

**ASECAP STUDY AND INFORMATION DAYS  
LISBON, 27 - 29 MAY 2015**

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

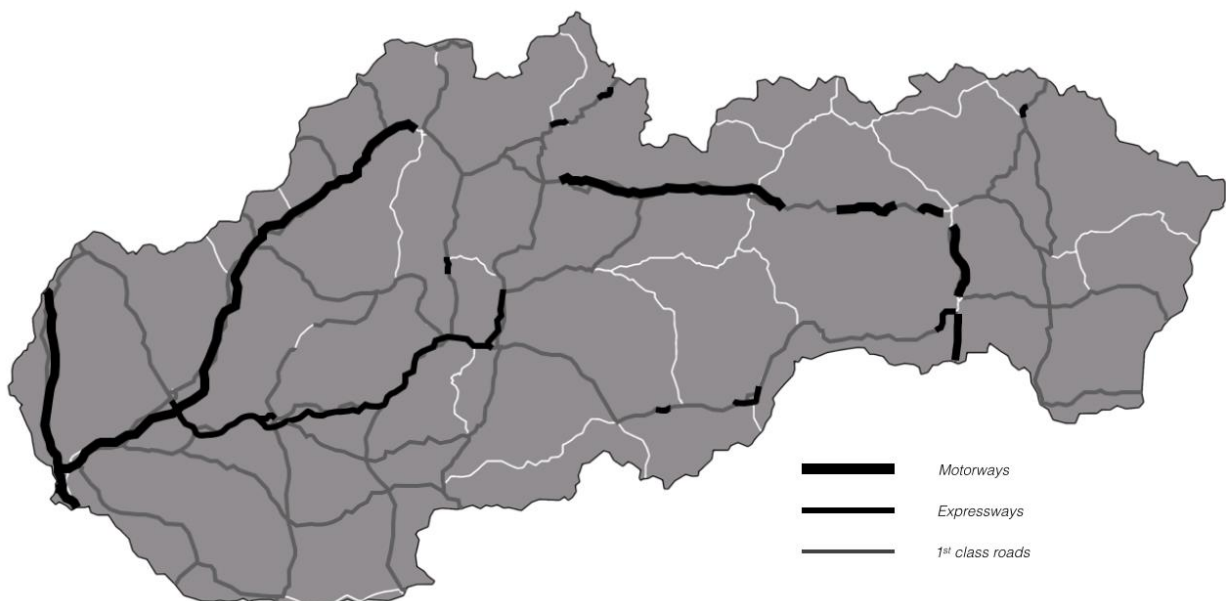
***Network length***

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	2013 (km in operation)	2014 (km in operation)
<b>Motorways</b>	D1	308.014	308.880
	D2	69.515	70.699
	D3	8.905	8.905
	D4	6.566	6.995
<b>Expressways</b>	R1	164.938	164.669
	R2	30.961	29.558
	R3	17.751	17.756
	R4	24.070	24.070
	R6	2.283	2.251
<b>1<sup>st</sup> class roads*</b>	I/11	27.258	27.287
	I/12	3.057	3.057
	I/13	10.882	10.930
	I/15	0.000	35.257
	I/18	204.411	229.008
	I/2	52.137	51.776
	I/49	9.336	8.933
	I/50	309.331	307.573
	I/51	57.191	114.978
	I/59	72.490	72.258
	I/61	112.930	112.508
	I/62	32.847	32.798
	I/63	67.668	67.329
	I/64	67.563	67.271
	I/65	98.202	95.998
	I/66	80.320	80.059
	I/68	23.559	23.267
	I/69	11.115	11.411
	I/70	0.000	10.911
	I/72	31.941	31.991
I/73	37.600	37.481	
I/75	41.573	94.484	
I/76	43.623	43.381	
I/79	28.442	66.005	
<b>Total length</b>		<b>2056.479</b>	<b>2269.764</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	4	8 015	329	34 643,7
Expressways	0	0	289	26 025,5
<b>Total</b>	<b>4</b>	<b>8 015</b>	<b>618</b>	<b>60 669,2</b>

### **Openings in 2015**

NDS is planning to open following sections in 2015:

<b>Name of the section</b>		<b>km</b>
<b>D1</b>	Janovce – Jablonov I. section	9.000
	Janovce – Jablonov II. section	9.540
	Fricovce - Svinia	11.220
	Dubna Skala - Turany	16.490
<b>R2</b>	Pstrusa - Krivan	10.380
<b>Total length in km</b>		<b>56.630</b>

## **Investments**

Narodna diaľnicna spoločnosť, a.s. (NMC) invested to new sections construction in **2014**:

**515,890,238 €**

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

**58,875,037 €**

For **2015**, there is planned for new sections construction:

**1,227,085,528 €**

and for reconstruction, maintenance and operation:

**70,476,587 €**

## **Building sites in operation as for the 31.12.2014**

<b>Name of the section</b>		<b>km</b>
<b>D1</b>	Janovce – Jablonov I. section	9.00
	Janovce – Jablonov II. section	9.54
	Dubna Skala - Turany	16.49
	Fricovce - Svinia	11.22
	Lietavska Lucka – Visnove – Dubna Skala	13.51
	Hubova - Ivachnova	15.28
	Hricovske Podhradie – Lietavska Lucka	11.32
<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
	Pstrusa - Krivan	10.38
	Ruskovce – Pravotice (half profile)	9.56
<b>Total length in km</b>		<b>133.86</b>

## New building sites to be opened in 2015

Name of the section		km
D1	Triblavina, intersection	1.630
	Budimir - Bidovce	14.400
	Presov, west – Presov, south	7.870
D3	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.

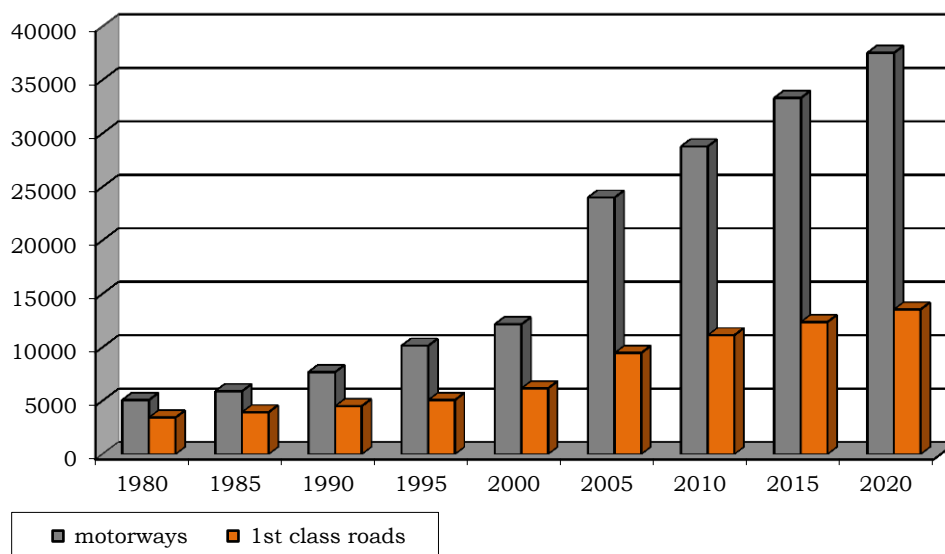
## Traffic

Year/GDP	I. quarter (mil. €)	II. quarter (mil. €)	III. quarter (mil. €)	IV. quarter (mil. €)
<b>2013</b>	17 036.3	18 399.6	19 399.9	18 757.3
<b>2014</b>	17 340.0	18 755.5	19 846.2	19 265.5

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.

Year	Motorways	1st class roads	Year	Motorways	1st class roads
<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			

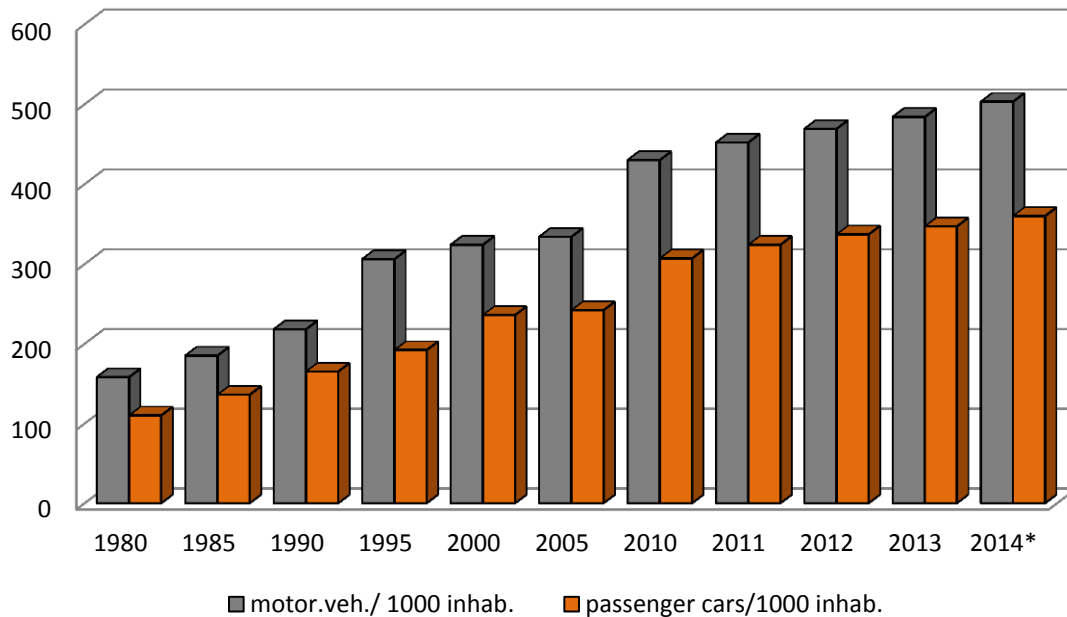
### Development of annual average daily traffic



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>1985</b>	5177	959	706	185	136
<b>1990</b>	5311	1156	876	218	165
<b>1995</b>	5368	1645	1033	306	192
<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

\* as of 30.09.2014

## 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 2014, 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 2014 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 2014**

<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

From 1 January 2014 ETC system expanded significantly - tolled 1<sup>st</sup> class road network increases by approx. 220 km by adding 6 additional, previously non-tolled roads, and traffic monitoring was introduced on the rest of the overall road network including specified transit corridors inside residential areas.



Satellite technology of the toll collection has therefore been covering almost 17 770 km of selected road sections in the Slovak Republic, including about 660 km of selected sections of motorways and expressways, 3 630\* km specified sections of 1<sup>st</sup> class roads, other 3 640 km specified sections of 2<sup>nd</sup> class roads and more than 9 840 km of specified 3<sup>rd</sup> class roads which are at the moment tolled by zero rate and subject of monitoring only.

\* different to real overall length of 1<sup>st</sup> class road network in the Slovak Republic (approx. 3 300 km) due to virtual combinations of residential area transit corridors

## Toll rates

From 1 January 2014, ETC system established new tolling strategy – toll rates for cargo transport (toll rates for busses remains the same) were changed towards favoring higher emission class vehicles, as well as towards 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 discounts for every vehicles depending on driven km was introduced.

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	0.222 €	0.201 €	0.172 €
		3 axles	0.234 €	0.212 €	0.181 €
		4 axles	0.243 €	0.220 €	0.188 €
		5 axles	0.234 €	0.212 €	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	0.222 €	0.201 €	0.172 €
		3 axles	0.234 €	0.212 €	0.181 €
		4 axles	0.243 €	0.220 €	0.188 €
		5 axles	0.234 €	0.212 €	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>2013</b>	<b>2014</b>	<b>% growth</b>
Yearly	30 402 375	33 289 623	9,5%
Monthly	4 003 417	4 356 240	8,8%
10 days	17 695 433	18 366 032	3,8%
<b>Total</b>	<b>52 101 225</b>	<b>56 011 896</b>	<b>7,5%</b>

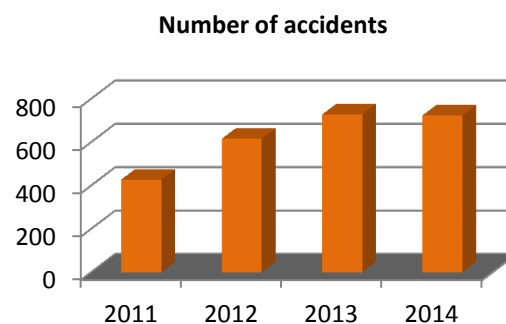
<b>Toll collection</b>		<b>2013</b>	<b>2014</b>	<b>% growth</b>
Heavy vehicles	3.5 t – 12 t	12 550 995	14 346 810	14,3%
	over 12 t	138 151 470	163 220 284	18,1%
Busses	3.5 t – 12 t	225 078	271 129	20,5%
	over 12 t	4 598 899	5 561 626	20,9%
<b>Total</b>		<b>158 628 700</b>	<b>183 399 850</b>	<b>15,6%</b>

There is a total rise in revenues of vignettes 7.5 % and rise in revenues of toll 15.6 % comparing years 2013 and 2014. Revenues only from motorways and expressways are **62%** of whole toll revenue.

## **Safety**

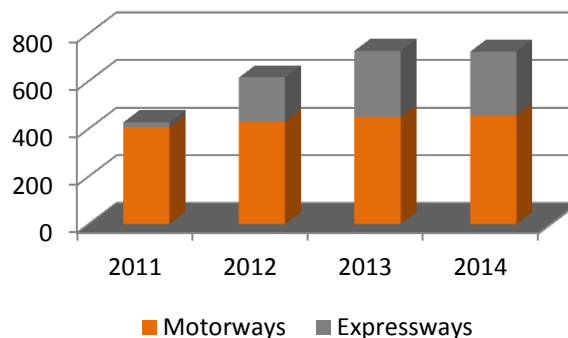
Table below shows number of all accidents (fatal, seriously and slightly injured), on road network in the Slovak Republic. Significant reduction in number of accident was caused by a change of legislation in 2009. Since 2009 legislation increased the minimum amount of damage, when police forces have 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



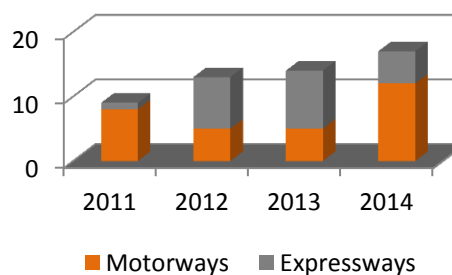
### Number of accidents

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



### Number of fatal injuries

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



	<b>Definition and method of calculation</b>	<b>In number for one billion kilometres travelled in 2014*</b>	<b>2013</b>	<b>2014</b>	<b>Variation in % in 2013/2014</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>205</b>	<b>258</b>	<b>+20%</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>14</b>	<b>17</b>	<b>+18%</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)

### ***Long-term forecasts and tendencies***

In Slovakia every motorway and expressway in operation is charged as soon as a new section is opened. Therefore NDS does not have in operation non – charged network except for already mentioned bypasses and residential areas. Table shows plans for construction of expressway and motorway network in Slovakia until the year 2019.

	<b>Forecasted annual growth (km)</b>			
	2016	2017	2018	2019
motorways	0	11.2	25.4	0
expressways	74.37	42.7	47.33	67.17

### ***Significant actions already started (and/or to be achieved in 2014 and foreseen for 2015)***

Národná diaľničná spoločnosť prepares the implementation of a new system of electronic vignette. This system will increase customer's comfort and wider possibilities for vignette buying. Driver may buy them by internet or by terminals at patrol stations. Exact technology will arise from the ongoing tender.

### MAIN ASECAP KEY FIGURES

<b>Country: Slovak Republic</b>	<b>Indicate below how you calculate each figure provided in the “2014” column</b>	<b>2014 Figure</b>
Network length (Km).....	Figure include motorways and expressways	651 km
Number of km in construction	Summary of lengths of each building site in operation	133,86 km
Forecasts of opening motorways section	Summary of lengths of each section planned to be opened in 2015	56,63 km
Annual toll revenues* (in millions of Euros)	Summary of all revenues from vignettes and ETC	239 mil. €
Annual ETC revenues from motorways and expressways* (in millions of Euros)	Summary of revenues from ETC for motorways and expressways only	113,7 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	1 641
Average daily traffic (light vehicles)	Average of measured data between individual intersections	16 539
Average daily traffic (heavy vehicles)		4 887
Average daily traffic (total = light + heavy vehicles)		21 427

Total number of accidents	Total number of accidents when the police forces were called	723
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	258
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	17
Fatality rate		x
Kilometres travelled		1 503 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	609 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	246 912



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	76
Number of restaurants	Number of restaurants on both sides of motorways and expressways	19
Number of hotels	Number of hotels on both sides of motorways and expressways	3

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