

# GENERAL NATIONAL REPORT: 2008 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 2006. No new sections were opened in 2007.  
31.12.2007.

- motorways and expressways: 640 km
- tolled motorways and expressways: 603 km

## Openings in 2008

The opening of the following sections of tolled motorways is foreseen in 2008:

| Motorway     | Section        | Length km   |
|--------------|----------------|-------------|
| E.75 South   | Nis - Pirot    | 40,0        |
| E.75 South   | Nis - Leskovac | 20,0        |
| <b>Total</b> |                | <b>60,0</b> |

## Investments in motorways

| Year  | 2007         |            | 2008*        |               |
|---|--------------|------------|--------------|---------------|
|   | mil CSD      | mil EUR    | mil CSD      | mil EUR       |
| Investments in construction of new motorways                | 11155        | 139,4      | 7557         | 91,05         |
| Investments in routine maintenance of existing motorways ** | 2050         | 25,6       | 17740        | 213,73        |
| <b>Total</b>  | <b>13205</b> | <b>165</b> | <b>25297</b> | <b>304,78</b> |

\* Source: Motorway Development and Maintenance Plan for the year 2008 - which is not still approved by the Government of Republic of Serbia;  
1 EUR = 83 CSD approx.

\*\* Figures presented for the year 2007 and 2008 included total investments in routine maintenance of road network in Serbia.

## **Financing**

| <b>Year</b>                                 | <b>2007</b>  | <b>2008</b> |
|---|--------------|-------------|
| National Budget                             | 8 %          | /           |
| Loans                                       | 23 %         | 23 %        |
| Own income (toll collection and other fees) | 31 %         | 36 %        |
| Taxes - 10% of tax on oil derivatives       | 10 %         | 24 %        |
| National investment plan funds              | 28 %         | 14 %        |
| Other sources                               | /            | 3 %         |
| <b>Total</b>                                | <b>100 %</b> | <b>100%</b> |

## **Traffic on Serbian motorway network**

According to the data published by Statistical Office of the Republic of Serbia estimated growth rate of [GDP 2007/2006 in Serbia is 7, 3%](#)

[GDP 2006: 25, 262 million EUR \(Ministry of Finance estimated\)](#)

[GDP 2007: 31, 135 million EUR \(Ministry of Finance estimated\)](#)

[Traffic growth on motorway network in 2007/2006: 6, 7 %](#) (taking into account the total volume of traffic on all tolled motorways in Serbia).

## **Toll Rates**

[Toll tariffs are different for domestic \(4, 10 Eurocent/km\) and foreign vehicles](#)

[\(5, 8 Eurocent/km\). The relation is 1:1, 41.](#)

The last correction of tariffs was in July 2006 when toll rates for domestic vehicles were increased by 20% in order to equalize the toll rates between domestic and foreign vehicles by the end of 2007. The rate for foreign vehicles remained the same.

[Inflation rate in 2006 was \(taking December 2007/December 2006 price index\) 6, 6 %.](#)

### **Toll classes:**

**Class I and V:** two axled vehicles with a maximum height above the front wheel of under 1.3 m

**Class II and VI:** vehicles with three axles, under 1.3 m in height above the front wheel

**Class III and VII:** vehicles with two or three axles, 1.3 m or over in height above the front wheel

**Class IV and VIII:** vehicles with more than three axles, 1.3 m or more in height above the front wheel

Note: Classes V, VI, VII and VIII are for vehicles with foreign license plates.

### ***Revenues***

The gross toll income in 2007 was 14.806 million CSD or 182, 8 million EUR, taking the exchange rate 1 EUR = 80, 9924 CSD. The gross toll income in 2006 was 14.120 million CSD so the toll revenue is approx. 4, 86 % more than in the year 2006 (calculated in national currency).

The main reason for increased toll income in 2007 is increased toll rate of 20% for domestic vehicles in July 2006, in order to equalize domestic and foreign toll rates by the end of 2007, and increased traffic flow by 6,7 % (taking into account total volume of traffic on motorways in Serbia).

### ***Safety***

#### **Main indicators:**

According to statistical data published by Statistical Office of the Republic of Serbia in 2006 and the report published by Ministry of Internal Affairs in 2007 the following total of accidents on all roads in Serbia was:

|                                   | 2006   | 2007   | Variation<br>2006/2007 |
|-----------------------------------|--------|--------|------------------------|
| Total number of accidents:        | 13.912 | 16.585 | 19,22 %                |
| No. of personal injury accidents: | 18.405 | 22.201 | 20,63 %                |
| No. of dead:                      | 900    | 962    | 6,9 %                  |

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

### ***Long term forecast and tendencies***

- Design and construction of the new bridge “Beska” over Danube river,
- Construction of Belgrade by-pass with construction of the new bridge near Vinca and connection with Pancevo city,
- Finalization of the motorway section Leskovac - border to FYRM,
- Construction of the second carriageway of motorway Novi Sad- Horgos, concession,
- Construction of the new motorway Belgrade - Pozega, concession,
- Construction of the motorway Nis - Dimitrovgrad

### ***Significant actions already started and foreseen for 2008***

- Modernization of toll collection system in Serbia

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

- Equalization of toll tariffs between domestic and foreign vehicle

## Summary

### **MAIN ASECAP KEY FIGURES**

|  |             |
|--|-------------|
| Country : Serbia                           | 2008        |
| Network length .....                       | 603 km      |
| 2 x 2 lanes .....                          |             |
| 2 x 3 lanes .....                          |             |
| 2 x 4 lanes.....                           |             |
| No. of km in construction                  | 60 km       |
| Forecasts of opening motorways section     | 60 km       |
| Annual toll revenue**                      | 182,8 M EUR |
| Permanent staff                            | 1228        |
| Average daily traffic (LV) ***             | N/A         |
| Average daily traffic (HV) ***             | N/A         |
| Average daily traffic (LV+HV) ***          | N/A         |
| Total number of accidents                  | 16.585*     |
| No. of personal injury accidents           | 22.201*     |
| No. of dead                                | 962*        |
| Km travelled (10 <sup>6</sup> x km)        | N/A         |
| No. of toll plazas                         | 37          |
| No. of lanes                               | 146         |
| No. of ETC equipped lanes                  | 31**        |
| No. of ETC subscribers                     | 640         |
| No. of rest areas (with stations services) | 54          |

|                    |     |
|--------------------|-----|
| No. of rest areas  | 177 |
| No. of restaurants | 20  |
| No. of hotels      | 14  |

\* Total of accidents on all roads in 2007

\*\* 27 combined manual and ETC and 4 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, II, V, VI + VII class are designated as light vehicles and vehicles belonging to III, IV, VIII + IX class are designated as heavy vehicles.

| Motorway section  | Vehicle category   |           |
|-------------------|--------------------|-----------|
|                   | light              | heavy     |
|                   | Number of vehicles |           |
| Beograd-Nis       | 13.377.519         | 3.621.412 |
| Beograd-Sid       | 4.859.434          | 1.292.052 |
| Beograd-Novı Sad  | 3.534.972          | 964.036   |
| Novı Sad-Subotica | 1.542.928          | 476.758   |
| Nis-Leskovac      | 1.793.154          | 609.171   |

Table 1 - Total traffic flow volume in 2007.