

**ASECAP STUDY AND INFORMATION DAYS  
MADRID, 23 - 25 MAY 2016**

***Naradna dialnicna spolocnost, a.s. – SLOVAK REPUBLIC  
National Motorway Company***

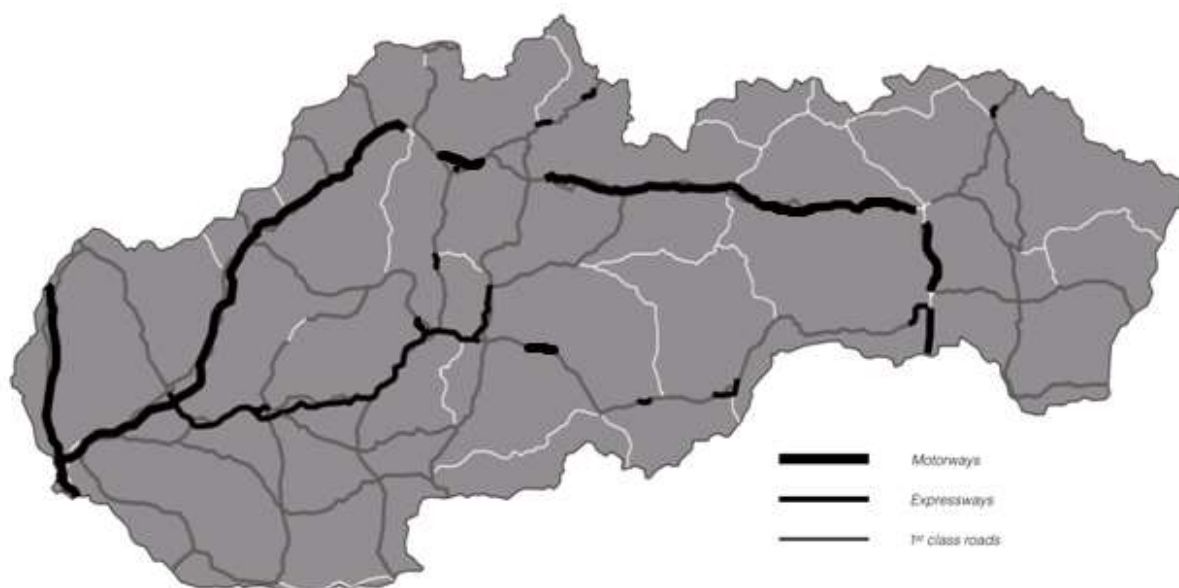
***Network length***

From 1 January 2010, the system of network charging had changed. Except for the vignette system which is still valid for vehicles under 3.5 t, the Slovak Republic introduced a multi-lane, free flow electronic tolling system. In principle, all commercial vehicles with a maximum allowable mass extending 3.5 tons are subject to a distance based toll charge. This toll depends on the road category, the vehicle category, which is established through the number of axles and emission class of the vehicle. In residential area, toll rate is zero.

**Currently charged road network in the Slovak Republic**

<b>category</b>	<b>motorways</b>	<b>expressways</b>	<b>1<sup>st</sup> class roads</b>	<b>bypasses outside residential areas</b>	<b>residential areas</b>
under 3.5 t	✓	✓	x	x	x
over 3.5 t	✓	✓	✓*	✓	x

\* approx. 49% of 1<sup>st</sup> class road network



Type of road	Road specification	2014 (km in operation)	2015 (km in operation)
<b>Motorways</b>	D1	308.880	346.444
	D2	70.699	70.699
	D3	8.905	8.905
	D4	6.995	6.995
<b>Expressways</b>	R1	164.669	164.669
	R2	29.558	45.338
	R3	17.756	17.756
	R4	24.070	24.070
	R6	2.251	2.251
<b>1<sup>st</sup> class roads*</b>	I/11	27.287	27.287
	I/12	3.057	3.057
	I/13	10.930	10.930
	I/15	35.257	35.257
	I/18	229.008	229.022
	I/2	51.776	51.776
	I/49	8.933	8.933
	I/50	307.573	307.573
	I/51	114.978	114.978
	I/59	72.258	72.089
	I/61	112.508	112.508
	I/62	32.798	32.798
	I/63	67.329	67.329
	I/64	67.271	67.271
	I/65	95.998	95.998
	I/66	80.059	80.059
	I/68	23.267	23.267
	I/69	11.411	11.411
	I/70	10.911	10.911
	I/72	31.991	31.991
I/73	37.481	37.481	
I/75	94.484	98.344	
I/76	43.381	43.381	
I/79	66.005	66.005	
<b>Total length</b>		<b>2269.764</b>	<b>2337.483</b>

\* National Motorway Company owns only motorways and expressways but is a toll collector on some 1<sup>st</sup> class roads too. Therefore later in presentation there are published only figures regarding to motorway and expressway network, but revenues contain also 1<sup>st</sup> class roads.

## **Tunnels and bridges charging policy**

In the Slovak Republic, there are not any special rates for tunnels or bridges. Both of them are charged according to rules of charging for motorways, expressways and 1<sup>st</sup> class roads. If the tunnel or bridge is a part of section charged by zero rate, they are both charged by the rate zero.

### **Tunnels and bridges which are part of motorways and expressways**

<b>Road</b>	<b>Tunnel</b>		<b>Bridge</b>	
	Number	Length (m)	Number	Length (m)
Motorways	5	8 603	430	48 566.51
Expressways	0	0	296	22 863.89
Total	5	8 603	726	71 430.4

## **Openings in 2016**

NDS is planning to open following sections in 2016:

<b>Name of the section</b>		<b>km</b>
<b>D3</b>	Svrcinovec – Skalite – border crossing SR/PR	15.460
<b>R2</b>	Zvolen, east - Pstrusa	7.850
	Ruskovce - Pravotice ½ profile	9.560
<b>Total length in km</b>		<b>32.870</b>

## **Investments**

Narodna diaľnicna spoločnosť, a.s. (NMC) invested to new sections construction in **2015**:

**892,772,979 €**

For motorways, expressways and selected I. class roads in operation invested for reconstruction, maintenance and operation:

**58,234,848 €**

For **2016**, there is planned for new sections construction:

**1,130,926,436 €**

and for reconstruction, maintenance and operation:

**74,152,924 €**

### **Building sites in operation as for the 31.12.2015**

<b>Name of the section</b>		<b>km</b>
<b>D1</b>	Nova Polhora, feeder	1.452
	Triblavina, intersection	1.63
	Hubova - Ivachnova	15.28
	Hricovske Podhradie – Lietavska Lucka	11.32
	Lietavska Lucka – Visnove – Dubna Skala	13.51
<b>D3</b>	Skalite – border crossing SR/PR (half profile)	3.18
	Svrcinovec – Skalite (half profile)	12.28
	Zilina, Strazov – Zilina, Brodno	4.25
<b>R2</b>	Zvolen, east - Pstrusa	7.85
	Ruskovce – Pravotice (half profile)	9.56
<b>Total length in km</b>		<b>80.312</b>

### **New building sites to be opened in 2016**

<b>Name of the section</b>		<b>km</b>
<b>D1</b>	Triblavina, intersection	1.630
	Budimir - Bidovce	14.400
	Presov, west – Presov, south	7.870
<b>D3</b>	Cadca, Bukov - Svrcinovec	5.670
<b>Total length in km</b>		<b>29.57</b>

## **Financing**

NDS is funded through a multi-pillar system. It disposes of the following funding resources:

1. State Budget
2. Funds of the European Union
3. NDS loans
4. Vignettes and toll
5. Other (rent, services...)

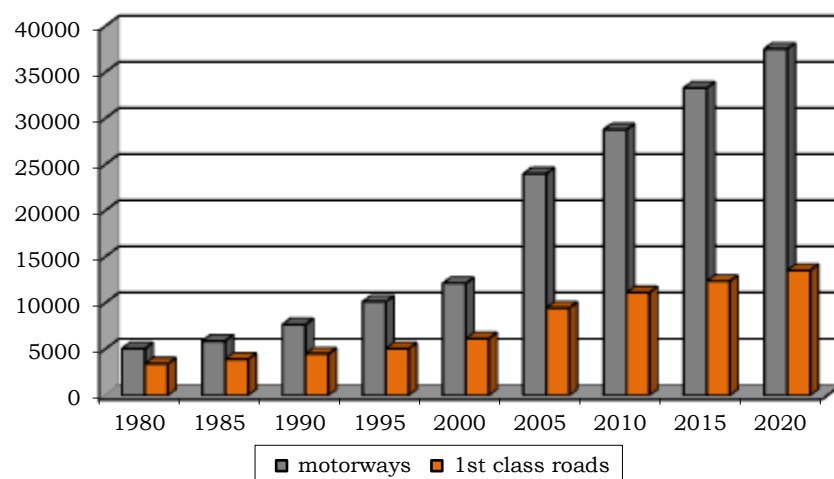
The maximum part of such funds is used for the construction of motorways and expressways.

## **Traffic**

<b>Year/GDP</b>	<b>I. quarter (mil. €)</b>	<b>II. quarter (mil. €)</b>	<b>III. quarter (mil. €)</b>	<b>IV. quarter (mil. €)</b>
<b>2014</b>	17 419.7	18 841.7	19 937.4	19 361.6
<b>2015</b>	17 858.6	19 424.7	20 618.6	20 168.9

Traffic growth in Slovakia is in accordance with the Gross Domestic Product. Data on traffic development are from the State Traffic Counting performed every 5 years (in the period 1980-2010) and are forecasted for the period 2015-2020.

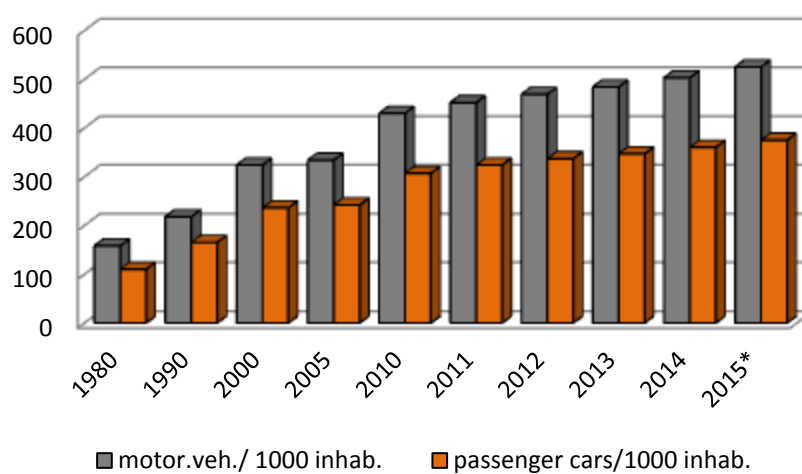
<b>Year</b>	<b>Motorways</b>	<b>1st class roads</b>	<b>Year</b>	<b>Motorways</b>	<b>1st class roads</b>
<b>1980</b>	5066	3428	<b>2005</b>	24002	9466
<b>1985</b>	5895	3928	<b>2010</b>	28782	11129
<b>1990</b>	7686	4500	<b>2015</b>	33315	12368
<b>1995</b>	10147	5070	<b>2020</b>	37531	13546
<b>2000</b>	12150	6164			



Year	no. of inhabitants (thous.)	no. of vehicles (thous.)	no. of light vehicles (thous)	motor.veh./ 1000 inhab.	passenger cars/1000 inhab.
<b>1980</b>	4996	790	552	158	110
<b>1990</b>	5311	1156	876	218	165
<b>2000</b>	5403	1752	1274	324	236
<b>2005</b>	5389	1801	1303	334	242
<b>2010</b>	5435	2339	1669	430	307
<b>2011</b>	5404	2442	1749	452	324
<b>2012</b>	5410	2537	1824	469	337
<b>2013</b>	5415	2623	1880	484	347
<b>2014</b>	5421	2726	1949	503	360
<b>2015</b>	5424*	2844	2035	525	375

\* as of 30.09.2015

### Motorization level



Traffic volume especially on motorways has a rapid increasing trend caused by growing of number of vehicles on road network but also thanks to acceleration of new motorway sections construction in the Slovak Republic.

### ***Tolling system and tolling technologies used***

In 2015, vehicles were divided into 2 groups according to weight of vehicle:

1. below 3.5 t (vignette system)
2. over 3.5 t (ETC system)

#### 1. Vignette system

Types of vignettes for the year 2015 were:

1. Year vignette
2. Month vignette
3. 10 days vignette

All types of vignettes are both for motor vehicles (category M1, N1, M1G and N1G) and trailed vehicles (category O1, O2). Vignette for trailed vehicle is necessary when total weight of motor vehicle and trailed vehicle exceed 3.5 t.

#### **Vignettes for 2015**

<b>One - year vignettes</b>		
1	Motor vehicles up to 3.5 t	50 €
2	Trailed vehicle	50 €
<b>Month vignettes</b>		
1	Motor vehicles up to 3.5 t	14 €
2	Trailed vehicle	14 €
<b>10-days vignettes</b>		
1	Motor vehicles up to 3.5 t	10 €
2	Trailed vehicle	10 €

## 2. Electronic toll collection system:

The Slovak Electronic Toll Collection System (ETC system) uses technologically innovative “hybrid” OBUs integrating three technologies:

- satellite GPS technology for determining the position – collection of data about the use of Specified Road Sections,
- GSM/GPRS technology for the communication within mobile networks – serving for the transmission of data among the OBU and other information subsystems within the Electronic Toll System,
- microwave DSRC technology for short-distance communication – serving for the control of toll payers within the toll collection control process.

### Tolled road network

In 2015 ETC system continues to operate more than 17,000 km of roads, integrated in the system since 2014. Besides that it expanded on about 57 km of newly built sections.

### Toll rates

Since 2014, ETC system continues using specified tolling strategy - favoring higher emission class vehicles, as well as reducing avoidance primary road network through parallel 1<sup>st</sup> class roads (by equalization of toll rates on 1<sup>st</sup> class roads parallel with motorways and expressways with toll rates on motorways and expressways), and also providing discounts for every vehicle depending on driven km.

Toll rates on road network covered only with traffic monitoring (part of the 1<sup>st</sup> class road network, total 2<sup>nd</sup> and 3<sup>rd</sup> class road network) equals zero for all vehicles.



**Toll rates for the use of specified sections of motorways and expressways**

	Vehicle category		Emission class		
			EURO 0 – II	EURO III, IV	EURO V, VI, EEV
<b>Heavy vehicles</b>	3.5 t – to 12 t		0.103 €	0.093 €	0.080 €
	12 t and more	2 axles	0.221 €	0.200 €	0.172 €
		3 axles	0.233 €	0.211 €	0.181 €
		4 axles	0.242 €	0.219 €	0.188 €
		5 axles	0.233 €	0.211 €	0.181 €
<b>Busses</b>	3.5 t – to 12 t		0.060 €	0.050 €	0.030 €
	12 t and more		0.110 €	0.100 €	0.060 €

**Toll rates for the use of specified sections of the 1st class roads parallel with motorways and expressways**

	Vehicle category		Emission class		
			EURO 0 – II	EURO III, IV	EURO V, VI, EEV
<b>Heavy vehicles</b>	3.5 t – to 12 t		0.103 €	0.093 €	0.080 €
	12 t and more	2 axles	0.221 €	0.200 €	0.172 €
		3 axles	0.233 €	0.211 €	0.181 €
		4 axles	0.242 €	0.219 €	0.188 €
		5 axles	0.233 €	0.211 €	0.181 €
<b>Busses</b>	3.5 t – to 12 t		0.040 €	0.030 €	0.020 €
	12 t and more		0.080 €	0.070 €	0.040 €

**Toll rates for the use of specified sections of the 1st class roads not parallel with motorways and expressways**

	Vehicle category		Emission class		
			EURO 0 – II	EURO III, IV	EURO V, VI, EEV
<b>Heavy vehicles</b>	3.5 t – to 12 t		0.080 €	0.072 €	0.062 €
	12 t and more	2 axles	0.172 €	0.156 €	0.133 €
		3 axles	0.181 €	0.164 €	0.140 €
		4 axles	0.185 €	0.167 €	0.143 €
		5 axles	0.181 €	0.164 €	0.140 €
<b>Busses</b>	3.5 t – to 12 t		0.040 €	0.030 €	0.020 €
	12 t and more		0.080 €	0.070 €	0.040 €

## **Revenues**

<b>Vignette</b>	<b>2014</b>	<b>2015</b>	<b>% growth</b>
Yearly	33 289 623	35 278 708	5.98%
Monthly	4 356 240	4 677 633	7.38%
10 days	18 366 032	19 280 550	4.98%
<b>Total</b>	<b>56 011 896</b>	<b>59 236 892</b>	<b>5.76%</b>

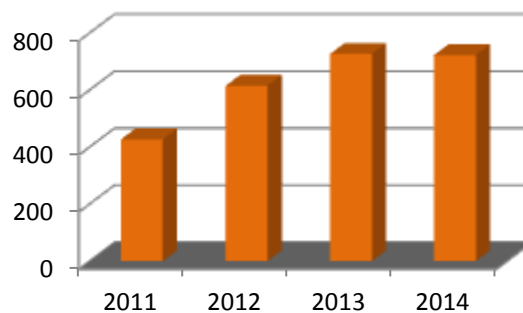
<b>Toll collection</b>		<b>2014</b>	<b>2015</b>	<b>% growth</b>
Heavy vehicles	3.5 t – 12 t	14 346 810	13 933 589	-2.88%
	over 12 t	163 220 284	168 090 168	2.98%
Busses	3.5 t – 12 t	271 129	264 035	-2.62%
	over 12 t	5 561 626	5 101 483	-8.27%
<b>Total</b>		<b>183 399 850</b>	<b>187 389 274</b>	<b>2.18%</b>

There is a total rise in revenues of vignettes 5.76 % and rise in revenues of toll 2.18 % comparing years 2014 and 2015. Revenues only from motorways and expressways are **64%** of whole toll revenue.

## **Safety**

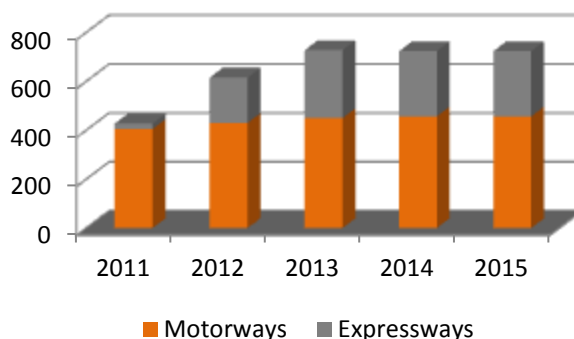
Table below shows number of all accidents (fatal, seriously and slightly injured), on road network in the Slovak Republic. Significant reduction in number of accident was caused by a change of legislation in 2009. Since 2009 legislation increased the minimum amount of damage, when police forces have to be called and accidents were divided into casualty (accidents with a little damage which are not solved by police forces but through insurance company directly) and accidents (when the police forces are called). Until 2011, there was not any difference between accidents on motorways and expressways mainly because of small amount of expressways network. Since 2011, the table shows only accidents on motorways and expressways. Data are registered statistically and shown in tables. Chart below shows only data since 2011 due to above mentioned. Increasing of number of accidents can be caused by increasing of expressway network.

Year	No. of accidents	Fatal injury	Seriously injured	Slightly injured
2000	50932	628	2204	7890
2005	59991	560	1974	8516
2010	4270	135	367	1695
2011	427	9	30	-
2012	615	8	37	195
2013	727	14	41	164
2014	723	17	42	216
2015	710	19	61	212



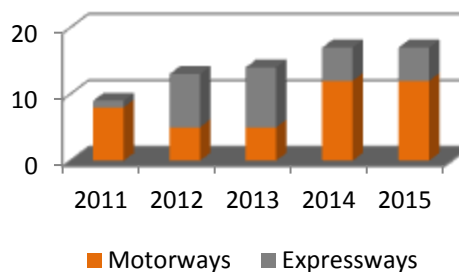
### Number of accidents

Year	No. of accidents	
	Motorways	Expressways
2011	405	22
2012	430	185
2013	449	278
2014	456	267
2015	442	268



### Number of fatal injuries

Year	No. of fatal injuries	
	Motorways	Expressways
2011	8	1
2012	5	8
2013	5	9
2014	12	5
2015	13	6



	<b>Definition and method of calculation</b>	<b>In number for one billion kilometres travelled in 2015*</b>	<b>2014</b>	<b>2015</b>	<b>Variation in % in 2014/2015</b>
<b>Personal injury rate</b>	People that have received any injury except for one time treatment that do not require specialist's examination or sick absence	<b>x</b>	<b>258</b>	<b>273</b>	<b>+5,8 %</b>
<b>Fatal accident rate</b>	Number of people that have received very serious injuries leading to their death at the moment of the accident or within 24 hours subsequent to the accident	<b>x</b>	<b>17</b>	<b>19</b>	<b>+12%</b>
<b>Rate of dead*</b>	No measuring of this figure	<b>x</b>	<b>x</b>	<b>x</b>	<b>x</b>

\* this figure is not measured in the Slovak Republic. Kilometres travelled are counted at the basis of heavy vehicles (vehicles over 3.5 t) and injuries include also injuries caused by personal vehicles (vehicles under 3.5 t)

***Significant actions already started (and/or to be achieved in 2015 and foreseen for 2016***

Since January 2016 a new system of electronic vignette has started, greatly increasing customer's comfort – not only by removing the requirement of sticking a vignette on the windscreen, but also greatly expanding the opportunities for customer services, in addition to the actual gas stations via the Internet and mobile application.

### MAIN ASECAP KEY FIGURES

<b>Country: Slovak Republic</b>	<b>Indicate below how you calculate each figure provided in the “2015” column</b>	<b>2015 Figure</b>
Network length (Km).....	Figure include motorways and expressways	700 km
Number of km in construction	Summary of lengths of each building site in operation	80,312 km
Forecasts of opening motorways section	Summary of lengths of each section planned to be opened in 2016	29,57 km
Annual toll revenues* (in millions of Euros)	Summary of all revenues from vignettes and ETC	246.6 mil. €
Annual ETC revenues from motorways and expressways* (in millions of Euros)	Summary of revenues from ETC for motorways and expressways only	119.6 mil. €
VAT % (Indicate the VAT % percentage to the toll revenues)	VAT rate is the Slovak Republic	20%
Permanent staff	Number of permanent staff without any agreement based contracts	1 450
Average daily traffic (light vehicles)	Average of measured data between individual intersections	17 587
Average daily traffic (heavy vehicles)		5 326
Average daily traffic (total = light + heavy vehicles)		22 913

Total number of accidents	Total number of accidents when the police forces were called	710
Number of personal injury accidents	People that have received any injury except for one time treatment that do not require specialist's examination or sick absence	273
Number of dead	Number of people that have received very serious injuries leading to their death at the moment of the accident or within 24 hours subsequent to the accident	19
Fatality rate		x
Kilometres travelled		1 636 mil.
Number of toll transactions (Total) Number of toll transactions (light vehicles): Number of toll transactions (heavy vehicles):	Number of transactions in ETC for vehicles over 3.5. t including busses	659 mil.
Number of toll stations		x
Number of toll lanes		x
Number of ETC lanes		x
Number of ETC subscribers (Total): Number of ETC subscribers (light vehicles): Number of ETC subscribers (heavy vehicles):	Number of OBUs in ETC for vehicles over 3.5. t including busses	257 694

Number of service areas (equipped with petrol stations)	Number of service areas on both sides of motorways and expressways	40
Number of rest areas	Number of all rest areas on both sides of motorways and expressways with or without any services	78
Number of restaurants	Number of restaurants on both sides of motorways and expressways	20
Number of hotels	Number of hotels on both sides of motorways and expressways	3

\*please provide the figure VAT and other taxes excluded.