

GENERAL NATIONAL REPORT: 2016 MOTORWAY DEVELOPMENT IN SERBIA

1. Total length of Serbian motorway and expressway network

The length of the tolled motorways network managed and maintained by PE Roads of Serbia remained the same compared with 2013. No new sections were opened in 2014.
31.12.2015.

- motorways and expressways
- tolled motorways and expressways: 603 km

Openings in 2016

The opening of the following sections of tolled motorways is foreseen in 2016:

Motorway	Section	Length km
E 70/75 Belgrade By pass	Sector B1- B3: Dobanovci - Ostružnica	10,05
E 75 Srpska kuca Levosoje 8km	Grabovnica - Levosoje	25,4
E 80	Niš - Dimitrovgrad	74,11
Total		110,01

Investments in motorways

Year	2015		2016	
	mil CSD	mil EUR	mil CSD	mil EUR
Investments in construction of new motorways	3.820,40	31,92	16.503,50	134,72
Investments in routine maintenance of existing motorways ***	19.879,50	166,08	16.520,70	134,86
Total	23.699,90	198,00	33.024,20	269,58

***Investments in routine maintenance are for all state roads I and II category.
Exchange rate 1 EUR = 119, 7 CSD/ 2015; Exchange rate 1 EUR = 122, 5 CSD/ 2016;

Financing

Year	2015	2016
National Budget	28 %	21 %
Loans (IFI)	10 %	29 %
Own income (toll collection and other fees)	60 %	50 %
Other funds	2 %	
Total	100 %	100%

Traffic on Serbian motorway network

According to the data published by Statistical Office of the Republic of Serbia estimated increased of GDP 2015/2014 in Serbia is 1, 2 %.

Inflation rate in 2015 was (taking December 2015 / December 2014 price index) 1, 5%.

Traffic growth on motorway network in 2015/ 2014: 6, 30 % (taking into account the total volume of traffic on all tolled motorways in Serbia).

Tolling system and tolling technologies used

On next sections: Belgrade - Niš- Doljevac, Belgrade - Šid and Belgrade - Sirig are installed so-called „closed“toll system and on section Sirig - Subotica is „open“toll system.

To save space and money a lot of lanes are mixed with manual and electronic toll.

ETC Pay Toll system features

- ✓ Cutting edge technology
- ✓ Interoperability with neighbouring countries (Montenegro and Federation of Bosnia and Herzegovina) as well as with other countries
- ✓ High reliability
- ✓ Easy to maintenance
- ✓ State-of-the-art technology
- ✓ Excellent working environment

ETC Pay Toll system - Technology

- ✓ ETC system was implemented in accordance with EU CEN 278/2004 and carrier frequency of 5.8 MHz
- ✓ Based on DSRC (Dedicated Short Range Communications) technology
- ✓ Implemented for pre-paid, post-paid and exempted users
- ✓ Each user of the ETC system has a on-board unit (OBU) attached to the windscreen of the vehicle
- ✓ Payment without stopping for all vehicle categories
- ✓ The speed of passing vehicles is limited to 50 km / h for safety reasons

Toll Rates

Now In Serbia there are only four toll classes, as follows:

Toll classes:

1a. Class

- a. Motor vehicles with the characteristics of motorcycle, motor tricycle and quad

1. Class

- a. Motor vehicles with two axles and height equal to or lower than 1.3 m, measured at the first axle
- b. Vans with two axles and total height equal to or lower than 1.9 m, with maximum allowed weight up to 3,500 kg

2. Class

- a. Motor vehicles with two axles and height equal to or lower than 1.3 m measured at the first axle, with trailers
- b. Vans with two axles and total height equal to or lower than 1.9 m, with maximum allowed weight up to 3,500 kg with trailers
- c. Vans with two axles and total height over 1.9 m, with maximum allowed weight up to 3,500 kg

3. Class

- a. Motor vehicles with two or three axles, with height over 1.3 m, measured at the first axle, with maximum allowed weight over 3,500 kg
- b. Vans with two axles and total height equal to or over 1.9 m, with maximum allowed weight up to 3,500 kg with trailers

4. Class

Motor vehicles with four or more axles (also counting the trailers' axles), with height over 1.3 m, measured at the first axle, with maximum allowed weight over 3,500 kg

Revenues

The gross toll income in 2015 was 16.801 million CSD or 139, 55 million EUR, taking the exchange rate 1 EUR = 120, 3918 CSD.

The gross toll income in 2014 was 16.094 million CSD so the toll revenue approx. increased 4, 16 % in the year 2015 (calculated in national currency).

Safety

Main indicators:

According to statistical data published by Statistical Office of the Republic of Serbia in 2014 and the report published by Ministry of Internal Affairs in 2015 the following total of accidents on all roads in Serbia was:

Indicate the following main *ratios*:

	Definition and method of calculation	In number for one billion kilometers travelled in 2015	Variation in % in 2014/2015
Personal injury rate	2014 – 97,1% total number of injury 2015 – 97,0% total number of injury	-	+ 7,3%
Fatal accident rate	2014 – 1,4% total of accident number 2015 – 1,6% total of accident number	-	+ 13,4%
Rate of dead	2014 – 2,9% total number of dead 2015 – 3,0% total number of dead	-	+ 12,1%

	Total number of accidents	Number of accidents with a fatality	No. of dead	Total no. of injured	No. of personal injury accidents
2014.	35.010	487	536	17.991	18.527
2015.	34.162	550	601	19.335	13.098

There is no available data about accidents with respect to designated motorway sections.

On-going projects:

- Construction of Belgrade by-pass
Sector B1- B3: Dobanovci - Ostružnica / in progress
- Construction of Belgrade by-pass, Bridge over Sava river / in progress
- Construction of Belgrade by-pass
Sector 4: Construction of the “Petlovo Brdo” Interchanges
- E 763 Beograd - Požega / in progress
- E 80 Nis - Dimitrovgrad / in progress
- Finalization of the motorway section E 75 Grabovnica - Levosoje / in progress
- Construction of the motorway E 75, Beograd - Niš - FYR Macedonia, section
Srpska kuća - Levosoje / in progress

- Construction of new toll station Vrčin / in progress

Long term forecast and tendencies:

- Construction of the motorway E 70 Belgrade - Pančevo - Vršac
- Construction of Belgrade by-pass
Section C Bubanj Potok - Pančevo
- E 763 Požega - Boljare
- E 761 Pojate - Preljina
- E 761 Požega - Užice - BIH
- E 761 Bulgarian border - Zaječar - Paraćin
- M 19, M 21 Novi Sad - Ruma - Šabac - Loznica
- M-24 Hungarian border - Kikinda - Pančevo - Kovin
- Nis - Merdare, Route no. 7 (SEETO), general design

Significant actions already started and foreseen for 2016

- Modernization of toll collection system in Serbia

On the northern branch of Corridor X, i.e. motorway from Belgrade to Subotica, toll collection is currently conducted in closed toll collection system on the section from Stara Pazova to Sirig. Introduction of closed toll collection system from Sirig to Subotica, i.e. incorporation of the system into one closed toll collection system from Belgrade to Subotica, is planned for the third quarter of 2016.

In order to establish closed toll collection system, the process of obtaining all necessary permits and public procurement procedure have commenced. The construction of new front toll station in the north at Subotica, 27 kilometers from Hungarian border, construction of new double sided toll stations Feketić, Bačka Topola and Žednik, and reconstruction of new lateral double sided toll stations Zmajevac and Vrbas, along with demolition of the existing front toll station Sirig on 95,5 km are anticipated within this phase.

Upon completion of installation and establishment of closed toll collection system from Belgrade to Subotica, this system will, in addition to two front toll stations, comprise 11 lateral toll stations.

The plans for 2016 comprise the establishment of an open toll collection system on the section from Vladičin Han to state border with Macedonia, first of all on the toll station Preševo stretching 22 km from the border to Levosoj by the end of April, and from October on the section from Vladičin Han to Srpska Kuća 34 km in length, on the toll stations Vranje and Bujanovac I.

By mid-2016 and upon completion of construction works on new motorway E763 from Ljig to Preljina stretching 39.3 km, the establishment of toll collection in an open toll collection system is planned to be performed on two toll stations Preljina and Takovo.

All abovementioned toll stations will be provided with equipment which has already been installed on other toll stations with closed and open toll collection systems, and which will allow toll collection without stopping of vehicles by using electronic devices (Tags). Data on toll collection will be encrypted and secured against abuse, and the system itself will perform license plates recognition and traffic recording 00-24, i.e.

surveillance system will be established to control personnel and traffic participants
using tolled motorway.

SUMMARY

MAIN ASECAP KEY FIGURES

Country: REPUBLIC OF SERBIA	Indicate below how you calculate each figure provided in the “2015” column	2015 Figure
Network length (Km)..... 2 x 2 lanes (Km)..... 2 x 3 lanes (Km)..... 2 x 4 lanes (Km).....		603 km 603 km - -
Number of km in construction		
Forecasts of opening motorways section		
Annual toll revenues* (in millions of Euros)	139,55 M EUR =120,3918 + 23,26 VAT	139,55 M EUR
VAT % (Indicate the VAT % percentage to the toll revenues)		20%
Permanent staff		1437
Average daily traffic (light vehicles)		/
Average daily traffic (heavy vehicles)		/
Average daily traffic (total = light + heavy vehicles)		/
Total number of accidents		34.162
Number of personal injury accidents		13.098
Number of dead		601
Fatality rate		+12,1
Kilometres travelled (10⁶ x km)		/

	Indicate below how you calculate each figure provided in the “2015” column	2015
Number of toll transactions (Total) Number of toll transactions (light vehicles): Number of toll transactions (heavy vehicles):		39.867.598 32.776.863 6.467.984
Number of toll stations		42
Number of toll lanes		229
Number of ETC lanes		164**
Number of ETC subscribers (Total): Number of ETC subscribers (light vehicles): Number of ETC subscribers (heavy vehicles):		70.987 42.223 28.764
Number of service areas (equipped with petrol stations)		109
Number of rest areas		177
Number of restaurants		20
Number of hotels		60

*please provide the figure VAT and other taxes excluded.

** 154 combined manual and ETC and 10 ETC only

*** There is no data available on AADT on all motorways in Serbia; instead PE Roads of Serbia uses data about total traffic flow volume at designated sections of motorways as shown in table 1. For the purpose of this report vehicles belonging to I and II class are designated as light vehicles and vehicles belonging to III and IV class are designated as heavy vehicle

Total traffic flow volume in 2015

Light vehicle (I and II class): 32.867.598 number of vehicles in 2015

Heavy vehicle (III and IV class): 6.467.984 number of vehicles in 2015