

GENERAL NATIONAL REPORT: 2015 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.
31.12.2014.

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

Openings in 2015

The opening of the following sections of tolled motorways is foreseen in 2015:

Motorway	Section	Length km
E 70/75 Belgrade By pass	Sector B1- B3: Dobanovci - Ostružnica	10,05
E 75	Grabovnica - Levosaje	31,9
E 80	Niš - Dimitrovgrad	86,9
Total		128,85

Investments in motorways

Year	2014		2015	
	mil CSD	mil EUR	mil CSD	mil EUR
Investments in construction of new motorways	2.508,10	20,95	14.394,90	120,26
Investments in routine maintenance of existing motorways ***	14.660,00	122,47	10.435,00	87,18
Total	17.168,10	143,42	24.829.90	207,44

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

Financing

Year	2014	2015
National Budget	34 %	21 %
Loans (IFI)	3 %	31 %
Own income (toll collection and other fees)	62 %	47 %
Other funds	1 %	1 %
Total	100 %	100%

Traffic on Serbian motorway network

According to the data published by Statistical Office of the Republic of Serbia estimated decreased of GDP 2014/2013 in Serbia is 1, 8 %.

Inflation rate in 2014 was (taking December 2014 / December 2013 price index) 1, 7 %.

Traffic growth on motorway network in 2014 / 2013: 2, 44 % (taking into account the total volume of traffic on all tolled motorways in Serbia).

Tolling system and tolling technologies used

On two sections: Belgrade - Niš- Doljevac and Belgrade - Šid are installed so-called „closed“ toll system and on section Belgrade-Subotica „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 2014 was 16.094 million CSD or 138, 44 million EUR, taking the exchange rate 1 EUR = 116, 25 CSD.

The gross toll income in 2013 was 15.552,5 million CSD so the toll revenue approx. increased 3, 7 % in the year 2014 (calculated in national currency).

Safety

Main indicators:

According to statistical data published by Statistical Office of the Republic of Serbia in 2013 and the report published by Ministry of Internal Affairs in 2014 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 kilometres travelled in 2014	Variation in % in 2013/2014
Personal injury rate	2013-96,6% total number of injury 2014-97,1% total number of injury	-	- 2,6%
Fatal accident rate	2013-1,6% total of accident number 2014-1,4% total of accident number	-	- 18,0%
Rate of dead	2013-3,4% total number of dead 2014-2,9% total number of dead	-	-17,5%

	Total number of accidents	Number of accidents with a fatality	No. of dead	Total no. of injured	No. of personal injury accidents
2013.	37.163	594	650	18.476	19.126
2014.	35.010	487	536	17.991	18.527

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
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

Long term forecast and tendencies:

- Construction of the motorway E 70 Belgrade - Pančevo - Vršac
- Construction of Belgrade by-pass
Section C Bujanj 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 2015

- **Modernization of toll collection system in Serbia**

Further modernization of toll collection in Serbia will be based on the new ETC system which was put into operation at the beginning of 2007 on motorway section Belgrade - Sid.

By the end of 2015, closed toll collection system with two front toll stations and six lateral toll stations will be established on Belgrade-Subotica motorway on the section from toll station Stara Pazova to toll station Sirig. Two lateral toll stations Beška and Indija are already modernized and the modernization of the remaining toll stations Stara Pazova, Maradik, Kovilj, Novi Sad-South, Novi Sad-North and Sirig are planned for modernization.

ETC represents completely new toll collection technology solution with the best cost/performance ratio. It also provides simple and reliable operation combined with the highest security of data exchange with encrypted data transfer.

The new system is completely in compliance with EU recommendations and standards for electronic tolling interoperability.

The modernization of toll collection system is reflected in the following:

- it supports open and closed toll collection systems
- it enables payment transactions with cash, credit and debit cards and RF tags
- it performs automatic classification of vehicles
- it enables automatic vehicle licence plate recognition
- it enables electronic toll collection without stopping

SUMMARY

MAIN ASECAP KEY FIGURES

Country: REPUBLIC OF SERBIA	Indicate below how you calculate each figure provided in the "2014" column	2014 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		128,85
Forecasts of opening motorways section		128,85
Annual toll revenues* (in millions of Euros)	138,44 M EUR =115,37 + 23,07 VAT	138,44 M EUR
VAT % (Indicate the VAT % percentage to the toll revenues)		20%
Permanent staff		1290
Average daily traffic (light vehicles)		/
Average daily traffic (heavy vehicles)		/
Average daily traffic (total = light + heavy vehicles)		/
Total number of accidents		35.010
Number of personal injury accidents		18.527
Number of dead		536
Fatality rate		-2,9%
Kilometres travelled (10 ⁶ x km)		/

	Indicate below how you calculate each figure provided in the “2014” column	2014
Number of toll transactions (Total) Number of toll transactions (light vehicles): Number of toll transactions (heavy vehicles):		37.003.992 30.776.863 6.227.129
Number of toll stations		38
Number of toll lanes		196
Number of ETC lanes		143**
Number of ETC subscribers (Total): Number of ETC subscribers (light vehicles): Number of ETC subscribers (heavy vehicles):		38.463 19.019 19.444
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.

** 138 combined manual and ETC and 5 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 2014

Light vehicle (I and II class): 30.776.863 number of vehicles in 2014

Heavy vehicle (III and IV class): 6.227.129 number of vehicles in 2014