transition towards higher speed internet packages allows users to receive better quality services with less interruptions.

As regards the internet speed provided, it should be noted that in 2021 a considerably higher number of subscribers using speeds higher than 100 Mbps, with the number reaching 55,065 in 2021 compared to 15,406 in 2020.

The considerable increase in subscribers with access to fixed connections of more than 100 Mbps is a very positive indicator in regard to meeting the objectives provided in the national broadband plan for high speed and very high speed digital broadband infrastructure across the country and for further progress towards the Gigabit society.

The main technology for the provision of fixed network broadband access is FTTH/FTTB, which increased by some 36% compared to 2020, followed by DSL connections.

The majority of DSL connections are based on combined fiber optic and copper networks (FTTN/FTTC). It should be noted that ISP providing broadband services through fixed networks are increasingly switching their connections from DSL (and relevant combinations) to FTTH/FTTB fiber optic, which allow much higher speeds and quality compared to DSL.

¹⁸ https://www.opensignal.com/reports/2021/10/albania/mobile-network-experience

At the end of 2021, the number of DSL based connections decreased to some 85 thousand from some 170 thousand in 2019, while the number of FTTH/FTTB technology connections at the end of 2021 reached 314 thousand, up from some 142 thousand in 2019.

Market share dynamics

Market development is based on new commercial and innovative strategies focusing on technology. These strategies do not only shape products or services to be provided to consumers, but also the consumer approach to the innovations of the market. Market implications regarding the identification of strategic opportunities, maintenance and use of cost effectiveness, market actor efforts to achieve and maintain competitive advantage, the need to adequately diagnose strategic skills and to optimize their management are closely related to sector policies.

In this context, investments made by mobile and fixed network operators in recent years, which have also had an effect in driving competition between operators, reflected in market share changes for each operator, must also be noted.

Vodafone Albania continues to be the operator with the largest market share in 2021, with regard to all main mobile electronic communications services' indicators. However, the company has posted slight declines compared to 2020 with regard to the majority of these indicators.

In more concrete terms, market share in 2021 for Vodafone Albania sh.a is presented as follows:

- approximately 44% of the SIM card users, compared to approximately 47% in 2020;
- approximately 45% of the active SIM card users, compared to approximately 47% in 2020;
- approximately 50% of the mobile outbound calls market share, compared to 53% in 2020;
- approximately 56% of the data volume (internet) market share, compared to 64% in 2020;
- approximately 45% of active internet users (broadband) market share, compared to 49% in 2020;
- 53% and 54% respectively of the total revenue and retail revenue market share.

The One Telecommunications sh.a. operator has continued growth regarding the main indicators in 2021, thus driving competition in the mobile services market, and this is also reflected in the market share growth in some of the main indicators:

- approximately 40% of the SIM card users, compared to approximately 37% in 2020;
- approximately 39% of the active SIM card users, compared to approximately 37% in 2020;
- approximately 39% of the mobile outbound calls market share, compared to 34% in 2020;
- approximately 32% of the data volume (internet) market share, compared to 23% in 2020;
- approximately 40% of active internet users (broadband) market share, compared to 36% in 2020;

• approximately 34% and 33% respectively of the total revenue and retail revenue market share compared to 31% for both indicators in 2021.

In 2021, the Albtelecom sh.a operator was not able to improve its position in the market and has recorded slight declines in its main indicators compared to 2020. The steepest decline was recorded in the outbound calls indicator:

- approximately 16% of the SIM card users, on par with 2020;
- approximately 15% of the active SIM card users market share, marking a 1 percentage point decline compared to 2020;
- approximately 11% of the mobile outbound calls market share, compared to 13% in 2020;
- approximately 12% of the data volume (internet) market share, compared to 13% in 2020;
- approximately 15% of active internet users (broadband) market share, on par with 2020;
- approximately 13% and 14% respectively of the total revenue and retail revenue market share compared to 14% for both indicators in 2020.

Mobile and fixed network services tariffs

Pursuant to the provisions of article 54 of law No. 9918/2008, as amended and the regulatory acts thereof, AKEP conducts periodic monitoring of the tariff dynamics and transparently publishes on its official website information on mobile and fixed network service charges, and broadband internet access service fees.

In 2021, mobile service providers have continued to announce a number of promotional campaigns for existing plans and the launching of new bundles for specific user categories.

The main share is taken by standard 30-day bundles, varying from 500 ALL to 2,500 ALL and offering a variety of unlimited minutes/SMS/internet combinations. The competition element is evident in the promotional prices offered for various bundles by the operators, with deals focusing on the end of year period with discounts of up to 50% and increased number of units in existing bundles. The three mobile operators offer a large number of bundles with the goal of meeting consumer requirements and preference, and of note in this regard is the design of bundles for specific consumer groups, in line with the needs and characteristics of these consumers. In providing retail mobile services, mobile operators are mainly focused on providing minute and SMS bundles with various data volumes.

Standard mobile service charges are considerably higher than the prices for the bundles in question, however the application of these charges is considerably lower than bundles. In this regard, bundle calls make up some 96.5% of all calls, compared to 96.8% in 2020.

The same is true for SMS volumes, where in 2021 95.8% of the total SMS volume originated from bundles, compared to 95.6% in 2020. These figures clearly show that almost all users are using bundles

with included minutes and SMS (up to unlimited volumes), thus leading to a considerable decrease in the application of standard per unit charges.

In contrast with the mobile services market, the number of operators providing internet services and integrated fixed network-based services, is considerably higher, however for the most part their coverage is local. The high number of providers for these services leads to a high diversity of service packages in the market, both from the price and the combination of units included perspectives. In practice it is difficult to compare service package prices for fixed networks, because the majority of these services are provided as bundled services.

In 2021, operators providing services from fixed networks have focused on new plans in the fiber broadband internet technology and IPTV, with the main focus being on increasing internet speeds, offering now Gigabit generation download speeds as well.

Integrated packages (Bundles)

The consumption strategy towards bundled service packages which include national phone minutes, SMS and internet access, along with the changes mentioned, has allowed for an easier comparison of the packages from one operator or among various operators, and better expenses control by mobile users.

The tendency of mobile operators in offering bundles to their prepaid users is to provide daily, weekly, and monthly (30-day) plans bundling data in addition to minutes and SMS in the majority of them. These bundles allow choice for prepaid users and are easily compared on the basis of price, units included and length of validity.

The provision of fixed network services in bundled internet access packages including fixed telephony and television channels (CaTV or IPTV), is the predominating form of competition among fixed network providers.

The number of fixed network subscribers that have access to dual and triple bundled services (combination of telephony/internet/TV) at the end of 2021 was some 302,596 or 3% more than in 2020.

A special section of the periodic information publications AKEP posts on its official website regarding mobile prices, includes a comparison of the packages from different operators, using the package length and relevant prices as the basis for their comparison.

The data shows the following:

- The number of mobile and fixed network bundles/promotions/offers is considerable, providing diverse choice for the end consumer.
- Operators employ similar marketing practices for both subscriber categories (household and business), in line with the variety of services provided in the market in their bundles (prepaid and postpaid).

 When considering transparency, offers, standard services and bundles are published on the operator websites in separate sections for household and business subscribers, providing detailed clarifications on method of payment, service prices for the main household and business categories

Competitiveness

Mobile telephony markets

Mobile service providers executed intensive marketing campaigns in 2021, with operators announcing the launch of new plans or changes to existing ones. The main focus is on providing the internet services included in the bundles, with a considerable increase of the 4G speed units, which are combined with unlimited internet access at reduced speeds.

In line with its specific mission, the Electronic and Postal Communications Authority (AKEP) oversees the electronic and postal communications markets with the purpose of regularly reviewing relevant free and efficient competition, transparency, and objectivity dynamics, focusing especially on their impact on services provided to consumers.

In this framework, AKEP has paid close attention to retail mobile telephony market developments even though not under regulation. The institution pays close attention to this segment through continuous communication and dialog with operators in order to prevent specific commercial tendencies that could escalate into harmful practices or artificial supply and price situations that contradict the midterm and long-term interests of the market stakeholders and consumers.

In addition to being subject to the principle of social responsibility vis-a-vis the consumer pursuant to the relevant applicable primary and secondary legislation, electronic service network operators in the Republic of Albania also have the obligation to align their commercial action to the normative principles of free, fair and efficient competition, based on objective, proportional and transparent policies and actions. Avoiding these obligations may lead to legitimate doubt about the self-regulatory retail market capacities and to consideration of unilateral regulatory interventions.

For these reasons, AKEP has regularly invited operators to align, through dialog and concrete action, their promotional practices and campaigns to the abovementioned legal and regulatory principles. In this regard measures have been taken to lower pressure on the consumer and to establish favorable conditions that allow anyone to freely and transparently chose their favorite services and offers within reasonable timeframes.

Fixed network markets

The number of operators that have reported to provide services from fixed networks in Albanian as of the end of 2021 was 240. The majority of alternative operators are small and have a very limited network presence in urban or rural areas in the proximity of urban centers.

The market for broadband services based on fixed networks is characterized by a large number of operators resulting in heavy competition in the market.

Only a few of the operators in this market have broad coverage in a number of regions in the country, while the rest compete in smaller segments and are mainly local providers.

In 2021, the operators with the largest shares of the fixed broadband network market were the following:

- Albtelecom with approximately 21% market share;
- Vodafone Albania with approximately 20% market share;
- ASC with approximately 11% market share;
- Abissnet with approximately 8% market share;
- Digicom with approximately 4% market share;
- Nisatel with approximately 4% market share;
- OA (other operators) with 33% of the market share.

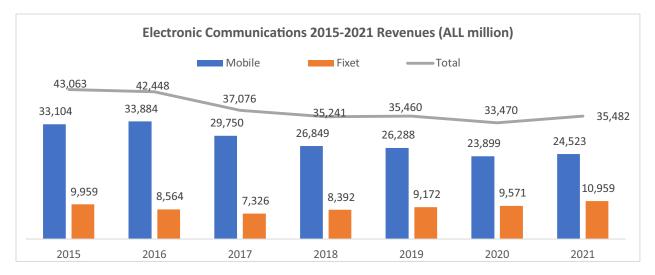
In recent years, the provision of bundled fixed and mobile network services has grown, promoting packages that bring benefit to both markets if bundled services are used.

Revenue and investments in electronic communication networks

Reporting during 2021 shows that electronic communications service providers reported **a total of 35.4 billion ALL in revenue** from electronic communications, marking an increase compared to 2020 and 2019 for the period before the pandemic.

The main weight in the growth of total revenue in the market comes from the revenue generated from fixed network services provision.

The following chart shows total electronic communications operator revenues disaggregated into fixed and mobile network revenues.



Source: Revenues reported by operators. Processed by AKEP

Operators have reported a total *turnover of* **24.5 billion ALL** for 2021 in the mobile services market, marking an increase of some 3% compared to 2020.

Even though in smaller overall value compared to 2020, investment in the mobile services networks continued in 2021, reaching a total investment value of over **4.6 billion ALL.** Some 82% of the investment value reported was mobilized for the upgrading of the mobile broadband provision infrastructure, which is reflected in the improved 3G and 4G coverage. This was also driven by the data volumes consumed.

Revenue from electronic communications reported by fixed network service providers for 2021 surpassed **10.9 billion ALL**. Compared to 2020 this is a growth of approximately 15%.

More than 80% of the revenue in this market is generated by the 7 main operators, which are:

• Albtelecom sh.a (34%),

- Vodafone sh.a. (24%),
- ASC (7%),
- ATU, Abissnet, Nisatel and Digicom with some 4% of the market share each,
- The other operators (OA) even though numerous have a collective market revenue share of 20%.

According to the reporting in 2021, fixed network operators have invested 2.4 billion ALL, which were mainly related to improving access to broadband services, with the main focus being the switch from the DSL connection technology to the fiber optic technology.

The figure below provides some information on the revenue level for some of the main operators in the electronic communications market.

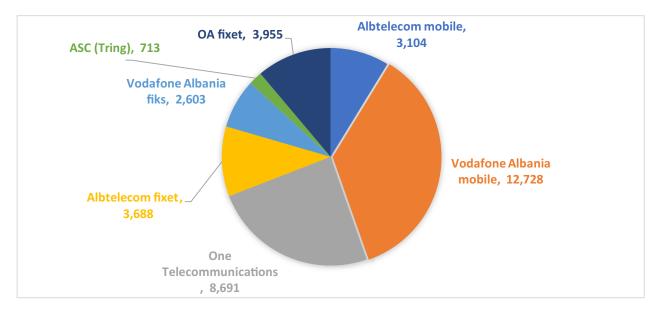


 Figure:
 Revenue distribution among electronic communications operators (in million ALL)

 Source:
 Revenues reported by operators. Processed by AKEP

The electronic services market is also one of the sectors with considerable contribution to the employment rate. In 2021, a total of more than 3,280 individuals were employed in this market.

1.2. Developing the advanced national cost model for market analysis in line with 21st century standards

In 2020 and 2021 AKEP has continued the process for the final adoption of the *"Results of the wholesale mobile services cost model"* document.

The implementation of this project aims at reflecting the actual costs of services provided by mobile network operators, considering also the features and characteristics of the country of operation. As a clarification, starting in April 2014 AKEP has used the benchmarking method to regulate mobile call termination charges (MTR), with the benchmark being the average value of termination charges in the European countries applying the clean LRIC cost model. This method is in line with EC recommendations.

The identification of mobile services costs in line with the EU member state practices, and adapted to the national circumstances, has been a request brought by mobile operators during the previous mobile services market analyses conducted by AKEP.

AKEP contracted the "AIR Communications Shpk" and "Tera Consultants Sha" as consulting companies for the purposes of finalizing the national cost model, which defined the model used along with the

general principles and the methodologies for implementing the model and the way the costs will be assessed.

The final "Results of the wholesale mobile services cost model" document identifies the wholesale costs for services provided by mobile operators in Albania, in line with the LRIC+ and Pure LRIC methodology.

The mobile services cost assessment methodology presented by the consultants was adopted by the AKEP Steering Council with its Decision No. 24, dated 26.11.2020, and was subsequently subjected to the public consultation procedure in the period between 26.11.2020 and 26.12.2020. Upon conclusion of this Public Consultation procedure, AKEP administered the stakeholder comments and forwarded them to the consultant for integration in the final document that will be used as a model for mobile services cost estimation.

As a next phase to this process, with Decision of the Steering Council No. 3 dated 1.4.2021, AKEP adopted the ""Reference model for the development of the mobile services cost model" - Final Document".

Upon analyzing and processing the data following EU member state practices as well, the consultancy joint venture developed the "Results of the wholesale mobile services cost model results" - Public Consultation Document" pursuant to the contractual obligations and based on the Final Cost Model adopted with DSC No. 3, dated 1.04.2021 and the data obtained from the mobile operators in Albania.

With Decision No. 8, dated 27.5.2021 AKEP adopted and posted for public consultation for a period of one month the "Results of the wholesale mobile services cost model results" - Public Consultation Document".

As a next step, with its Decision No. 10 dated 22.07.2021, the AKEP Steering Council adopted the final document on the "Wholesale services costing model results in mobile networks". ¹⁹

The document developed by the consultant on the results generated by the cost model and adopted by AKEP, provides in detail all modeling issues, assumptions, parameters, procedures and methodologies used for the mobile services costing model development. In addition, the document provides the approach and calculations in the framework of the estimation of weighted average cost capital (WACC) for mobile services activities.

The consultant has also included a proposal to reduce national call termination charges in a gradual manner to approach the costs identified for this service. Based on the practice followed in the EU countries, the consultant has estimated a period of 2 years to reach a level of national MTR of 0.75 ALL. The orientation of call termination charges to cost drives competition in the mobile termination services provision market and increases benefits to end consumers as a result.

The results generated by the cost model, especially the national and international call termination charges will be used in future call termination market analyses and in other processes based on the needs of the authority.

¹⁹ https://akep.al/wp-content/uploads/2022/03/Vendim-Nr.10-date-22.07.2021.pdf

1.3 Information processing for electronic communications networks (ATLAS)

AKEP has established and manages the ATLAS centralized information system, in which electronic communications operators record their active and passive networks pursuant to the provisions of:

- Law No. 9918, dated 19.5.2008 "On electronic communications in the Republic of Albania";
- Law No. 120/2016 "On the development of high-speed electronic communications networks and ensuring right of way".

Electronic communications operators continued their efforts to update data in the electronic communications network centralized information system (ATLAS) throughout 2021.

All operators have been informed regarding their obligation to update data in the system and the majority of them have input their information in the online system.

Data updating is a ongoing process undertaken pursuant to regulation No. 26, dated 16.8.2012 on "Contents, form and function of the public electronic communications networks electronic register in the Republic of Albania".

By the end of 2021, and out of 245 operators:

- 150 operators have completed the network registration pursuant to the provisions of the regulation;
- 86 operators have completed network registration, but registration has been returned for review and completion, and for accurately defining the relevant fields, pursuant to the provisions of the regulation;
- 14 operators have declared to not have any networks under ownership;
- 37 operators have access to the ATLAS system, but have not registered their network;
- 44 operators have not replied on either accessing or registering their data in the ATLAS system, against which the relevant measures have been taken.

It should be noted that the main issue related to network information input in the ATLAS system originated from local government authorities, which have input insufficient information in 2021, even though periodically reminded by AKEP to complete their information.

Quality of Services (QoS) monitoring indicators data for mobile GSM, UMTS and LTE technologies were updated in the Atlas system in 2021.

In 2021, AKEP continued its cooperation with the State Authority for Geospatial Information (ASIG) to provide electronic communications operator data in the GIS (shapefile) format, pursuant to decision of the Council of Ministers No. 166 dated 1.3.2017 "On appointing the authority responsible for

administering the single information point for the provision of minimal information on infrastructure networks at the national level".

In addition, in cooperation with the Ministry of Infrastructure and Energy, AKEP is closely working with the consultant selected by MIE for the "Development of the Albanian Broadband ATLAS" project, in the framework of the EU investments under the Western Balkans Investment Facility (WBIF) program.

Currently, this project is in the "pre-feasibility" stage and should be completed within a 3-year period.

The project aims at:

- increasing transparency for information exchange regarding broadband communications;
- improving policy making and planning in the digital sector;
- improving investment effectiveness and public and private operator usage of the network where investment is made.

In more concrete terms, the project aims at assessing and then developing the ATLAS system, adding new functionalities among which the following can be mentioned:

- information down to the end user;
- information on the use of broadband internet in Albania;
- service providers in a given area;
- information on white areas;
- mobile service coverage based on the best international practices and models.

In addition to developing the private sector, decreasing the cost for the implementation of electronic communications networks, this project also has an impact on the expansion of high speed broadband networks to state, education, healthcare, agriculture, tourism, transport, environmental, cultural, administrative and other types of institutions.

Furthermore, the coordination of activities with all interested stakeholders for electronic communication network information exchanges continued in 2021. Coordination has also been ongoing with the relevant ministry for the development and implementation of the secondary legislation for the implementation of law No. 120/2016 "On the development of high-speed electronic communications networks and ensuring right of way".

1.4 Exponential growth of entrepreneurship in the postal market and its impact on the universal postal service

Postal services market

The postal sector in Albania has undergone a process of changes over time, based on the EU member states model and in accordance with the best international practice. The transformation went from the provision of traditional monopolistic postal services towards a market that is gradually opening up to competition, where the provision of these services is aided by technological developments and infrastructure modernization.

The postal sector is of importance in the Albanian economy and is one of the sectors with the highest number of employees in the country with more than 3,200 employees. The activity of the postal sector is managed based on the relevant legislation (Law No. 46/2015 "On postal services in the Republic of Albania" and the relevant secondary legislation adopted for its implementation) and is developed according to the instructions and objectives set in the postal policy document developed and adopted by the Government.

The postal services market has changed considerably in recent years. One of the main changes is the move away from traditional paper-based communication towards electronic devices based communication, which has led to a considerable decline of postal object volumes. At the same time, digitalization exponentially drives up the volume of postal packages (parcels) as a result of the e-commerce growth.

In 2021 the volume of postal parcels has increased driven by e-commerce, which has become the main segment for newcomers in the market, in the form of postal parcel delivery service providers, **which** grew from 26 operators at the end of 2020 to 34 operators by the end of 2021.

In cooperation with the Ministry of Infrastructure and Energy and the Ministry of Finance and Economy in the framework of meeting the obligations under the Stabilization and Association Agreement regarding postal services, AKEP has contributed to the transposition of Regulation of the EU 644/2018 on the transboundary delivery of postal parcels, which was adopted with Instruction of the Minister of Infrastructure and Energy No. 5 dated 25.06.2021 "On adopting rules for the transboundary delivery of postal parcels".

Pursuant the abovementioned instruction, AKEP has notified and instructed all postal service providers regarding the obligations stemming from this instruction.

Furthermore, pursuant to the provisions of this instruction and upon collecting the relevant information from the postal service providers, AKEP published summary information on cross boundary postal fees of these operators on its official website.

Postal market volume indicators

In 2021, postal services in Albania were provided by 34 operators holding 'General Authorizations', of which the Posta Shqiptare sh.a. is the only Universal Postal Service provider.

The total number of postal objects accepted in 2021 by the Posta Shqiptare sh.a and the other postal services providers reached some **27.1 million**, an increase of some 9.4% compared to 2020.

This increase came as a result of the increased postal services volume by Posta Shqiptare sh.a.

The same is true for the total volumes accepted by other postal service providers. The largest growth was achieved by the non-universal postal service for international postal shipments, which grew by some 72%, while the domestic express service grew by some 14% over 2020. The domestic post and express international post services have contracted by 10.2% and 1.6% respectively.

Revenue and investment in the postal market

Pursuant to Law No. 46/2015 "On Postal Services in the Republic of Albania" AKEP collects and processes statistical and financial information from postal service providers in line with its regulatory duties.

According to the data reported for 2021 by the universal postal service provider and postal service providers, financial revenue in the postal market reached a total of **2.65 billion ALL**.

The operator with the largest market postal services share is Posta Shqiptare sh.a. which has generated **a total of 1.43 billion ALL** in revenue in 2021, while the other postal service providers combined have generated a total of approximately **1.22 billion in revenue**.

A comparison of the data for 2021 and 202 shows a 5% decline in the total revenue reported. The following chart shows the market shares in the postal market according to 2021 revenue for some of the main operators.

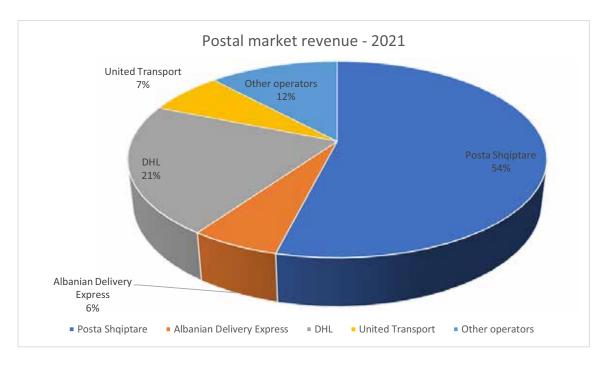


Chart: Revenue based market share in the postal sector - 2021. Source: Data provided by Posta Shqiptare and other Providers. Processed by AKEP

The chart above on the market share based on revenue shows that:

- Posta Shqiptare sh.a. generates the largest portion of revenue, with some 54% of the total,
- DHL has 21%
- United Transport has 7%,
- Albanian Delivery Express has 6%,
- The other operators combined have generated some 12% of the total postal sector revenue.

As regards the Posta Shqiptare revenue, some 92% is generated by the universal postal services, followed by the express post services at some 8%.

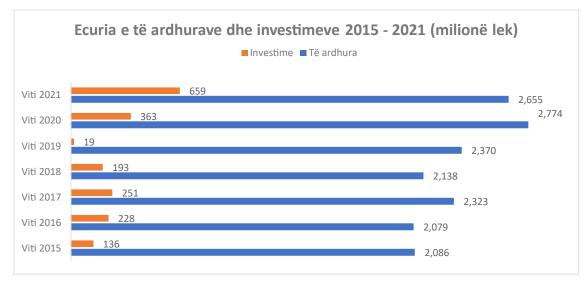


Chart: Revenue and investment dynamics 2015-2021 Source: Data provided by Posta Shqiptare and other Providers. Processed by AKEP

As shown in the chart above, regardless of the slight decline in revenue generated by the postal services, investment in the sector has considerably increased reaching the highest value in recent years at some 660 million ALL, or 82% more than in 2020. Posta Shqiptare leads the investment category with some 40% of the total, followed by United Transport with some 37% of the total.

Postal service inspection

The annual inspection plan had scheduled inspections in all operators providing postal services and registered in the Postal Services Register, and inspections in the field were conducted at all these operators by the end of 2021.

The inspections found as follows:

- 5 postal service providers have unenrolled from the General Authorization Register;
- Legal violations were found in 6 providers and all have been penalized administratively with fines;
- 13 operators providing postal services have partially complied with the General Authorization conditions, with complementary penalties in the form of recommendations and relevant deadlines to comply with said conditions pursuant to Law No. 46/2015 "On postal services in the Republic of Albania" imposed against them;
- the inspection of the universal service provider (Posta Shqiptare sh.a.) was competed in January 2022 and recommendations and relevant deadlines have been defined.

In the framework of the Memorandum of Understanding entered into on 04.10.2019 between AKEP and the General Taxation Directorate, which provides for institutional interaction and cooperation for systematic information exchange on relevant institutional activities, for the purposes of communication and data exchange to improve effectiveness and coordination for a stronger fight against informality by electronic and postal communication operators, AKEP inspection structures have conducted field and remote inspections between April and July 2021 in a number of operators that provided postal services without AKEP authorization and without being registered in the Postal Services Provider register.

The relevant inspections found that some of these operators had just started operations and were guided to complete procedures for registration in the Postal Service Provider Register, that some of them did not provide proper postal services, but delivery services, while 3 cases were referred for follow up to the Economic and Financial Crimes Sector while also informing the prosecution.

1.5 Monitoring and inspection activities in the supervised market and for frequency use

Monitoring activities

Pursuant to Law No. 9918, dated 19.5.2008 "On electronic communications in the Republic of Albania" AKEP is defined as the national authority responsible for monitoring the frequency spectrum use, pursuant to the National Frequency Plan and the Frequency Use Plan. For the purposes of meeting the legal obligation to monitor the frequency spectrum use and to monitor the activities of public service providers, and in accordance with the primary and secondary legislation, AKEP conducts periodic radio frequency spectrum monitoring, especially regarding compliance with the general conditions provided in the Individual Authorization granted to public service providers.

The monitoring of the 20 - 8500 Mhz frequency spectrum from Fixed Stations aims at:

Periodic monitoring through fixed RFMS and SRMF frequency spectrum monitoring stations with the aim of providing valuable data on the spectrum administration process, regarding the current use of frequency channels and bands, the verification of the real technical characteristics of the signal broadcasted, the provision of monitoring information related to requests for special assistance to eliminate harmful interference by neighboring administrations, and to identify and terminate off-band broadcast;

The most important task of monitoring through fixed stations is related to data collection on the use of the radio frequency spectrum. This is achieved both through individuals measurements and through recordings. In addition to addressing interference, which is commonly identified as the most important monitoring task, data collection on Frequency Channel Occupancy (FCO) and Frequency Band Occupancy (FBO) can be considered another important task of the National Monitoring Center and Regional Monitoring Offices at AKEP.

The Frequency Spectrum Periodic Monitoring aims at:

Monitoring fixed radio connection frequencies at main broadcasting points of the Republic of Albania, where operator broadcasting equipment is installed, with the aim of verifying the use of frequencies authorized for use, which should be in compliance with the applicable legal and regulatory framework, pursuant to the authorization conditions.

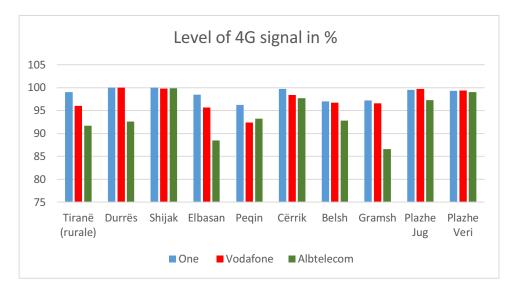
The main purposes for using this type of equipment in 2021 were to verify legal and administrative compliance by operators operating under the AKEP Individual Authorization regime, so that the use of frequencies authorized complies with the applicable legal and regulatory framework, the authorization conditions, mainly regarding the use of frequencies allocated for fixed radio connection use according to the National Frequency Plan and the AKEP Frequency Use Plan.

The Service Quality Monitoring for GSM, UMTS and LTE Services aims at:

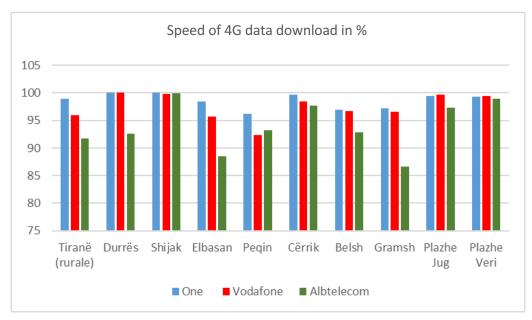
Monitoring mobile telephony services quality, in order to identify problematic areas of low quality services and to stimulate operators to further improve their GSM, UMTS and LTE services in these area.

In 2021, measurements were taken on manually selected GSM, UMTS and LTE technologies, and for the first-time measurements were taken in rural areas with very low population densities to understand mobile services provision in these areas.

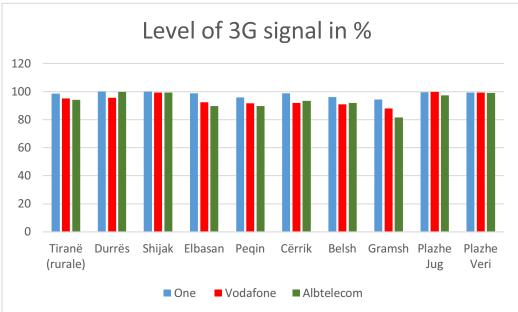
The following shows 3G (UMTS) and 4G (LTE) signal levels and the data download speeds for LTE and UMTS technologies from measurements along accessible road segments in the rural areas of the Municipalities of Tirana, Durrës, Shijak, Elbasan, Peqin, Cërrik, Gramsh and in the main beach areas of the country.



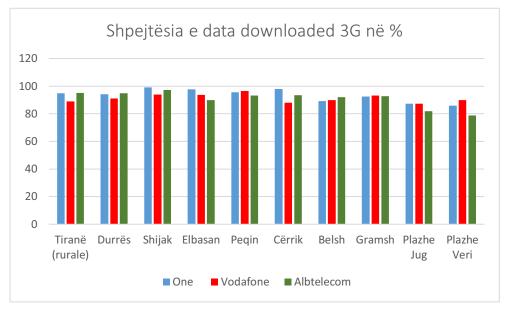




% of Data Downloaded for 4G (LTE)



³G signal in % chart



[%] of Data Downloaded for 3G (UMTS)

Special importance has been paid to monitoring new road segments that have become operational during 2021, such as:

- 1. The Vlora Bypass, where after the AKEP request and after the operators cooperating with one another, service coverage percentage has increased considerably.
- 2. Arbri's Road and the Vlora-Kuç-Gusmar-Tepelena segment with regard to which, operator comments are expected in regard to the report findings on improving mobile services.



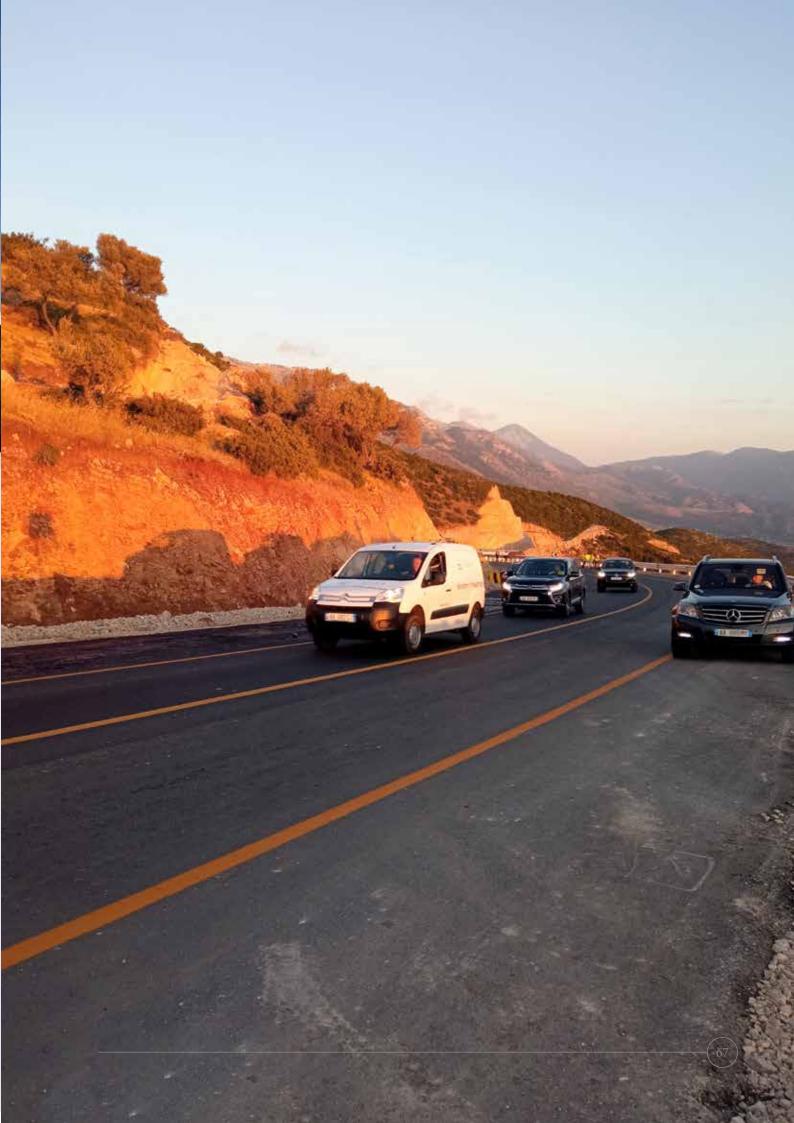
The relevant reports have been developed for all measurements taken, which have been provided to the operators for comments on report findings and conclusions, and for them to take improvement measures for quality KPIs (Key Performance Indicators), coverage and broadband services improvement.

AKEP has requested operator commitment²⁰ regarding:

- Additional sites for station construction jointly funded by the operators;
- Additional sites for coverage and quality of service improvement in portions of the territory where the signal levels and the quality KPIs are not in compliance with the provisions of regulation No. 16, dated 16.4.2010 on "Service Quality Indicators".

The broadband services coverage issues in low population density areas and the improvement quality of services provided in a number of areas have been at the center of attention for AKEP. In this regard measures have been taken to enable the penetration of broadband services in rural and tourist areas, and for the provision of basic telephony and internet services where they are absent or are provided at inadequate levels compared to the required level of quality. All interventions to improve the quality of services provided in uncovered areas and those with low quality coverage that will be planned for the 2022-2023 period will be coordinated with operators based on their budget investment projections.

²⁰ Letter of the AKEP Chairman No. 1488/1 Protocol, dated 01.06.2021 with subject line "Regarding the necessity to provide mobile coverage along the Vlora Bypass segment" addressed to the Albanian Road Authority and the three mobile operators Letter of the AKEP Chairman No. 1488/7 Protocol, dated 08.07.2021 with subject line "On taking measures to provide mobile coverage along the Vlora Bypass segment" addressed to MIE



Addressing complaints of harmful interference

An analysis of the operator reported interference cases shows that the majority of them are related to frequencies used for GSM, UMTS and LTE broadband broadcasting on the frequencies used by mobile network operators.

Fixed monitoring stations are not always adequate for these types of interferences, since problem identification in these cases requires the identification of the interfering signal source (direction), which in general operates at a lower strength and within a narrower action area.

The monitoring method employed by AKEP is the combination of fixed stations with mobile monitoring stations equipment to improve interference investigation efficiency.



Figure 5: Monitoring using the Homing DF and QLMF methods Source: AKEP

To allow full interference source identification in a specific complaint case, it is often necessary to undertake an inspection of the radio equipment of the radio station that has been identified as responsible for the interference. The inspection undertaken as part of planned work aims at ensuring that the installation complies with its technical conditions of use, and that the radio equipment operates in a manner which does not cause unwanted interference.

The frequency spectrum monitoring to address interference complaints is conducted based on operator complaints which are administered by AKEP.

The cases of interference addressed in 2021 are presented below:

| No. | Operatori | Number of complaints | Complaints addressed | Identified sources |
|-----|------------------------|----------------------|----------------------|--------------------|
| 1 | ALBtelecom | 9 | 7 | 2 |
| 2 | One Telecommunications | 13 | 12 | 1 |
| 3 | Vodafone Albania | 1 | 1 | 1 |
| 4 | Other operators | 0 | 0 | 0 |
| | TOTAL | 23 | 20 ²¹ | 4 |

Inspection process in AKEP

In accordance with the annual inspection plan, in 2021, the AKEP inspection structures conducted inspections in a number of public communications operators.

1. Planned Inspections

The electronic network and service operators selected for field inspection by the relevant structure in 2021, were selected on the basis of the following categories.

- Companies not inspected over the pas two years, i.e., in 2019 and 2020;
- Companies categorized as high risk.

The 2021 inspection plan, similarly to the plan for the previous year, continued to include Domain Registries in the inspection procedure.

This plan details the inspections activities to be conducted at Domain Registries in 2021 by AKEP, including the main topics and legal compliance checks regarding the provisions of regulation No. 2, dated 21.2.2008, "On the registration and administration of domain names under the .AL and under the .gov.al, .mil.al, .edu.al, .com.al, .org.al and .net.al domains".

In total, the following has been undertaken in 2021:

- 62 planned inspections in electronic communications operators registered in the register of operators providing electronic communications networks and services pursuant to the General Authorization regime;
- 235 subjects were inspected remotely;
- 6 inspections in Domain Registries.

²¹ Three of the complaints have been resolved by the operators themselves without the need for AKEP to address the interference

Upon conclusion of the planned inspections in 2021 and in addition to the recommendations made or the main administrative measures taken against companies that have committed legal violations, 15 such companies were penalized with an administrative fine.

The administrative measure of "Warning" has been imposed for one Registry, while a complementary penalty in the form of recommendation was imposed for another Registry.

1.2 Remote inspection

In addition to the planned field inspections, and pursuant to Regulation No. 46 dated 27.10.2016 "Electronic Communications Network and Service Operator Activity Inspection Methodology", the relevant AKEP inspection structure conducted two remote inspections verifying in cooperation with other AKEP structures all companies operating in the market.

No administrative measures were taken for companies which at the end of the inspection procedure met all regulatory obligations to AKEP, considering also the unusual situation created and faced by the entire country as a result of the Covid 19 pandemic. In this case, the positive will of the companies to meet relevant obligations was also taken into account.

Upon completion of the inspection procedure,

- complementary administrative sanctions in the form of recommendations were imposed on (first time violation) subjects, with the goal of complying with the regulatory obligations immediately.
- the main administrative measure of "fine" (when the entity had committed repeat violations) followed by complementary decisions to comply with the regulatory obligations immediately, were imposed for all companies which upon completion of the inspection procedure had not complied with the regulatory obligations towards AKEP.
- The inspection group proposed the following for companies which at the conclusion of the inspection procedures were found noncompliant with the regulatory obligations towards AKEP and which according to the statistics were repeat offenders for the same violation:
 - revoke the right to use frequencies/numeration;
 - revoke the right to provide electronic communications market services.
- for inactive or suspended companies according to their registration with the NBC, for companies
 that have late payments owed to AKEP, or which have requested to be removed from the
 companies register, a recommendation was made to immediately remove them from the
 general electronic communications company register, upon the decision to end the Individual
 Authorization or cancel the numeration allocation.

Inspection regarding number porting

The following have been ported in 2021:

121,331 mobile telephony numbers among the three mobile operators, **880** landline telephony service numbers.

AKEP has received 1,903 complaints by subscribers related to refusal of request to port numbers by the relevant operators, along with the reasoning provided for not completing the porting process.

The main reason for rejecting porting requests for prepaid subscribers was the discrepancy for the subscriber personal information (ID), while the main reason for rejecting porting number requests for contract/postpaid subscribers was the presence of unpaid dues or various penalties under contractual conditions.

Considering the number of complaints and issues raised by the citizens, and considering the higher number of porting requests, AKEP undertook an inspection process in 2021 focusing on the three mobile operators.

The Inspection Authorization of 23.12.2020 orders thematic inspections to be conducted at all three operators, regarding the following:

- a. Verification of compliance with Regulation No. 43, dated 22.9.2016 "On the number portability implementation method", adopted with SCD No. 2689, dated 22.09.2016) (Amended by SCD No. 35, dated 15.05.2018);
- b. Verification of recommendations made under the previous inspection (2018).

The Inspection Group (IG) administered the documentation required under the topic defined in the Inspection Authorization and after inspecting the companies at their place of business,

analyzed various cases of number porting requests with the aim of verifying the procedure implemented and time required for addressing and activating the number on the side of the granting operator. The analysis found violations of the provisions of Regulation No. 43 dated 22.09.2016, "On the number portability implementation method", in all three operators.

The IG classified violations as administrative infringements, for which pursuant to article 137, Law No. 9918, dated 19.05.2008 "On electronic communications in the Republic of Albania" as amended, the main administrative measure of "Fine" is provided.

The three inspected companies were penalized with the main administrative measure of "Fine" and complementary administrative penalties in the form of recommendations and remedies regarding the violations found, within a reasonable timeframe.

In more concrete terms, pursuant to paragraph VII of article 137 of Law No. 9918 dated 19.05.2008 "On electronic communications in the Republic of Albania" as amended, the Albtelecom sh.a. electronic communications operator was penalized with an administrative fine in the amount of 300,000 (three hundred thousand) ALL and complementary penalties in the form of recommendations. This administrative measure has been complied with voluntarily by the operator in question.

- a. It is recommended that the Albtelecom sh.a. operator analyze and resolve the causes that lead to the violation of primary and secondary legislation provisions relating to the number portability process, lengthening the procedure without legal grounds or rationale.
- b. It is recommended that the Albtelecom sh.a. operator update the data managed in its database, and especially to update subscriber data registered with old passports or certificates that do not have the subscriber's Personal ID Number;
- c. It is recommended that the Albtelecom sh.a. operator perform internal periodic controls/audits to identify and remedy rejection cases due to non-compliance of the subscriber's ID resulting from human error when inputting data in the relevant database (CRM).
- d. It is recommended that the Albtelecom sh.a. operator develop intensive training with sales staff on the procedure of filing requests for number portability, as well as any other change to the regulation and obligations deriving from such changes.
- e. The Albtelecom sh.a. operator should immediately comply with the obligations on the time frame on responding to requests for portability T1 (paragraph 6, article 18 under the Regulation No. 43, dated 22.09.2016 "On number portability implementation method").
- f. The Albtelecom sh.a. operator should immediately implement the obligations on responding to portability requests in relation to the % of rejected and accepted cases (paragraph 5, article 18 under the Regulation No. 43, dated 22.09.2016 "On number portability implementation method").
- *g.* The Albtelecom sh.a. operator should remedy the identified violations and eliminate their consequences within 60 (sixty) days from the date of the final inspection decision notification.

The One Telecommunications sh.a. electronic communications operator was penalized with an administrative fine in the amount of 1,200,000 (one million two hundred thousand) ALL and complementary penalties in the form of recommendations. The "fine" administrative measure has been appealed in court and is currently under review by the administrative court of appeals.

a. It is recommended that the One Telecommunications sh.a. operator analyze and resolve the causes that lead to the violation of primary and secondary legislation provisions relating to the number portability process, lengthening the procedure without legal grounds or rationale.

- b. It is recommended that the One Telecommunications sh.a. operator update the data managed in its database, and especially to update subscriber data registered with old passports or certificates that do not have the subscriber's Personal ID Number.
- c. It is recommended that the One Telecommunications sh.a. operator perform periodic self-controls to identify and remedy rejection cases due to non-compliance of the subscriber's ID resulting from human error when inputting data in the relevant database (CRM).
- d. It is recommended that the One Telecommunications sh.a. operator develop intensive training with sales staff on the procedure of filing requests for number portability, as well as any other change to the regulation and obligations deriving from such changes.
- e. It is recommended that the One Telecommunications sh.a operator immediately cease misguiding and aggressive commercial practices that have an impact on the porting process and may result in tailormade offers in violation of the relevant regulatory acts.
- f. The One Telecommunications sh.a. operator should immediately comply with the obligations on the time frame on responding to requests for portability T1 (paragraph 6, article 18 under the Regulation No. 43, dated 22.09.2016 "On number portability implementation method").
- g. It is recommended that the One Telecommunications sh.a. operator immediately implement the obligations on responding to portability requests in relation to the % of rejected and accepted cases (paragraph 5, article 18 under the Regulation No. 43, dated 22.09.2016 "On number portability implementation method").
- h. It is recommended that the One Telecommunications sh.a. operator implement pursuant to the applicable legislation, the complaint format, time frames, and procedure relating to the porting process.
- *i.* The One Telecommunications sh.a. operator should remedy the identified violations and eliminate their consequences within 60 (sixty) days from the date of the final inspection decision notification.

The Vodafone Albania sh.a. electronic communications operator was penalized with an administrative fine in the amount of 1,200,000 (one million two hundred thousand) ALL and complementary penalties in the form of recommendations.

This administrative measure has been complied with voluntarily by the operator in question.

- *a. It is recommended* that the Vodafone Albania sh.a. operator analyze and resolve the causes that lead to the violation of primary and secondary legislation provisions relating to the number portability process, lengthening the procedure without legal grounds or rationale.
- b. It is recommended that the Vodafone Albania sh.a. operator update the data managed in its database, and especially to update subscriber data registered with old passports or certificates that do not have the subscriber's Personal ID Number.

- c. It is recommended that the Vodafone Albania sh.a. operator perform periodic self-controls to identify and remedy rejection cases due to non-compliance of the subscriber's ID resulting from human error when inputting data in the relevant database (CRM).
- d. It is recommended that the Vodafone Albania sh.a. operator develop intensive training with sales staff on the procedure of filing requests for number portability, as well as any other change to the regulation and obligations deriving from such changes.
- e. It is recommended that the Vodafone Albania sh.a operator immediately cease misguiding and aggressive commercial practices that have an impact on the porting process and may result in tailormade offers in violation of the relevant regulatory acts.
- f. The Vodafone Albania sh.a. operator should immediately comply with the obligations on the time frame on responding to requests for portability T1 (paragraph 6, article 18 under the Regulation No. 43, dated 22.09.2016 "On number portability implementation method").
- g. It is recommended that the Vodafone Albania sh.a. operator immediately implement the obligations on responding to portability requests in relation to the % of rejected and accepted cases (paragraph 5, article 18 under the Regulation No. 43, dated 22.09.2016 "On number portability implementation method").
- h. The Vodafone Albania sh.a. operator should remedy the identified violations and eliminate their consequences within 60 (sixty) days from the date of the final inspection decision notification.

AKEP inspection structures continued monitoring and checking the completion of the task assigned to the relevant operators as described above.

Pursuant also to the 2021 Annual Inspection Plan, and referring to the issues identified during the previous inspection, and with the goal of verifying that recommendations made had been met, AKEP conducted another inspection of the three main mobile operators at the end of 2021.

The inspection scope was to verify compliance with Regulation No. 43 "On number portability implementation method" and to verify the implementation of the relevant recommendations made during the previous inspection.

One Telecomunications sh.a

Based on the documentation reviewed during the inspection procedure, reflected also in the inspection record of 21.12.2021, the Inspection Group (IG) found that the inspected operator has demonstrated positive will to comply with the obligations and implement the recommendations made by the AKEP structures during the previous inspection.

The One Telecommunications sh.a. operator was ordered to:

- 1. Continue the campaign for the update of subscriber data, especially to update the data of subscribers registered with old passports or certificates that do not have the subscriber's ID number.
- 2. Continue internal periodic controls/audits to identify and remedy rejection cases due to non-compliance of the subscriber's ID resulting from human error when inputting/registering data in the relevant database (CRM).
- 3. Continue the delivery of intensive training with sales staff on the procedure of filing requests for number portability, as well as any other change to the regulation and obligations deriving from such changes.
- 4. Continue to submit periodic monthly reports (on the 30th of each month) until the final time frame is reached, defining what progress has been made regarding the performance of tasks on violation redress.
- 5. It is also recommended that the One Telecommunications sh.a. operator in the quality of the Receiver Operator to submit individual requests for each porting case.

Albtelecom sh.a

Based on the documentation reviewed during the inspection procedure, reflected also in the inspection record of 21.12.2021, the IG found that the inspected operator has demonstrated positive will to comply with the obligations and implement the recommendations made by the AKEP structures during the previous inspection.

The Albtelecom sh.a. operator was ordered to:

- 1. Continue the campaign for the update of subscriber data, especially to update the data of subscribers registered with old passports or certificates that do not have the subscriber's ID number.
- 2. Continue internal periodic controls/audits to identify and remedy rejection cases due to non-compliance of the subscriber's ID resulting from human error when inputting/registering data in the relevant database (CRM).
- 3. Continue the delivery of intensive training with sales staff on the procedure of filing requests for number portability, as well as any other change to the regulation and obligations deriving from such changes.
- 4. Continue submitting periodic monthly reports (on the 30th day of the month) until the final time frame is reached, defining what progress has been made regarding the performance of tasks on violation redress.

Vodafone Albania sh.a

Based on the documentation reviewed during the inspection procedure the IG found that the activity of the operator subject to inspection has been conducted in violation of the provisions of Regulation No. 43, dated 22.09.2016 "On the number portability implementation method".

In addition, upon reviewing the documentation, the IG found that the operator has not completely implemented the recommendations made by the previous inspection conducted in the 2020-2021 period.

Pursuant to the relevant timeframe, the IG proceeded with making the Final Inspection Decision on 19.01.2022.

Pursuant to article 136 of law No. 9918/2008, the Operator filed an administrative appeal with the AKEP Steering Council regarding the Final Inspection Decision. Upon holding the relevant hearing and within the legal timeframe, the AKEP SC upheld the final inspection decision.

Pursuant to article 137 of Law No. 9918, dated 19.05.2008 "On electronic communications in the Republic of Albania" as amended, the administrative measure of fine in the amount of 2,000,000 (two million) ALL and complementary penalties in the form of recommendations were imposed against the Vodafone Albanian sh.a. electronic communications operator for the violation of the relevant legal provisions.

The administrative measure was complied with voluntarily by the operator, who at the same time exercised its right to appeal with the first instance administrative court.

The following recommendations were made for the operator:

- 1. It is recommended that the Vodafone Albania sh.a. operator immediately update its subscriber data including the State Police number, with the purpose of not impeding the portability process.
- 2. It is recommended that the Vodafone Albania sh.a. operator continue the campaign for the update of subscriber data, especially to update the data of subscribers registered with old passports or certificates that do not have the subscriber's ID number.
- 3. It is recommended that the Vodafone Albania sh.a. operator continue internal periodic controls/audits to identify and remedy rejection cases due to non-compliance of the subscriber's ID resulting from human error when inputting/registering data in the relevant database (CRM).
- 4. It is recommended that the Vodafone Albania sh.a. operator continue delivering training with sales staff on the procedure of filing requests for number portability, as well as any other change to the regulation and obligations deriving from such changes.
- 5. The Vodafone Albania sh.a. operator should remedy the identified violations and eliminate their consequences within 60 (sixty) days from the date of the final inspection decision notification.

- 6. The Vodafone Albania sh.a. operator should notify violation redress withing the time frames defined above and file evidence thereto;
- 7. The Vodafone Albania sh.a. should continue to submit periodic monthly reports (on the 30th of each month) until the final time frame is reached, defining what progress has been made regarding the performance of tasks on violation redress.

AKEP continuously monitors and develops periodic reports with the statistical data generated from the CRDB system on the performance of operators regarding the implementation of porting time frames and rules.

2. The strategic perspective of new general networks and bands: national assessment on the future of 5G in Albania

2.1 International consultation process and consultation with sector operators

One of the tasks assigned by the Parliament of Albania in the Resolution of AKEP for 2021 was the undertaking of a long-term assessment of the parameters, capacities and strategies for the implementation of new (5G) band technologies and networks, within 2021.

In the quality of the only regulatory body in the area of electronic telecommunications, and in accordance with the regulatory objectives defined in Law No. 9918/2008, and with the purpose of completing the task assigned by Parliament and the primary and secondary legislation, AKEP conducted a public procurement procedure for consultancy in conducting a detailed study/analysis of new mobile broadband technologies in Albania.



Figure 6: AKEP Chairman Mr. Tomi Frashëri and General James L. Jones after the delivery of the new technologies and networks in Albania document Source: AKEP photograph, 2022

Upon conclusion of the procurement procedure in April 2021, AKEP awarded the contract to the joint venture winning economic operator of "Jones Group International" & "Dynology Corporation" (JGI&DC), an American company with long experience in the areas of national security, international affairs and

foreign policy, cybersecurity and technological development. It should be noted that recently this company has started its cooperation with the Albanian government by entering a Memorandum of Understanding with the Council of Ministers on strengthening the cybersecurity of the Albanian critical infrastructure.

During the cooperation with AKEP and during the document development phase, 12 workshops and meetings were held among the consultant, the AKEP specialists and the mobile operators, where relevant issues were discussed taking under consideration the perspective, opinions and suggestions of operators as well.

In line with the consultancy contract obligations, the consultant initially developed the "Strategic Plan for 5G technology in Albania" document, which was submitted to the AKEP Steering Council.

With Steering Council Decision No. 19, dated 4.11.2021, AKEP adopted the start of the public consultation process for the "Study/analysis of the new mobile broadband technologies in Albania" document for a period of 30 days, by publishing the document on the AKEP website. The document was also disseminated to stakeholders to collect opinions, suggestions and comments.

The three mobile operators and MIE provided opinions, observations and suggestions during the public consultation phase. These were taken under consideration and forwarded to the consultant for integration in the final document.

Among other things, the document also includes a process to grant use rights on the most objective and transparent manner possible, for the benefit of the Albanian consumer and economy, the establishment of a competitive market in Albania and the effective use of the frequency spectrum, in line with regulatory objectives.

The national level study and assessment undertaken by AKEP is in line with a number of Albanian

Government policies, such as:

- Multi-year spectrum policy program;
- National Plan on the sustainable development of digital broadband infrastructure;
- Memorandum of Understanding between the Government of Albania and the Government of the United States of America on matters of 4G/5G security.

The study is quite timely and serves as a roadmap/test bed for AKEP, for the ministries involved in the process, for the Government of Albania itself and for the mobile operators.

Upon expiry of the public consultation period, AKEP organized individual meetings with each operator and the consultant to address in detail their comments and position regarding the public consultation document.

At the end of December 2021, the consultant submitted the final document, which was adopted by the AKEP Steering Council on 31.03.2022 with its Decision No. 7²²

2.2. 4 focus points of the strategic reflection for coherent sector development policy

The "Study/analysis of new mobile broadband technologies in Albania" focuses on four main fields:

The First Focus is the need to facilitate Tendering or Auction procedures for the 5G Spectrum in Albania. The consultant has presented a series of examples and ways of facilitating the tendering/ auctioning procedures and timeframes, in order to shorten the average time required for granting 5G frequency authorizations. According to the analysis, it would be in the interest of the country but also the mobile operators, for them to have the adequate time to secure financing for the investments required, to improve/prepare the telecommunications infrastructure in Albania, and to safely implement 5G.

The Second Focus is around recommendations to undertake legislative action, which are necessary to support the expansion of 5G networks. The stress is mainly placed on the planning and implementation of the new 5G technology, which requires new operational strategies both on the side of the Government and the telecom industry, new regulations and tools to monitor performance and measures success, and a transparent process that drives investment in the future. The consultant recommended that laws, regulations and other administrative processes be reviewed to support the goal of successfully implementing 5G across Albania. The consultant has also developed a series of concrete recommendations on legislative action that should be taken to facilitate the expansion of 5G networks

As a Third Focus, the consultant raises the need to promote 5G networks in relation to two priorities:

- 1. observations and recommendations for operators when they consider investing in 5G;
- 2. the role that the Government should play in promoting these investments and in informing the public about 5G benefits through an awareness raising campaign.

As a Fourth Focus, the consultant raises the need to assess and address a number of risks and considerations, such as:

- the incomplete and unsatisfactory spectrum auction results;
- the availability of systems/components or reliable 5G network equipment supply chains;
- 5G network weaknesses because of unreliable network suppliers;
- operator financial or technical constraints to implement 5G, etc.

²² The detailed document and the SCD are available at https://akep.al/vendime-te-keshillit-drejtues/

2.3. Recommendations to bring relevant frequency bands to full function

The "Study/analysis of the new mobile broadband technologies in Albania" document describes values and benefits from 5G, among which, the following:

- Considerable economic benefits;
- Digital Governance for public services, including education, healthcare, government facility management, defense, smart cities initiatives;
- Benefits in the areas of healthcare and medicine;
- Benefits in various industry and agriculture sectors;
- Benefits to public transport;

The document includes a number of very important recommendations, such as:

- Structuring the 5G technology frequency band allocation for the purposes of developing cooperation.
- Implementing a rights granting process that is as objective and transparent as possible for the benefit of Albanian consumers, the Albanian economy, and in order to establish an increasingly competitive market in the country.
- Assessing the effectiveness of using the current spectrum to identify how the spectrum is used currently.
- Promoting new technologies that have an effect on the efficient use of the band.
- Identifying solutions that are favorable to the market, through adequate spectrum allocation mechanisms.

This plan introduces a number of innovative ideas related to handling the new 5G network spectrum, the handling of 2G and 3G technologies, allowing the combined use of contemporary technologies (OpenRAN), the need to establish a national telecom laboratory to certify telecommunication equipment, the application of network slicing where the same spectrum can be used in different areas, the concept of allowing a portion of the spectrum for private 5G networks, addressing 4G/5G network security issues, etc.

2.4 Summary overview of the national assessment results on the future of 5G networks and technologies in Albania

The study, coupled with the national assessment, include a number of conclusions of special interest for the sector, which can be summarized as follows:

- The development of 5G technology in Albania will surpass the existing wireless network capacities to develop communication services that are available everywhere, anytime, and at visibly faster speeds, and which are expected to be available globally, while its development is expected to align with market needs.
- 5G networks will enable the expansion of Digital Governance for public services, including education, government facility management, defense, Smart City initiatives by local government, etc.
- The implementation of 5G technologies will result in considerable economic benefit for the country.
- 5G networks will bring benefits in the areas of healthcare and medicine, in various industry and agriculture sectors, in public transport and in many other areas. 5G will bring important improvement to virtual reality, augmented reality and artificial intelligence, creating opportunities for people to connect well beyond what is possible with the current mobile technology.
- Communication speeds on 5G networks will be much higher than current mobile network speeds. This means faster population access to the internet, state or private technology systems or platforms, and better and higher quality service for 5G network users.
- The 5G network frequency spectrum allows for better coverage of both territory and population, which will result in better quality services by these networks.
- For the first time, there will be an opportunity to implement private 5G networks, i.e. networks for private use by various companies, and not for use by the general public. This will be possible, because a portion of the 5G spectrum will be dedicated to these private networks. This will be of great benefit for the industry, agriculture, tourism, etc.

The study makes recommendations on appropriate handling and addressing of as many issues as possible related to 5G networks, such as:

- The methodology for handling the 5G frequency spectrum;
- 5G network technical and technological issues;
- Need for 5G network security;
- Promoting 5G using information and awareness raising campaigns, etc.
- The need for amending primary legislation and the regulatory framework, which includes also facilitating the tendering/auction process;
- The need to set requirements for reliable 5G technology suppliers;
- Raising awareness about 5G opportunities and benefits;
- The need for Marketing and National Advertising Campaigns;
- The establishment of a National Telecom Laboratory;
- The need for a National Giga-Backhaul Optical Infrastructure Network (NBON) and the necessity of ensuring cable installations during road construction or reconstruction;

- Creating opportunities for a diverse and reliable telecom supply market;
- Developing the Criteria for Trusted Vendors;
- Application of the Open RAN (multiple vendors) to drive competition, innovation and diversity of mobile network technology developers;
- Exposure of people to electromagnetic radiofrequency fields, etc.



INSTITUTIONAL COOPERATION AT THE NATIONAL, REGIONAL AND EUROPEAN LEVEL



Figure 7-8 AKEP Chairman Mr. Tomi Frashëri, attending the annual meeting between the leaders of independent constitutional authorities, as established pursuant to the law, and the Speaker's Office, December 2021

Source: Group picture of the Parliament's press office, 2021



1. Institutional cooperation at the national level

1.1 Signing of the cooperation agreement with the Audiovisual Media Authority





Figure 9-10. AKEP Chairman, Mr. Tomi Frashëri and AMA Chairwoman, Ms. Armela Krasniqi, sign the cooperation agreement between the two regulatory entities so as to meet their joint obligations tasked by the Resolution of the Albanian Parliament Source: AKEP and AMA pictures, 2021 The Audiovisual Media Authority and the Electronic and Postal Communications Authority signed a Memorandum of Cooperation on 03.11.2021 to guarantee and provide operational, technical, and legal support in areas of mutual interest.

This memorandum of understanding expresses the common will of both institutions to discuss and address all the issues they encounter to the benefit of the highest public interest.

Under this Memorandum, the institutions undertake to cooperate for its quickest and mos efficient implementation possible and to ensure that its purpose is meet to its fullest extent.

The two institutions will also cooperate to:

- free up the 700 MHz band (also known as DD2) by AMA and take over the band by AKEP, complying with the deadlines set by the EU and ITU;
- establish a TASK-FORCE composed of mutual representatives from both institutions, aiming to combat illegality in non-copyright broadcasting through electronic communications networks and conduct the activity only by entities licensed/authorized by the regulatory authorities;
- create a mutual group to regularly monitor the issues from interferences caused by entities whose activity falls under the scope of the two institutions, as well as interferences reported by the regulatory authorities of neighboring countries;
- create a unified frequency inventory pursuant to the legal obligations imposed on both institutions as regards the "Approval of the multiannual program for spectrum policy and action plan", as well as the relevant sub-legal acts thereto.

Upon signing the memorandum, both parties established a joint working group consisting of experts from frequency monitoring sectors at both institutions, who will keep an eye on interference issues that are reported from the regulatory authorities of other neighboring countries, in borderline areas and not only, and the establishment of TASK-FORCE aiming at combating illegality in non-copyright broadcasts.

Both institutions will cooperate among other things for AMA to free up the 700 MHz band (also known as DD2) and for AKEP to take over the band, complying with the deadlines defined by the EU and ITU.

1.2 Cooperation with the Competition Authority

AKEP has cooperated on the other hand with the Competition Authority by informing the CA on the adoption of measures to implement the recommendations issued by the latter relating to the handling of disruptive and aggressive commercial practices.

During 2021, AKEP has made available from time to time full information on mobile service packages and tariffs notified by mobile phone operators. AKEP has notified the Competition Authority too on the measures adopted by AKEP aiming at solving the technical issues on the number portability procedure, in order to ensure an effective competition among the market operators.

In its standing as an independent electronic communication, AKEP has cooperated and continues to do so in issues of common interest, and continues to prioritize such issues in order to protect users and consumers, and to support the development of a fair competition in the electronic communications market in the Republic of Albania.

AKEP monitors and analyses the behavior of mobile phone service providers, which informs the performance of its tasks relating to wholesale market research in line with the international practices, thus defining and announcing the operators with Significant Market Power and adopt proportionate and non-discriminatory regulatory measures. In this framework, AKEP cooperates with the Competition Authority to avoid anti-competitive behaviors and adopt the relevant regulatory measures, following the previous practices, and in line with the Memorandum of Cooperation entered into between the two institutions for such purposes. AKEP has continuously monitored the developments in the mobile phone market, especially notices of tariff plans in the retail market and has informed the Competition Authority on the prices and content of such plans, as well as on the adoption of measures aiming at implementing the recommendations of the latter on handling the concerns raised about the application of disruptive and aggressive commercial policies. In 2021, official communications have taken place and information on phone service packages and tariffs notified by mobile phone operators has been provided, including information exchange with the Competition Authority on the measures adopted by AKEP on the solution of technical issues in the number portability procedure, in order to ensure an effective competition among operators in the market.

2. Cooperation perspectives with the regulatory authorities of the Republic of Kosova and Republic of North Macedonia

In 2021, AKEP has enhanced its cooperation with the Regulatory Authorities of the Republic of Kosova

(AKEP) and Republic of North Macedonia (AEK) in the field of administration and allocation of frequency spectrum, cross-border coordination, and joint interstate project implementation.

MolE representatives and the Ministry of Economic Development of the Republic of Kosova agreed in an inter-ministerial and regulatory meeting on 28.10.2021 to adopt a common agenda of actions to facilitate the establishment of the 5G²³ digital corridor and mobility to and from the two countries in the future. Cooperation in this area builds on contemporary technological services and commitments made upon approval of the Western Balkans Regional Plan, joint declaration of the Western Balkans Prime Ministers in Sofia Summit on May the 17th 2018, and "5G Corridors and Automated Driving Cars" EU initiative. Cooperation between the AKEP and ARKEP regulatory entities aims at leading to



Mac And Dub Source: AKE

Chairmen of the regulatory entities of Albania, North Macedonia and Kosova, Tomi Frashëri, Jeton Akiku, and Nazim Rahmani in BEREC plenary session in Dubrovnik, Croatia, September 2021 AKEP picture, 2021:

the design of policies and programs for 5G network development, the establishment of standards on secure

networks and mobility based on EU good practices, and international commitments to clean networks.

AKEP and ARKEP agreed to take a coordinated approach regarding the harmonization of the 5G frequency spectrum, and to cooperate for the establishment of pioneer bands for 5G, pursuant to the applicable European practices.

²³ The digital corridor enables a 5G coverage of Tirana-Prishtina highway.



 Figure 12: Joint work meeting in Prishtina between the representatives of the ministries responsible for electronic communications and Albanian and Kosova regulatory authorities.
 Source: AKEP picture, 2021:



Figura 13: Official visit of AEK Chairmen, Mr. Jeton Akiku, Tirana, May 2021 Source: AKEP picture, 2021:

AKEP has enhanced its cooperation with the Regulatory Authority of the Republic of North Macedonia (AEK), chaired by Mr. Jeton Akiku from February 2021.

Anofficial meeting washeld in Tirana on May 2021 with representatives from both authorities, with the main focus being the 5G bands in both countries, fee-up of the 700 MHz in Albania, the 5G band allocation time in both countries, cross-border coordination to avoid

interferences, review of current agreements and signing of new agreements between the regulatory authorities.

The signing of a new Memorandum of Cooperation aiming at a long-term technical and institutional coordination between the two regulatory authorities is among AKEP's strategic targets for 2022.



 Figure 14: Official visit of the representatives of the Regulatory Authority of Electronic Communications of the Republic of North Macedoni8a, Tirana, May 2021
 Source: AKEP picture, 2021:

3. AKEP participation in the processing of European and international-level



Information on BEREC activity during 2021

In 2021, AKEP kept on actively participating in the highest representative and technical levels of the European regulatory body (BEREC) and in the global reflection on the future of this important coordination instance relating to its future plans. In addition to the coordinated actions with the RCC and the European Commission to make BEREC increasingly participate in the process of roaming tariff reduction in the EU and WB, AKEP has also shared with other BEREC-member regulators its vision and approach on issues like digital dependency, digital education and market self-regulation.

AKEP also lobbies at BEREC for an increased awareness-raising on the need for clean networks and a solid, strong, and reliable interaction and technology safety chain in Europe.

Information on FRATEL activity during 2021

AKEP has furthered its close and fruitful cooperation with Fratel network members in 2021.²⁴ Fratel aims at creating and strengthening cooperation and exchange between its members. As we speak, Fratel counts 50 members, with AKEP being one of them.



Figure 15: Pictures from the first plenary meeting with BEREC's physical attendance from the beginning of the COVID-19 pandemic, September 2021 Source: AKEP picture, 2021:

The network's mission is to promote information exchange and to contribute as much as it can to the technical training, coordination and cooperation between its members, as well as to contribute to research on any issue related to telecommunications regulation.

²⁴ Fratel is a French-speaking telecommunications regulatory network. It was established in 2003 in Bamako from French telecommunications regulators. Fratel establishment was decided during a symposium of French-speaking regulators in a meeting held in Paris in June 2002.

AKEP representatives participated in two meetings organized by Fratel network during 2021, and other meetings organized by the Senegal Telecommunications and Post Regulatory Authority (ARTP), who chaired the Fratel network presidency for 2021.

In July 2021, AKEP representatives attended the online workshop *"Universal service and access-how to fund, implement, and control them"*.

The workshop was attended by 170 participants, including 33 regulatory authorities that are members of the Fratel network, and international institutions (ITU, European Commission, UEMOA, AFD, World Bank, BEI), minister, consumer's association, academics, and industry representatives.

The workshop focused on topics about the legal frameworks, potential funding resources of the universal service, and cost methodology. Discussions focused also on the designation of the operators tasked with universal service or access provision, and the potential methods to check if their obligations have been met.

The progress report on mobile phone coverage and the service quality in the respective countries was presented by the network members in this workshop.

The presentations and the workshop handouts are uploaded in the Fratel[s website for all those interested. $^{\rm 25}$

On November 2021, AKEP representatives attended the meeting *"Universal service and access: A commonality accessible by all" in Dakar, Senegal.*

Meeting discussions focused on public policies relating to universal service encouragement and evolution, as well as digital inclusion, based on the latest technology developments.

Although the electronic communications market opened up after the pandemic-caused health crisis, the availability of essential services still persists among the major issues in terms of quality and financial fees affordable by the wider public. Fratel network member states have approved regulatory frameworks to designate the responsible undertakings to provide a universal service, estimate the service costs and the potential funding in case the designated operators are overburdened.

Considering cooperation with the network members as highly significant, AKEP deems that participation in future common meetings will lead to higher exchange levels of information, and the acquisition of best practices in the electronic and post communications area.

²⁵ https://www.fratel.org/18e-seminaire-fratel-7-et-8-juillet-2021/.

Information on ITU activity during 2021

2021 continued the cooperation with the International Telecommunication Union (ITU) regarding activities organized by ITU and contribution to filling out and updating questionnaires and various publications, with the following considered as most significant



Figure 16: Participants in the 19th plenary meeting of FRATEL French network regulatory authorities in Dakar, Senegal, November 2021 Source: FRATEL group picture

In cooperation and coordination with the Ministry of Infrastructure and Energy, AKEP has updated the data for Albania in:

- "Regional Assessment on Electromagnetic field (EMF) levels and risk communication challenges in the Europe Region" questionnaire;
- "BACKGROUND PAPER Broadband Mapping Systems in Europe and Regional Harmonization Initiatives" questionnaire;

AKEP Chairman Mr. Frashëri has attended the forum organized by ITU and EKIP (regulatory authority of the Republic of Montenegro) with the topic: *"Regional Regulatory Forum for Europe on "Universal Connectivity for a Post-Pandemic Digital Europe"*.



The forum was held online on 27 and 28 September 2021, in the framework of the Regional Regulatory Forum for Europe and broadband infrastructure development.

The forum extended a unique opportunity to high-level dialog between the parties interested broadband developmenton oriented strategies and policies in the region, thus paying special attention to landline and mobile markets, and the tools available to the National Regulatory Authorities to get tangible results. effective Discussions regarded the unusual COVID-19 pandemic situation and the postpandemic recovery scenarios too.

Figure 17-18: Forum organized by ITU and EKIP (regulatory authority of the Republic of Montenegro) with topic: "Regional Regulatory Forum for Europe on "Universal Source: AKEP Source: AKEP

The virtual forum was attended by representatives of the European Regulatory Agencies, responsible ministries of the respective countries, Electronic Communications Operators, academics, and other actors involved with the ICT regulatory policies.

AKEP Chairman Mr. Frashëri highlighted during his speech that the prioritization of innovation and digitalization helped Albania not to be caught off-guard by the pandemic and be recognized as one of the countries with the highest internet speed for landline networks per 100 inhabitants, with reference to the latest ITU report.

In line with the best practices and guidelines, AKEP has finalized a series of mobile wholesale market research, has approved regulatory documents, and has developed the 5G strategic plan for Albania. Mr. Frashëri highlighted that 5G is still among the main AKEP future challenges.

INTERNAL PERFORMANCE AND GOOD FINANCIAL MANAGEMENT IN 2021

1. Complete automation and digitalization of AKEP processes

Taking into account the significance of the institution and the complexity of it operations, as well as considering that the current systems need to be upgraded and separated from each other, the full computerization of institutional operations in a centralized system was deemed necessary, with the work progress being covered by the system.

The project aimed at digitalizing and automating the entire operational activity of the institution by integrating and combining all processes within one single process, with real time synchronized data and fully integrated operations.

The implemented platform consists of the ERP component - Enterprise Resource Planning software and iBPMS component (smart platform on business process management).

Both software components are ready to be used, with no necessity for coding. Moreover, both components support the eventual needs of the institution to adapt their own processes and enable interface or integration through development packages/tools, in the form of libraries or connectors, or to support personalization and improvement.

The system consists of the following components:

- 1. Contract management module;
- 2. Process building module;
- 3. Case management module;
- 4. Official communications management modules;
- 5. Business Intelligence reporting module

Functions are integrated and data synchronization is performed in real time, thus minimizing user interventions.

The implementation of this system had the following benefits:

- Reduction of time spent for the realization of business processes;
- Improvement of employee performance, thus avoiding potential errors;
- Improvement of information safety, thus reducing the likelihood for data loss.

The successful realization of the process had the following results:

- Development of business processes according to AKEP functional requests;
- The automation of institutional business process by using a work flow management application;
- Management of internal processes, with reference to mandates, applications, reports and inspections/monitoring thus including external and internal users in the full management of a business process;
- Management of contracts with third parties and follow-up of their progress through electronic means;
- Digitalization and management of official communications in electronic form for every document arriving at and leaving the institution;
- Integration through the iBPMS and ERP platform in order to ensure an automated work flow, when creating cases for registration or administering institutional contracts;
- Management of all cases created by the institution and their tracking from registration to final resolution;
- Implementation of a reporting platform enabling real time generation of dynamic and managerial reports for the entire system, based on user experience

Process implementation and configuration was followed by training sessions for all employees that will interact with the platform. These training courses include the presentation of the system, modules, functions, processes and functional testing with tangible examples of processes and their roles. System users are trained for all operations deemed necessary to perform their daily work. Once the system implementation finishes, users will be given access to a User's Guidebook with all system components.

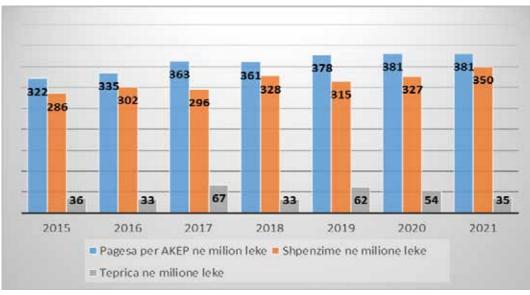
2. Revenue collection performance of electronic communications and postal service undertakings

Pursuant to DCM No. 1096, dated 24.12.2020,AKEP engaged in the timely billing and collection of revenues and their use in line with the criteria defined for such purposes, irrespective of the ongoing pandemic situation.

AKEP payments for 2021 show that:

ALL 381.24 million have been billed, or 97.26 % of the budget; ALL 379.92 million have been collected, or 99.65 % of bills.

Compared to one year ago, 2.7% less funds have been billed and collected. This is caused by the technological changes in operators, investments in their systems, that are related to their decreasing demand for allocating frequencies to landline and radiocommunication networks.



Payments to AKEP

Payments on market surveillance

About the payment process, the following were billed and collected:

- ALL 168.2 million from electronic communications market surveillance and ALL 168.1 million collected.
- ALL 9 million from postal market surveillance and ALL 9 million collected.

Payments for using the frequency spectrum

During 2021:

- ALL 120.9 million were collected from frequency allocation and use and
- ALL 120.5 million were collected.

With reference to the above, 92% of payments have been billed and 99.6% have been collected

Numeration payments and portability service costs

ALL 46.5 million billed from numeration allocation and use and portability service cost and ALL
 46.3 million have been collected.

About payments for numeration and portability service cost, 101% of the amount has been billed with 99.57 % having been collected.

Payments per domain and others

ALL 12 million or 95.8% have been billed from payments per domain.

Commission as tax agent

In the program of 2021, the item was foreseen to account for ALL 25 million.

Based on the demand of undertakings for different frequency bands and bands under use, **ALL 490.89 million** have been billed from the tariffs of frequency spectrum use.

From these bills, ALL 466.35 million have been transferred to Tirana Regional Directorates.

Due to the billing, collection and transfer of these tariffs to the State Budget, about ALL 24.54 million or 98.2% of the program has been collected by AKEP by the commission as tax agent.

3. Timeframe and implementation of the institutional budget

AKEP, pursuant to DCM No. 1096, dated 24.02.2020, administered and managed public funds for 2021, by the following items:

| Salaries and other additions | Social and health insurance contributions | Materials | Services | Investments |
|---------------------------------|-------------------------------------------------|-------------|---------------|---------------|
| 109.800.000 L | 15,000,000 L | 8,850,000 L | 150,967,400 L | 107,382,600 L |

A total of 89% of AKEP administrative expenses fund has been used up in 2021, or ALL 350.24 out of ALL 392 million planned and approved. Collection rate has increased by ALL 22.97 million or 7% compared to a year ago.

Despite all the difficulties emerging from the extended pandemic situation, the procurement procedures have been regularly developed and in the majority of the cases the lower price of procurement has made the difference between the fact and the program. To efficiently manage the surplus, the budget has undergone budget reviews within the allowed limits.

1. Salaries

Expenses for salaries and additions in 2021 stood at 87% or 13% less than the program. This has been impacted by the vacancies in the approved organizational chart, staff turnover and salary stagnation for the administration.

The difference with the approved plan is **ALL 14.54 million.**

2. Social insurance

For same reasons applying to salaries, the level of social insurances stands at 90% or 10% less than planned, which translates into a difference of **ALL 1.54 million**.

3. Materials

About tangible expenses, there's a difference of ALL 4.15 million attributed to the following factors:

 reduction of consumption for several items such as fuel, and the increase of consumption for sanitizers etc.

4. Services

ALL 13.25 million in the service item was not used, because some services depend on utility consumption such as: electricity, postal service, suspension of some national or international activities, or mobility restriction during 2021.

Differences have occasionally emerged due to the estimated value and offers made during the procurement procedures and the signing of service contracts in amounts much smaller than the planned fund.

5. Investments

Just like the procurement procedure, the initial expenditure plan was 100% delivered.

About the investment fund, 92.3% of investment items were realized. ALL 99.11 out of ALL 107.38 million planned have been used.

The differences between the limit fund and the successful offers were used for emergency equipment purchases serving to AKEP network extension.

With regards to the investment item, we hereby clarify that:

- All the investments programmed for 2021 were realized.
- The procurement procedures have been successfully concluded, by signing contracts with the successful economic operators.
- Funds are well-managed and transparent, thus redistributing them within the legal time frames.

2021 continued the information technology infrastructure development and improvement of existing applications. AKEP has employed the most innovative methods in developing information systems, based also on the duties assigned in the Parliament of the Republic of Albania Resolution and relevant sub-legal acts.

The main activities carried out in 2021 include highly significant investments that have been addressed in this report.

- Establishment of the service quality monitoring system «Nett test for QOS»;
- Automatization of AKEP processes;
- IT Redundant system infrastructure and network upgrade;
- Study/analysis for new mobile broadband technologies in Albania;
- Fiscalization of sales and purchases.

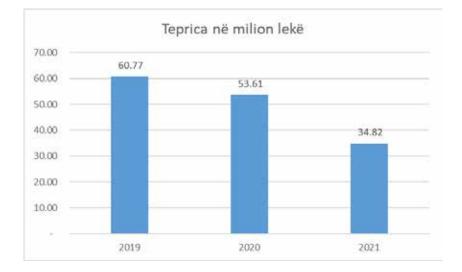
Surplus of revenues

The surplus of revenues and expenses for 2021 stands at ALL **34.81 million** due to the differences from payments of undertaking and failure to save/realise several approved items in AKEP's fund of expenses.

Compared to one year ago, the value decreased by 35%, thus representing a positive indicator relating to the efficient management of funds, despite the challenges of the period.

Surplus of revenues and expenses for the period 2019-2021 is as follows:

| year | 2019 | 2020 | 2021 |
|------------------------|------------|------------|------------|
| Surplus in ALL | 60,767,384 | 53,613,913 | 34,817,270 |
| Surplus in ALL million | 60.77 | 53.61 | 34.82 |



The following table shows the realization of revenues and expenses for 2021 compared to the program in absolute value and percentage.

| Nr | Designation | Year 2021 | | Fact-Program difference | % of annual realization |
|----|------------------------------------------|-----------|--------|----------------------------|-------------------------|
| I | Total revenues: | 392.00 | 381.23 | -10.77 | 97% |
| П | Total expenses: | 392.00 | 350.24 | -41.76 | 89% |
| 1 | Expenses for salaries and extra payments | 109.80 | 95.25 | -14.55 | 87% |
| 2 | Expenses for social and health insurance | 15.00 | 13.46 | -1.54 | 90% |
| 3 | Expenses for materials | 8.85 | 4.70 | -4.15 | 53% |
| 4 | Expenses for services | 150.97 | 137.72 | -13.25 | 91% |

Value in ALL million

| 5 | Expenses for investments | 107.38 | 99.11 | -8.27 | 92% |
|---|---------------------------------------------------------------------------------------------------|--------|--------|-------|-----|
| Ш | Radiocommunications service tariff | | | | |
| 1 | Radiocommunications tariff collected | | 490.89 | | |
| 2 | Radiocommunications tariff transferred to the State Budget | | 466.35 | | |
| 3 | Revenues as tax agent from the collection and deposit of radiocommunications service tariff | 25.00 | 24.54 | | 98% |

4. Process of collecting late revenues and judicial proceedings

All the necessary efforts have been made in 2021 to collect late liabilities and to evidence the institution's inability to collect their liabilities by means of the support documentation. All individual authorizations of the debtor entities have been revoked and are being published in AKEP's website.

The court has decided to trial the lawsuits and in the majority of the cases the debtor entities have made the payments without the bailiff service needed to intervene.

Issues noted during the follow-up of such cases are the inaccurate addresses and most of them have a passive status in the commercial extract, thus causing notices to be given through public announcements and extending the court deadlines.

In 2021, the debtor entities that confirmed having received the notices files lawsuits and initiated 8 trials.

The court accepted to trial 2 lawsuits, while the other 6 lawsuits are still to be reviewed.

During 2021, the Electronic and Postal Communications Authority was invested as a litigation party in:

- The capacity of the defendant, in 6 judicial proceedings;
- The capacity of the plaintiff, in 8 judicial proceedings;
- The capacity of the third party, in 2 judicial proceedings.
- court proceeding, 6 trials.

In the capacity of the defendant, the Court has decided in favor of AKEP, deciding the rejection of the lawsuit of the defendant, in 3 judicial proceedings.

In the capacity of the plaintiff, the Court has decided in favor of AKEP, deciding the acceptance of the lawsuit, in 2 judicial proceedings.



1. AKEP organizational structure and chart

The Electronic and Postal Communications Authority is organized and functions in reference to the organizational chart approved by Decision of the Parliament of Albania No. 55/2018, "On adopting the organizational structure, composition and categorization of positions for the Electronic and Postal Communications Authority (AKEP)".

The employees recruited by the Institution are treated pursuant to the provisions of the Law "On Civil Servants", as amended, and the Labor Code.

The AKEP organizational structure and composition consists of 58 employees, organized in 8 Directorates and 14 Sectors.

During 2021, based on the annual plan of admissions and vacant positions, 17 recruitment procedures in the civil service were carried out, following the recruitment stages of parallel movements, promotion, and admission in civil service.

By the end of 2021, there were 10 vacancies waiting to be filled out, more specifically 8 vacancies in the Civil Service at the executive level and low management level, as well as 2 vacancies for the Steering Board Chairman Advisor and AKEP Steering Board Secretary.

In 2021, the gender balance for the total of active employees stood 53% for females and 47% for males, while the ratio for the executive level reversed to 43% females and 57% males.

Report on the implementation level of the Parliament of the Republic of Albania resolution recommendations for 2021

1. In the framework of consumer protection, following the inspection exercise targeting «Posta Shqiptare» sh.a., entity, the monitoring of recommendations made for the full removal of the tariff for postal items delivery (small packages or post parcels coming from abroad) should continue, and the obligations of Posta Shqiptare sh.a., delivering packages at the individual's address as a legal requirement and consumer right should be met.

Completed

About this recommendation, we would like to clarify that during 2020, AKEP has performed inspection exercises targeting the universal postal service "Posta Shqiptare sh.a."

The inspection revealed that the activity of the Posta Shqiptare sh.a. entity had some flaws and was given the following recommendations in addition to the administrative "fine":

- Take organizational and technical measures for the delivery of all post items (packages/parcels) to the recipient's address, in accordance with article 40 of Law No. 46/2015.
- Take measures for the review of Decision of the Albanian Post Office Supervisory Board No. 5, dated 30.1.2017, and the review of Decision of the Albanian Post Office Supervisory Board No. "On adopting changes to the postal service tariffs of the Posta Shqiptare sh.a. company" (notification to retrieve post parcels), with the aim of correcting the issues identified with the tariffs levied from users when retrieving packages received and stored at the post offices.
- Take measures to carry out the necessary legal procedures so as to meet the requirements in Article 31 under the law no. 46/2015 "On postal services in the Republic of Albania" and regulation no. 41, date 3.3.2016 "On the separation of accounts and estimation of universal post service cost".

Following the recommendations made to it, AKEP continues to monitor their implementation process, thus appraising the willingness displayed by the Posta Shqiptare sh.a. company and its continuous efforts o meet such recommendations.

According to the reports on the distribution of post items to the recipient's address, the "Posta Shqiptare " sh.a. has made some considerable investments, thus creating a transport fleet dedicated to post

packages/parcels delivery.

Additionally, the "Posta Shqiptare" sh.a., has declared that starting from 1 January 2021, the charge for delivering post items, packages, and parcels originating from abroad will not be collected. The issue on expense (cost) separation, by service evidenced in the financial system (ETERNA), because this system has not identified the Universal Postal service into basic units.

To further inform on the performance of duties, on 15.12.2021 a joint meeting was held between AKEP and Posta Shqiptare sh.a. representatives in order to inform on the implementation of recommendations given by the inspection, plans for 2022 and the steps to be taken by the Post for carrying out specific duties.

During December and January 2022, AKEP structures carried out the first inspection at the Posta Shqiptare sh.a. entity with the scope of verifying the implementation of the Resolution of the Albanian Parliament.

2. After AKEP's inspection of the three mobile network operators, monitoring regarding their fulfillment of recommendations to remedy violations found by such undertakings regarding compliance with the number portability regulation has continued, in order to enable subscribers to exercise their right to port their mobile numbers in line with the timeframes and procedures provided in the regulatory acts.

Realizuar

About this recommendation we would like to clarify that after the inspection performed by AKEP structures during 2020, some issues were noted in the activity of mobile undertakings regarding the porting process.

After inspecting 3 public mobile phone network undertakings "One Telecommunications" sh.a., "Vodafone Albania" sh.a., and "Albtelecom" sh.a., AKEP inspection unit found that all the three undertakings had violated the provisions under regulation no. 43, dated 22.9.2016 "On the implementation method of the number portability", which are classified as administrative offences punishable by the administrative sanction "fine" or other complementary sanctions as recommended in Article 137 under the law no. 9918, dated 19.5.2008, dated "On Electronic Communications in the Republic of Albania", as amended

The three AKEP inspection structure have been given complementary administrative measures in the form of recommendations, as follows:

- analyze and solve the causes that lead to the violation of legal and sub-legal provisions relating to the number portability process, thus extending the procedure on no legal grounds;
- update database data, especially to update the data of subscribers registered with old passports or certificates that do not have the subscriber's ID number;
- perform internal periodic controls/audits to identify and correct the refusal cases due to non-compliance of the subscriber's ID and human errors when loading the data in the relevant database (CRM);
- develop intensive training with sales staff on the procedure of filing requests for number portability, as well as any other change to the regulation and obligations deriving from such changes;
- immediately stop disruptive or aggressive commercial practices, individualized offers that impact the porting process;
- immediately implement the obligations regarding the time limits on responding to requests for portability (paragraph 6, article 18 under the regulation no. 43, dated 22.9.2016 "On number portability implementation method"
- immediately implement the obligations on responding to portability requests in relation to the % of refused and accepted cases (paragraph 5, article 18 under the regulation no. 43, dated 22.9.2016 "On number portability implementation method"
- implement pursuant to the legislation in force the complaint form, time frames, and procedure relating to the porting process;
- correct the identified violations and to eliminate their consequences within 60 (sixty) days from the final inspection decision;
- give notice on the correction of violation within the time frames defined above and file evidence;
- hand over periodic monthly reports (on the 30th day of the month) until the final time frame is reached, thus defining what progress has been made regarding the performance of tasks on violation redress.

In order to meet the inspection recommendations, the undertakings are monitored on the porting process, and have to hand over to AKEP periodic monthly reports (on the 30th day of the month).

A working group established at AKEP has monitored and prepared periodic reports with the statistical data generated from the CRDB system on the performance of operators regarding the implementation of porting time frames and rule.

These repots highlight that the porting levels remain high.

On these grounds, in order to verify if the previous inspection recommendations are met and to carry

out a holistic assessment of the porting situation, AKEP structures have lately initiated the inspection of all the three mobile phone network undertakings, which concluded in December. The inspection results are shown in the annual report.

3. Cooperate with the Competition Authority to avoid disruptive and aggressive commercial practices and below cost offers that lead to market distortion.

Completed

Regarding this recommendation, AKEP has cooperated on the other hand with the Competition Authority by informing the CA on the adoption of measures to implement the recommendations issued by the latter relating to the handling of disruptive and aggressive commercial practices.

In 2021, AKEP has made available complete information on the packages and fees for mobile services announced by mobile operators. AKEP has notified the Competition Authority too on the measures adopted by AKEP aiming at solving the technical issues on the number portability procedure, in order to ensure an effective competition among the market operators.

In its standing as an independent electronic communication, AKEP has cooperated and continues to do so on issues of common interest, and continues to prioritize such issues in order to protect users and consumers, and to support the development of a fair competition in the electronic communications market in the Republic of Albania.

4. Upon approval of the regulation on Protection of Electronic Communications Service Consumers and Users, work towards the implementation of the present regulation from electronic communications service operators, especially regarding new services for users with special abilities, such as Text Relay service (text conversion service), which allows persons with hearing and/or speech impairments to make and receive calls, or options proposed to aid subscribers with low income, such as the extension of the phone credit validity to 12+3 months and the right of subscriber for compensation of the unused amounts.

Completed

The "Regulation on the protection of public electronic communications services consumers and subscribers" document is an important regulatory act for the achievement of the objectives set in Law No. 9918/2008, electronic communications sector strategies and policies, the fulfillment of the recommendations made by the Parliament of Albania, and the goals of the EU integration process.

The document was adopted by the AKEP Steering Board on 11.3.2021 upon completion of the public consultation process started on 30.9.2020. The regulation will become effective on 1 February 2022. The undertakings have meanwhile given notice to AKEP on subscriptions draft contracts and have notified the subscribers on the time frames.

The adopted regulation aims at providing better protection of public electronic communications consumer and subscriber rights, by setting clearer rules regarding their rights in their relations with undertakings, including:

- clearer obligations on terms and conditions that must be included and become an integral part
 of subscription contracts for the provision of electronic communications public services and/or
 networks;
- clearer rules on access to emergency services and transmission of subscriber location information for these calls, including calls to the 112 unique emergency number.
- clarifications on contract length, renewal and termination;
- clearer rules on addressing of complaints by operators and their record keeping, and the resolution of the subscriber - operator disputes;
- conditions for transparency and information disclosure by public electronic communications network/service providers;
- measures to ensure equal access for persons with disabilities.

The "Regulation for the protection of public electronic communications services consumers and subscribers" contains the following:

- AKEP provisions on regulating relations between public electronic communications networks and services operators and subscribers;
- alignment with EU directives and recommendations, BEREC documents and practices in a various EU member states regarding the protection of the electronic communications services end consumer/user;
- adaptation of electronic communications and issues encountered in the operator-subscriber relation to the current conditions of the Albanian market;
- consideration of the comments made by stakeholders, such as operators and persons with disabilities associations.
- consolidation of a number of AKEP acts related to subscriber rights into a single act.

AKEP has cooperated with the Ministry of Health and Social Protection and associations for the protection of persons with disabilities on the drafting of contracts for such persons, and meetings have been held with mobile phone operators to perform technological upgrades to their systems to enable some benefits for this specific group.

5. Conduct a long-term assessment of parameters, capacities and strategies on the implementation of the new band networks and technologies (5G) within 2021.

Completed

The Electronic and Postal Communications Authority (AKEP), in the capacity of the regulatory authority in the field of electronic communications, exercises its activity in line with the regulatory objectives defined in article 7 under the law no. 9918/2008, such as:

- Leading investments focused on the sustainable digital development, improving the service quality and guaranteeing consumer rights.
- Making the electronic communications and postal services sector more dynamic through fair and free competition in the market;
- Promoting national assets, frequency bands and their efficient use in the framework of next generation technologies;
- Standardization of the network security and reliability of electronic communications servicesthrough safe providers and technologies.
- lose harmonization with the regulatory and functional independence requirements, by sticking to EU standards.

In the capacity of the Contracting Authority, AKEP has developed the public procurement procedure with subject *"Study/analysis on new mobile broadband technology in Albania"* and has signed upon its completion an agreement with the successful economic operator, the consortium of economic operators Jones Group International" & "Dynology Corporation" (JGI & DC).

In line with the contractual obligations, the contractor has signed with AKEP the document "Study/ analysis on new mobile broadband technology in Albania" which has been recognized by AKEP. AKEP started conducting this study, including an overall assessment considering relevant technology, safety, affordability, and skills. The meetings with mobile operators and their perspective towards the measures that should be taken to encourage investment in the 5G network in the future, were of special importance for the development of the document. Telecom operators in Albania have made a valuable contribution to this study and will be fundamental part of the 5G implementation in Albania.

The study includes among others a process to grant use rights on the most objective and transparent manner possible, for the benefit of the Albanian consumer and economy, the establishment of a competitive market in Albania and the effective use of the frequency spectrum, in line with regulatory objectives.

When preparing the regulatory documents for the electronic communications market and before any decision-making that considerably impacts the electronic communications market, AKEP is obligated to take into account and consider the opinion of third parties through public consultation and therefore has put the document out for public consultation.

The document put out for public consultation has four main areas of focus, described as follows:

- I. First Focus: Facilitating the 5G Tender/Spectrum in Albania
- II. The document focuses on how to facilitate the tendering/auctioning procedures and timeframes, in order to shorten the average time required for granting 5G frequency authorizations. It would be in the interest of the country but also the mobile operators, for them to have the adequate time to secure financing for the investments required, to improve/prepare the telecommunications infrastructure in Albania, and to safely implement 5G.
- III. Second Focus: Recommendations on legislative actions to support the 5G network establishment.

The new 5G technology planning and implementation requires new operational strategies for the government and the telecom industry, regulatory acts and other tools for performance monitoring and performance measurements, as well as a transparent process that encourage future investments. This means that the laws, regulations and other processes should be reviewed to support the goal of successfully implementing 5G across Albania. The document also includes several recommendations for legislative actions that will help facilitate the 5G networks dissemination.

IV. Third Focus: 5G promotion.

This focus will address two main aspects: (1) telecom opinions and recommendations, when they are considering to invest in the 5G; and (2) the role that the government should play to encourage such investments and inform the Albanian public on 5G benefits.

V. Fourth Focus: Assessment and addressal of risks and other 5G considerations

This document part focuses on risks that my emerge in many forms, such as: results of the unsatisfactory or incomplete spectrum; availability of systems/components or trustworthy supply chains; weaknesses of safe 5G networks from the network supplier and the financial/technical limitations of the telecom operator to implement the 5G.

In the end of the procedure, AKEP has administered the thoughts of the three mobile undertakings and MolE's. The comments and opinions have been forwarded to the consultant who has drafted the final document along with AKEP specialists in the end of December.

6. Play a pro-active role in the short term on the one hand to enable the adoption of measures for the existing cable system in cooperation with all the actors and in the long term on the other hand to propose legal/sub-legal changes regarding the solution of this problem.

In progress

In order to meet the obligations arising from the Albanian Parliament Resolution for AKEP, the undertakings network and infrastructure situation continues to be followed up in the areas identified as "troublesome", and the intervention in some areas to eliminate the air infrastructure continues in line with the annual inspection plan, in order to meet the technical conditions laid down in regulation no. 22, dated 24.6.2011,"On Technical Conditions for the Construction of Urban Cable Networks and Interurban Fiber Optic Networks of Electronic Communications".

AKEP has continuously requested the electronic communication undertakings, cable network providers, and one of the local units to take measures so that to eliminate the power and lighting network-based connections.

However, to avoid or minimize this phenomenon, with the aim of achieving the standardization required for the engineering network of electronic communications, one of the most important factors we consider is to meet operators' requirements for obtaining appropriate permits for making available and extending the infrastructure needed for the underground lines of electronic communications, in accordance with the legislation in force, as well as its inclusion by the local government in all urban infrastructures (roads, sidewalks) already built or to be built in the future.

We deem that the issue of air cables cannot be solved through drastic measures because they

would collapse the services that undertakings provided to subscribers, but through smooth actions, with operators using the OSHEE poles and substituting them in some phases, in line with the city development planning, as well as taking into account the projections and the technical norms related to electric safety, isolation level, pole height etc. In this aspect, AKEP continues to prioritize this issue by coordinating its work with other actors in the process, thus encouraging cooperation between OSHEE and other landline network operators on the rehabilitation and use of passive infrastructure, pursuant to the agreements concluded between the parties.

In this paragraph, just like many other resolution paragraphs, the performance of duty is dependent upon several actors, with AKEP playing a proactive role and extending its contribution and cooperation. However, to fully perform the duty, all the stakeholders in the process such as OSHEE, municipalities, undertakings etc. should properly implement and coordinate their actions.

7. Cooperate with mobile operators and coordinate the work to increase the service coverage and quality in the GMS, UMTS and LTE frequencies in the main cities, main national roads, urban and rural areas of the country, especially in tourist sites where issues in coverage and services have been identified

Completed

During 2021, AKEP has continued to control the increase of service coverage and quality in the GMS, UMTS and LTE frequencies in the main cities, main national roads, urban and rural areas of the country, especially in tourist sites.

The following service improvements have been noted in 2021:

- LTE technology data transfer speeds have been considerably increased in high user density areas in the cities of Durrës, Shijak, Elbasan, Peqin, Cërrik, Peshkopi, Klos, Burrel.
- Coverage and service quality have been improved in the tourism site of Gërmenj and surrounding rural areas and the beach sites around the country. In addition, operators have been requested to take measures to improve mobile telephony services in the tourist site of Butrint, considering that this was one of the most frequented sites in 2021.
- Mobile telephony coverage has been provided and service quality has been improved along new road segments that have been completed or are about to complete, in cooperation with the Ministry of Infrastructure and Energy. During the 2021 tourist season measures were taken along most of the Vlora Bypass segment - the construction works for which are expected to be completed soon - to improve coverage and to provide services of reasonable technical quality. AKEP has requested operators to achieve maximum service coverage and quality along this road segment and to provide services before the start of the new 2022 summer season.

Monitoring has also been conducted along the Rruga e Arbrit segment and issues have been identified in specific areas. The operators have been requested to plan measures for service provision when this road segment becomes operational.

• In order to cover and improve the mobile telephony service for urban and rural areas identified by AKEP, operators have applied in line with their budget plans for permit to construct the stations as per the applicable legislation.

8. Make all efforts to allocate the remaining 800 MHz frequency band lot within this year and play a proactive role, thus cooperating with all actors on freeing up the 700 MHz band (DD2 band).

Completed

With regard to the unallocated 800 MHz (1x10 MHz, coupled) band, and after the conclusion of the relevant consultancy at the end of 2020, AKEP has been waiting for an expression of interest by the mobile operators for this band. However, this spectrum will be taken into account even after the conclusion of the consultancy taking place as an analysis study for new mobile broadband technologies in Albania.

AKEP has taken all the steps regarding the remaining band frequencies and in cooperation with the consultant has provided the relevant scenarios for each case. Operators however have not shown any interest in using such band.

This task relates to recommendation 5 (above) because the 700 MHz band is one of the main 5G network bands, but also relates to the 5G strategy in Albania which is being designed by the Ministry of Infrastructure and Energy (MolE) in cooperation with AKEP.

In order to free up the 700 MHz band, MolE has benefited the ITU consultancy which in cooperation with AMA and AKEP found several technical solutions to free up this band.

Additionally, DCM No. 636, dated 29.7.2020 "On approval of the multiannual program for spectral policy and action plan" foresaw the date for freeing up the band was defined to be 30.6.2022.

Coordination efforts between the countries of the region have been made by the RCC (Regional Cooperation Council) too, which organized on 8.11.2021 a meeting for the broadband and 5G developments in the Western Balkans. The meeting agreed to organize an online workshop on freeing up the 700 MHz band with the participation of AMA, AKEP, EKIP and AEK.

During the meeting, AMA presented one of the most viable technical solutions about freeing up the 700

MHz band, in order for the neighboring regulatory authorities to get a preliminary idea how they will be affected by this technical solution and to drive forward the cross-border coordination process.

In the context of the cooperation on vacating the 700 MHz band, the Audiovisual Media Authority and the Electronic and Postal Communications Authority signed a Memorandum of Cooperation on 3.11.2021 to ensure and provide operational, technical, and legal support in the areas of mutual interest.

Both institutions will cooperate among other things for AMA to vacate the 700 MHz band (also known as DD2) and for AKEP to take over the band, complying with the deadlines defined by the EU and ITU.

AKEP has expressed its readiness to take this band under administration after it has been vacated by AMA.

9. Cooperate with MIE on the approximation of electronic communications legislation with the new European Electronics Communication Code, a requirement highlighted in the EC progress report.

Completed

Taking into account the great impact of this sector into the digital economy development and its extraordinary evolution within a short period of time, the Electronic and Postal Communications Authority considers that having in place a legal framework suitable to the dynamic of this sector is paramount. The electronic communications market is constantly changing in the face of the growing demand for high speed infrastructure development, and the mass use of mobile applications in the modern life, therefore, in this context, the legislative intervention in the legal framework in force is considered as pretty important.

As per the above, to ensure that Albanian citizens are provided electronic communication services with the same standards of EU member states, AKEP is cooperating with MIE to harmonize the electronic communication legislation with the new EU regulatory framework (envisaged in the European Electronic Communications Code (EECC)).

Meanwhile, AKEP is part of the working group established by MIE, which is closely working with the consultant selected by the European Union Delegation in the framework of the IPA technical assistance, on the approximation of Directive 2018/1972/EU Electronic Communications Code into the national legislation by the end of 2022.

10. Cooperate in the framework of the National Plan on Broadband Infrastructure Sustainable Development 2020-2025 to perform the duties directly related to AKEP, such as: broadband atlas upgrade, improvement of the shared use of the existing infrastructure.

Completed

AKEP is working in the framework of the National Plan on Broadband Infrastructure Sustainable Development 2020-2025 to improve the Broadband Atlas.

AKEP has also been working with all the electronic communications operators on the registration and update of undertakings in the Atlas system, in line with the definitions under the regulation no. 26 "On the content, form, and functioning of the electronic communications networks electronic register in the Republic o Albania".

As clarified in other paragraphs of the resolution, we have to perform a duty which should requires coordination with other actors, such as the local power, ADF, and ARA - they should update their network in the ATLAS system. AKEP has delivered the relevant notifications and has organized meetings with municipality representatives for the continuous data update.

MoIE and AKEP have cooperated with the project "Development of the Albanian Broadband Atlas and its use in the public and private sector" project, which Albania has benefited under the 23rd call of the Western Balkans Investment Framework (WBIF).

This project aims at developing the Atlas system, updating this system with information down to the end user, information on the use of broadband internet in Albania, service providers in specific areas, information on white areas and mobile services coverage, based on the best international practice and models.

In addition to the impact on the development of the private sector, this project will also affect the expansion of high speed internet in state institutions such as schools, health centers, administrative units, etc.

This project also aims at improving the Atlas system for electronic communications infrastructure, thus uploading new information even for the end point of the network, and information on passive existing networks that may be used for the Broadband.

MoIE and AKEP are working with the selected consultants for the timely delivery of the project.

11. In the framework of the action plan on the spectrum policy, AKEP will create along with AMA a unified joint inventory on the radio spectrum used for commercial and public purposes, and draft in cooperation with MolE and AMA a methodology to perform an analysis on the technological trends based on the European Union practice and future needs and demands for radio spectrum in the relevant sectors.

Completed

Pursuant to DCM No. 636, dated 29.07.2020 "On approval of the multiannual program for spectral policy and action plan", the Ministry of Infrastructure and Energy has approved Instruction No.3, dated 7.6.2021 "On establishment and management procedures of the joint unified inventory, common for the radio spectrum used for commercial and public purposes". In 2021, AKEP has implemented the advance frequency system for a better and more modern automated use of frequencies administered by AKEP.

In meeting the obligations defined in the RoA Parliament Resolution, AKEP and Audiovisual Media Authority have coordinated in developing a unified frequency inventory, based on the provisions of the Spectrum Policy, which serves for the following:

- Identification of frequency bands with room for efficiency improvement in the current radio spectrum use, considering also the possibility of allocating/reallocating frequencies.
- Identification of free frequency bands that will ensure a more effective use promoting innovation and increasing market competition within the country.
- Identification of frequency bands where joint radio spectrum use is possible considering at the same time the demand for new services.
- Analysis of different radio spectrum use typologies by the users and the public and private sector.
- 12. Intensify the efforts to sign a cooperation agreement with AMA, which will add a new dimension to the cooperation in common areas of work involving 2 authorities, especially in the framework of the spectrum policy program and action plan approved by the government, but also when it comes to preventing audiovisual online piracy.

Completed

The Electronic and Postal Communications Authority (AKEP) and the Audiovisual Media Authority (AMA) have met bilaterally recognizing and appreciating the so-far cooperation, and stressing the

intensification of relations between the institutions and more cooperation in the areas of common interest.

Following such meetings, both authorities signed on 3.11.2021 a Memorandum of Cooperation to ensure and provide operational, technical, and legal support in the areas of mutual interest.

Under this Memorandum, the institutions undertake to cooperate for its quickest and mos efficient implementation possible and to ensure that its purpose is meet to its fullest extent. The two institutions will also cooperate to:

- release the 700 MHz band (also known as DD2) by AMA and take over the band by AKEP, complying with the deadlines set by the EU and ITU;
- establish a TASK-FORCE composed of mutual representatives from both institutions, aiming to combat illegality in non-copyright broadcasting through electronic communications networks and conduct the activity only by entities licensed/authorized by the regulatory authorities;
- create a mutual group to regularly monitor the issues from interferences caused by entities whose activity falls under the scope of the two institutions, as well as interferences reported by the regulatory authorities of neighboring countries;
- create a unified frequency inventory pursuant to the legal obligations imposed on both institutions as regards the "Approval of the multiannual program for spectrum policy and action plan", as well as the relevant sub-legal acts thereto.

13. Implement an accessible online platform for measuring the quality service in the territory of the Republic of Albania from users and all undertakings of electronic communications that operate in it.

Completed

In meeting its obligations provided under the "National Plan for Sustainable Digital Broadband Infrastructure 2020-2025", AKEP has provided citizens with the opportunity to file complaints regarding internet services, related to quality of services among other things, by developing a measuring tool.

The platform is accessible on AKEP's website https://nettest.akep.al/sq/test and all final users may use it to measure and compare current internet speeds with what has been agreed in the contract. After the measurement, results can be automatically submitted to AKEP and can be used for end user complaints.

In order to deliver this project, AKEP relied on the EU Regulation 2015/2120 approved by the European Parliament and the Council of Europe of 25.11.2015 laying down measures concerning open internet access and amending the Directive, and on the "Open Internet" principle approved by BEREC (Body of European Regulators for Electronic Communications) in June 2020.

This platform allows any user to measure the landline, mobile and Wi-fi internet connection anytime and anywhere, thus mirroring the user results in a map. It will moreover enable a wider testing, including other parameters such as signal strength or quality parameters. This method relies on the expertise of regulatory authorities across Europe and contribution of thousands of users and executed measurements. By means of this platform, AKEP has been able to analyze and publish the data on the quality of services provided by internet operators, by displaying the data on service quality (QoS), and ranking operators and handling user complaints, thus encouraging the provision of a higher quality service.

14. Agree on and approve cross-border agreements to prevent interferences in the use of frequencies

In progress

In the framework of the Frequency Spectrum Coordination process in the cross-border areas but not only, AKEP has performed several meetings and is about to conclude bilateral and multilateral agreements. More specifically, the first meeting with representatives of Albania, Montenegro and North Macedonia was held in Tirana,

on 8 October 2021, in the framework of the regional meeting organized by the Regional Cooperation Council on the broadband and 5G development in the Western Balkans.

On 20 October 2021 the spectrum coordination meeting was held with Albania sending its own representatives from MolE and AKEP and AMA regulatory bodies, and Montenegro and North Macedonia sending their representatives of regulatory bodies (EKIP and AEK respectively).

The meeting aimed at discussing the spectrum coordination process between Albania, Montenegro and North Macedonia in connection with freeing up the 700 MHz band.

AKEP is currently working on a multilateral draft agreement that will renew the agreement signed in 2019 between MNE, MKD, Bosnia- Hercegovina and Serbia.

AKEP has also agreed with the neighboring regulators on the opportunity to join the regional agreements on 4G and 5G bands: 700 MHz, 3.6 GHz, 26 GHz.

AKEP has held several meetings with representatives of electronic communications agency (AEC) of the Republic of North Macedonia. It was agreed during the meeting to review the memorandum of cooperation and cross-border agreement under the light of new changes in spectrum management.

Just like in other paragraphs of the Resolution, in order to meet the recommendation, several actors have been engaged like AMA and the regulatory bodies of the neighboring countries, which should coordinate their actions for the spectrum under their management and to successfully conclude the bilateral or multilateral parties.

15. Approve within this year the cost model to be implemented in the electronic communications markets regulated by AKEP.

Completed

In 2020 and 2021 AKEP has continued the process for the final adoption of the "Results of the wholesale mobile services cost model" document.

In the capacity of the Contracting Authority, AKEP has developed the public procurement with the scope "International Consultancy service" and has signed an agreement with the successful economic operator resulting from a "AIR Communications Shpk" and "Tera Consultants Sha" consortium.

AKEP Steering Board, through its Decision No. 24, dated 26.11.2020 approved the "Reference document for the design of the mobile services cost model" for public consultation, which underwent the procedures of the public consultation during the 26.11.2020 – 26.12.2020 period.

Upon conclusion of this Public Consultation procedure, AKEP administered the stakeholder comments and forwarded them to the consultant for integration in the final document that will be used as a model for mobile services cost estimation.

As a next phase to this process, with Decision of the Steering Council No. 3 dated 1.4.2021, AKEP adopted the ""Reference model for the development of the mobile services cost model" - Final Document".

Upon analyzing and processing the data following EU member state practices as well, the consultancy joint venture developed the "Results of the wholesale mobile services cost model results" - Public Consultation Document" pursuant to the contractual obligations and based on the Final Cost Model adopted with DSC No. 3, dated 1.4.2021 and the data obtained from the mobile operators in Albania.

With Decision No. 8, dated 27.5.2021 AKEP adopted for public consultation the "Results of the wholesale mobile services cost model results" - Public Consultation Document" for the 27.05.2021 – 25.06.2021 period.

As a next step, with its Decision No. 10 dated 22.7.2021, the AKEP Steering Council adopted the final document on the "Wholesale services costing model results in mobile networks". This document describes and explains the main modelling principles and parameters used to estimate mobile services

costs, taking under the closest consideration possible KE recommendations and international best practice. It also addresses the results of wholesale services costs provided by the mobile operators in Albania, based the LRIC+ and the Pure LRIC methodology.

16. Continue to implement the Regional Roaming Agreement to enable "Roaming like at home» from 1 July 2021 in the Western Balkan countries.

Realizuar

Roaming regulation at the regional level in the Western Balkan countries (Albania, Kosova, North Macedonia, Montenegro, Serbia an Bosnia-Hercegovina) is part of the Multiannual Action Plan on Regional Economic Area - MAP REA), signed by the WB leaders at the Trieste Summit on 12 July 2017.

Following this process, on 4 April 2019, in Belgrade, Serbia, the "Agreement on the reduction of

roaming service tariffs in public mobile communication networks in the Western Balkan region" (hereinafter RRA) was signed in the framework of the Western Balkans Digital Summit.

The agreement foresaw among others that starting from 1.7.2021 the WB6 will start implementing the 'Roam Like At Home' model, i.e retail roaming tariffs in the WB6 will be equal to the relevant tariff within the country.

In line with the second paragraph of Article 6 under the RRA, AKEP approved by its decision no. 1, dated 14.1.2021 the draft regulation "On the implementation of a fair policy of use and sustainability assessment methodology on removal of the retail roaming tariffs (RLAH) with the Western Balkan".

Upon conclusion of the public consultation procedure (SCD 1/2021) and upon collecting and reviewing stakeholder comments, AKEP adopted with decision No. 9 dated 9.6.2021 the document for the implementation of the Fair Use Policy (FUP) and the instruction for the implementation of RLAH and FUP, as follows:

- "Regulation on the implementation of the Fair Use Policy and the Methodology for the Elimination of Retail Roaming Charges (RLAH) Sustainability Assessment for the Western Balkans";
- "Instructions for the implementation of RLAH and FUP for roaming in the Western Balkans".

The roaming charge reduction process in the WB6 has been dynamic and has been an ongoing process for over two years. Continuous discussion and meetings have been held during this process with the Regional Cooperation Council (RCC) structures in the quality of the roaming charge reduction process in the WB6 coordinator, the EU, regional regulatory bodies, and regional mobile operators.

In addition, continuous meetings and discussions were held in 2021 between WB6 representatives and the EC structures representatives regarding the start of the roaming services charges reduction process between Western Balkan countries and the European Union as well. This process is coordinated by the RCC with the participation of EC representatives, line ministries responsible for ICT and Regulatory Authorities of the six WB countries, and with the participation of WB6 and EU operators.

As regards the implementation of the Regional Roaming Agreement to make possible "Roaming like at home" in the Western Balkans, AKEP has been conducting the verification for the implementation of this agreement since July 2021, establishing ad hoc working groups to verify the implementation of the agreement and any issues arising during the first stages of its implementation.

Verifications have been conducted namely for the Republic of Montenegro, the Republic of Kosovo and the Republic of Northern Macedonia with regard to the use of the GSM, UMTS, and LTE technologies.

The verification of the Albanian operator roaming services in public mobile communication networks in the

Western Balkans focused in three directions:

- I. The provision of inbound calls and SMS services free of charge by operators.
- II. Provision of roaming services based on active user packages.
- III. Roaming service provision based on service fees.

The verifications conducted starting in July 2021 for the Republic of Montenegro, the Republic of Kosovo and the Republic of Northern Macedonia regarding the use of GSM, UMTS, and LTE technologies found the following:

- I. Inbound calls and SMS services are provided free of charge by operators.
- II. Roaming services based on user active packages are provided by the operators only for the plans indicated on their respective websites.
- III. Roaming services based on the service fees are provided by the operators in line with the statements on their websites.

During this period operators have periodically reported data on the number of subscribers and traffic volumes for their mobile services (voice, SMS, and data). The data submitted by the operators have been collected and aggregated by the WB regulators and have then been submitted to BEREC, which has prepared periodic reports on the roaming services indicators in the WB6 countries and other parts of the EEA and the 'Rest of the World'.

The data reported by the operators in Albania for relevant periods show that the effects roaming services price reduction policy in the WB and the implementation of the RLAH regime have been very positive for final users.

The following are some comparative data on the mobile services volumes and subscribers that have used roaming in the WB.

The number of subscribers using roaming at least once in the WB during the any quarter has increased many fold, with figures jumping from some 77 thousand subscribers in the second quarter of 2019 to some 280 thousand in the third quarter of 2021 (which coincides with the period of the RLAH policy implementation period). The data show that the steepest incline occurred during the third quarter of 2021, with an increase of approximately 400% compared to the same period of the previous year, and some 300% compared to the preceding quarter Q2 - 2021).

The positive effects of roaming charges reduction have also been reflected in the increased use of internet services while roaming in the WB countries, with the volume of data used in roaming during the third quarter of 2021 surpassing 103 thousand GB, which is an 11 fold increase compared to Q3-2019 and a 14 fold increase compared to Q3 of 2020.

3. Statistics of Market Dynamics in the Electronic Communications and Postal Services Markets

| Year | 2015 | 2016 | 2017 | 2018 | 2019 | 2020 | 2021 | Difference 2021/202 0 |
|---------------------------------------------------------------|---------------|---------------|---------------|-------------------|-------------------|-------------------|-------------------|-----------------------------|
| Number of mobile telephony users: | | | | | | | | |
| According to SIM cards | 4,777,885 | 5,280,990 | 5,558,492 | 4,143,603 | 3,378,886 | 3,337,824 | 3,484,158 | 4.38% |
| - Active users | 3,442,665 | 3,490,686 | 3,625,699 | 2,714,878 | 2,630,076 | 2,618,880 | 2,635,466 | 0.63% |
| Number of users with 3G/4G broadband access: | | | | | | | | |
| - Total | 2,049,072 | 2,739,550 | 3,345,045 | 2,657,015 | 2,462,057 | 2,469,850 | 2,789,023 | 12.92% |
| - Active users | 1,297,281 | 1,686,354 | 2,030,978 | 1,809,996 | 1,789,158 | 1,998,579 | 2,056,444 | 2.90% |
| Outbound mobile phone calls (minutes) | 7,381,147,348 | 6,793,769,155 | 6,619,674,715 | 6,019,006,07 3 | 5,494,296,03 4 | 5,286,361,92 7 | 5,602,663,59 0 | 5.98% |
| National inbound calls (minutes) | 1,388,340,601 | 2,522,840,417 | 2,893,847,082 | 2,525,099,11 2 | 2,318,816,61 9 | 2,306,339,57 7 | 2,501,744,33 7 | 8.47% |
| International inbound calls (minutes) | 420,253,147 | 300,227,063 | 168,753,020 | 164,608,604 | 213,311,650 | 187,708,51 0 | 144,033,38 2 | -23.27% |
| SMS texts sent by users | 1,598,702,865 | 1,610,322,977 | 1,400,142,526 | 1,212,559,06 8 | 967,833,263 | 660,604,925 | 555,701,627 | -15.88% |
| Total volume of data transmitted over mobile networks (GB) | 12,740,073 | 26,753,639 | 45,901,117 | 60,051,808 | 69,135,490 | 88,950,833 | 155,585,664 | 74.91% |

Table 1 Main indicators of the mobile service volumes 2015-2021

| | 2015 | 2016 | 2017 | 2018 | 2019 | 2020 | 2021 | Difference 2021/2020 |
|-------------------|------|------|------|------|------|------|------|-------------------------|
| Outbound calls | 182 | 166 | 155 | 158 | 171 | 168 | 178 | 5.78% |
| Inbound calls | 171 | 169 | 156 | 161 | 177 | 174 | 182 | 4.60% |
| MOU | 353 | 335 | 311 | 319 | 348 | 342 | 360 | 5.18% |
| Outbound SMS | 39 | 39 | 33 | 31 | 30 | 21 | 18 | -16.06% |
| Data traffic (GB) | 1.0 | 1.5 | 2.1. | 2.6 | 3.2 | 3.9. | 6.4 | 63.55% |

Table 2: Average monthly use of mobile phone calls 2015-2021

| | Albteleco m | Vodafone Albania | One Telecommunicatio ns | Plus Communicatio n | TOTAL | Penetrat ion rate per populat ion |
|------|----------------|---------------------|-------------------------------|---------------------------|-----------|-----------------------------------------------|
| 2015 | 214,42 8 | 706,880 | 375,97 3 | 0 | 1,297,281 | 46.00% |
| 2016 | 231,32 1 | 921,854 | 460,22 1 | 72,958 | 1,686,354 | 60.00% |
| 2017 | 282,07 7 | 1,030,61 4 | 613,88 6 | 104,40 1 | 2,030,978 | 72.00% |
| 2018 | 272,28 2 | 931,730 | 605,98 4 | 0 | 1,809,996 | 63.00% |
| 2019 | 280,73 7 | 940,849 | 567,57 2 | 0 | 1,789,158 | 63.00% |

 Table 3
 Number of subscribers with 3G/4G broadband access over the years

 Source:
 Data sent from operators to AKEP.

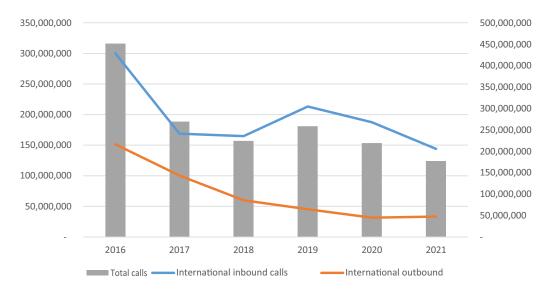
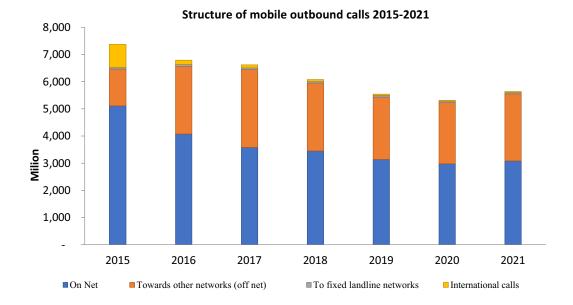
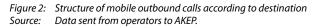
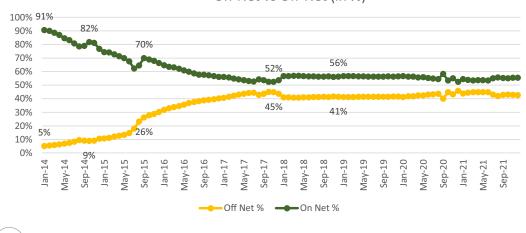


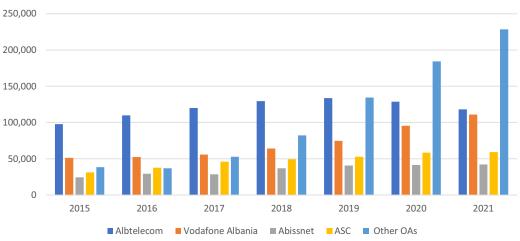
Figure 1: Progress of international outbound and inbound calls (in minutes) in mobile networks Source: Data sent from operators to AKEP.











Dynamics of the number of subscribers with broadband access from fixed networks 2015-2021

Figure 3 Dynamics of the number of subscribers with broadband access from fixed networks 2015-2021 Source: Data sent from operators to AKEP.

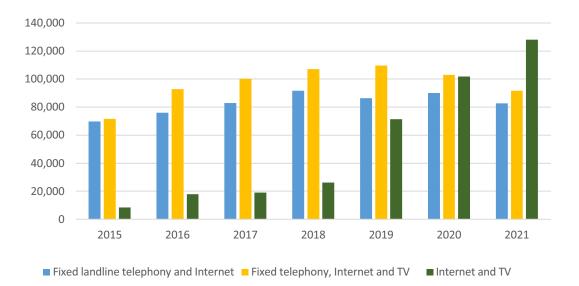


Figure 4 Number of subscribers with access to integrated services (Telephony, Internet and TV) Source: Data sent from operators. Processed by AKEP

In 2021, subscribers with integrated packages made up 54% of subscribers with broadband access to fixed networks, while 30% of subscribers with integrated packages have purchased three-in-one packages (Telephony, Internet and TV).

POSTAL SERVICES

| | Post objects | 2017 | 2018 | 2019 | 2020 | 2021 | Difference for 2021/20201 | |
|-----|------------------------------|------------|------------|------------|------------|------------|------------------------------|--|
| POS | POSTA SHQIPTARE sh.a | | | | | | | |
| 1. | Universal Postal Service | | | | | | | |
| 1.1 | Domestic mail | 18,599,662 | 18,298,143 | 20,348,070 | 17,487,538 | 20,219,877 | 15.6% | |
| 1.2 | International mail | 1,322,758 | 1,413,574 | 1,152,935 | 903,336 | 662,949 | -26.6% | |
| 1.3 | Total 1.1+1.2 | 19,922,420 | 19,711,717 | 21,501,005 | 18,390,874 | 20,882,826 | 13.5% | |
| 2 | Non-universal Postal Service | | | | | | | |
| 2.1 | Domestic mail | 2,603,017 | 2,819,601 | 656,177 | 873,512 | 301,052 | -65.5% | |
| 2.2 | International mail | 9,702 | 6,616 | 5,624 | 2,344 | 2,762 | 17.8% | |
| 2.3 | Total 2.1+2.2 | 2,612,719 | 2,826,217 | 661,8018 | 75,856 | 303,814 | -65.3% | |
| 3. | Express mail services | | | | | | | |
| 3.1 | Express domestic mail | 724,794 | 699,731 | 644,049 | 486,531 | 669,874 | 37.7% | |
| 3.2 | Express international mail | 25,764 | 18,842 | 79,071 | 12,874 | 18,902 | 46.8% | |
| 3.3 | Total 3.1+3.2 | 750,558 | 718,573 | 723,120 | 499,405 | 688,776 | 37.9% | |

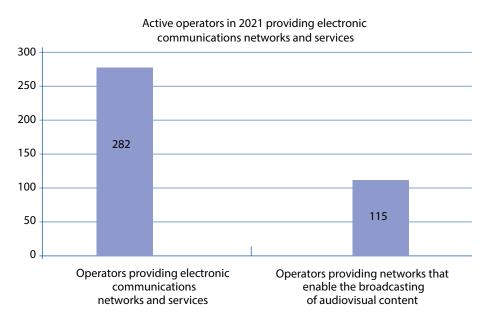
SOCIAL SERVICES PROVIDERS

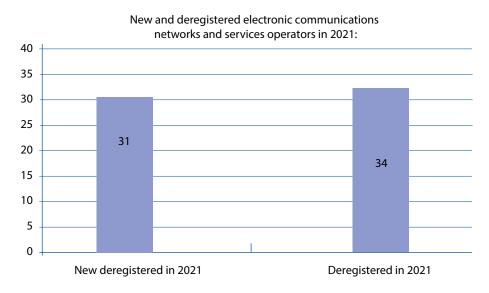
| 4. | Non-universal Postal Service | | | | | | |
|-----|------------------------------|------------|------------|------------|------------|------------|--------|
| 4.1 | Domestic mail | 277,504 | 490,900 | 698,388 | 1,914,761 | 1,719,277 | -10.2% |
| 4.2 | International mail | 34,632 | 35,486 | 39,769 | 45,036 | 77,419 | 71.9% |
| 4.3 | Total 4.1+4.2 | 312,136 | 526,386 | 738,157 | 1,959,797 | 1,796,696 | -8.3% |
| 5. | Express mail services | | <u>`</u> | | | | |
| 5.1 | Express domestic mail | 1,050,783 | 1,408,298 | 2,010,034 | 2,796,387 | 3,192,279 | 14.2% |
| 5.2 | Express international mail | 206,705 | 222,725 | 246,931 | 272,860 | 268,528 | -1.6% |
| 5.3 | Total 5.1+5.2 | 1,257,488 | 1,631,023 | 2,256,965 | 3,069,247 | 3,460,807 | 12.8% |
| 6. | Total 1.3+2.3.3.3+4.3+5.3 | 24,855,321 | 25,413,916 | 25,881,048 | 24,795,179 | 27,132,919 | 9.4% |

Table 4:Data on the main categories of post objects (2017-2021)Source:Data sent by operators. Processed by AKEP

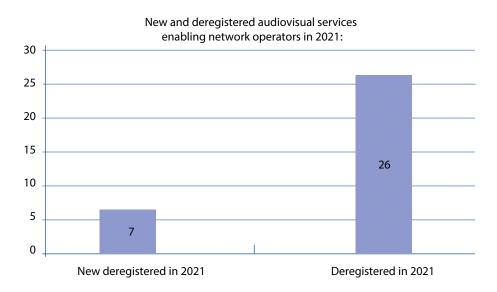


I. REGISTRATION OF OPERATORS TO PROVIDE THE ELECTRONIC COMMUNICATIONS NETWORKS AND SERVICES, ACCORDING TO THE GENERAL AUTHORIZATION REGIME

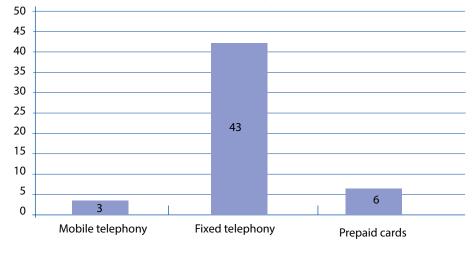


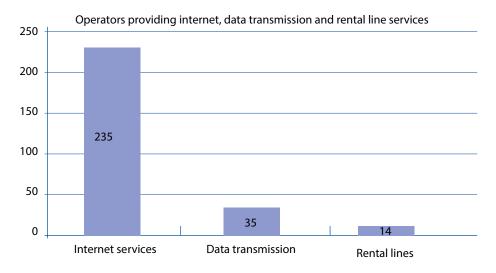


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Operators providing telephony public services



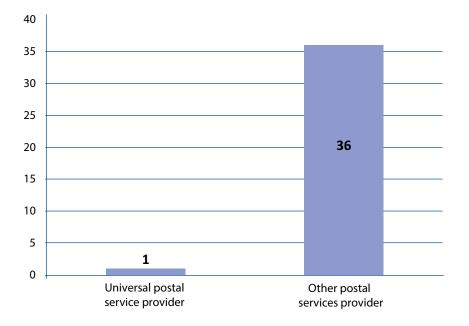


It should be noted that in 2021, operators have reported about the construction of modern networks employing only fiber optic. The installation of fiber optic is being undertaken in both urban and rural areas.

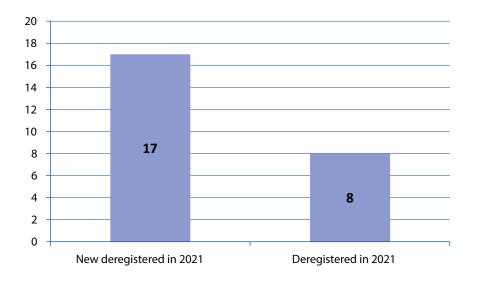
II. REGISTRATION OF POSTAL SERVICE PROVIDERS, ACCORDING TO THE GENERAL AUTHORIZATION REGIME

During 2021, the following have exercised their activity:

- 1 universal post service provider (Posta Shqiptare sh.a.).
- 36 post service providers that are not part of the universal post service.



In 2021, 17 (seventeen) new post service providers have been registered with AKEP, which are not part of the universal post service and 8 (eight) post service providers have deregistered.



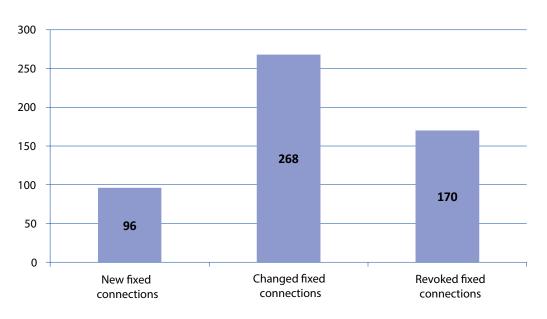
III. INDIVIDUAL AUTHORIZATIONS

1. Individual Authorizations to undertakings providing mobile networks and services for the use of frequencies:

In 2021, 3 operators have provided mobile telephony and broadband services through mobile networks: Vodafone Albania sh.a., One Telecommunications sh.a., and Albtelecom sh.a., have been granted by AKEP their Individual Authorizations for the use of frequencies in GSM/UMTS/IMT/LTE (800/900/1800/2100/2600 MHz) bands, otherwise known as 2G/3G/4G.

2. Individual Authorization for the use of frequencies in fixed (point-to-point) networks, PMR radio communication/radio alarm systems etc.

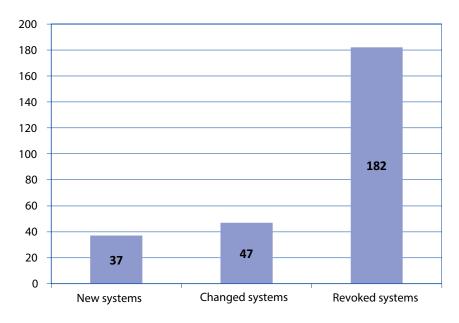
In 2021, AKEP has issued 96 new fixed connection individual authorizations and 268 changed fixed connections individual authorizations (total of 364 fixed connections) to electronic communications operators to use frequencies. 170 fixed connection Individual Authorizations have been revoked.



Individual Authorizations - Fixed connections (2021)

In 2021, a total of 266 applications have been confirmed for operators using frequencies for PMR (radiocommunication and radio-alarm) systems:

- 37 applications are related to new systems,
- 47 applications are related to changing existing authorizations,
- 182 applications are related to frequency revocation.



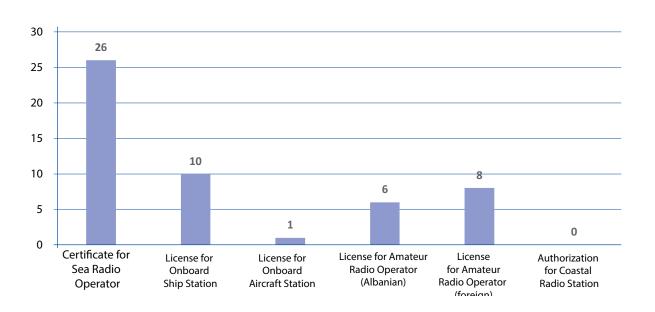
Individual Authorizations - PMR Systems (2021)

3. Numbering Individual Authorizations:

In 2021, a total of 47 Individual Authorizations have been issued for fixed numeration, mobile numeration, short codes, etc., while 61 numerations have been cancelled of which 53 by request of the operator and 8 by initiative of AKEP in the case of operators with back dues.

4. Authorizations, licenses and certificates for air, maritime services etc.

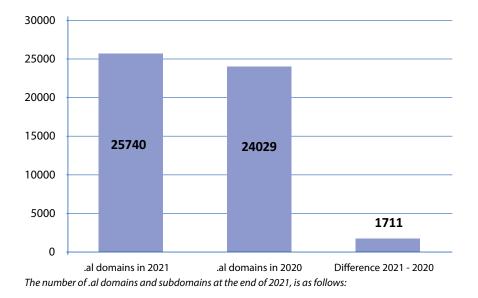
Pursuant to law 9918, as amended, and AKEP regulations, and based on applications submitted, the following Licenses, Certificates and Authorizations have been granted to coastal radio stations:

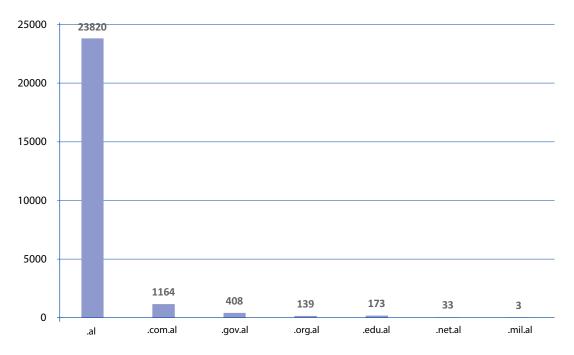


IV. ADMINISTRATION OF THE ".AL" DOMAIN:

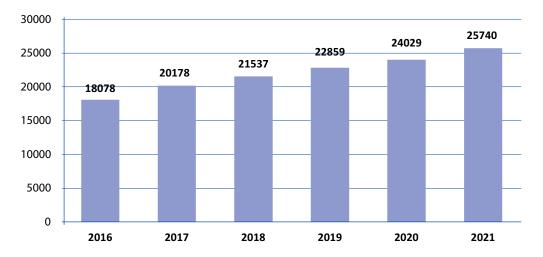
The number of .al domains ending and relevant subdomains registered in 2021 was 5931. The total number of .al domains and relevant subdomains at the end of 2021 is 25,740.

In statistical terms, another increase in the number of total registered domains is recorded in 2021 compared to 2020, with 1711 more domains registered in 2021 than the preceding year.





The number of .al domains and subdomains over the last 5 years, is as follows:



TOTAL NUMBER OF .AL DOMAINS IN THE LAST 5 YEARS

In 2021, 25 .gov.al domains have been registered and 97 have been renewed. By the end of 2021, the total number of .gov.al domains were 408.

V. Shutting down access to a number of websites/domains hosting illegal content.

The Games of Change Oversight Authority (AMLF), the Audiovisual Media Authority (AMA) and the Commissioner for the Right to Information and Protection of Personal Data (CRIPDP) have filed a number of requests in 2021 to have ISPs shut down access to 125 domains hosting illegal content. Pursuant to article 15, of law 9918/2008 as amended, AKEP has forwarded the requests filed by these institutions to the relevant ISPs.

In more concrete terms, the institution and the number of domains for which access shut down has been requested, is provided below:

- AMLF: 76 domains,
- AMA: 45 domains,
- CRIPDP: 4 domains.

Based on the lists submitted by these institutions, there were no applications to shut down access to .al domains.

5. EP Steering Board Decisions in 2021

| Decision | Date | Title of Decision |
|----------|------------|----------------------------------------------------------------------------------------|
| No.1 | 14.01.2021 | On "Approval of public consultation for: "Regulation on the implementation of the fair |
| | | use policy and the methodology for the elimination of retail roaming |
| | | charges (RLAH) sustainability assessment for the Western Balkans"; |
| No.2 | 11.03.2021 | On adopting the "Regulation for public electronic communications services |
| | | consumer and subscriber protection" document. |
| No.3 | 01.04.2021 | On adopting the "Reference template of the document for developing the cost model |
| | | for mobile services" document |
| No.4 | 28.04.2021 | On Adopting the Report of Activities of the Electronic and Post Communications Au- |
| | | thority (AKEP) for 2020 |
| No.5 | 28.04.2021 | On "Reviewing the administrative complaint filed by the Albtelecom sh.a. electronic |
| | | communications operator against the "fine" administrative measure". |
| No.6 | 28.04.2021 | On "Reviewing the administrative complaint filed by the Vodafone Albania sh.a. elec- |
| | | tronic communications operator against the "fine" administrative measure". |
| No.7 | 28.04.2021 | On "Reviewing the administrative complaint filed by the One Telecommunications |
| | | sh.a. electronic communications operator against the "fine" administrative measure". |
| No.8 | 27.05.2021 | On approving the public consultation for the "Wholesales services costing model re- |
| | | sults in mobile networks" document |
| No.9 | 09.06.2021 | On adopting the "Regulation on the implementation of the fair use policy and the |
| | | methodology for the elimination of retail roaming charges (RLAH) sustainability as- |
| | | sessment for the Western Balkans" document and complementary documents thereto. |
| No.10 | 22.07.2021 | On adopting the "Wholesale services costing model in mobile networks" |
| | | document. |
| No.11 | 22.07.2021 | On approving the public consultation for the "Regulation on public notification and |
| | | consultation procedures" document. |
| No.12 | 31.08.2021 | On "Approving the public consultation for: On some additions and changes to Annex |
| | | 1, Regulation No. 12, dated 7.4.2010 "On electronic communications networks and/or |
| | | service operators periodic financial and statistical data", as amended. |
| No.13 | 31.08.2021 | On the use of commissions collected by AKEP in the quality of a tax agent as remuner- |
| | | ation for difficult work for 2021". |
| No.14 | 21.09.2021 | On "Arrangements to use commissions collected by AKEP in the quality of tax agent |
| | | in 2022″. |
| No.15 | 21.09.2021 | On developing the administrative expenditure fund and the draft budget for 2022 |
| | | for AKEP. |
| No.16 | 04.10.2021 | On adopting the Memorandum of Understanding between the Electronic and Postal |
| | | Communications Authority (AKEP) and the Audiovisual Media Authority (AMA). |

| No.17 | 04.10.2021 | On postponing the effective date of Regulation No. 49 dated 11.3.2021 "On the protec- |
|-------|------------|---------------------------------------------------------------------------------------|
| | | tion of public electronic communications services consumers and subscribers". |
| No.18 | 04.11.2021 | On adopting the Additions and changes to Annex 1, Regulation No. 12, dated 7.4.2010 |
| | | "On electronic communications networks and/or service operators periodic financial |
| | | and statistical data", as amended. |
| No.19 | 04.11.2021 | On approving for public consultation, the "Study/analysis of new mobile broadband |
| | | technologies in Albania" document. |
| No.20 | 07.12.2021 | On postponing the effective date of Regulation No. 49 dated 11.3.2021 "On the protec- |
| | | tion of public electronic communications services consumers and subscribers". |
| No.21 | 07.12.2021 | On approving the "Regulation on public notification and consultation procedures" |
| | | document. |
| No.22 | 07.12.2021 | On determining procedures for rewarding good work outcomes for AKEP |
| | | employees in 2021". |

The following contributed to the development of this Report:

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Foto AKEP: Eduard Pagria



