



PUBLIC ENTERPRISE
ROADS OF SERBIA

FEBRUARY 2017

Newsletter 16 | 17



Riga – signed contracts for Surčin-Obrenovac motorway and Belgrade bypass

On the Fifth Summit of Heads of the Government of China and 16 Central and Eastern European countries held in Riga, Deputy Prime Minister and Minister of Construction, Transport and Infrastructure, Prof dr Zorana Mihajlović and president of the Eksim Bank, Liu Liang signed the contract on financing the construction of Surčin-Obrenovac motorway on 05.11.2016 in the value of EUR 208 million.

Deputy Prime Minister, together with acting director of the PE “Roads of Serbia” Zoran Drobňjak, signed commercial contract with the Chinese company “Power Construction Corporation of China” for the continuation of Belgrade Bypass construction in the value of EUR 207 million. This contract covers the works on the section from Ostružnica Bridge to Bubanj Potok. The contract also foresees that national companies take part in the works with 49 percent.



Photos taken from the MCTI website



Conclusion of the contract with Eksim Bank on financing the construction of Surčin-Obrenovac motorway enables the start of works on the final section of the motorway from Belgrade to Čačak.

Construction of Belgrade Bypass will also be continued in cooperation with China, namely, the works will be executed on 19.5 km long section from Ostružnica Bridge to Bubanj Potok. As a part of this project, four tunnels will be constructed in the total length of 2.7 km, as well as 22 bridges in the length of 5.3 km.

Second Serbian Road Congress

The Second Serbian Road Congress was held on June 9 and 10, 2016 in Belgrade, in the hotel Crowne Plaza organized by the Road Association of Serbia “Via vita” and the PE “Roads of Serbia”.

Roads form life of a modern society and determine the paths of future development. The way a society relates to its environment and itself reflects from the way the society relates to roads and the way the roads relate to the nature. Responsible decision making, based on new technologies in planning and designing, as well as construction based on modern techniques of materialisation of these projects will turn good ideas into even better road infrastructure. The following topics were covered on the Congress:

- Planning and design
- Construction and maintenance of roads
- Road management
- Traffic, ITS and new technologies
- Road traffic safety
- Sustainable development and environmental protection

The Congress was opened by Prof dr Zorana Mihajlović, Deputy Prime Minister and Min-

ister of Construction, Transport and Infrastructure stating the following: “I am proud of the construction and road workers in Serbia who were diligent, because we realized everything we had promised. Team work and strong position of the Government that infrastructure is the priority is the key to such success”. She informed that 170 km of motorways had been constructed in Serbia since the previous First Road Congress, while the construction of another 90 km and rehabilitation of about 200 km of roads were expected in 2016.

“With black and white lists in civil engineering, we have introduced criteria for business activities, we have tightened the quality control of the roads, now we have to continue with all of that”, Mihajlović said estimating that the road workers did an excellent job. She highlighted that designs in road infrastructure were EUR 3.2 billion worth, however there were also potential road projects awaiting us, with the value between EUR 2 and 2.5 billion, one of them being the construction of Niš-Merdare motorway.

“We are not fully satisfied, it is the characteristic of us who always want more”, it was stated by Mihajlović; she informed the designers that they would have to be more ready for the up-



coming tasks in the near future because special attention will be paid to design technical documents of good quality, quality of roads and increase of traffic safety.

Successful business year behind us

Another successful year is behind us in which new projects started and old projects finished. Satisfied with the achieved, we are heading forward towards better and bigger results pursuant to the vision to be respectable and successful company for the management and development of state roads.

Our imperative is to provide the users of state roads with available, safe and comfortable conditions for travelling, to create for the entire society an infrastructural base for development, to provide long-term business to the partners with the potential of development, to take care of environment protection.

It is not an easy task to stay on this positive track having in mind the circumstances. Maintenance, rehabilitation and reconstruction of the road network demand big investments of funds, which is only possible with the support of stable sources of financing. It is all a part of the upgrade of traffic infrastructure.

Great challenges and significant projects are ahead; completion of the construction of the frontal toll station Vrčin, continuation of the rehabilitation of state roads within the Road Re-

habilitation and Safety Project, continuation of the construction of Belgrade Bypass, expansion of 17 existing toll stations and many other.

Cooperation with international financial institutions is of extreme significance as well as the increase of revenues from fees for using state roads through the construction and incorporation of the new constructed motorway sections into the toll collection system.

PE "Roads of Serbia" and I, being a part of this big organization, are aspiring towards constant improvement of each aspect of our business activities.

Construction of Corridors 10 and 11 and other road infrastructure is the driver of the entire economic and social development in Serbia. Quality and efficient, equal connection of industrial regions as well as of provinces and regions in Serbia is an imperative.

The objective is clear and common – strong and stable Serbia networked with corridors and connected with the entire region.

Zoran Drobnjak, B.Sc.C.E.
Acting Director



Certificates for high quality of business activities of the public enterprise "Roads of Serbia"

In June 2016, Public Enterprise "Roads of Serbia" was certified for quality management system and occupational health and safety management system, which is another high mark for successful business activities of the enterprise.

The concept of quality as an efficient means for successful management of the company and achievement of significant business objectives is also provided through the implementation of another two important international standards.

The first is ISO 9001:2008 (Quality Management System) and OHSAS 18001:2008 (Occupational health and safety management systems). Accredited certification body MSC ("Management Systems Certification" Belgrade) conducted a successful check of the quality system. The check involved all activities under the jurisdiction of the PE "Roads of Serbia" and our enterprise received the highest mark for compliance of business processes with the requirements set in the standards. Our enterprise established an integrated quality management system – IMS for the first time, consisting of ISO 9001 and OHSAS 18001 standards.

By applying the stated standards, PE "Roads of Serbia" performed the engineering, optimization and upgrade of all defined processes referring to the activities of state road management in the Republic of Serbia. Entire documentation of the integrated management system – IMS consists of the Rules of Procedure, Quality Policies, 37 procedures, 10 integrated instructions and over 700 records, which enables successful business activities of the company not only in the field of jurisdiction, but also from the aspect of the requirements of state institutions and wider community.

The existing processes are still upgraded continuously, new documents are created as well as procedures and instructions for the affairs of integrated management systems in all organizational units of the enterprise.





Maintenance of the road network – preservation of the greatest capital value of the Republic of Serbia

Road network is one of the biggest capital values in the Republic of Serbia, on the territory of which there are 16,162.724 km of I and II category state roads the value of which is estimated at about EUR 4.5 billion.

Sector for the Maintenance of I and II Category State Roads performs extensive and responsible tasks primarily directed towards the preservation and maintenance of the existing road network with structures.

In 2016, RSD 20.2 billion was invested in the maintenance of I and II category state roads.

Maintenance involves summer and winter maintenance of roads, electrical installations and lighting, remedies of the carriageway, landslides and retaining walls, designing, remedy of bridges and tunnels, patching of potholes, grass mowing, replacement of the missing and renewal of the existing signage, cleaning of channels, etc.

Last year, the following was rehabilitated: intersection of the streets Ulica kneza Miloša and Bruski Put in Kruševac, roads in the regions of Jagodina, Sremska Mitrovica, Lačarak, sections Novi Sad-Rumenka-Stepanovićevo, Bistrica-Prijepolje, Drakčići-Kraljevo, Prolom Banja-Vlasovo and other. Lighting was installed on the east Kruševac bypass, landslide in the settlement Ravne was remedied on the road Jabuka-border crossing Montenegro -Prijepolje...

For the purpose of upgrading traffic safety, we remedied dangerous locations in Leskovac and on the intersection Petrijevska raskrsnica in Smederevo during 2016.

This year we are continuing at the same pace, with works on the landslides on sections Klokočevac-Plavna, Klokočevac-Zamna and Donji Milanovac-Tekija, crossings of the sections Ljig-Preljina, Takovo-Nevade and Niška Banja-Gadžin Han.

Numerous road routes and structures suffered great damages during the floods in 2014 and 2015. Thus pursuant to the decision of the Government of the Republic of Serbia we remedied over 60 sections on local roads and struc-

tures that had been damaged or partially demolished, in the value of RSD 1.3 billion.

A lot of rehabilitated bridges

On the roads in the Republic of Serbia there are about 3000 bridges of various age, construction manner and static systems.

Through routine maintenance of road structures on the state road network, inspections, monitoring and recording of the changes of their condition are performed based on which the works are carried out for the elimination of the recorded damages.

All bridge elements: piles, bearings, expansion joints, main girders, cross girders, bracings, slab, consoles, corrosion on reinforcement, carriageway, wedges, transitional slabs, head slopes,

Bearing in mind the condition of roads in our country, conclusion is imposed that investment in the existing road network is absolutely necessary in order to provide permanent and incessant preservation of previously invested capital and reduce the costs of users to an acceptable level.

For routine maintenance of the road network in Serbia under the jurisdiction of our enterprise, about RSD 25 billion annually is required.

Maintenance, rehabilitation and reconstruction of the road network required big investment of funds, which is possible only with the support of stable sources of financing.





Bridge “Ariljska petlja”

“Works on the bridge “Ariljska petlja” are an exceptional construction project having in mind the conditions for work. In particular, the works were aggravated by the fact that the bridge passed over the railway track and other roads. Quality of the performed works was taken into consideration to its maximum effect in order to enable traffic safety”, it was stated by acting director Zoran Drobnyak on the occasion of putting the bridge “Ariljska petlja” into operation on 19.08.2016 and added that the bridge rehabilitation works were complex and they included reinforcement of the pavement, repair of damaged piles, installation of carbon strips which enabled the bridge to support maximum foreseen load, replacement of guardrails and waterproofing, reconstruction of pedestrian footways and approaches to bridge as well as new asphalt.

Bridge over the river Zapadna Morava in Čačak

In 2016, PE “Roads of Serbia” successfully rehabilitated the bridge over the river Zapadna Morava in Čačak on I B category state road No. 23, section Konjević-Beljina, as well as the urban roads onto which the traffic was diverted during the works on the bridge, namely the streets: Ulica Nikole Tesle, Crvene armije and Braće Kovačević.

guardrails, pedestrian footways, drainage, signage, etc. are included in the inspections in which the damages on the structure are recorded and conclusion is made regarding the activities for their elimination.

Routine maintenance of structures involves the cleaning of bridges (pavement, pedestrian footways, areas around bearings, expansion joints, gullies, cleaning and arrangement of profiles under the bridge, etc.), maintenance of traf-

fic profile, minor repairs of concrete surfaces (protective concrete barriers, concrete parapets, cornice, etc.), maintenance of steel structures and metal elements, replacement of expansion joints and bearings, repairs of anti-corrosion protection of steel elements, maintenance of signage... These works are carried out during the entire lifespan of the bridge.

In 2016, we completed periodical maintenance of the bridges and tunnels on the following state roads: IB category state roads No. 23 and 21, Požega – Užice, overpass over the railway and road – interchange Ariljska petlja; IB category state road No. 23 Konjević-Beljina, bridge over the river Zapadna Morava; IB category state road No. 23 Nova Varoš – Prijepolje, bridge over the river Bistrica – “Bistrica 8” and IB category state road No. 28, Užice-Kostanjević-Rogačica-Okletac road-pedestrian bridge over the river Derventa in the settlement Zlodol.

This year we are continuing with the start-up works on periodical maintenance of bridges

and tunnels on the following state roads: IA category No. 1, Niš (Severni bulevar) – Niš (Trupale), overpass over the railway tracks Belgrade – Niš and Trupale – Popovac; IB category No. 12, Novi Sad - Kač, expanded overpass; IB category No. 29, Aljinovići – Sjenica, bridge over the river Uvac; IB category No. 22, Raška – Novi Pazar, bridge over the stream Jablanički potok in Batnjak; IB category No. 15 Novi Bečej – Kikinda, overpass at Novo Miloševo; IB category No. 33 bridge over the stream Volujski potok in the settlement Duboka and IIA category No. 148, Obrenovac – Stepovevac, bridge over the stream Maričića potok in Mislodin.

Professional departments in the sector monitor the implementation of all the stated works, quality, quantity and method statements are controlled by the supervision department, while laboratory checks are performed by accredited laboratories for the control of concrete, asphalt and other used materials.

High standards of Winter Service 2016/2017

Traditional annual press conference and public presentation of the Winter Maintenance Plan and the functioning of state roads maintenance, system for providing information to the media and all interested parties about road conditions during the winter period was held on 15.11.2016.

At the conference, Zoran Drobnyak, acting director and Zoran Stojisavljević, executive director of the Sector for the Maintenance of I and II Category Public Roads and head of Winter Service Headquarters, Branimir Pejović, assistant to the head of the Traffic Police Directorate, Nedeljko Munjas deputy head of the Traffic Police Directorate for the City of Belgrade, PhD Jovica Vasiljević, assistant director of the Road Traffic Safety Agency, Ljerka Ibrović, head of the



Department for Public Relations and Stanislava Ostojić, head of Information Centre and others gave their statements to the press.

For the purpose of successful implementation of all activities referring to the provision of passability of the roads and traffic safety in winter conditions, PE "Roads of Serbia" timely prepared the Winter Maintenance Plan which foresees special works, activities and measures necessary for providing passability and traffic safety on the roads in winter period.

Winter Maintenance Plan for state roads of I and II category is implemented from 15.11.2016 until 31.03.2017 and it is an obligatory framework for the preparation of plans of 24 specialized companies contracted for the maintenance of the network of state roads in the Republic of Serbia.

Journalists and the entire public were presented with the manner of work and overview of the organization of manpower, resources and machines engaged in the specific and important aspect of the maintenance of state roads in the Republic of Serbia and also with the information system about road conditions for the Ministry of Construction, Transport and Infrastructure, Ministry of Interior of the RS – Sector for Emergency Management and Traffic Police Department, public and all interested parties.



Research study of snowdrifts on state roads of I category

Public Enterprise "Roads of Serbia", Sector for Strategy, Design and Development initiated the preparation of the Research study of snowdrifts on state roads of I category with the purpose to improve the traffic flow on the state road network in winter period by applying adequate protection measures against snowdrifts.

On the locations on which terrain configuration, obstacles or route position cause the deceleration of wind, snow accumulation and snowdrifts appear. Snowdrifts are a meteorological phenomenon with significant impact on roads maintenance and they are a frequent cause of delays in road traffic during the winter time.

Data about the conditions for the occurrence of snowdrifts are an important factor for the designing of roads as well, and timely and reliable meteorological data during the operation enable quality implementation of the necessary activities for the purpose of providing the passability of road infrastructure and traffic safety.

Based on the data of the relevant road companies from 2007 to 2015, the Study provides the table overview of the sections on I category road network on which snowdrifts are frequent. Jeopardised locations are also presented on the map.

Mechanical, meteorological and thermodynamic analyses were used to determine the conditions and patterns for the occurrence of snowdrifts and based on the obtained results maps

Connection with winter service

Maintenance of roads in the winter period, which implies the prevention of ice and elimination of snow and snowdrifts, is a highly responsible job which requires the engagement of significant resources in terms of materials, manpower, specialized equipment, construction machines and storage capacities.

Integrated with timely and reliable meteorological data about snow precipitation, the Research study of snowdrifts can be a useful tool for the optimization of activities necessary for providing the passability of road infrastructure and traffic safety.

are produced showing the potential transport of snow with wind and reallocation for the entire network of I and II category road network.

The chapter Proposal of Protection Measures gives the method of foreseeing the formation of snowdrifts depending on the cross section of the road, provides recommendations for the reduction of the potential for snowdrifts creation by adapting the centre line, level and cross section in the design phase as well as the proposal of protection measures for the sections that are already constructed.

Calculations of the dimensions for protective fences are also elaborated as well as structural details. In practice, protective elements (fences and vegetation) have proven to be a good way to prevent the occurrence of snowdrifts and ice on the pavement as well as for increasing the visibility on the road.

Preliminary solution for the protection against snowdrifts has been prepared in the form of a case study for E-70 motorway section Bačka Topola – Feketić. Check lists are also provided as a part of the study for the analysis of locations prone to snowdrifts.

The Study gives the foundation for establishing a developed, comprehensive, efficient and effective system for the reduction of risks and consequences of snowdrifts, which contributes to the increase of safe traffic and common safety of state roads functioning.

The plan is to prepare an adequate study for II category roads and the recommendation is to include also the calculations of snowdrift height and form on the cross section of the newly designed roads, in addition to the technical documents for new road routes. Check lists should assist the companies responsible for winter maintenance to register micro-locations for snowdrifts within the sections on which this phenomenon can be expected, all for the purpose of optimizing protection measures.

Upgrade of traffic safety is still the priority



Department for Traffic Safety implements development programs of traffic safety on state roads in addition to the designs the objective of which is the upgrade of traffic safety. One of the programs is the Project of independent road impact assessments on the occurrence of accidents with fatalities, which has been implemented successfully for the second year already.

Independent assessments of traffic accidents imply systematic approach to surveying the causes and circumstances which have led to the occurrence of a traffic accident with fatalities, which are directly or indirectly connected with the road. Purpose of the analysis is to find the sequence of occurrences which have led to the accident with fatalities, primarily directed to noticing the deficiencies of the road as a factor of traffic safety, which will contribute to the improvement of traffic safety on the roads in the Republic of Serbia as well as to the reduction of the number of fatalities in traffic accidents.

This way, the number of traffic accidents will reduce to the level of the leading EU countries and provide an acceptable level of road traffic safety with minimal negative impact on environment.

Our pricelists for works and price modifications

Last year, as well as in the years before, the Department for Technical Preparation, Sector for Strategy, Design and Development performed a significant work regarding the auditing of invoices for special orders for road construction and reconstruction works, heavy and routine maintenance of roads and bridges.

By monitoring price changes of materials, fuels and equipment on the market, by the preparation and collection of data, their direct impact on potential modification of prices in the pricelists has been analysed and regularly monitored, thus keeping them to-date.

Within the project, almost 600 reports have been produced in which the impact of the road on the occurrences or consequences of the traffic accident was determined.

Reports of independent assessments contain the analysis of deficiencies which have led to the occurrence of the traffic accident with fatalities, with highlight on the impact of the road, as well as a detailed proposal of measures for preventing similar types of accidents on the observed location or any other similar location. Results of the analyses will upgrade the quality of road design in Serbia.

For implementing the Project it is necessary to obtain the data on recorded traffic accidents with fatalities, which has been realized through highly successful cooperation with the Ministry of Interior of the Republic of Serbia, i.e. with the

Traffic Police Directorate, which delivers all significant data for one independent assessment on a specially created form.

The objective is to continue with the project in 2017, in accordance with the existing experience for the preparation of reports pursuant to the upgraded Terms of Reference. It is planned to have an accompanying project for upgrading the locations on which the contribution of the road to the occurrence of consequences of a traffic accident is established.

On the 15th International Symposium "Upgrade of Police Affairs for Traffic Safety" held from 01. to 03.11.2016 in Subotica, Department for Traffic Safety of the PE "Roads of Serbia" presented the results of this important Project for the first time.



Energy management for the first time in our Enterprise

With the Directive 2005/32/EC on ecodesign, titled "Energy-Using Products" (EuP), the European Commission set the requirement to gradually eliminate from use inefficient forms of lighting which are not compliant with the requirements for environment protection in order to reduce the present 20 percent of electricity dissipated through inefficient lighting.

The trend in public lighting develops in the direction of the replacement of the classic VTF with LED lights, which solves the problems of increased pollution, unreliable operation and high maintenance costs. Benefits of using LED lights are the following:

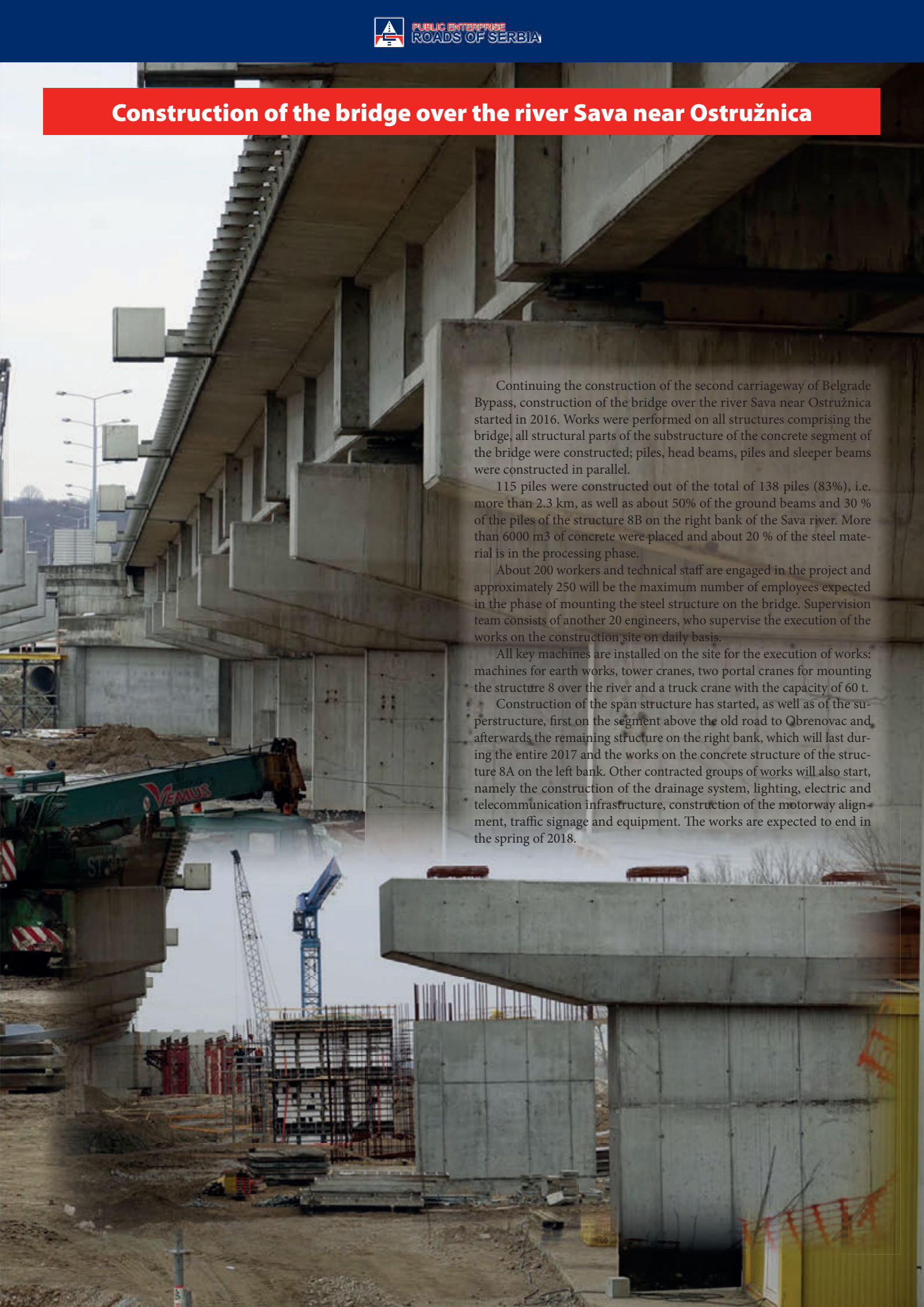
- More light and reduction of electricity consumption and consequently the CO₂ emission.
- Higher level of safety because they enable full recognition of colours in the night time and more detailed visibility of objects
- Longer life which reduces maintenance costs, less waste and possibility to recycle the components

- Invested financial resources return after 3-4 years

Pursuant to the Law on Energy Efficiency which sets the obligation of all big consumers of energy to engage a responsible person for its savings, namely an energy manager, Supervisory Board of the PE "Roads of Serbia" adopted the Decision on Amending the Rulebook on Internal Organization and Job Classification on October 31st, 2016, by means of which Department for Energy Management was established within the Sector for Strategy, Design and Development.

The Sector for Strategy, Design and Development deals with the implementation of design processes taking into consideration key steps for optimizing the construction and operation of state roads, thus it has recognized these trends and incorporated them in its future activities so that the Enterprise would operate pursuant to the principles of sustainable development, and with the adoption of the Business Program for 2017 the Department became operational at its full capacity.

Construction of the bridge over the river Sava near Ostružnica



Continuing the construction of the second carriageway of Belgrade Bypass, construction of the bridge over the river Sava near Ostružnica started in 2016. Works were performed on all structures comprising the bridge, all structural parts of the substructure of the concrete segment of the bridge were constructed; piles, head beams, piles and sleeper beams were constructed in parallel.

115 piles were constructed out of the total of 138 piles (83%), i.e. more than 2.3 km, as well as about 50% of the ground beams and 30 % of the piles of the structure 8B on the right bank of the Sava river. More than 6000 m³ of concrete were placed and about 20 % of the steel material is in the processing phase.

About 200 workers and technical staff are engaged in the project and approximately 250 will be the maximum number of employees expected in the phase of mounting the steel structure on the bridge. Supervision team consists of another 20 engineers, who supervise the execution of the works on the construction site on daily basis.

All key machines are installed on the site for the execution of works: machines for earth works, tower cranes, two portal cranes for mounting the structure 8 over the river and a truck crane with the capacity of 60 t.

Construction of the span structure has started, as well as of the superstructure, first on the segment above the old road to Obrenovac and afterwards the remaining structure on the right bank, which will last during the entire 2017 and the works on the concrete structure of the structure 8A on the left bank. Other contracted groups of works will also start, namely the construction of the drainage system, lighting, electric and telecommunication infrastructure, construction of the motorway alignment, traffic signage and equipment. The works are expected to end in the spring of 2018.

Road Rehabilitation and Safety Project – Urgent works completed on 124 km

In 2016, activities within the Road Rehabilitation and Safety Project were primarily directed towards the ending of the works from the component Urgent Works, i.e. the remedy of damages on the sections affected by floods, as well as towards the provision of services for producing final designs for the sections from the first and second year of the regular part of the project.

124 km of state road network were rehabilitated as a part of Urgent works. Special aspect implied cooperation with local self-government in order to solve the problems of constructing pedestrian footways, bus stops, improvement of traffic safety on connection points with access roads, etc.

Upgrade of traffic safety

In the Project component referring to the upgrade of traffic safety, Road Safety Inspection is contracted for 1000 km for the sections outside the RRSP, as well as Road Safety Audit for the phase of final design for the first 9 design contracts and Terms of Reference is prepared for certifying road safety auditors.

In the upcoming period, it is planned to initiate the service for implementing the campaigns for increasing awareness about traffic safety in schools in close vicinity to the sections included in the Project.



So far, 5 contracts have been completed in the total length of 79.3 km:

- Aranđelovac-Krčevac (8.713 km)
- Lazarevac 4-Aranđelovac 1 (17.607 km)
- Mali Zvornik-Gračanica (23.62 km)
- Raška 2-Jarinje (10.55 km); and
- Mrčajevci - Kraljevo 1 (18.791 km)

In the category of works, public procurement for the following sections is initiated: Belgrade – Novi Sad in the length of 5.5 km, Užice 3 – Kratovska Stena in the length of 37.028 km and Kač – Zrenjanin 1 (bypass in the length of 24.211 km) and the works on the stated sections are expected to begin in the first half of 2017. During 2016, activities started for the provision of services for determining the situation on the state road network and checking of Disbursement Linked Indicators.

Procurement of works for heavy maintenance is planned until the end of 2017 for the following sections which are being designed:

- IB39 Vlasotince – Svođe, 12.51 km;
- IB21 Irig – Ruma, 15.245 km;
- IB25 Topola – Kragujevac, 31.714 km;
- IB35 Kladovo – Brza Palanka, 23.565 km;
- IB23 Kneževići – Bela Zemlja – Užice, 15.234 km;
- IB29 Prijepolje – Sjenica, 13.8 km;
- IA3 Border CRO/SR (Batrovci) – Kuzmin, 21.805 km
- IB35 Zaječar - Knjaževac 24.222 km

In the first quarter of 2017, contracting of the services for the preparation of final designs is also expected for another 11 sections in the total length of approximately 180 km. Procurements for works on these sections are planned in 2018. This year, procurement procedures for 12 designs from the third year of the Project implementation will also be carried out in the length of about 211 km as well as for 9 designs from the fourth year of the Project in the length of about 250 km.



High standards of internal control

During 2016, the Department for Internal Control of Tolling Supervision and Automatic Data Processing performed two routine and 23 outstanding controls of work and operation through the check of documents and with insight into the activities of the employed in the controlled departments. More than 650 documents were also controlled, originating from the activities of the employees in the checked organizational units.

Super-monitoring of the work of employees in the toll collection on all road routes was also carried out, which covered all foreseen means of control checks and minutes and reports were produced.

On two road routes on which maluses of participants in traffic are expressed, who jeopardise their own and other people's safety and inflict financial damage to the PE "Roads of Serbia", teams recording the maluses and forward the evidence for further processing were supervised.

Insight was taken in the operating process of the committees for downloading original data from 35 toll stations of closed and open toll collection system, their import in the database, pro-



cessing, storage, insight into the takeover of data on selling and recharging TAG devices from the points of sale of external companies authorized by our enterprise.

System of process management and performance of activities in the controlled depart-

ments is well established. Based on the findings from the performed routine and outstanding controls, certain space is identified for upgrading the processes of work, recommendations are made and deadlines for their implementation are set.

Safety, health and protection of employees always on the first place

During 2016, the Department for Health and Safety, Fire Protection and Rescue at Work initiated and implemented the procedure for amending the Enactment on Risk Assessment on Job and Work Environment because of the start of operation of new toll stations on the section Belgrade-Subotica which were created in the transition from open to closed toll collection system, relocation of the toll station Bubanj Potok and opening of the sections Ljig-Preljina and Doljevac-Preševo.

Health care was provided to the employees in cooperation with the Directorate for Health Care of the Employees of the "Serbian Railways" in the form of periodic daily, winter and occasionally night checks of the work environment, regulated previous and periodic health checks of the employees. 871 general check-ups, 642 ophthalmology checks, 87 regulated checks were performed, 15 injuries at job were cured out of which 13 were slight and 2 were



heavy injuries. Employees are provided with 24h accident insurance and voluntary health insurance.

Business premises were controlled and equipment for the maintenance of the protection of electrical installations was improved, which has created safer work environment for our employees. 1338 fire extinguishers and 23 hydrants were serviced, 42 emergency lights were replaced and 1050 Rulebooks on safety and health at work were produced. All distribution cabinets were checked and 15 measures were proposed for the elimination of deficiencies, with which all of the set goals are fulfilled.

Successfully completed projects

During 2016, the Sector for Traffic Management Information System carried out the following activities: equipping the control and surveillance centre for managing tunnels and open sections with hardware and video equipment; connecting of facilities and equipment with communication infrastructure; equipping with terminals of TETRA communication system for management and surveillance activities; installing and connecting the access control equipment in the facilities.

Project on extension, integration and development of weather station network has been successfully completed; data on traffic flow are regularly collected, processed and published; geospatial databases are integrated and developed; surveying of cross profile evenness and longitudinal roughness; recording of average speed of vehicles on the segment of national road network.

The Sector has participated in the diagnostics of the condition of the national road network for the purposes of the Road Rehabilitation and Safety Project, in the implementation



of the project on the Unified road accident database, as well as in the modernization of the main ADP centre for toll collection.

It is also important to mention the introduction and distribution of Reference Time for the needs of ADP and toll collection; development of computer science application and application of IT security measures in accordance with the law, maintenance of computers and computer and communication equipment of the enter-

prise, maintenance of traffic monitoring system, ITS equipment and subsystems installed on tunnel structures and national road network.

At the end of 2016, Information Centre, Quality Department and Department for Safety, Health, Fire Protection and Rescue at Work were incorporated into the Sector. The planned activities were successfully performed, thus creating a solid basis for further operations in 2017.

Information Center – precision, accuracy, teamwork

In order to meet the needs of all road users in the Republic of Serbia and provide them with fast and accurate service information, the Information Center of the PE “Roads of Serbia” has been established.

The Information Center keeps the public and road users in the Republic of Serbia timely and accurately informed on road works and traffic regime modifications, closures and traffic normalization, rockfalls and landslides, bans for certain vehicle categories, condition of bridges, tunnels and other road structures, as well as on all current situations during the Winter Service term, i.e. during the winter maintenance season on national roads.

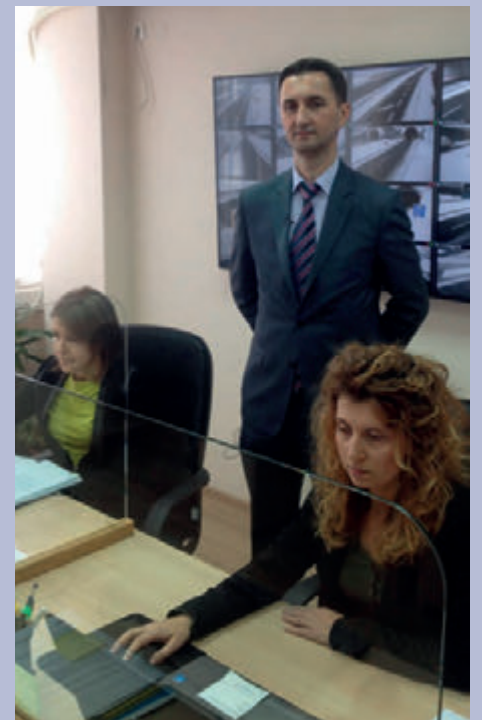
Activities of the employees include oral communication with citizens, supervisors, persons on duty at the Traffic Police Directorate; preparation of announcements forwarded through the mass media leaning on the received decisions of the Ministry of Construction, Transport and Infrastructure; electronic communication with other organizational units of the Enterprise and external entities; cooperation with the sectors in the Enterprise which

provide the Center with information, which are further forwarded to the public through announcements.

By calling the free-of-charge number 0800/111-004, 24 hours a day, all drivers can obtain professional and accurate information about road conditions, operators' advice or hear messages in Serbian and English through IVR with the information on current situation on the main road routes in Serbia.

IVR's special menu – Winter Service – provides regular and special Winter Service Reports, which are updated two or more times a day, depending on weather conditions and they are distributed to the media, the Ministry of Construction, Transport and Infrastructure and the Emergency Management Sector of the Serbian Ministry of Interior.

Information on the current situation on every toll station, on all four sections of the motorways, as well as on border crossings of the Republic of Serbia are also available to road users. All data of this kind are being regularly updated on the website of the Public Enterprise “Roads of Serbia”.



In order to provide information to the users efficiently, timely and accurately, working time of Information Center is 24 hours a day.



Information Center

Free of charge IVR phone number
0800/111-004
info.centar@putevi-srbije.rs

The highest percentage of collectibility in Europe

Collectibility of 99.92% is the highest in Europe. Such an outstanding result is achieved owing to mobile teams for surveying traffic which register the disassembling of guardrails along the motorway and illegal exits and submit them to the Ministry of Interior for further processing.

Toll stations "Takovo" and "Preljina"

Toll stations on the newly constructed section of E-763 motorway, from Ljig to Preljina became operational on 1st January 2017.

On this section toll is collected on new toll stations Takovo and Preljina.

Satisfied with achieved results

Increased revenue, almost a hundred percent collection, increased number of vehicles using our tolled roads, and a record growth of ETC users in 2016 are indicators of high goals in accordance with which the Sector for Toll Collection achieved excellent results.

Revenue from toll collection on motorways of the Republic of Serbia amounted to approximately RSD 16.9 billion in previous year, which is 0.55% more compared to 2015, indicating tendency towards the increase of the number of vehicles on Serbian roads. During the previous year, the total of 43,022,987 vehicles passed through toll stations, namely 9.37% more compared to 2015.

Great ambitions

Continued modernization of toll collection system is planned for 2017, i.e. expansion of 17 toll stations with special lanes for electronic toll collection, and completion of construction of the new frontal toll station "Vrčin". Modern complex with 23 traffic lanes, several ETC lanes, new administration facility and motorway maintenance depot will relieve traffic and meet all users' needs.

Owing to excellent organization and great experience, the Sector for Toll Collection withstands all challenges and achieves significantly better results year after year.

Toll station "Preševo"

Toll collection commenced on 12th December 2016 on motorway section from Levošoje to the border with Macedonia in the length of 22 kilometres and it is performed on the newly constructed toll station Preševo on eight toll lanes.



Record high sale of TAG devices

Sale of TAG devices in 2016 exceeded the total number of TAG devices sold in the previous nine years!

The total of 61,145 TAG devices were sold last year, which is 86.98% more compared to 2015 when 32,700 devices were sold.

With 130,187 users of electronic toll collection we realized the revenue of RSD 5.6 billion, which is one third of the total revenue.

It is also important to note that the number of IV category vehicles using ETC has increased by almost 55% compared to a total number of IV category vehicles.



Quality and devoted work leads to the best result

“In 2016 we realized positive exposure of the enterprise in the public - 99%, we reached the goal we had been striving to”, it was stated by Ljerka Ibrović, head of the Department for Public Relations for the Newsletter and continued: “More than 10,150 feature stories about our enterprise and only 140 of them with negative tone is surely the best result ever since the very establishment of the Department for Public Relations to date.”

“I would like to highlight in particular that the value of 10,150 feature stories amounts to RSD 1,934,199,115.00 i.e. if we had paid for each feature story or announcement in print and electronic media, agencies, or web portals it would have cost us that much, which indicates that the Department for Public Relations actually saved the stated amount for the enterprise” Ljerka Ibrović highlighted.

Ljerka Ibrović says that „communication and its results are measurable” stating: “More than 1500 answered questions, more than 100 interviews and almost 200 announcements about corporate affairs are the balance of our successful communication with more than 70 print and electronic media, newspaper agencies, internet portals and production companies on annual level.

Last year we organized more than 20 press conferences in cooperation with the Ministry of Construction, Transport and Infrastructure, we visited dozens of construction sites all over the Republic of Serbia, we prepared and organized 10 presentations and seminars about new technologies, products, equipment...



We ended last year successfully with the presentation of the Winter Maintenance Plan for I and II category state roads and annual press conference.

Media, road users, partners, line institutions, associates, colleagues and all concerned entities were informed on daily basis about the work and activities of the enterprise.

Publishing/broadcasting of 7,359 feature stories is the result of our direct PR activities, which is 73% of the total number of feature stories!“

“Over 350,000 visits and over 900,000 page views of the website of our enterprise in 2016, with growth tendency of more than 15% annu-

ally, are the results of our work.”, Ibrović pointed out and added: “Through technological innovations, regular updating of content management system and daily updating of the content we have advanced communication between the enterprise and all interested parties. The greatest number of visits is from Serbia, followed by Bosnia and Herzegovina, Croatia, Macedonia, Slovenia, Germany, Austria, Bulgaria, Hungary, the Czech Republic... Almost 30% of all visits is from mobile platforms, for which the Department had been adjusting and updating the components for years so as to make presentation design adjustable to all screens.

We issued the triple issue of our internal newsletter – Newsletter 13, 14 and 15, which provides information to the employees, business partners, users and media representatives as well as all others interested in business activities of the enterprise.

With joint work, we have succeeded to be informative, useful, comprehensive and interesting!

I would like to use this opportunity to thank all executive directors of the Sectors, heads of the Departments and all our colleagues for the understanding, support, selfless assistance in each segment of our activities.”

Timeliness, objectivity and versatility are the principles we are guided by in our work in order to inform the public in a professional, conscientious and responsible manner, and objectives set high, quality and devoted work, genuine commitment to work are a safe path towards the achievement of outstanding results!”, Ljerka Ibrović concluded.



Business Program for 2017 adopted in December last year

Construction, maintenance and upgrading of the road network in the Republic of Serbia could not be implemented without the Sector for Economic, Financial and Commercial Affairs.

Owing to the work and engagement of the employees, Business Program of the PE "Roads of Serbia" for 2017 was successfully prepared and adopted by the Supervisory Board on 13.12.2016, while the Government of the Republic of Serbia approved it on 20.12.2016. This is the first time ever that the Program for the next year is adopted in the current year.

Year after year, the Sector is dedicated to the preparation of business programs, restatements, financial reports, reports on the level of implementation of Business Program; it monitors the implementation of the Road Rehabilitation and Safety Project, income, expenses, costs of the enterprise and all other complex affairs regarding the collection, preparation and processing of the data necessary for control and evaluation of the realization of business activities and also they are the basis for establishing short-term and long-term objectives of the Enterprise.

Synonym for responsible and coordinated work

Good legal basis is the foundation of every successful business.

Well-coordinated teams and departments in the Sector for Legal, Staff and Common Affairs have worked intensively to solve property-legal

relations for the purpose of constructing the sections on Corridors X and XI.

With the professional work in the Sector, several hundreds of public procurements were conducted, the enterprise was represent-

ed in many litigations, criminal proceedings and offences, and employees were taken care of through accurate staff records.

Office and archive activities, translations and foreign correspondence, typing are also a part of the activities performed in this Sector, without which no big business system like our enterprise could function.

Visit of Minister Mihajlović to the Information Center of the PE "Roads of Serbia"

Deputy Prime Minister and Minister of Construction, Transport and Infrastructure Prof. Dr. Zorana Mihajlović visited the Information Center of the PE "Roads of Serbia" on Tuesday, 10th January 2017 as part of the visit to all competent services monitoring the situation in road, railway and water transport in emergency situations and adverse weather conditions.

In the presence of Zoran Drobnjak, Acting Director of the Enterprise, Minister Mihajlović said to journalists that the situation in all modes of transport was almost regular: "We have seen that the system is functional in all modes of transport, and all departments under the jurisdiction of the Ministry of Construction, Transport and Infrastructure have proven to work well. Nobody can say anymore that winter sometimes surprises us", at the same time expressing gratitude to the competent departments from her own field of jurisdiction for their dedication and great commitment.

Zoran Pešović, Executive Director of the Sector for Traffic Management Information

Systems informed the Minister how the Information Center and video surveillance operated, currently covering Belgrade Bypass, tunnel "Straževica", newly constructed section Ljig – Preljina, etc. "Service information center of

the PE "Roads of Serbia" should develop further and be provided with modern equipment, so that we could be informed what is going on at every point in time", Minister Zorana Mihajlović stated.



ECORoads project in Belgrade

South East Europe Transport Observatory (SEETO) in cooperation with the Ministry of Construction, Transport and Infrastructure of the Republic of Serbia, with technical support of the Public Enterprise "Roads of Serbia" (Sector for Strategy, Design and Development, Department for Traffic Safety, Sector for Road Maintenance and Sector for Traffic Control Information Systems) for the implementation of the project, coordinated the organization and implementation of the ECORoads European project on September 27 and 28, 2016 in Belgrade.

Purpose of the project was the exchange of best European practice in the field covered with the European Union directives 2008/96/EC (on road infrastructure safety management) and 2004/54/EC (on tunnels). Within the project, the review of a tunnel over 500 meters long was planned from the aspect of traffic safety (Road Safety Inspection), which was carried out by the experts from the EU. After the inspection was carried out, the report was prepared with the proposal of measures for upgrading the tunnel conditions from the aspect of traffic safety.

Proposed measures provided good guidelines on how to upgrade traffic safety both in this tunnel and in all other tunnels on the territory of the Republic of Serbia in the upcoming period. The Republic of Serbia, as the SEETO member, applied in 2015 its tunnels for this project through the Ministry for Construction, Transport and Infrastructure of the Republic of Serbia and the Department for Traffic Safety within the Sector for Strategy, Design and Development. After evaluating the applications, 3 tunnels in total from the SEETO member states were officially included in the project: "Straževica" (new tunnel on Belgrade Bypass) in Serbia, "Demir Kapija" in Macedonia and "Krabbe" in Albania.

The project is a valuable experience for future activities related with legislative framework, which will regulate this field and improve traffic safety as anticipated by all the strategic documents of the Republic of Serbia, and give the traffic safety engineers the opportunity to get acquainted and cooperate with the best European experts in this field.



EU support to the reconstruction of road structures damaged in the floods in Serbia

At the beginning of last year, the project "Support of the European Union to the reconstruction of road structures damaged in the floods in Serbia" started for which the EU allocated EUR 10.49 million from the IPA fund for the remedy of 48 critical landslides and the reconstruction of 14 road structures (bridges) damaged by erosion.

The project that contributes to the creation of conditions for the prevention of floods and reacting in emergency situations is conducted from January 2016 until December 2018 (24 months for project implementation and 12 months for defects liability period) and it is implemented by The United Nations Office for Project Services (UNOPS) through the partnership with the Public Investment Management Office, PE "Roads of Serbia", EU Delegation in the Republic of Serbia and local self-governments.

Visit to the noise barrier construction works in the zone of UHMC "Bežanijska kosa"

Zoran Stojisavljević, executive director of the Sector for Maintenance of I and II Category State Roads of the PE "Roads of Serbia" and Goran Vesić, city manager visited the works regarding the construction of noise barriers in the zone of the UHMC "Bežanijska kosa" on 10.11.2016.

City manager Goran Vesić reminded that the PE "Roads of Serbia" carried out works on more than 100 kilometres of roads in Belgrade in the last three years and added that without

our help it wouldn't be possible to solve many big and important problems.

Noise barriers in the zone of the UHMC "Bežanijska kosa" will be installed in the length of 650 meters, while on the motorway section in the zone of Ambulance building 350 m will be installed. In addition to the installation of one kilometre of noise barriers on the territory of the city where health institutions are located, remedy of the two related bridges will also be carried out, one of which is located in the zone of the UHMC "Bežanijska kosa".





“My wish is”

Kids drawing competition titled “My wish is” is traditionally organized in the period before New Year’s holidays. Our youngest were very creative in expressing their wishes and the jury had a difficult task to select the best among the received drawings. New Year cards and desk calendars for 2017 of our enterprise are illustrated with the winning drawings.



Plaque for participation in the action “Cap for Handicap”

Employees in our enterprise collected 280 kg of caps and thus placed the PE “Roads of Serbia” among top 10 companies which gave contribution to the action “Cap for Handicap”, which enables the purchase of orthopaedic aids by collecting and recycling plastic caps.



“Soko Banja 2016”

During July 2016, trade union of the PE “Roads of Serbia” organized the summer camp for more than 250 kids aged 9 to 15, who enjoyed the beauties and charms of Soko Banja in four different periods through numerous activities. During the camp, thematic walks, visit to the waterpark, volleyball, football, basketball tournaments were organized as well as relay races and traditional games.

“Putarijada 2016” on Kopaonik

“Putarijada 2016”, 21st workers’ sports games were held on Kopaonik at the end of June 2016, in which 670 employees from the road companies participated. In addition to the sports competition, operating competition in paving was also held. PE “Roads of Serbia” won the 2nd place overall with 137 points, only two less than the winning team.

Blood donation of the employees at the PE “Roads of Serbia”

About 200 employees in our enterprise in Belgrade, Novi Sad and Niš gave their contribution to the action of blood donation on 09.12.2016 in order to mitigate the short supplies and assist all who are in urgent need of blood.



PE “Roads of Serbia” won the first place on football tournament

Football team of the PE “Roads of Serbia” won the first place on the football tournament among the road companies in September 2016.