

## HIGHLIGHTS:

**Gazela Bridge passed the second test**

**ITS systems on the Serbian road network – management – monitoring – safety**

**Interview – Miodrag Milijić, President of the Independent Union of the PE “Roads of Serbia”**

**Vehicle flow from June – August 2012**

**Construction of Corridor X – Levosoje- border with FYR of Macedonia**

**Rehabilitation of I A Category section no. 6, Brodarevo Gostun**

### PR “Roads of Serbia” – measure of SUCCESS!

During this construction season the intensive works have been conducted, and still are in progress, on the road network of the Republic of Serbia. The works comprise new infrastructure projects, as well as routine and periodical maintenance of road routs and structures.

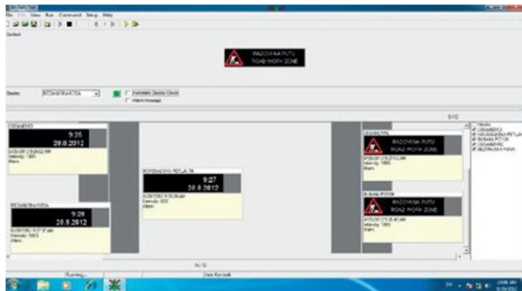
Our enterprise, as Employer, has successfully completed 15, 5 km of the Belgrade Bypass, from “Batajnica” Interchange to “Dobanovci” Interchange, and from “Orlovača” Interchange to the Ring road, including “Straževica” Tunnel. And after load testing of main span of the Gazela Bridge steel structure, the full-scale rehabilitation project related to the busiest bridge in Serbia, with its access roads, has been completed. Concurrently with this project, a part of the other project related to the implementation of IT systems, first of all video surveillance, cameras for traffic counting, road weather stations and electronic information panels with variable traffic signalization has been completed.

Until the end of this construction season, the rehabilitation works, among other things, will be completed: motorway E-75 on the passage through Belgrade, old bridge Beška and bridge over the Arkanj Channel. Works that come under the routine maintenance of road network from Prijepolje to the border with Montenegro, sections Brodarevo – Gostun, as well as works on construction of the right lane of the motorway E-75, sections Levosoje – border with the FYR of Macedonia have been completed.

Consequently, we have great responsibilities before us, which we shall realize with joint efforts of all employees, as usual, and confirm that, in line with awarded Quality System Certificate ISO 9001:2008, we perform business according to the highest international standards. If that is a measure for success, than we are on the right track.

# Implementation of the ITS System on Serbian road network

## MANAGEMENT - MONITORING – TRAFFIC SAFETY



During implementation of the **“Gazela Bridge Rehabilitation”** project the PE **“Roads of Serbia”** has realized a part of the project related to the implementation of **IT systems in Gazela Bridge influential zone**. On this occasion, the installed systems were integrated in IT Center within **the Sector for Traffic Control Information System**, which conducts control of functionality and system management.

This IT system includes video surveillance, cameras for traffic counting, road weather stations and electronic information panels with variable traffic signalization.

Video surveillance system consists of 10 cameras installed in Gazela Bridge zone and roads within influential bridge zone. These cameras provide aid in monitoring traffic flow on the following locations: Emergency center, left and right bank of the **“Gazela”** bridge, Donjosavska street, Vladimira Popovića street, intersection Vladimira Popovića – Jurija Gagarina, Staro sajmište, Old Sava bridge – right bank, Branko`s bridge – left coast, intersection Karađorđeva – Crnogorska.

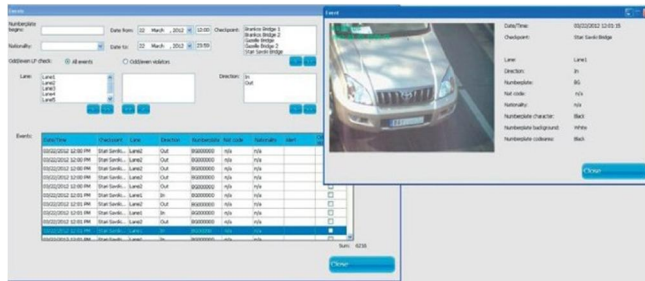
Along with video surveillance cameras, additional 8 cameras for traffic counting and license plates reading for all traffic lanes on the Gazela Bridge and Old Sava Bridge have been installed.

The Center is in charge of monitoring of data from three road weather stations installed on the following locations: Emergency Center, Dobanovci and Železnik interchange.

Electronic Information Systems with a variable traffic signalization are installed on five locations (Bubanj potok, Dušanovac, Bežanijska kosa, Novi Sad road – Interchange T6, Dobanovci), they provide traffic participants with information on planned changes or changed traffic regime, weather and traffic conditions, road works, as well as incidents.

There are ongoing activities regarding application of up-to-date IT systems installed in Straževica tunnel and integration with IT Center. Tunnel is equipped with devices and systems for fire detection, burglaries, video surveillance, intercom communications and SOS telephones, air control, traffic detection, sound systems, variable traffic signalization. All installed

systems are integrated into software control unit which will enable monitoring and control of system performance, automatic control of all incidents, according to the predefined scenarios.



**The PE "Roads of Serbia" has a plan to equip the remaining structures on the Belgrade Bypass with contemporary IT systems in the following period, in order to enable the Sector for Traffic Control Information System to manage and monitor traffic on this important infrastructure structure. Additional plan is**

**to equip the structures of the same type on the road network of the Republic of Serbia. The structures with installed IT systems shall be integrated in IT Center, wherefrom the remote monitoring and control shall be performed.**

## Gazela Bridge passed the second test



In the night between 11 and 12 August 2012, another load testing of main span of the Gazela bridge, which is integral part of Rehabilitation Project according to the Standard SRPS U.M1.046 – Bridge load testing was performed.

Testing was performed in line with adopted and approved Program for the Bridge load testing, schemes and load method (static and dynamic), while the results were systematically collected through device.

On the main span and predefined structure parts 500 measuring tapes were placed on ca. 100 survey points, 100 points for measurement of the structure temperature, as well as other devices necessary for precise measurement and behavior of the main span of bridge structure.

Testing elapsed according to the scheduled plan and program. During bridge testing other planned activities, comprising improvement of dynamic driving characteristics on the traffic profile, taking samples for testing, inspection and control of structure parts were impossible to be performed under full traffic.

Through testing of reconstructed elements of the main span of the Gazela Bridge, expected structural response was registered under applied load testing.

During load testing 36 trucks weighing 25 tons were used. They were moving across the bridge according to the specified schedule at different speed from 20 to 50 km per hour. Necessary equipment and kilometers of cables under the bridge recorded structure behavior.



With performed load testing of the main span of the bridge steel structure the Gazela Bridge and access roads rehabilitation project are officially completed.



**Gazela “jumped over” the river Sava on December 1970, and thus connected the Belgrade old city with Novi Beograd. Bridge rehabilitation began in 2010, and in less than two years, old and dilapidated Gazela was given a new life for the next couple of decades by means of contemporary and high-quality material.**

### Rehabilitation of motorway E-75 on passage through Belgrade

On the rehabilitation project of the motorway E-75 on the passage through Belgrade, app. 80% of total works is being executed. На пројекту рехабилитације аутопута Е-75 на проласку кроз Београд до сада је завршено око 80% од укупних радова.

There are ongoing works on the stage 16, in the length of 1,100 m, and stage 18 in the length of 2,000 m.

On the remaining stages replacement of the existing curbs is foreseen, existing asphalt is being replaced by base course – base BNS and SMA wearing course or road surface. In addition to the basic works, there is ongoing repair of damaged elements of the drainage system

Works completion is expected at the end of construction season.



### Construction of the right lane of the motorway E-75, section Levosoje – border with the FYR of Macedonia, sector I and II from km 955+700.59 to km 976+950.30



Designed motorway route Levosoje – border with the FYR of Macedonia is 21.25 km long.

Full motorway profile is 27.40 km long. Traffic lane width is 4x3.75 km, emergency lane is 2x2.5 m, green median is 1x4.0m, two verges are 1.0 m wide each, marginal strips between driving and emergency lane are 2x0.20 m and marginal strips beside green median are 2x0.50 m.

Motorway construction was conducted in phases. The first phase was finished in 2009, and it included construction of the left side of motorway route now opened to traffic.

Construction works on the right side are in the final phase.

App. 504,000.00 m<sup>3</sup> earth and rock-fill material has been excavated, 280,000 m<sup>3</sup> embankments, 7 bridges in road base have been constructed, as well as 22 box culverts, 8 overpasses and 47 pipe culverts in road base.

App. 250,000 m<sup>2</sup> of crushed stone has been placed in blanket course, 450,000 m<sup>2</sup> of asphalt base course BNS22 is constructed, as well as 225,000 m<sup>2</sup> of wearing asphalt road surface.

There are 225,000 m<sup>2</sup> of asphalt left for placement into the right motorway route.

Gutters, app. 18,500 m long, and rainwater sewerage in the length of app. 15,000 m have been constructed in order to drainage surface waters from pavement.

Resoiling of median, shoulders, steep slopes and overpass embankments of the area of app. 200,000 m<sup>2</sup> has been executed.

For purposes of safe traffic flow on the right and left traffic lane, the elastic safety fence in the length of app. 21,000 m was placed in the median, as well as on the embankments in shoulder zone in the length of app. 6,500 m.



### Continuation of land acquisition on Corridor X and motorway E-763 (Corridor XI)



One of the most important activities related to traffic infrastructure is land acquisition.

Land acquisition on Corridor X in 2012 and motorway section towards Montenegro require provision of total amount of RSD 1.270 billion.

Provision of RSD 600 million is necessary for continuation of land acquisition, i.e. RSD 500 million for sections on the Corridor X, and additionally RSD 100 million for motorway E-763 (Corridor XI) from Ub to Ljig.

The PE "Roads of Serbia" is responsible for land acquisition on the sections Obrenovac – Ub, Ub – Lajkovac and Lajkovac – Ljig, in the total

length of 62.5 km.

In order to fully complete the land acquisition on every section of the Corridor X, as well as sections of motorway E-763 (Corridor XI) from Obrenovac to Ljig it is necessary for additional RSD 1.5 billion to be provided in 2013.

From the middle of 2008 until the present day the PE "Roads of Serbia" has paid RSD 8.7 billion in total on behalf of land acquisition to previous owners.

### Vehicle flow for period from June – August 2012

ДЕОНИЦА	ЈУН, ЈУЛ, АВГУСТ 2011.г.	ЈУН, ЈУЛ, АВГУСТ 2012.г.	2012.г./2011.г.
Београд Ниш	5.253.723	5.439.345	103,53%
Београд Шид	1.965.156	1.967.312	100,11%
Београд Нови Сад	1.485.857	1.550.312	104,34%
Нови Сад Суботица	832.318	852.830	102,46%
Ниш Лековац	958.736	1.016.127	105,99%
<b>УКУПНО</b>	<b>10.495.790</b>	<b>10.825.926</b>	<b>103,15%</b>



Total vehicle flow on all sections for the period from **June until August 2012** compared to the same period in last year (June – August 2011) **records increase, i.e. upturn by +3.15%, which amounts 330,136 vehicles more than in 2011.**

**COMPARISON OF SECTIONS FOR THE PERIOD JUNE – AUGUST 2012 RELATED TO THE SAME PERIOD IN 2011**

**Section Belgrade – Niš records increase for the period June – August 2012 compared to the same period last year, by +3.53%, i.e. 185,622 vehicles**

Section Belgrade – Šid records increase for the period June – August 2012 compared to the same period last year, by +0.11%, i.e. 2,156 vehicles.

Section Belgrade – Novi Sad records increase for the period June – August 2012 compared to the same period last year, by +4.34%, i.e. 64,455 vehicles.

Section Novi Sad – Subotica records increase for the period June - August 2012 compared to the same period last year, by +2.46%, i.e. 20,512 vehicles.

Section Niš – Leskovac records increase for the period June – August 2012 compared to the same period last year, by +5.99%, i.e. 57,391 vehicles.

**PE % Roads of Serbia+in Turkish newspaper %Hürriyet+**



Nenad Grubić, B.S.(C.E.), Assistant to Director of the Sector, responsible for toll collection on the motorways of the Republic of Serbia, gave an interview to Turkish newspaper "Hürriyet". Team of journalists of this mass-circulation newspaper got detailed answers to the questions important for the travelers who are using our roads to go on vacation or come back home.

Along with providing useful information, Grubić informed readers of the newspaper "Hürriyet" that electronic toll collection functions on the roads in the Republic of Serbia, and that its usage contributes to the faster vehicle passing through toll stations. He also kindly asked the drivers to prepare the exact amount of money for toll payment prior to their arrival to the toll station in order to avoid hold-ups and creation of long delays.

Grubić emphasized that it is of special importance to inform drivers about false rumors that loss of the card entails fine in amount of EUR 75, and even if it happens drivers only have to

pay toll for the longest distance on that route, plus RSD 350 (EUR 3.5).

Drivers from Turkey can send all questions and comments on our enterprise's e-mail address [office@putevi-srbije.rs](mailto:office@putevi-srbije.rs), or to contact Embassy of Turkey, which we have extremely good cooperation with, highlighted Nenad Grubić.



## Interview

**Milodrag Milijić, B.S.(C.E.)**

**Chairman of the Trade Union organization of the Autonomous Trade Union of the PE "Roads of Serbia"**



### For better working conditions for employees

The majority of employees spend most of their daytime at work, and therefore we all wish to spend this time as best as possible.

This wish contributed to the birth of an idea about basic human rights that everyone deserves to protect from malpractice. In order to represent employees, improve and protect professional, working, economic, social and cultural interests, the autonomous and independent Union Trade organization – enterprise's Union – has been established.

Based on intention to provide employees in the PE "Roads of Serbia" with the best possible working conditions, the Union Trade organization of the Autonomous Trade Union has been established.

Union Chairman, Mr. Miodrag Milijić, speaks for the Newsletter on Union's importance, strength, members and ways of its functioning.



Prior to becoming the Chairman, Mr. Miodrag Milijić was Union's Commissioner, and on 5 November 2005 on the elections of the Union in the PE "Roads of Serbia" he became a Chairman, and after that a member of presidency of Autonomous Trade Union of Road Maintenance Workers. At that point the Trade Union had 430 members, and the current number is over 900. Trade Union has 14 committee members that gained confidence of other Union members on the elections, and they represent employees from all toll stations on the sections: Belgrade – Šid, Belgrade –Subotica, Belgrade – Leskovac and administrative buildings in Belgrade. Meetings with chiefs, shift leaders and managers

where employees present their problems and make proposals and suggestions are held on daily basis. Meetings with Committee, Union Chairman and Director General of the PE "Roads of Serbia" are held four times a year, when Director General gets acquainted with employees' problems and Union's activities, and mutual agreement is the way of problem solving

Extraordinary engagement of the Union has contributed to new Collective Bargaining which stipulates rights and responsibilities of the employees. This new Collective Bargaining was signed by Prime Minister of the Republic of Serbia – Minister of Infrastructure and energy Milutin Mrkonjić, Director General of the PE "Roads of Serbia" Zoran Drobnjak, and the Chairman of the Trade Union organization of the Autonomous Trade Union of the PE "Roads of Serbia", Miodrag Milijić



„Payrolls are increased due to the cooperation between the Union and Director General with whom we have great collaboration with” – Milijić pointed out.



rehabilitation.

Employees have special benefit of buying goods through administrative order in numerous retails which Union has entered into contract on business cooperation with. Administrative order enables installment payment and thus significantly relieves household budget.

In the case of dismissal due to greater number of employees, employer is obliged to make severance payment before cancelation of Agreement of service. Severance payment includes EUR 350 per year for 10 years of service, and EUR 330 for each subsequent year.

Agreement of service does not end Union activities. There are continuous endeavors for providing employees with better conditions, as well as introducing novelties according to European standards. Some of these novelties include education and seminars for all Union members, and special attention is paid to the young members. This kind of seminar has been up till now held in Germany, Italy and Belgrade.

Union cooperates with numerous international trade unions, exchanging experience and thus significantly improving work performance.

Business Plan and Program anticipate financial funds intended for employees` children, up to 12 years of age, for New Year`s parcels and performances.

In order to develop children`s imagination, the contest of drawings with “Santa Clause on the road” theme was thought-out last year. Awarded drawings were used as motifs for 2012 calendar production.

Activities that are not covered with the Agreement of service are organized through mutual agreement between Chairman, Union`s board and Director General of the PE “Roads of Serbia”, and such activities are, for example, gatherings of children and summer camps with various dwelling places.

Even our employees are not deprived of outdoor activities. On their disposal are various sport activities, gatherings and New Year parties.

Event which everyone expect with impatience is Putarijada, organized by Autonomous Union of road workers, the PE “Roads of Serbia” and the Autonomous Trade Union of the PE “Roads of Serbia”, that, besides representing a type of recreation, serves for gathering of employees from all road construction enterprises to meet at one place, and, beside competition, which is main purpose of gathering, to exchange impressions and realize even better collegial relationships.

Beside competition at Putarijada, there are football competition “Honda zlatna liga – liga javnih preduzeća” (Honda golden league – league of public enterprises), organized from October till April every year, as well as competition at Enterprise`s level, where all interested employees can participate. It is necessary to emphasize that participating employees do not have to be members of the Union.

**“We wish to make it possible for the employees to have insight in all activities and commitments of the Union. Everybody is welcome!”**

Jubilee awards are introduced, and they are awarded every year for continuous work in the Enterprise, so an employee receives one additional payroll for 10 consecutive years of work, two for 20 years, and three payrolls for 30 and 40 years. Amount of hot meal allowances and recourses is increased.

Special attention is paid to better working conditions, especially to modernization of toll booths. In addition to that, every booth is equipped with air conditioners that facilitate working activities during hot summer or cold winter days.

Systematic medical examination of employees is conducted in every two years, as well as spa sojourn as a way of rest and





Thanks to continuity of work alone we can expect great results and goals achievement, says Union's Chairman Milijić, underlying that the coming plans indicate payroll increase and Union's requests to be the part of the Business Plan and Program.

## Rest and recuperation

SPAS – employees in the PE “Roads of Serbia” have a right to medical treatment as a way of recuperation in spa Apatin, spa “Junaković”, Atomic spa “Trepča”, spa “Prolom”, “Lukovska” spa and Vrnjačka Banja spa.

ZLATIBOR – Union organizes, as a form of vacation, a usage of holiday apartments PE “Roads of Serbia” for employees.

## Aid types

SOLIDARITY ALLOWANCE – RSD 15,000 in a case of illness, aftercare and invalidity

BORROWINGS – RSD 20,000 for procurement of firewood and winter stores, textbooks...

CHILDBIRTH – RSD 5000 for each child

DEATH – RSD 5000

## “Play and learn”



Away from city noise, in the National park Fruška gora, at recreation center “Testera”, fifty-seven children had this year an opportunity to gather and socialize, learn through games and fun something new about sport, beauty of life in nature and team spirit.

Recreation center is positioned at an altitude of 250 m and it was intentionally constructed for children, sportsmen and amateurs in such a manner that it satisfies all standards related to accommodation, nutrition, education and medical care. It was right place for vacation and play for youngsters, between 8 and 15 years of age, divided into two groups (from 1<sup>st</sup> until 10<sup>th</sup> and from 10<sup>th</sup> until 20<sup>th</sup> August), and it contributed to devotion of full attention and care to them.



Every day in the camp was thoroughly planned in advance. Instructors managed to through exercises, animations and fun fulfill every day leaving it without “space” for boredom.

## Brodarevo – Gostun



At the end of August final works on rehabilitation of a part of the state road IA no. 6, from Prijepolje to the border with Montenegro, section Brodarevo – Gostun have commenced. Works are executed within routine maintenance of road network in the Republic of Serbia financed by the PE “Roads of Serbia”. Carriageway on the section longer than 9 km along the canyon of the river Lim, will have new bituminous overlay, and on particular locations it will be widened to 6 m, and new curbs and flumes will be placed.

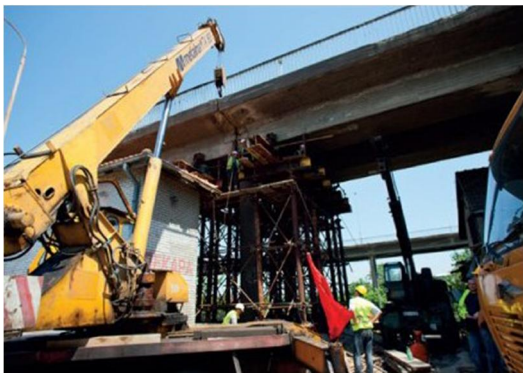


There are ongoing remedial works on rock slopes that used to cause problems to heavy trucks and busses, complicated bypassing, and provoked landslides and road delays. With completed remedial work of the whole section from Prijepolje to the border with Montenegro, black spots will be eliminated, and this will secure conditions for safer driving on this usually burdened road route.

Due to the short term for works completion, the Contractor engaged great number of workers and necessary heavy machines, because traffic frequency and importance of road route put this construction place among the most important ones. Remedial works on rock slopes, excavations and preparations for placement of curbs, as well as new, wearing asphalt course are executed concurrently.

More than 50 workers are engaged on construction sites on daily basis, as well as sufficient number of excavators, trucks, loaders and combined machines.

## Continuation of remedial works on road network



The PE “Roads of Serbia” continues with works on renovation and maintenance of the road network across the Republic of Serbia.

There are ongoing landslide remedial works: Ljuboviđa on P-113, Sedlare – Varda on P-213, Mojkovići – Krupanj on P-127, Stolice – Krupanj on P-211, near shoe factory on P-234, Kominje on M-22 and Jezgrovica 2 on M-2.

Works on the II Category State Road no. 102 Subotica – Bačka Topola (from km 55+086 to km 57+606) are completed.

Rehabilitation works have commenced on the following road routes: II category State Road no. 129, section Smederevska Palanka – Velika Plana, II Category State Road no. 129 section Žabari – Petrovac, P-263 section Kosjerić grad – cement plant Titan, IA Category State Road no. 6, Brodarevo – Gostun, P-228 Jasenovо – Bela Reka, P-

225 Rašovka-Dobre Vode, II Category State Road no. 132 Paraćin – Pojate, II Category State Road no. 101 Bačko Petrovo village – Bečej, IB Category State Road no.16 Belasovci – Krčevac, M-14.1 Šepak – Loznica, M-4 Zvornik – Loznica, IB Category State Road no.11 Kikinda – Bašaid, M-9 Blato – Pirot.

Works on urgent structure maintenance are in progress, too. Pančevo bridge has been repaired by replacement of cracked bearing pads, and there are ongoing works on periodical structure maintenance: “Ivanov Potok” bridge rehabilitation on the I Category State Road, M-2, section Ribarice – Kosovska Mitrovica, and rehabilitation of the bridge over river Pek in Miljević village on the II Category State Road no. 108a, section Srednjevo – Miljević (on km 16+700).

There is a plan for commencement of rehabilitation works on bridge over impounding reservoir “GRUŽA”, on the II Category State Road no. 155, section Ravni Gaj – Knić – Mrčajevci, as well as rehabilitation of the superstructure and poles on the left side of the “Šabazovica” bridge (on km 768+500.00) of the motorway E-75 (Ia Category State Road no. 1), Belgrade – Niš.