WORK PLAN 2019

November 2018

I. INTRODUCTION

The Regulatory Agency for Electronic Communications and Postal Services (hereinafter: the Agency) was founded pursuant to the Law on Electronic Communications ("Official Gazette of RS", Nos. 44/10, 60/13-CC Decision and 62/14, hereinafter: the Law) as an independent regulatory body, endowed with quality of legal person, performing public authorities for the purpose of implementing established policies in the field of electronic communications, fostering competition in the domain of electronic networks and services, improving their capacities and quality, contributing to the development of electronic communications market and protecting the interest of electronic communications' users, in accordance with the provisions of this Law and bylaws based thereon, and performing regulatory and other activities pursuant to a separate law regulating the domain of postal services.

The Managing Board of the Agency, pursuant to Article 11, paragraph 1, item 1 of the Law, adopts annual work plan of the Agency, which is harmonized with strategic acts and action plans in the domain of electronic communications and postal services, at the latest until December 15 of the current year, for each following year.

Based on the objectives of the Strategy for the development of electronic communications in the Republic of Serbia from 2010 to 2020 ("Official Gazette of RS" No. 68/10, hereinafter: the Strategy), the Agency prepared its Work Plan 2019, with includes activities related to the development of an independent and consequent regulatory practice, for the purpose of supporting further electronic communications market development, fostering the competition, deploying new technologies and protecting end users.

Since new laws regulating the domains of electronic communications and postal services are expected to be adopted in 2019, RATEL's principle activities will be focused on the implementation of new legal solutions, i.e. on drafting the relevant bylaws. The adoption of new laws will lead to a greater level of harmonization of the national regulations with the current EU regulatory framework. RATEL will also closely follow the adoption of the European Electronic Communications Code (EECC), along with its proposed solutions, so as to keep up with modern trends in the telecommunications market regulation.

RATEL will continue with its activities pertaining to the work of the National Centre for the Prevention of Security Risks in ICT Systems, pursuant to the Law on Information Security, and relevant regulations.

In accordance with its competencies and current trends in the development in the fields of telecommunications, postal services and information security, but also having in mind the needs of operators and end users, **RATEL** has defined nine strategic priorities for 2019:

- 1. ENHANCEMENT OF ELECTRONIC COMMUNICATIONS REGULATORY FRAMEWORK
- 2. ENHANCEMENT OF POSTAL SERVICES REGULATORY FRAMEWORK
- 3.5G ROADMAP
- 4. PROTECTION OF ELECTRONIC COMMUNICATIONS AND POSTAL SERVICES USERS
- 5. INCREASE IN THE EFFICIENCY OF RF SPECTRUM MANAGEMENT
- 6. ENHANCEMENT OF COMPETITION ON THE ELECTRONIC COMMUNICATIONS MARKET
- 7. DEVELOPMENT OF MECHANISM FOR COORDINATION AND RISK PREVENTION IN ICT SYSTEMS
- 8. INCREASE IN INTERNATIONAL PRESENCE OF THE AGENCY
- 9. INCREASE IN THE EFFICIENCY OF AGENCY'S WORK

II. STRATEGIC PRIORITIES IN 2019

1. ENHANCEMENT OF ELECTRONIC COMMUNICATIONS REGULATORY FRAMEWORK

In the following period, the National Assembly is expected to adopt a new Law on Electronic Communications, after which the Agency shall be obliged to undertake a set of regulatory activities, namely to adopt necessary bylaws and carry out new legislative decisions. Detailed activity plan regarding the adoption of necessary bylaws, in accordance with prescribed deadlines, can only be prepared after the adoption of the Law. In Transitional and Final Provisions of the currently available version of this act, which is still in the form of proposal, the set deadline for the adoption of bylaws shall be one year following the day of entry into force of the Law on Electronic Communications. The new Law on Electronic Communications will be harmonized with the 2009 EU regulatory framework. The intention of the legislature, in addition to fulfilling the obligation of the Republic of Serbia to align its legislation in the field of electronic communications with the EU acquis communautaire, is also to improve and regulate in greater detail the existing legal provisions, in order to provide a modern, efficient and unique legal framework for further development of electronic communications, leading in turn to increased competitiveness and stimulation of foreign and domestic investments, a range of high-quality services, improved business environment for electronic communications operators and improved protection of electronic communications users' rights.

Activity 1 Implementation of the new Law on Electronic Communications by drafting new bylaws and harmonizing with the EU electronic communications regulatory framework

In accordance with the provisions of the new Law, the drafting of bylaws and harmonization thereof of will last throughout the year. Preparation and adoption of bylaws are planned to be carried out in several phases. Before being forwarded for enactment, each draft shall be subject to the process of public consultations.

Phase 1 - Rulebook regulating fees for provision of service within the competence of the Agency, Rulebook on number portability for services provided via public mobile communications networks, Rulebook on obligations of value added services provider and Rulebook on general terms and conditions for performing electronic communication activities under general authorization regime.

Phase 2 - Numbering Plan, Rulebook on application form for the issuance of license for the use of numbering, Rulebook on quality parameters for publicly available electronic communication services and monitoring of electronic communication activity, Rulebook on the manner of collection and publication of the data on the type, availability and geographic location of the electronic communications network's capacities, Rulebook on the terms and conditions for access to and usage of the data from a public directory.

Phase 3 - Rulebook on number portability on public telephone networks at a fixed location, Rulebook on manner and conditions for assignment and usage of numbers from numeric range starting with number 116, Rulebook on content and manner of notification of

international interconnection agreements and Rulebook on the manner of RF spectrum usage monitoring, technical inspection and protection from harmful interference.

Phase 4 – Rulebook on the manner of substantiating additional costs and eligibility criteria for the right to cost recovery for additional costs related to universal service provision and Rulebook on the level of detail and manner of publishing the information on universal service provision offered by operators.

Phase 5 - Rulebook on the manner of radio frequency usage under general authorization regime – (following the adoption of the Numbering Plan).

Phase 6 – Rulebook on the manner of amateur radio station usage (adopted in 2018 and submitted to the line ministry in order to obtain the opinion on compliance with the Constitution and laws).

Phase 7 – Amendments to any other rulebooks and/or alignment with the new law regulating electronic communications, adoption of new bylaw following the entry into force of the new law and drafting proposals of the bylaws adopted by the line ministry on the Agency's proposal:

- Rulebook on the manner of radio stations usage on national and foreign aircrafts, locomotives, ships and other vessels;
- Rulebook on application forms for the issuance of individual license for the use of radio-frequencies;
- Proposal of rulebook on radio equipment;
- following the adoption of the Numbering Plan, amendments will be made to the existing rulebooks stipulating RF allotment plans;
- Proposal of Rulebook on universal service.

Phase 8 - With the aim of harmonizing with the EU regulatory framework in the domain of markets susceptible to ex-ante analysis, independently from the adoption of the new law regulating electronic communications, Rulebook on cost-oriented price calculation is planned to be passed and the Rulebook on the minimum content, level of detail and manner of publication of reference offers, prepared in 2018, is planned to be adopted.

2. ENHANCEMENT OF POSTAL SERVICES REGULATORY FRAMEWORK

In order to enhance postal services regulatory framework, the Agency participates in the activities related to the adoption of the new Law on Postal Services. In addition, the Agency drafts propositions and adopts bylaws, arising from this law, which in a general manner govern the matters within Agency's competence. The adoption of the Law on Postal Services is expected to take place in the following period. After this, the Agency will undertake a set of regulatory activities pertaining to the implementation of the new legal solutions and it will adopt necessary bylaws, pursuant to the new law. The activities related to the adoption of necessary bylaws will began following the adoption of the law, in line with the set timeframe.

Activity 1 - Development of the regulatory framework in accordance with the new Law on Postal Services

The main activity, once the law is passed, is the adoption of bylaws, consisting of drafting new bylaws and aligning the existing ones. Preparation and adoption of bylaws are planned to be carried out in several phases. Before being forwarded for enactment, each draft shall be subject to the process of public consultations.

Phase 1 - Rulebook on conditions for and manner of postal service provision, Rulebook on single tariff categories for Universal Postal Service (UPS), Rulebook on application form for permit issuance for the postal service provision, Rulebook on establishment of the amount and manner of fee payment by postal operators, Rulebook on manner and conditions for the access to the public postal operator's postal network and Internal instructions on permit issuance.

Phase 2 - Rulebook on the manner of keeping separate accounts and authenticity verification, Rulebook on identification card forms and manner of their issuance, Rulebook/ Instructions on technical control, Rulebook/ Instructions on mediation in out-of-court disputes, Rulebook on quality standards for the UPS provision, Rulebook on technical requirements for residential mailboxes and other bylaws in the competence of the Agency, pursuant to the law regulating postal services.

Activity 2 – Introduction of technical control in order to create a more favourable environment for market development

For the purpose of improving conditions for promoting competition and liberalized market, the Agency monitors the work of postal operators, by analyzing achieved results, user complaints, postal industry innovations, and produces reports on annual market overview. It also analyzes the work of each postal service provider and points out to the identified shortcomings at the meetings with operators, or reports them to the inspection services of the line ministries.

With the adoption of the new law the Agency's is likely to have another competence, involving technical control of the work of postal service providers. This competence will considerably contribute to a more efficient impact of the Agency on the establishment of better conditions on the postal market. Consequently, necessary bylaws will need to be adopted and activities of professional staff who will perform technical control will need to be organized. Instructions, plans, description of technology phases which will be the subject of technical control, as well as necessary identification cards for the employees performing technical control will need to be prepared.

Activity 3 Drafting study on the analysis of postal service market development in line with ECOMPRO programme

The Agency analyses the development of postal service market in the Republic of Serbia and follows the reports published by the UPU and ERGP. In the analysis, the Agency has noted a high degree of correlation between the postal service market trends in Serbia with the trends

present in a number of other countries. A decrease in the volume of letter mail (documents) and increase in the volume of parcels (containing goods) is an observed trend. Large companies offering online sale contributed to the increased need for delivering goods, providing a new development opportunity to the entire postal sector. These trends are analysed by the UPU and ERGP, with the maim task of enhancing the regulation so as to establish a common market.

Having recognized the trends in the global market, UPU has introduced ECOMPRO package service as the answer to the increasing volume of international packages generated by distance sale. The service is in the development stage and it is intended for authorized postal operators.

In 2018, the EU has intensively worked on the Regulation of the European Parliament and Council on cross-border parcel delivery services. The reasoning accompanying the Regulation proposal defines the requirement of the NRAs to monitor mational markets and colect data on volume and revenue made from cross-border parcel delivery services. Consequently, the Agency adapted the reporting forms and quastionnaires for postal operators and created conditions for designing a model of support to cross-border parcel delivery development.

The Ministry of Trade, Tourism and Telecommunications defined in the Action Plan of the Strategy for the Development of Postal Services in the republic of Serbia for 2017-2020 a very important objective: "Innovation of the existing and development of modern postal services in teh republic of Serbia through modernization and full integration of product portfolio", setting Activity 3-3-1: "To define a model of support to cross-border parcel delivery development, in line with ECOMPRO programme" falling within competence of the Agency. Accordingly, the Agency is planning to prepare a study on the "Analysis of postal market development in line with ECOMPRO programme."

3. 5G ROADMAP

One of the priorities set out by the European Union is a coordinated application of 5G in all member states by 2020. In this regard, it is in the interest of Serbia not to be left behind, but to take a timely and active part in this process. This is why one of the priorities of the Agency is to see to all preparatory activities, so as to create conditions for 5G RF spectrum auction in 2020.

Activity 1 Study on the optimal RF spectrum auction model for the existing and future 5G technology

As part of the preparations for 5G RF spectrum auction, i.e. the sale of the unsold, free parts of frequency bands 900 MHZ, 1800 MHz and 2100 MHz, as well as of future bands to be allocated to 5G (700 MHz, 2.6 GHz, 3.5 GHz, 26 GHz...), a public bidding model needs to be selected, both in order to achieve the maximum amount of the one-off fee for licence issuance and to stimulate swift deployment of the new technology by the operators. The proposed public bidding model needs to take into account the specific characteristics of our

electronic communications market and the Strategy for the Development of Electronic Communications in the Republic of Serbia from 2010 until 2020. Having regard to the complexity of the public bidding, mainly due to the type of public bidding which will offer combined spectrum (several frequency bands), optimal auctioning model and the conditions for public bidding need to be identified. The study should also involve the definition of requirements for the eligibility to participate in the public bidding, the criteria, application forms, proof etc., as well as the definition of the necessary procedure in case of any complaints to the outcome of the public bidding.

Activity 2 New Allocation Plan and frequency allotment plans for 5G

Amendments to the current Radio Frequency Allocation Plan were necessary, based on the WRC-12 and WRC-15 results and updated ECA Table. Upon the completed legal procedure, the final text of the Radio Frequency Allocation Plan shall be submitted to the line ministry for further procedure within their competence.

Radio frequency allotment plans are proposed by the Agency and passed by the line ministry. Following the adoption of the Allocation Plan, and as a result of the need to define the conditions for frequency usage, new allocation plans will need to be prepared and the old ones amended. The implementation of the following adopted allotment plans will take place, pursuant to the Allocation Plan, following the entry into force thereof:

- Allotment plan for operation in 700 MHz frequency band, to be submitted for public consultation and forwarded to the line ministry.
- Amendments to the Rulebook stipulating the Frequency Allocation Plan for public electronic communication service provision systems – broadband wireless access systems (BWA), mobile/fixed communication networks (MFCN) in frequency bands 3400-3600 MHz and 3600-3800 MHz, to be submitted for public consultation and forwarded to the line ministry.

Activity 3 Frequency coordination with the administrations of the neighbouring countries

The process of frequency coordination with the administrations of the neighbouring countries entails implementation of coordination based on the signed regional agreements; preparation of new technical agreements pertaining to frequency bands for which the usage rights in border areas has not yet been agreed upon:

- Coordination agreement for frequency band 800 MHz, with Bosnia and Herzegovina, Montenegro and Macedonia;
- Coordination agreement for frequency band 900 MHz, with Bosnia and Herzegovina, Montenegro and Macedonia;
- Coordination agreement for frequency band 1800 MHz, with Bosnia and Herzegovina, Montenegro and Macedonia;
- Coordination agreement for frequency band 2100 MHz, with Bosnia and Herzegovina, Montenegro and Macedonia;

- Coordination agreement for frequency band 3400-3600/3600-3800 MHz, with Bosnia and Herzegovina, Montenegro and Macedonia;
- Coordination agreement for frequency band 380-385 MHz / 390-395 MHz with Romania, Bulgaria and Macedonia, depending on these countries.

We will continue with the regular frequency coordination process concerning:

- FM broadcasting station coordination;
- DVB-T and T-DAB broadcasting assignment coordination and
- Application of HCM (Harmonised Calculation Method) agreement in the coordination process with the neighbouring countries.

Activity 4 Procurement of consultant services for the purpose of carrying out the public bidding in 2020

Based on the Study on the optimal RF spectrum auction model for the existing and future 5G technology, a consultant for carrying out the public bidding according to the proposed model will be selected. The consultant shall be required to prepare all necessary procedures for carrying out the public bidding, define the rules for carrying out the bidding procedure based on the type of bidding, develop software - in case of electronic auction and adapt the electronic auction software to our specific requirements and set out regulations, etc. The consultant shall be required to hold training for necessary software usage by all qualified bidder (operators) and the staff of the Agency, provide support throughout the public bidding and provide support after the best bids and bidders should court proceedings be initiated.

4. PROTECTION OF ELECTRONIC COMMUNICATIONS AND POSTAL SERVICES USERS

One of the postulates upon which market regulation rests is the provision of a high-level protection of consumers' interests in their relations with operators. This is particularly reflected in making available clear and complete information on price, access and usage to customers, as well as in the efficient handling of complaints related to the work of operators. Constant effort in improving the availability, accessibility and quality of public communications networks and services for all users continues to be a priority of the Agency in 2019.

Activity 1 More efficient dispute resolution

During the application of the Law on Electronic Communications, it was noted that the majority of complaints made to the work of operators are related to the received bill for provided services. The Agency carries out the procedure of mediation in peaceful dispute resolution between subscribers/users and electronic communications operators regarding the bill and/or quality of services, pursuant to Article 113 of the current Law on Electronic Communications. The practice has demonstrated that excessive amounts on the bills are most usually the consequence of subscribers' lack of information, which results in unusually high amounts on the bills issued to the customer. The new Law on Electronic Communications prescribes mechanisms for preventing excessive consumption by obliging the operator to

alert the subscriber when the amount to be paid becomes twice as high as the average sum charged to the particular subscriber. Thus the problem will be duly spotted and any further unjustified increase in the bill charged for services will be prevented. Empowered by the new Law, the Agency will also be authorized to resolve disputes between operators and subscribers in an out-of-court procedure, by means of a decision "on the merits", in the best interest of both parties, and particularly with the aim of applying a better user protection.

In addition, the Agency analyzes the General Terms and Conditions of electronic communications operators, for the purpose of giving orders, recommendations and suggestions on how to make changes and amendments to these Terms and Conditions and of their harmonization with regulations governing the domain of electronic communications and consumer protection and with other acts, all with the aim to apply a more efficient protection of electronic communications users. In this sense, the Agency cooperates with many bodies and organizations, such as the line ministry, inspection services of the line ministry or of the authorities of the autonomous province in charge of inspection, the Regulatory Authority for Electronic Media and other relevant bodies.

Activity 2 Development universal service

Adoption of the new Law on Electronic Communications will bring about the requirement to draft bylaws regulating in detail the manner of determining and substantiating additional costs related to universal service provision, procuring the funds for cost recovery and eligibility criteria for the right to cost recovery for additional costs, conditions for providing equal opportunities for universal service usage and access and the level of detail and manner of publishing information on universal service offer, which needs to be made publicly available by operators.

The Agency will launch a public call to operators interested in providing universal service under the prescribed conditions.

The Agency shall carry out the analysis of universal service provision in terms of volume, geographic coverage and the quality of service provision and shall determine and control the level of detail and the manner of publishing information on universal service offered, which needs to be made publicly available by operators.

Activity 3 Monitoring of regulated roaming charges

The Agency will continue to monitor regulated roaming charges and to control the application of the Decision on reduction of roaming charges pursuant to the Agreement on reduction of roaming charges between Bosnia and Herzegovina, Montenegro, Macedonia and Serbia. Should, in the meantime, a new regional roaming agreement be signed, mirroring the EU regulations, the Agency will adopt a new decision on roaming charges and will control its application.

Activity 4 EM field level measurement in urban areas

In accordance with Feasibility study on the sensor system roll out of for continuous EM field level measurement, a network of 100 measurement stations is planned to be rolled out in urban areas in the Republic of Serbia.

More than 200 facilities in 20 Serbian towns were visited in 2017 and 2018 for the purpose of EM field level measurement and exploring technical conditions for mounting sensors, whereby 26 optimal facilities for installing sensors were identified.

Further search for optimal locations and mounting of sensors on facilities of interest is planned for 2019.

Activity 5 Implementation of portal for comprehensive search related to electronic communication service costs

Based on the provisions of Article 111 of the Law on Electronic Communications referring to the obligation to keep an up-to-date database of prices and to publish it on the Agency website, equipped with a "search" feature, the Agency plans to implement the information portal on available electronic communications services, available bundled services, characteristics and prices, in the form of a general search engine for the current offers of the electronic communications operators. Price comparison will be enabled according to the type of service or type of bundled services, duration of user agreement, conclusion of a new user agreement etc. Electronic communications operators will update their information on the portal by themselves, whereas the Agency will be required to inform the public of the existence of the portal, so as to make it in the best interest of the operators to regularly update the available information.

Activity 6 Guidelines for electronic communication and postal services user protection and net neutrality

In view of the new legal solutions, objectives and principles under the current laws and of the practice of the European regulators in the area of end user empowerment through providing necessary information, possibility of choice and a more active role in the market, Guidelines for electronic communication and postal services user protection in terms of Agency involvement are as follows:

- 1. Provision of information and education to users/subscribers by:
 - providing advice and instructions via direct telephone line, regarding the rights and obligations of the operators and users/subscribers, the competencies of the Agency and specific cases based upon complaints, etc;
 - providing written instructions, advice, answers to FAQ and information on the Agency website;
 - providing update on specific cases based upon complaints to the users who have filed the complaint via "Internet desk" portal;
- 2. Cooperation with the media on general and/or specific issues;
- 3. Cooperation with the line ministry, whose portfolio includes both electronic communication and postal services issues and consumer protection issues;
- 4. Net Test Internet QoS related application usage;
- 5. Implementation of application for prices of services offered by electronic communication operators.

Pursuant to Law on Postal Services, with the aim of protecting postal service users, the Agency undertakes the following measures:

- 1. Provision of information and education to postal service users by providing both oral and written advice and instructions, and by providing answers to FAQ, information and communications on the Agency website;
- 2. Cooperation with the line ministry, whose portfolio includes both postal services issues (inspection) and consumer protection issues;
- 3. Survey on postal services user satisfaction, in particular with universal postal service scope, as the service of general interest. The survey should provide a true picture of real needs of the user, both private and business, and focus on 5 key issues:
 - QoS measurement, related to regularity and realibility of service;
 - acceptance and delivery;
 - access points;
 - user satisfaction measurement;
 - user needs survey.

Net neutrality is related to equal treatment of all data transmitted via Internet, regardless of user, content, platform, application and communication mode. Net neutrality disables the operators providing the Internet access service to discriminate in any way Internet content, services or protocols. This means that they may not block or slow pages or services.

Special services may be offered to business or private users who wish to pay more in order to have priority. However, such services may not be offered if they would limit bandwidth or speed for regular users and websites.

5. ENHANCED EFFICIENCY OF RF SPECTRUM MANAGEMENT

The law defined management of RF spectrum, as scarce resource, to be based on the principles of rationality, economy, transparency and non-discrimination. Pursuant to regulations, the Agency participates in RF spectrum usage planning, in line with the relevant international agreements and recommendations and the interest of citizens, business, national security and defence; assigns frequencies based on Allocation Plan and allotment plans; coordinates RF usage and monitors RF spectrum, detects harmful interference and takes measures to eliminate them.

Activity 1 Continued construction of RF spectrum monitoring system

Activities related to the construction of the system of fixed remotely controlled monitoring and measurement stations, which should enable a continuous radio frequency spectrum monitoring on the whole territory of the Republic of Serbia, will be continued in 2019.

Completed rollout and launch of 7 such stations and additional five stations for which the procedure of location acquisition is underway, are planned for 2019. In this way, RF spectrum monitoring systems will have 2 monitoring and measurement centres and 16 remotely controlled monitoring and measurement stations.

Activity 2 Procurement of measurement equipment and vehicles

During 2019, procurement of measurement equipment for five fixed remotely controlled monitoring and measurement stations is planned. Also, planned procurement includes: field monitoring and measurement vehicle, vehicle with quality parameters measurement equipment, EM field (non-ionizing radiation) measurement equipment, generators and RF power amplifiers, as well as a smaller quantity of equipment for portable monitoring and measurement stations and measurement in field conditions.

Activity 3 TVWS project implementation

White Spaces (WS) are parts of RF spectrum not used by RF usage licence and/or permit holders at a specific time (interval) and in a given geographic area.

A one-year project related to a Feasibility study on TVWS device usge in UHF band (470-790 MHz) is planned to be carried out in cooperation with Microsoft. TVWS is available part of RF spectrum within 470-790 MHz frequency band, allocated on primary basis to digital terrestrial TV signal broadcast.

The purpose of the study is to lay down the guidelines that would provide an overview of the prospects for implementation of TVWS devices in Serbia, by analyzing possible applications of TVWS devices, existing TVWS installations in Europe and in the world, technical parameters of the equipment and possibility of coexistence with primary users of the 470-790 MHz band, as well as the degree of technical standardization and the possibility for the regulator to efficiently and timely monitor and coordinate different TVWS systems and primary users.

6. ENHANCEMENT OF COMPETITION ON THE ELECTRONIC COMMUNICATIONS MARKET

One of the primary activities of the Agency, pursuant to the Law is to enhance competition on electronic communications market. The main mechanism available to every regulator is market analysis and the Agency will continue with its activities in this area. Also, mobile network quality parameters benchmarking campaigns will be continued and guidelines for telecom infrastructure sharing will be prepared.

Activity 1 Implementation of performed analysis of markets susceptible to ex ante regulation

During 2018, another circle of analysis of relevant markets has been completed, in line with the Commission Recommendation on relevant markets (2014/710/EU) and new Decision on designating relevant markets susceptible to ex-ante regulation has been adopted, (Official Gazette of RS, number 78/18), identifying the following four relevant markets susceptible to ex ante regulation:

- 1) Wholesale call termination on individual public telephone networks provided at a fixed location;
- 2) Wholesale voice call termination on individual mobile networks;

- 3) (a) Wholesale local access provided at a fixed location;
 - (b) Wholesale central access provided at a fixed location for mass-market products.

Based on the results of the market analysis, decisions designating operators with significant market power on each relevant market have been adopted. With the purpose of implementing the decisions designating operators with significant market power, a new Rulebook on minimum content, level of detail manner of publishing standard offers which will be aligned with the new Decision on designating relevant markets susceptible to ex-ante regulation will be adopted. The operators with significant market power will then be obliged to adopt new or amend the existing standard offers within 60 days.

Activity 2 Introduction of a Long Run Incremental Cost (LRIC) model

A new Rulebook on application of the cost-based prices, introducing bottom-up long run incremental cost model – LRIC for fixed and mobile network, will be adopted in order to align with the Commission Recommendation of 7 May 2009 on the Regulatory Treatment of Fixed and Mobile Termination Rates in the EU (2009/396/EC). The existing current costs model will continue to be applied until the full switch over long run incremental cost model.

Activity 3 Price control of regulated services and bundled services

During 2017, the methodology for identifying margin squeeze in bundled service pricing has been completed. The majority of EU countries and countries in the region have a developed methodology for identification of margin squeeze prices which is consequently implemented on bundled service prices. Since the share of bundled services in retail services offered by operators is gradually increasing, the control of bundled service prices represents a continuous task for the Agency in the following period.

Activity 4 Mobile network quality parameters benchmarking

A new campaign of mobile network quality parameters benchmarking and analysis is planned to be conducted on the mobile operator networks in the territory of the Republic of Serbia. While the measurement campaign will be carried out by an outsourced firm, it will be coordinated, monitored and the results checked by the Monitoring Department. Processed measurement results will be available at the existing portal http://benchmark.ratel.rs

Upgrade of the interactive portal for mobile network quality benchmarking in the Republic of Serbia with 2019 benchmarking results and the development of new portal functions are planned for 2019.

Activity 5 Visualization of electronic communication operators' network elements

The Agency keeps an up-to-date database on type and geographic location of available electronic communication networks and accompanying facilities. Information in the database involves cable and wireless infrastructure offered by owner-operators to other operators for leasing.

Pursuant to the new proposed legal solution, the operators will be required to show entire built infrastructure and not only the infrastructure available for leasing. Thus, the number of elements in the base will be significantly increased.

Activity 6 Guidelines for shared telecom infrastructure usage

Adoption of the new law will require amendments to the Rulebook on the manner of collecting and publishing the data on the type, availability and geographic location of all electronic network capacities, which will include the work on drafting the guidelines for mobile network infrastructure sharing.

7. DEVELOPMENT OF MECHANISM FOR COORDINATION AND RISK PREVENTION IN ICT SYSTEMS

Pursuant to the Law on Information Security and related bylaws in the field of information security, the National CERT was established in 2017. Organizational changes have been made and new staff hired. With the aim of a further development of the National CERT in 2019, activities involving the implementation of amendments made to the Law on Information Security, implementation of Q radar, campaigns, trainings and promotion of information security, drafting guidelines for IT service user protection and connecting with international organizations dealing with cybersecurity.

Activity 1 Implementation of amendments made to the Law on Information Security

Pursuant to the amended Law on Information Security, activities within the responsibility of the National CERT will be carried out.

Activity 2 Implementation of Q radar

In line with the carried out public procurement, system software will be implemented, such as to enable the Agency's information system activities to be collected and analysed, while signalling the processes likely to be vulnerable to attacks or misuse. The process of implementation will consist of several phases:

- installation: software package set up and application related training for the staff
- process analysis: collecting information system activities over time, identifying processes and patterns
- modelling: adjusting rules and testing with the collected data
- verification: setting new rules in the production environment and work monitoring.

The processes are cyclic and require constant system adjustment, in line with the tendency for danger of information system attack to develop.

Activity 3 Campaigns, trainings and promotion of information security

Promotion of information security will be carried out by:

• producing video materials and clips for public service broadcasting;

- producing banners and publications for social media;
- organizing seminars for institutions recognized under the Law on information Security as information systems of particular importance;
- organizing technical workshops for IT experts from institutions recognized under the Law on information Security as information systems of particular importance, focusing on cyber defence drill.

Activity 4 Drafting guidelines for IT service user protection

Providing information and education to IT service users through:

- written instructions, advice, answers to FAQ, information and communication posted on the National CERT website;
- advice and instructions given via direct telephone line on how to report an incident related to information security and on how to use the service provided by the Agency.

Activity 5 Connecting with international organizations dealing with cybersecurity

The National CERT cooperates directly with the authority in charge of ICT system security, special CERTs in the republic of Serbia and similar organizations in other countries, public and business entities, CERTs of independent ICT system operators, and CERT of the national authorities.

Connecting with international organizations dealing with cybersecurity will involve the following:

- implementation of standards for acquiring the status of accredited member in the organizations Trusted Introducer and FIRST;
 - active participation in TF-CSIRT conferences;
 - active participation in cyber drills organized by the ITU;
- active participation in DCAF's project project. "Enhancing Cybersecurity Governance in the Western Balkans".

8. INCREASE IN INTERNATIONAL PRESENCE OF THE AGENCY

The Agency will continue to participate in the work of international organizations and institutions in the field of electronic communications, postal services and information security. In addition, further cooperation with regulatory and expert bodies of neighboring countries, EU member countries and other countries is planned, in the aim of harmonizing practices and implementing regulations. A particular focus will be placed on the stronger presence in the work of the European regulators for electronic communications and postal services, as well as on the cooperation with the NRAs of the neighbouring countries.

Activity 1 Participation in BEREC EWGs and the work of IRG

In 2019, the cooperation with the EU member states and candidate countries will continue within the Body of European Regulators for Electronic Communications (BEREC) and Independent Regulators Group (IRG), mainly through participating in CN meetings and EWGs formed for different topics. The activities will focus mainly on the implementation of the new regulatory framework for electronic communications in the EU.

Activity 2 Participation in the work of ERGP and activities related to serving as CERP's Vice-Chair

The Agency participates in the work of international organizations and institutions in the field of postal services and cooperates with the regulatory and expert bodies of the EU member states and other countries in order to harmonize practices of postal regulators and application of postal service regulations.

Representatives of the Agency are currently actively involved in two ERGP WGs (*End user satisfaction and monitoring the market outcomes and Universal service obligation group*) and participate in the CN and plenary meetings.

In 2019, cooperation with the European Committee for Postal Regulation – CERP will continue, in particular since a representative of the Agency has assumed the duty of CERP Vice-Chair. CERP priorities were defined in the strategic document adopted in the plenary meeting in Copenhagen, in June 2018. In this regard, involvement can be expected in the team for preparing draft Universal Postal Union Strategy for Abidjan 2020 Conference and, in particular in the activities related to projects of preparing strategic documents and increasing postal regulators' capacities in the UPU member states.

Activity 3 Improvement of regional cooperation

The Cooperation Forum of Regulatory Authorities for Electronic Communications of Bosnia and Herzegovina, Montenegro, Macedonia and Serbia is planned to take place in November each year. Also, regular meetings between the experts from the four regulators on different topics will be intensified.

Cooperation between the signatory countries of the Agreement on reduction of roaming charges will be continued in order to define the next steps in the regulation of roaming charges. Also, visits to the regulatory authorities of the countries in the region are planned in order to share experience in the regulatory practice.

Activity 4 Organization of international meetings (ENISA, BEREC EWG, CEPT WG, cybersecurity conference)

Several international meetings in the field of electronic communications, postal services and information security are planned to take place in 2019.

In September 2019, the Agency will host a meeting related to the Memorandum on the Quality of Service, which will be attended by approximately 30 participants from the broader region.

The Agency is a candidate for the host of the 58th TF-CSIRT conference, which should take place in Belgrade in September 2019. The conference is expected to be attended by around 150 representatives of CERT teams worldwide.

Since April 2018, the Agency has been involved in the work of ENISA Artcle 13a Expert Group for harmonized implementation of Article 13a of Directive 2009/140/EC (resilience and security of networks and services). Workshops are held three times a year and the Agency has proposed to host a workshop in Belgrade, in November 2019.

9. INCREASE IN THE EFFICIENCY OF AGENCY'S WORK

Since it has been established, the Agency has been committed to improving its efficiency continuously, through development and usage of electronic services, in compliance with applicable regulations. The Agency's objective is to be a modern and efficient organization, with the obligation of making available electronic services within its scope of activities. During 2019, activities pertaining to the improvement of existing external services and development of new ones, should significantly contribute, along with the automation of internal procedures, to the overall work efficiency.

Activity 1 Connecting to the network of state authorities

Connecting to the network of state authorities will enable electronic data exchange with other institutions, which will contribute to efficiency in solving a number of business processes of the Agency. The activity will be carried out in the following directions:

- access to eGovernment portal for the purpose of easier and safer data exchange between the members of the Coordination body for information security issues;
- access to incident tracking application of the line ministry, intended for tracking incidents reported by ICT systems of particular importance;
- access to the service of the Business Registry Agency allowing for information on business entities which are users of Agency's services to be collected and updated quickly and reliably.
- providing information from the Agency's base for the purpose of eInspector project, so as to allow for a more efficient and faster work of inspection authorities.

Activity 2 Video conferencing and collaboration service

Video conferencing and collaboration service will enable: to organize meeting between teams at distant locations (Belgrade-Nis-Dobanovci) more frequently, to organize online training for a larger number of staff, to simplify work on team documents and to make available the last updated version to all participants, to safely exchange and work on a larger number of documents.