

INFRASTRUCTURE

TRANSPORT

CURRENT SITUATION

When it comes to all types of transport, the importance of the Republic of Serbia is indisputable, both for the Balkan countries, as well as for the area of Southeast Europe and beyond. The improvement of transport would be most expediently considered through five modes of transport: road, rail, air, water and intermodal.

The aspiration to approach the levels of development of the European Union is present in this segment as well, which is primarily reflected in the implementation and harmonization of Serbian positive regulations with European regulations. The basis for these activities is certainly the General Master Plan for Transport in Serbia (abbreviated TMP), from 2009, which contains guidelines and plans for the road, rail, water, air, and intermodal transport sector, ending in 2027. The General Master Plan for Transport in Serbia is also the basis for existing and future projects that will be financed from EU pre-accession and accession funds, as well as other sources of funding.

When it comes to legislation, the Road Transport Sector is the most extensive, given that road transport is the most represented in relation to other modes of transport. Out of Serbia's 5,000 kilometers of roads, 1,100 kilometers have been identified as a high priority for rehabilitation, in line with the Transport Strategy and the aforementioned General Master Plan. Progress has been made in road transport with the adoption of regulations in the field of dangerous goods and transport licenses, while regulations related to the transport of goods are in line with European regulations.

The railway sector is the sector in which the need for modernization is highest at the moment, which has been intensively worked on in the last few years. In the area of rail transport, where there is progress, it is necessary to continue to open the market to private operators and ensure the sustainability of reformed railway companies.

Waterways are not sufficiently used, nor is their potential in the context of Serbia's international connection. Another burning issue with this sector is the financing of both the reconstruction and modernization of water transport. The funds needed to improve ports, waterways, and associated systems, as well as their maintenance, are really large. Novelty in terms of reg-

ulations governing water transport introduce amendments to the Law on Navigation and Inland Ports.

Intermodal form of transport, with three partially built terminals, is a form of transport that is still in its infancy, with a tendency to develop in the coming period.

The three main characteristics of the state of transport in the Republic of Serbia are the current maintenance of the existing infrastructure, investment, i.e. modernization of the same, and harmonization with European standards. Investing in infrastructure, as well as investing and maintaining the existing transport network are the goals to be pursued.

COVID-19

All facilitation and elimination of administrative barriers, especially in the transport of goods, are of interest to the Republic of Serbia. About 350 kilometers of new highways have been built in Serbia since 2012, only in 2019, about 130 kilometers of highways on Corridor 10 and "Miloš the Great" were opened to traffic, and after 30 years, the complete road Corridor 10 was finished. However, it is clear that this connection and the reduced travel time have no use-value in the case of a long stay at border crossings. The initiative to establish "Green Corridors", for now, is focused on the time period in which there is an epidemic caused by COVID-19, but consideration should be given to continuing to support the established system even after the current situation has been stabilized.

Digitalization was of particular importance to the transport and logistics industry during the pandemic. The adoption of this trend, which was current even before the start of the pandemic, helped companies in this industry to adapt faster to the new situation. Its importance was especially reflected in the increased demand for home delivery service, and it is expected that the growth of buying and selling over the Internet will continue in the following period.

POSITIVE DEVELOPMENTS

In previous years, as well as this year, the improvement of all types of transport continued, not only in the technical sense but also in the sense of concluding contracts and negotiations with the executive authorities of the surrounding countries, as well as foreign investors.

Part of the projects facing the competent Ministry is the construction of the Belgrade-Budapest railway, the construction

of the Niš-Merdare-Priština highway, the reconstruction of the Belgrade-Bar railway, while project documentation for the Belgrade-Sarajevo highway is being prepared.

In the road sector, the emphasis was placed on the construction of Corridors 10 and 11. In August 2019, the highway from Obrenovac to Čačak on Corridor 11 was opened to traffic, and the works on the section Surčin - Obrenovac were completed in December 2019. The construction of the part of Corridor 11 Preljina - Požega started in May 2019, and the completion is planned within 36 months. Projects have been completed and building permits have been issued for the first phase of construction of this section, and expropriation procedures are being accelerated. The construction of the branch of Corridor 11 Požega - Boljare is also planned, as part of the road corridor Belgrade - South Adriatic. For the section of the Požega - Boljare Corridor, a Memorandum of Understanding was signed between the Republic of Serbia and the People's Republic of China, and the development of the Spatial Plan of the special purpose area is in progress. The southern branch of Corridor 10, the highway through Grdelica gorge, has been finalized and is open for traffic.

In water transport, the project "Introduction of an Electronic Waterway Marking System (AtoN)" which the Ministry of Construction, Transport, and Infrastructure is implementing in order to raise the level of navigation safety, was completed in May 2019. The delivered contracted equipment consists of the most modern IT technologies for water transport management. Also, within the project "Hydrotechnical and Excavator Works on Critical Sectors on the Danube River in Serbia, between Bačka Palanka and Belgrade", the technical acceptance of works on the critical sector "Futog" has been completed, and the handover of works on the critical sector "Čortanovci" is in progress. The works are expected to be completed by the end of 2020. The project for the construction of a new port in Belgrade, the completion of which is planned for December 2023, has been included in the Single Project Pipeline as a project of exceptional strategic importance. A Preliminary Feasibility Study is underway. During 2020, it is planned to start drafting a Feasibility Study with a Preliminary Design.

The railway sector continued to cooperate with regional countries. The preparation of documentation for initiating the tender procedure for the reconstruction of the Niš - Dimitrovgrad railway is underway, which is important since this part of the railway connects the Republic of Serbia and the Republic of Bulgaria, the completion of which is planned for the end of 2023. The project of modernization

of the Belgrade - Budapest railway is also in progress. The project is of exceptional strategic importance as it is part of the basic traffic transversal of the Republic of Serbia, it connects three of the five largest cities in the Republic and is part of Pan-European Corridor X. On the section, Belgrade - Stara Pazova, 17.19% of works have been physically realized, while for the section Novi Sad - Subotica, it is expected that the Preliminary Design will be ready during 2020.

In air traffic, the project of a new runway for the "Morava" Airport in Kraljevo is planned, and the completion of the project of the reconstruction of the runway of the "Nikola Tesla" airport. For the "Constantine the Great" Airport in Niš, the extension of the terminal building and the rehabilitation of the runway is planned.

Having in mind all current projects, it is evident that investing in transport infrastructure is a priority.

In March 2020, the Government of the Republic of Serbia passed the Decree on Subsidizing the Purchase of New Electric Vehicles, which directly encourages the use of an environmentally friendly mode of transport. The amounts of subsidies are 250 and 500 euros for electric motorcycles and between 2,500 and 5,000 euros (depending on the type of drive) for electric cars. Grants are awarded through the Ministry of Environmental Protection. In addition, by amendments to the law (on taxes on the use, possession, and carrying of goods), owners of hybrid vehicles are exempt from paying taxes on the use of motor vehicles.

REMAINING ISSUES

Traffic safety is the most important issue when it comes to transport problems. The number of injured and deceased is on the rise, which is contrary to the goals of the Road Traffic Safety Strategy 2015-2020. The ubiquitous problem of road traffic is also financing - funds from state revenues as well as foreign investments are not enough for maintenance, rehabilitation, and construction of new roads, and the aggravating circumstance is the fact that this problem is directly related to traffic safety.

One of the unresolved issues is the lack of adequate infrastructure for the use of electric vehicles, which could become a significant obstacle to the country's green energy agenda and could jeopardize the strategic importance of Corridors 10 and 11. On the other hand, it is encouraging that the Ministry of Construction, Transport, and Infrastructure has rec-

ognized the need for the improvement of this issue, therefore charging stations have been installed in certain places on Corridor 10. Some large oil companies have also installed charging stations on their PSs. However, there are several regulatory issues that need to be addressed to encourage this trend, as one of the obligations towards the EC and the EU is to achieve a certain share of energy from renewable sources in the transport sector. The bylaws were adopted in 2019, and are subject to fuel trading companies. As for the electricity consumed by EVs, the situation is as follows:

- Electricity consumed when charging electric cars cannot be charged, because no one has a permit/ consent from the Electricity Supplier and the Distribution System Operator for retail electricity trade;
- Therefore, for the realization of the share of RES in transport, in addition to not being able to charge for this electricity, taxpayers cannot even prove that they have met part of their obligations for RES through electricity placed in the transport sector;
- The new EU Directive from 2018 provides additional benefits if the trader/owner of PS gets the electricity used by EV from its own production of electricity from renewable sources, but this directive should be transposed into the legal framework of the Republic of Serbia.

Modernization is the biggest problem in the railway sector. It is necessary to work on the improvement of this type of transport because a large number of lines are not used, while in some sections the speed of trains is not satisfactory. Attention should be paid to a longer-term plan for the development of rail transport and its harmonization with road transport, with the aim of increasing intermodality. One of the problems is the image of the railway, which should be actively changed according to public opinion, by changing the marketing policy.

The usefulness of other airports, in addition to Belgrade and Niš, should be increased, and a long-term strategy for the use of the entire Serbian air infrastructure should be devised.

When it comes to water transport, the biggest problem is financing - large funds are needed only for the reconstruction of infrastructure dating back to the period of the former Yugoslavia. Modernization and maintenance of the water transport system cost a lot. It is encouraging that an investment in the total amount of 66.5 million euros has been announced in the coming years, which will be focused on the development of river transport and the protection of the natural characteristics of the Danube. One of the positive examples is the reconstruction of the port of Smederevo.

FIC RECOMMENDATIONS

- Introduce additional incentives for the construction of infrastructure for the use of electric vehicles. It is also necessary to provide an adequate regulatory framework that will enable the development of this sector which takes into account the constructive recommendations of relevant stakeholders. (2)
- Adapt the Energy Law to recognize and encourage the use of electricity in the transport sector. (1)
- Increase material quality control and inspection supervision when performing works; implement international quality and project management standards in the public sector as well. (2)
- Enter into public-private partnerships in transport areas that are vital and not reserved for the state, which the state is not able to independently train, restructure or modernize, or for which it is more optimal and efficient to do so in partnership with the private sector. (2)
- Additionally work on opening the market in railway transport, in order to establish the necessary institutional structures. The application of European standards in the implementation of technologies on the railway network, for the sake of interoperability and unhindered traffic with neighboring countries in order to increase transport through Serbia, is crucial in this regard. (1)
- Implement measures that will improve the characteristics of combined transport within the Serbian transport system. (1)

ENERGY SECTOR

CURRENT SITUATION

Electricity

The legal framework for electricity in Serbia is set out under the 2014 Energy Law, which for the most part transposes the European Union's (EU) Third Energy Package.

The main authorities responsible for this sector are: (i) the Serbian Government; (ii) the Ministry of Mining and Energy (the **"Ministry of Energy"**); and (iii) the Energy Agency.

State-owned enterprises Elektromreža Srbije (EMS) and Elektroprivreda Srbije (EPS) remain the dominant players in the sector. EMS is the transmission system operator. EPS is engaged in the production, wholesale and supply of electricity. EPS's subsidiary EPS Distribucija carries out the distribution and operates the distribution system.

The electricity market is fully liberalized on paper. Households and small consumers remain, for the time being, entitled to opt to be supplied under regulated prices (unlike other consumers which do not have the right to regulated prices). There is an intention to phase out the regulated supply of electricity, but the Energy Agency has taken the position that there is still a need for the regulation of electricity prices. On the other hand, the Energy Agency has allowed an increase of regulated prices - starting from the latest increase was in December 2019. The experts agree that this increase is insufficient and that new increases should be expected.

Despite the liberalisation, EPS remains the single most dominant supplier with around 98% of market participation.

The day-ahead market is operated by the joint-stock company South East European Power Exchange (SEEPEX). SEEPEX has not yet introduced intra-day market.

Renewables

The incentives package finalized in 2017 is available only to the entities that obtained the privileged power producer status or preliminary privileged power producer status (subject to reaching the final status during validity of the preliminary status) by the end of 2019. This incentives package was the result of the notable efforts to make consistent, comprehensive and bankable framework for supporting renewable energy.

With this package expiring in the end of 2019, Serbia has requested the assistance of the European Bank for Reconstruction and Development (EBRD) in the preparation and implementation of new incentives package based on competitive renewables auctions. Although it was expected that the Serbian Government would pass a new scheme by the end of 2019, the new scheme is not likely to be in place before the end 2020, or, even more realistic in 2021.

In preparation of the new incentives scheme, the decision makers should ensure that the new scheme envisages a competitive process for awarding incentives, rather than the first-come-first-serve system that Serbia has historically employed. The incentive scheme should also follow other criteria set out in EBRD and Energy Community joint policy guidelines.

There is still no indication whether the new scheme would envisage the support through feed-in tariff or contract for difference. The stakeholders expect that the mechanics itself is of less importance if the support scheme follows the bankability criteria.

Energy Efficiency

No major changes in the legislation regulating energy efficiency have been made in the previous year.

The Law on Efficient Use of Energy, adopted back in 2013, explicitly defines the energy services company (ESCO) and sets rules for energy performance contracting in line with the EU acquis, with the aim to provide a comprehensive legal framework for energy efficiency arrangements.

To enable the implementation of these general possibilities, the Rulebook on Model Energy Service Contracts for the Implementation of Energy Efficiency when Users are from the Public Sector (ESCO By-Law) was finally adopted in May 2015.

The ESCO By-Law prescribes two models of ESCO agreements, one for public buildings and one for public lighting. It requires public-private partnerships (PPP) to be established between the relevant public partner (e.g. a municipality, a public company, the state) and the relevant private partner (i.e. an ESCO company) on a long-term basis.

The energy efficiency market is still developing. Energy performance contracting (EnPC) projects in the area of public lighting have been initiated in a significant number of local municipalities, while the market is yet to see a successful cooperation between the public and private sector

in the area of public buildings.

The energy supply contracting (ESC) has also started functioning recently, primarily with public sector facilities such as schools and hospitals being the main point of interest. However, some of the implementation aspects, such as public budgeting, remain a point of misunderstanding for the public sector.

Unlike EnPC, ESC arrangements are still not governed by any by-law, nor is there a prescribed model available. The most notable difference between ESC and EnPC is in that EnPC implies backing the project with guaranteed savings, unlike the ESC, which focuses on a renewed arrangement regarding energy supply where the private partner guarantees the continuous provision of a certain minimum amount of energy. It is expected that, once the ESC model is regulated too, a much needed certainty will be brought into the sector, allowing for successful cooperation between the public and private sectors.

COVID-19

Electricity

COVID-19 has not particularly affected this sector.

Renewables

A few days after the declaration of the state of emergency, EPS invoked Force Majeure regime under power purchase agreements (PPA) with privileged power producers. Accordingly, effects of the PPA were suspended during the state of emergency.

This invocation of Force Majeure was arguably ungrounded and sent negative signal to the stakeholders in terms of reliability and predictability. Part of the sector perceived this also as a signal that EPS has notable liquidity issues.

Energy Efficiency

COVID-19 has not particularly affected this sector, except by general slow down in work process of administration due to rules that limited the number of persons i.e. employees in enclosed space.

POSITIVE DEVELOPMENTS

Electricity

SEEPEX membership grew to 21 members.

Renewables

A number of renewables projects, including large-scale wind power plants, reached commercial operations and started production in 2019.

Energy Efficiency

The number of awarded and initiated projects in the energy efficiency market has continued to grow, which is surely a positive step towards the further development of the energy efficiency market. In 2019, the competent Ministry published two tenders for award of funds from the Budget Fund. Based on the first tender, funds have been allocated to 24 projects, while funds from the second tender are still to be awarded.

The successful awarding of several energy performance contracting projects to private investors in the area of public lighting throughout Serbia continued during the previous year.

Energy supply contracting has also started to function, although it is still of somewhat limited scope. Several PPP contracts in this sub-sector have been awarded to private investors, with the projects typically relating to the heating systems of public utilities. Even so, private-to-private arrangements continued to grow, although existing practices are rather diverse and of different contracting quality.

REMAINING ISSUES

Electricity

Coal remains dominant resource for electricity generation – more than 70% of annual production comes from the coal-fired power plants.

Coal mines are in a relatively poor shape and in need of extensive modernisation in order to meet demand. Some major thermal power facilities will also need to be phased out or overhauled. It is not clear whether Serbia will have enough funds for these investments.

It can often be heard that an electricity price increase in Serbia would be justified, but vulnerable customers must be protected.

Renewables

The market does not seem to be mature enough to see a large-scale renewable projects realized solely on market basis, including on the basis of the corporate PPA. The customers are not currently driven to look into direction of corporate PPAs

as the prices for the electricity coming from EPS are still rather low and currently it would be hard to argue in favour of the need to ensure supply on the basis of the corporate PPAs.

In that sense, the lack of the incentive scheme for new projects seems to be the critical immediate factor obstructing further expansion of the RES projects.

Energy Efficiency

As to energy performance contracting (EnPC), apart from the need to have consistent practices in the formal preparation of projects fully in line with the ESCO By-Law and the PPP legislation, the challenges ahead also include the need to reduce subsidies, which keep energy prices on an artificially low level, and to introduce further sector-specific incentives for energy efficiency projects in the relevant regulations (notably, real estate and tax-related regulations) as well as the need to further raise financiers' awareness of the practical feasibility of ESCO projects.

As to energy supply contracting (ESC), the adoption of a model contract by the relevant authority (i.e. the Ministry of Mining and Energy) would be very helpful in addressing projects involving both the public and private sectors and removing

the existing ambiguities. The public sector is still overly careful in considering prospective projects, while the understanding of this concept and its practical implementation is still lacking on the authorities' side. This specifically relates to an absence of understanding of public budgeting procedures, with some important projects involving hospitals and schools in Serbia still lagging behind as a result thereof. Even though the Ministry started working on a model ESC contract which would allow for a greater transparency and feasibility of projects on the market, the relevant model has not yet been adopted.

The challenges ahead relating to both EnPC and ESC arrangements remain the same and require continuous work:

- capacities of the PPP Commission to be improved (including better understanding of EnPC and ESC projects' specifics);
- sharing of knowledge and existing know-how among various public entities to be strengthened and supported (especially in the case of minor Serbian municipalities);
- practical implementation of the rules relevant to determining the value of projects that are PPP-specific and of the rules of public budgeting needs to be improved, and the capacities of the public sector to be strengthened.

FIC RECOMMENDATIONS

Electricity

- Regulation of electricity prices to be abandoned (but vulnerable customers to be protected), allowing new investments in the modernisation and revitalisation of coal and electricity production. (3)
- Intra-day market to be introduced. (2)
- Consider introducing carbon pricing instruments. (3)
- Introduce grid connection reservation security mechanism e.g. bank guarantee or cash collateral by developers in order to avoid existing grid queues holding up capacity; (3)

Renewables

- Incentive system to be tailored to accelerate investments in the renewables sector and follow the EBRD and Energy Community policy guidelines. (3)
- To improve the provisions of the Law on Agricultural Land pertaining to the utilization of the state-owned agricultural land for non-agricultural purposes, such as the development of renewable energy projects, in a way to regulate in more detail the conditions for granting the public agricultural land to renewable energy investors." (2)

Energy Efficiency

- Adoption of a functional model contract to govern energy supply contracting. (3)
- Improvement of capacities of the PPP Commission and other notable public stakeholders with respect to both energy performance contracting and energy supply contracting projects involving the public and private sectors. (2)

TELECOMMUNICATIONS

The activities in 2020 triggered by the coronavirus pandemic were marked by the synergy between the Government of the Republic of Serbia and the electronic communications operators. The results of such activities had a significant impact on the entire society and economy of the Republic of Serbia by enabling successful functioning in the conditions of the state of emergency that was declared on March 15, 2020 on the territory of the entire country.

COVID-19

The operators supported all measures imposed by the state and made their resources available for general interest and to help facilitate the functioning of the entire society affected by the coronavirus. In a short period of time, the operators provided short codes free of charge and free calls to citizens of the Republic of Serbia, for the needs of the National COVID-19 Call Center within the Ministry of Health. The operators also provided the necessary devices for recording the content of the primary and secondary school curriculum, which was broadcast on the channels of the public media service and on RTS Planeta digital platform. In addition, students were provided with free data transfer to the digital platform RTS Planeta and Moja škola during online lessons in the Republic of Serbia. In this context, free internet access for video conferencing such as Microsoft Teams and Zoom was provided, which made it possible for the lessons to retain their interactive property in digital form. In cooperation with the competent ministry, a large number of students were provided with internet access, and within the same initiative, this was made possible for students from socially vulnerable families for each month until the end of the year. At the end of April 2020, for the purpose of online mock final exam for 8th grade elementary school students, using the Tesla EDU digital platform, for a period of three months mobile telephony operators provided a dona-

tion of over 1000 smart mobile phones with appropriate SIM cards for internet access.

On the other hand, the competent ministry and the regulator provided a considerable support to the industry and the Council commends their timely and adequate response during the crisis period. Owing to the strong support of the Ministry of Trade, Tourism and Telecommunications, it was possible to perform works on the development of additional network capacities and maintenance of the current capacities during the curfew, which enabled the continuous quality of services for the customers. We also appreciate the fact that during this period, RATEL worked continuously and provided maximum efficiency, while their announcement on the importance of the role of mobile operators contributed to raising citizens' awareness in recognizing false news about the alleged connection between 5G technology and the epidemic.

Although the state of emergency was lifted by the National Assembly of the Republic of Serbia on May 6, 2020, the need for greater digitalization in all areas of life and work is still present and is expected to grow even more in the coming period. Thus, the appearance of the COVID-19 virus further encouraged a faster and more comprehensive digital transformation of the society, compared to the planned transformation in ordinary circumstances. Mobile telephony operators, as holders of critical telecommunication infrastructure necessary for connecting and functioning of the entire public system and the work of the economy in the "remote" and „WFH" mode, have proven to be the main pillar of the process of digitalization of the entire society.

Also an important moment in the state of emergency is the sudden increase of national traffic that exceeds the existing capacity of the operators, as a result of which one of the main priorities was significant investment in the network to ensure the expansion of capacity for all types of traffic

in the territory of the Republic of Serbia. At the same time, there is a drastic decline in roaming traffic due to restrictions on the movement of people outside the territory of national borders around the world, which resulted in a drop in revenues.

The implementation of the Agreement on the price reduction of the roaming services in the Western Balkans region continued in 2020. Namely, from January 1, 2020, RLAH + methodology has been applied for roaming charges, and from July 1, 2020, there has been a new reduction of retail and wholesale roaming prices of operators operating in the Western Balkans. However, in 2020, the expected effect of traffic increase due to further lowering of roaming prices is missing, on the contrary - there is a significant drop in traffic due to restrictions on the movement of people between countries.

CURRENT SITUATION

The impact of negative effects on the electronic communications industry due to the appearance of the COVID-19 virus is expected not only in 2020, but also in the years to come. The key to resolving open issues lies in the improvement of the existing regulatory framework and aligning it with current developments. The adoption of the new Law on Electronic Communications is a precondition for further growth and development, not only for the electronic communications industry, but also for further digital transformation of the society and economy of our country and beyond.

Digital transformation would contribute to the development of the entire domestic industry and enable a more competitive offer by domestic companies outside national borders. This would further contribute to a better positioning of our country in the regional and world market, on the one hand, while on the other hand, these conditions would have a favorable effect on attracting additional capital and investments in our country.

This requires infrastructure and finding a model/pattern of joint action of the state and industry to overcome the current barriers, related to the construction of base stations, which relate primarily to:

- arbitrary interpretation of the Law on Non-Ionizing Radiation Protection and excessive reference to the principle of prohibition of exposure to non-ionizing radiation sources and the proportionality principle by local secretariats for environmental protection as well as arbitrary interpreta-

tion of the meaning/definition of sources of special interest;

- arbitrary introduction of restrictions in urban plans determining the minimum required distance for sites where base stations can be set up in relation to adjacent facilities, although there are no grounds for such restrictions in the law governing protection against non-ionizing radiation;
- although the Law on Environmental Impact Assessment does not impose the obligation to develop an environmental impact assessment for setting up of each individual base station, and in practice, this assessment is almost always required by local environmental secretariats (we would like to emphasize that in Serbia restrictions on the permissible level of electromagnetic radiation are several times stricter than in the European Union member states and that the actual values of the electromagnetic field measured on site are often ten times below the maximum permissible values).

Issues that hinder the installation and building of base stations due to inadequate interpretation and enforcement of environmental regulations, as well as restrictions in local self-government regulations governing spatial planning require the improvement of the capacity of state administration in terms of interpretation of regulations in the field of environmental protection and their enforcement by local self-government units in the process of environmental impact assessment.

The process of drafting of the Spatial Plan of the Republic of Serbia for the period from 2021 to 2035 is underway (hereinafter referred to as the: „Plan“) for the needs of which the mobile operators provided the Ministry of Construction, Transport and Infrastructure with the plans that include an overview of both existing and future locations of base stations and routes of fiber optic sections and cooperation with the working team in charge of drafting the said Plan is expected in the coming period.

The joint cooperation of the state and the operators in overcoming the existing barriers related to the construction of infrastructure is especially important from the perspective of the development of the 5G network in the Republic of Serbia. The activities planned in 2020 regarding the radio frequency spectrum auction intended for the development of 5G technology have been postponed for 2021 due to the coronavirus pandemic. It is crucial that the tender for 5G frequencies is organized in a transparent, efficient and optimal way.

The Strategy for the Development of Electronic Communications in the Republic of Serbia and the Strategy for the Development of the Information Society expire in 2020. We propose to make an analysis of the fulfillment of strategic goals defined by the above acts, ie new strategic documents harmonized with the current situation, challenges and expected development of the telecommunications sector in the Republic of Serbia. In addition, having in mind the dynamics of the relevant market and the past period since its adoption, it would be desirable to consider the current state of fulfillment of the goals of the New Generation Network Development Strategy, and inform operators about the market situation and upcoming steps.

Other important activities at the end of 2019 and the beginning of 2020 relate to public consultations organized by RATEL regarding amendments to the following bylaws:

- draft rulebook on quality parameters for publicly available electronic communications services, performance of measurements and testing and implementation of verification of activities of electronic communications operators;
- draft rulebook on calculation of cost-based prices according to the long-run incremental costs model;
- draft rulebook stipulating the Radio Frequency Allotment Plan in the radio frequency band 2500 - 2690 MHz;
- draft rulebook stipulating the Radio Frequency Allotment Plan in the radio frequency band 3400 - 3800 MHz;
- draft rulebook on obligations of value added services provider.

Amendments to the mentioned bylaws and more precise definition of certain provisions are aimed at improving certain areas of business and their harmonization with the current development of electronic communications in the country and beyond.

POSITIVE DEVELOPMENTS

Rulebook on changes to the Rulebook on the fee calculation for the provision of services within the competence of RATEL was adopted, which significantly reduced the costs of operators in case of status change, i.e. data change (change of name, business name, headquarters or identification mark) by reducing the fee for reissuance of license in electronic form from the previous 50% to 10% of the envisaged fee. In this way, RATEL encourages the use of e-business and contributes to further digitalization of Serbia and we should not

ignore the positive effects in the field of environmental protection, given that each operator has thousands of individual licenses for the use of radio frequencies and licenses for radio-relay links that may be subject to replacement.

In early July 2020 Regulation on the establishment of Radio frequency band allocation plan entered into force, which provided the legal conditions for changes to the existing and adoption of new regulations in the field of radio communications.

At the end of 2019 and the beginning of 2020, new standard offers of fixed and mobile telephony operators were published, which included the possibility of connecting via IP interconnection, thus creating the conditions for the existing TDM technology to be replaced by IP technology. In addition to the advantages of planning and realization of transport capacities, IP technology has also brought significant savings in the costs of interconnection between operators.

At the end of 2019, in cooperation with the OSCE, RATEL and ETF, MoCTI organized workshops on the development of broadband communication infrastructure in Niš, Novi Sad and Belgrade, in order to raise awareness of local government representatives about the benefits of using broadband communication networks and elimination of possible doubts regarding their implementation.

In 2020, progress has been made in the field of information security. RATEL initiated the process of registration in the Register of operators of ICT systems of special importance and adopted the Regulations on the content, manner of registration and record keeping of special centers for prevention of security risks in ICT systems, as well as the Regulation on type, form and manner of submitting statistic data on incidents in ICT systems of special importance.

In anticipation of future public tenders for the right to use parts of the radio frequency spectrum, which are a precondition for starting work on the commercial implementation of 5G technology, the Ministry of Trade, Tourism and Telecommunications has formed a working group to determine the optimal 5G model and long-term approach to this important topic. In addition to the public sector, its members are industry representatives. Such an initiative encourages the expectation that, when creating a strategy for 5G, the state will take into account the attitudes and needs of further development of our industry. In this regard, the Council expects that in the future a simple model of public bidding for radio

frequency spectrum intended for the development of 5G technology (rather than auctions covering spectrum blocks of different bandwidth) will be selected, which will open space for necessary investments in network development and introduction of innovative business models.

REMAINING ISSUES

Adoption of the new Law on Electronic Communications is necessary as a precondition for further market development - public consultations on the draft proposal of the Law on Electronic Communications were held at the end of 2016. Since the new law has not been adopted yet, the existing regulations are not harmonized with European regulations and do not follow the actual situation on the national market in terms of technology share and customer needs, which creates difficulties in developing new business models of operators and thus slows down the development of the electronic communications industry.

Despite the huge contribution during the current health crisis, in the same period, mobile operators are facing an unprecedented negative campaign and a large number of unfounded claims about the alleged connection between the infrastructure of mobile operators, 5G base stations and the current pandemic. This irrational phenomenon leads to huge problems in the field, which are primarily related to the obstruction of works on the construction and maintenance of base stations. Thus, false news and conspiracy theories affect the availability and quality of mobile networks and services, lead to delays in work, increase costs and cause significant damage to operators. As a result, citizens are deprived not only of the usual use of mobile phones but also of vital calls to emergency services, while at the same time the efficiency of the economy and public services is impaired. In this regard, mobile operators have already addressed the Government, and we expect that in the coming period the state will take all measures to

protect the critical telecommunications infrastructure. Also, we believe that it is very important that state institutions actively contribute to science-based education of the population on health aspects of telecommunications technologies and raising public awareness regarding the implementation of 5G technology from the perspective of positive impact on the country's economy and quality of life.

The adoption of amendments to the Rulebook on number portability in mobile and fixed network, which would speed up and simplify the number portability process - public consultations were conducted in May 2018, but the rulebooks have not yet been adopted without any official explanation. Their adoption would speed up and simplify the number portability process in mobile and fixed networks.

It is necessary to enable the provision of public electronic communication services at a fixed location via public mobile communication networks using CLL technology (Cellular Local Loop) throughout the Republic of Serbia.

Direct Carrier Billing (DCB) as the simplest, globally widespread way of purchasing apps from platforms such as Google Play, has not been enabled in Serbia yet. DCB involves the purchase of digital content for mobile devices in such a way that the billing of this content is done by charging payments to their mobile phone carrier bill. This model has been operating for years in the European Union, including the countries of the region, given that the Payment Services Directives (PSD1 and PSD2) recognize this transaction as an exception to payment services. Although the national legal framework is harmonized with the EU, specifically the Law on Payment Services is harmonized with the PSD1 Directive, the National Bank of Serbia has not changed its position that mobile operators should be registered as payment institutions in order to provide this service, which would make the model commercially unprofitable.

FIC RECOMMENDATIONS

- Improvement of regulations and their interpretation in the field of infrastructure construction: (3)
 - a) Issuance of guidelines to local self-governments by the Ministry of Environmental Protection would contribute to the cessation of excessive reference and arbitrary interpretation of the principle of prohibition of exposure to non-ionizing radiation sources and the principle of proportionality referred to in the Law on Non-Ionizing Radiation Protection by local environmental secretariats;

- b) In cooperation with the Ministry of construction and infrastructure and Ministry of State Administration and Local Self-Government, it is necessary to provide education to departments in local self-governments, in order to remove spatial restrictions for the construction and installation of mobile telecommunications infrastructure;
 - c) In accordance with the comparative practice of developed EU countries such as Germany and Finland and countries in the region (e.g. Croatia), we propose to exclude mobile telecommunications facilities from List 2 of the Regulation on establishing the List of Projects Requiring a Mandatory Impact Assessment and List of Projects that May Require an Environmental Impact Assessment, so that instead of making an environmental impact assessment for each individual base station, it would be sufficient to submit a notification on the installation of the base station together with the relevant measurement to the local self-government before its commissioning, where the local self-government has the possibility of inspection supervision.
- Joint cooperation between the state and industry in choosing the model and period of public bidding for radio frequency spectrum intended for the development of 5G technology - operators propose and advocate a simple auction model to sell the bands that are most needed from the perspective of technologies used and market demands. (3)
 - Adoption of the new Law on Electronic Communications and leaving sufficient time for the implementation of prepaid user registration and other innovations brought by the law. (2)
 - Revision of results and preparation of new strategic documents for the forthcoming period, in terms of electronic communications, information society and development of new generation networks, with active participation of operators in the process. (1)
 - When negotiating international agreements in the field of electronic communications, it is necessary to organize a process of public consultations and include industry representatives in order to consider the technical specifics, deadlines and financial implications, aimed at increasing business predictability. (1)
 - Adoption of the Rulebook on Amendments to the Rulebook on Number Portability for Services Provided via Public Mobile Communication Networks and the Rulebook on Amendments to the Rulebook on Number Portability in Public Telephone Networks at a Fixed Location within the shortest possible period of time. (1)
 - Enabling the provision of public electronic communications services at a fixed location using CLL technology in the Republic of Serbia, without restrictions. (1)
 - More active role of the Government aimed at suppressing of conspiracy theories and false news about 5G technology in order to prevent attacks and disruption of critical telecommunications infrastructure necessary for the provision of basic electronic communications services such as voice and Internet access. (1)
 - Issuance of a positive opinion of the National Bank of Serbia on the provision of Direct Carrier Billing service according to the EU model, in order to enable direct payment of digital content from Google Play and Apple Store via telecommunications operators according to the EU model. (1)

DIGITALIZATION AND E-COMMERCE

CURRENT SITUATION

The whole world has suddenly begun to adapt to the new situation and turn to e-business due to the completely changed way of life and business that we knew. Many positive changes have also taken place in Serbia. A large number of citizens have started using the services of the eGovernment portal, numerous new services have been developed, and administrative paperwork, which used to require queues, has never been faster and more accessible.

After digitalization has been proclaimed as one of the key priorities of the Government, most regulatory initiatives recognize the importance of digital business and electronic procedures.

Digitalization is increasingly perceived as an opportunity, not a threat, and it is important to work on its further improvement, not only in the public but also in the private sector.

The most important fact is that the consciousness of the citizens has started to change, and the Government has started to follow these significant changes rapidly. We are witnessing a sharp increase in the number of transactions performed electronically as well as the wider application of contactless payment using digital “wallets”, which are available in a large number of financial institutions.

When it comes to digitalization as a constant process, there is still significant room for improvement, which are just some of the key areas for further action of regulators, especially in the speed of changing the regulatory framework.

The existing legal framework provides space for businesses to develop digital sales channels, as well as to protect the rights of consumers in the online environment. Although this type of trade is constantly growing, e-commerce still has great potential for development. According to the data of the Statistical Office of the Republic of Serbia, in 2019, 43% of citizens have never bought goods and services online. For comparison, in 2010 this percentage was as high as 87%, which shows that this branch of business is recording constant growth. If we look at the use of the Internet, in 2010, over 54% of citizens never used the Internet, while in

2019 this percentage dropped to only 19.4%, which is also an improvement compared to 2018 by as much as 28%.

It is interesting to note that the Internet is used by all age groups, from 16 to 74 years of age, with an emphasis on increasing Internet use among the oldest population (from 64 to 74 years of age) from 1.3% in 2007 to as much as 30.1% in 2019.

According to the NBS, in 2019, almost three million users made payments over the Internet, i.e. almost 2 million users made payments via mobile phone, which again represents a nominal growth of 13% compared to 2018.

On the other hand, electronic procedures are not sufficiently represented in practice and administrative bodies do not show a willingness to use them in procedures where the electronic form is not mandatory, often insisting on the use of paper documents. The amendment to the Company Law revoked the use of the seal for business entities, by which the Law declared provisions of 10 laws and 107 bylaws in which the seal is mentioned null and void. After the adoption of this amendment, no institution, bank or organization has the right to demand a seal from companies or entrepreneurs.

The IT and Electronic Administration Office of the Government of the Republic of Serbia is the central body whose competence is the coordination of activities in the field of electronic administration, management of public IT infrastructure, and information security. A coordination council for eGovernment has been formed within the framework of the representatives of the Ministries and under the auspices of the Prime Minister of the Republic of Serbia. This year, the focus is on work on the eGovernment development program for the next three years.

Announced last year and opened in March 2019, the Data Center in Kragujevac is an institution in which, in addition to the most modern protection system, data from the city, city administrations, public companies, and institutions will be stored, and also connected to national databases. The aim of this project is to centralize all relevant data in order to more easily implement activities in the field of digitalization of eGovernment. It is planned to create a meta-register and catalog of all services.

A secondary benefit of this data center could be the renting of infrastructure and content to corporations, which would

be an excellent form of monetization and a source of funding for further improvement of the center.

The key challenges remain, creating a register of citizens and a register of addresses.

In addition to the above, we are witnessing significant progress in the part of the legal framework that enables further digitalization of financial services, through a series of decisions prescribed by the regulator, the National Bank of Serbia, in the previous period. Thus, in addition to the possibility of video identification of natural persons, with the extension of the relevant Decision, the identification of legal entities has recently been enabled. Furthermore, through the national system IPS (Instant Payment System) using the QR code, it is possible to pay monthly bills, make purchases in retail outlets and online stores in an extremely simple way.

When it comes to digitalization as a constant process, there is still significant room for improvement, which are just some of the key areas for further action of regulators, especially in the speed of changing the regulatory framework.

It is necessary to finalize bylaws that more precisely regulate the use of electronic signatures. In these areas, cooperation between the business sector and the Government can provide excellent expertise. This cooperation directly contributes to the optimization of e-business and affects the acceleration and implementation of key points needed for smooth business. One such is the recently launched bill digitalization initiative.

Namely, the law regulates lending to citizens electronically, identification via video link, but not the acquisition of collateral, which must be filled in and signed in paper form. The bill of exchange digitalization initiative directly affects the optimization and digitalization of this process.

The Law on Prevention of Money Laundering and Financing of Terrorism regulates the identification of users upon each establishment of business relations with entities that are liable for this Law. Identification is done in a direct meeting with the client, which disables any digital contracting process. Having in mind this obstacle, in March 2019, the National Bank of Serbia adopted the Decision regulating the identification of remote users, i.e. the Decision on the Conditions and Manner of Determining and Verifying the Identity of a Natural Person Using Electronic Means of Communication. By making this decision, Serbia became one of

the few countries in the region that regulated this area and provided legal preconditions for the purchase of financial services "from the chair".

Although adopted in March 2019, the Video Identification Decision has been implemented by a very small number of financial institutions. The reason for this lies not only in the fact that it is necessary to raise awareness about digital business but also about the complexity and investment requirements related to relevant video technologies, which a number of financial institutions still find difficult to monetize.

COVID-19

The pandemic has shown that the potential and necessity of digitalization is obvious, not only in the financial sector but also in all other sectors where business digitalization will enable easier and more efficient work, especially in circumstances of forced social distancing due to the COVID-19 virus.

Since the beginning of the pandemic, the government has passed laws and regulations in order to maintain the economic stability of the country and enable uninterrupted business in difficult conditions.

In order to carry out epidemiological surveillance related to the COVID-19 virus, the Government adopted a Conclusion on the Establishment of a Unique and Centralized Software Solution, which is established and managed by the Institute of Public Health with the technical support of the Information Technology and Electronic Administration Office and the Republic Health Insurance Fund. The aim of this solution is to collect data on the number of tested, infected, cured, and deceased from the consequences of diseases caused by COVID-19.

It is very important that the Government continues to be efficient in making decisions and regulations concerning the digital business, as well as to work on educating citizens in order to gain greater trust in digital services and information that is exchanged in this way.

POSITIVE DEVELOPMENTS

We are witnessing significant progress in the part of the legal framework that enables further digitalization of financial services, through a series of decisions prescribed by the regulator, the National Bank of Serbia, in the previous

period. Thus, in addition to the possibility of video identification of natural persons, with the extension of the relevant Decision, the identification of legal entities has recently been enabled. In addition, through the national system IPS (Instant Payment System) using the QR code, it is possible to pay monthly bills, make purchases in retail outlets and online stores in an extremely simple way.

On June 4, 2020, the Government of Serbia adopted the Program for the Development of Electronic Government 2020-2022, as well as the Action Plan for its implementation. In July 2020, only a month after the adoption of this Program, the data showed that over a million citizens of Serbia used the services of the Government and that over 70,000 requests were realized during this month alone. The eGovernment portal is optimized for mobile phones and tablets.

The new services that have been introduced represent a true relief for citizens in the situation of forced social distancing, shorter working hours of administrative offices, as well as the popularization of the concept of work from home. Very efficient service of electronic enrollment in primary and secondary schools was introduced, without the need to collect paper documentation and take it to school for enrollment. Furthermore, automatic notification of PCR test results via SMS or email as well as the availability of data to citizens from 20 electronic records were also enabled. Distance learning was established in record time, and a large number of educators quickly adapted to work in Google classrooms.

The adoption of the new Law on Trade and the amendments to the Law on Electronic Commerce are positive signs in the direction of further improvement of electronic commerce as a new business model that introduced the electronic store, electronic platform, and dropshipping.

Amendments to the Law on Foreign Exchange Operations have made some progress in the field of electronic payments. Among other things, it is possible to receive foreign currency payments for humanitarian purposes through services such as PayPal. Significant progress concerns the sale of software over the Internet, which is now included in the list of exemptions from performing payment transactions exclusively in dinars, including transactions between residents with each other. This enabled domestic IT companies to point out the price in foreign currency and sell their services without fear of being in violation if the buyer is a resident of Serbia.

However, although this exception is limited to software and digital services, liberalization has not been completed. Payment for citizens is possible with payment cards or through a domestic electronic money institution (in Serbia, after several years since the adoption of the Law on Payment Services, there is only one institution of this type), but not through the most famous global services such as PayPal or Skrill.

In October 2018, the system for instant payments was introduced, whose operator is the National Bank of Serbia - the IPS NBS system. As a participant in this system, banks have enabled their customers to transfer money in dinars in the branch, whereby the transaction is realized immediately. Users can perform transactions in real-time 24/7/365, up to the amount of 300,000 dinars per transaction. Banks have also enabled the option of instant payments on their digital channels.

The main progress has been made in the field of electronic payments on the eGovernment portal, where card payments are enabled, so now, for example, vehicle registration can be paid in this way. Payment by payment card as well as integration with electronic services of individual banks for services on the eGovernment portal is significant progress. In that way, one of the basic assumptions of eGovernment was realized, since without electronic payments it is not possible to get some of the most important services, and switching to physical payment channels made the purpose and advantages of electronic services meaningless in the past.

Decisions of the NBS enabled video identification, signing contracts through two-factor authentication, as well as instant payment. This created the conditions for lending, as well as other banking products to be offered electronically. The remaining point of contention is how to enable the acquisition of a bill of exchange (which must be signed) as collateral for the loan and as a mandatory and integral part of the client's credit file. The bill of exchange as security in paper form is issued by the Banknote Production Bureau. The digitalization of the bill of exchange is important not only from the aspect of banking operations but also for the economy as a whole.

In the past period, progress has been made on the issue of the eZup information system, which is used for electronic data exchange by state administration bodies and local self-government bodies.

REMAINING ISSUES

Although some progress was made in 2019, the high expectations from the basic, intermediate, and high-level electronic identification schemes, which were introduced by the Law on Electronic Business, have not yet been realized. Namely, the regulations in this area and technical standards in the EU, on the basis of which the Regulation on Conditions for Electronic Identification Schemes of a Certain Level of Reliability will be adopted, set rigid conditions for a high-level scheme so that it will not be more flexible than a qualified electronic signature. On the other hand, we can expect that the basic level scheme will not require user identification through physical presence and ID cards when assigning the scheme, but user identification will be done electronically. It remains to be seen what solution will be chosen for the medium-reliability scheme.

Also, when it comes to the digital agenda of the Government of the Republic of Serbia, the remaining activity is the formation of a national register of citizens and addresses. The Register of Business Entities exists within the Business Registers Agency and it is expected that such registers will be made for natural persons as well, in order to enable connection with other state institutions.

The remaining challenge is the greater focus of eGovernment on citizens, i.e. "completion of work from the chair", as most of the initiatives and implemented activities are aimed at optimizing the process within state bodies, so that they last shorter and citizens complete their obligations much faster, still at the counters.

One of the key steps in the following period is to enable the exchange of data on tax and utility obligations of clients between the Tax Administration and financial institutions in the first place, but also companies from other industries. In this way, by using advanced, centralized databases, an automatic verification system could be established, e.g. level of income, regularity in settling tax obligations, which would ultimately enable the full digitalization of the purchase of credit products by citizens, thus eliminating the need for a single paper document (such as the current certificate of employment and income).

Also, it is necessary to speed up the process of introducing eGovernment in the sectors of tax administration.

Further improvement of services and available information through eGovernment is a challenge for each year to come. Wider education of citizens and the economy is needed, as well as the promotion of speed, security, and safety in the use of electronic services, which will increase the trust of users and efficiency in work. Digitalization and further development of a unified electronic system of government have the effect of reducing bureaucracy, thus improving the quality of services needed by citizens and, consequently, reducing corruption.

In conclusion, the Committee notes that great efforts and progress have been made in order to enable further digitalization of the economy and the public sector in the past period and that the readiness of all state institutions to continue in that spirit in the future is noted.

FIC RECOMMENDATIONS

- Following the example of a large number of EU countries, it is extremely important to use centralized databases and enable the exchange of data between the Tax Administration and companies (primarily financial institutions) in order to ensure that data on citizens' incomes, with the consent of citizens, can be used in online lending processes, which would significantly eliminate the need for paperwork and enable the purchase of credit products completely online. (3)
- It is important to facilitate the use of digital identities/signatures so that they become available to the widest circle of citizens, in a simple way and without high costs. (2)
- In order to emphasize the reliability and ease of use of digital identity and electronic signature, as well as their dissemination and promotion, citizens should be informed about all the possibilities, rights, and benefits of this channel through educational campaigns. (2)

- It is necessary to legally regulate the institute of “digital bills of exchange” so that as such it can be registered in a single register of bills of exchange, i.e. signed electronically. (2)
- It is necessary to create a database of already identified citizens that will enable a simpler and more cost-effective introduction of digital solutions. (2)