# ASECAP STUDY AND INFORMATION DAYS DUBROVNIK, 26 - 28 MAY 2013

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

## Network length

From January 1<sup>st</sup>, 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 multilane, 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.

## Currently charged road network in the Slovak republic

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



Type of road	Road	2011	2012
	specification	(km in operation)	(km in operation)
Motorways	D1	309.369	308.014
	D2	69.515	69.515
	D3	8.905	8.905
	D4	6.566	6.566
Expressways	R1	165.265	164.938
	R2	30.961	30.961
	R3	17.265	17.751
	R4	10.025	9.895
	R6	2.283	2.283
I. class roads*	I/11	28.143	27.258
	I/12	3.057	3.057
	I/13	10.882	10.882
	I/18	206.460	204.411
	I/2	52.137	52.137
	I/49	9.706	9.336
	I/50	309.268	309.331
	I/51	53.092	57.191
	I/59	71.383	71.348
	I/61	113.230	112.930
	I/62	32.327	32.847
	I/63	67.714	67.668
	I/64	66.863	65.737
	I/65	99.473	98.202
	I/66	80.972	80.320
	I/68	23.559	23.559
	I/69	11.115	11.115
	I/72	32.034	31.941
	I/73	38.040	37.600
	I/75	0.000	37.166
	I/76	43.356	43.623
	I/79	26.633	26.734
Total length		1999.598	2033.221

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

## Openings in 2013

NDS is planning to open following sections in 2013.

Name	Name of the section	
D1	Janovce – Jablonov	9.000
R4	Kosice - Milhost	14.200
Total	Total length in km	

#### **Investments**

Narodna dialnicna spolocnost, a.s. (NMC) invested to new sections construction in **2012**:

## 158,000,000 €

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

# 53,150,000 €

For **2013** is planned for new sections construction:

and for reconstruction, maintenance and operation:

60,968,000 €

## Building sites in operation as for the 31.12.2012

Name	Name of the section					
D1	Janovce – Jablonov I. section	9.000				
	Janovce – Jablonov II. section	9.540				
	Dubna Skala - Turany	16.410				
	Fricovce - Svinia	11.220				
<b>D</b> 3	Skalite – border crossing SR/PR	3.180				
R2	Ziar nad Hronom bypass (half profile)	6.560				
R4						
Total	length in km	69.303				

## New building sites to be opened in 2013

Name	Name of the section					
D1	Hubova - Ivachnova	15.280				
	Lietavska Lucka – Dubna Skala	13.510				
D3	Zilina, Strazov – Zilina, Brodno	4.250				
	Svrcinovec - Skalite (half profile)	12.280				
R2	Ruskovce – Pravotice (half profile)	10.760				
	Zvolen east - Pstrusa	7.850				
	Pstrusa - Krivan					
Total	Total length in km 74.3					

# 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.

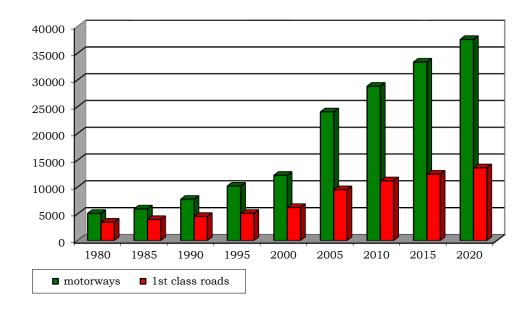
## **Traffic**

Year/GDP	I. quarter (mil. €)	II. quarter (mil. €)	III. quarter (mil. €)	IV. quarter (mil. €)
2011	15 857.6	17 201.0	18 198.8	17 850.9
2012	16 549.6	17 822.3	18 879.0	

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 1980-2005) and are forecasted for the period 2010-2020.

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

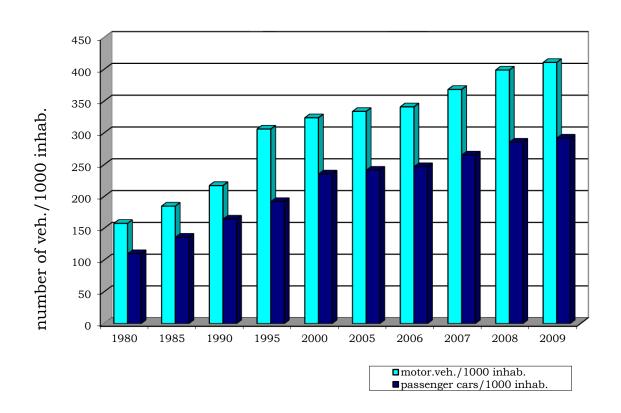
# Development of annual average daily traffic



	number of	no. of	no. of light		passenger
	inhabitants	vehicles	vehicles	motor.veh./	cars/1000
Year	(thous.)	(thous.)	(thous)	1000 inhab.	inhab.
1980	4996	790	552	158	110
1985	5177	959	706	185	136
1990	5311	1156	876	218	165
1995	5368	1645	1033	306	192
2000	5403	1752	1274	324	236
2005	5389	1801	1303	334	242
2010	5435	2339	1669	430	307
2011	5404	2442	1749	452	324
2012*	5408	2527	1815	467	336

<sup>\*</sup>no. of inhabitants as of 30.9.2012

#### **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.

### Tolls and vignettes

In 2012, 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 2012 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 2012:

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

## 2. Electronic toll collection system:

Shortly after ETC application, another form of toll collection - ticketing was introduced too. An advantage of the ticketing is that if using one of 4 specified transit road sections an On-Board Unit is not needed, the driver does not pay the guarantee for the On-Board Unit and the driver also does not pay the minimum toll.

The ticket is valid for 18 hours from issuing the confirmation of toll payment. The ticket may only be purchased at the transit border crossing. The amount of payment for ticket is calculated according to the basic transit route, vehicle category, number of axles and emission class.

Toll Rates for the Use of Specified Sections of Motorways and Expressways

Vehicle category			Emission class		
			EURO 0 - II	EURO III	EURO IV, V, EEV
	3.5 t – 12 t		0,093	0,086	0,083
		2 axles	0,193	0,183	0,179
Heavy		3 axles	0,202	0,193	0,189
vehicles	over 12 t	4 axles	0,209	0,199	0,196
		5 axles	0,206	0,193	0,189
Busses	3.5 t – 12 t		0,060	0,050	0,030
	over 12 t		0,110	0,100	0,060

Toll Rates for the Use of Specified Sections of the 1st Class Roads

Vehicle category			Emission class		
			EURO 0 - II	EURO III	EURO IV, V, EEV
	3.5 t – 12 t		0,070	0,063	0,063
	over 12 t	2 axles	0,146	0,136	0,136
Heavy		3 axles	0,153	0,146	0,143
vehicles		4 axles	0,156	0,149	0,146
		5 axles	0,153	0,146	0,143
Busses	3.5 t – 12 t		0,040	0,030	0,020
	over 12 t		0,080	0,070	0,040

Vignette prices as well as toll rates were not changed during the years 2011 and 2012.

#### Revenues

Vignettes	2011	2012	% growth
Year	27 658 081 €	28 834 959 €	4.1%
Month	4 125 266 €	3 701 765 €	-11.4%
10 days	14 463 051 €	18 015 109 €	19.8%
Total	46 246 398 €	50 551 833 €	8.5%

Toll collection		2011	2012	% growth	
Heavy	3.5 t – 12 t	13 291 190 €	12 689 624 €	-4.5%	
vehicles	over 12 t	129 938 635 €	133 605 837 €	2.8%	
Busses	3.5 t – 12 t	220 517 €	223 285 €	1.3%	
	over 12 t	4 948 295 €	4 745 718 €	-4.1%	
Ticketing		5 513 285 €	4 041 367 €	-26.7 %	
Total		153 911 922 €	155 305 831 €	0.9%	

Ticketing price decrease was caused by reduction of defined sections from previous 18 to today's 4.

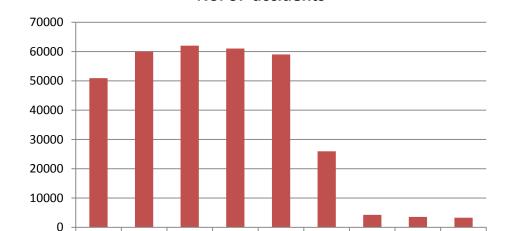
There was a total rise in revenues of vignettes **8.5** % and rise in revenues of toll **0.9** % comparing years 2011 and 2012.

## Safety

Table below shows number of all accidents including fatal, seriously and slightly injured on whole road network in 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). They are registered statistically and shown in the table and the chart below.

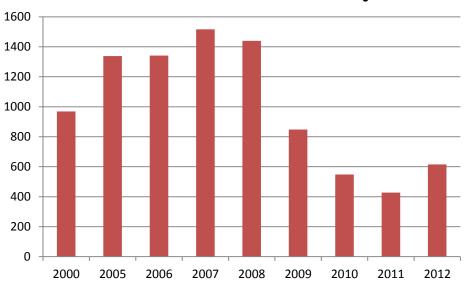
Year	No. of accidents	Fatal injury	Seriously injured	Slightly injured	Year	No. of accidents	Fatal injury	Seriously injured	Slightly injured
2000	50932	628	2204	7890	2009	25989	347	1408	7126
2005	59991	560	1974	8516	2010	4270	135	367	1695
2006	62040	579	2032	8660	2011	3557	150	380	1787
2007	61051	627	2029	9283	2012	3307	123	365	1615
2008	58996	559	1792	9192					

No. of accidents

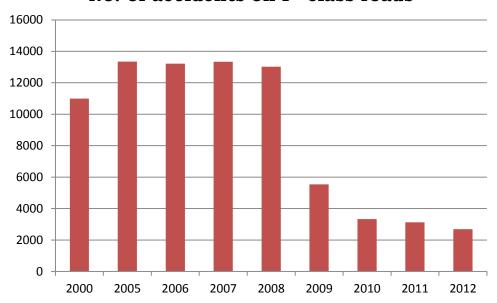


	No of a	accidents	Year	No of accidents		
Year	Motorways	I <sup>st</sup> class roads		Motorways	I <sup>st</sup> class roads	
2000	969	10 998	2009	848	5536	
2005	1338	13 352	2010	548	3331	
2006	1341	13 218	2011	427	3130	
2007	1516	13 341	2012	615	2692	
2008	1439	13 024				

No. of accidents on Motorways

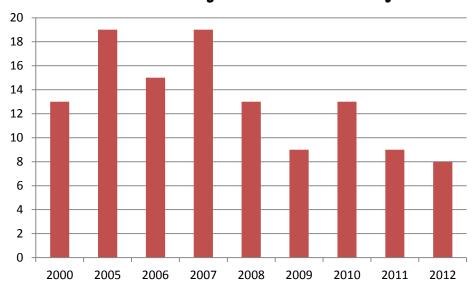


No. of accidents on Ist class roads

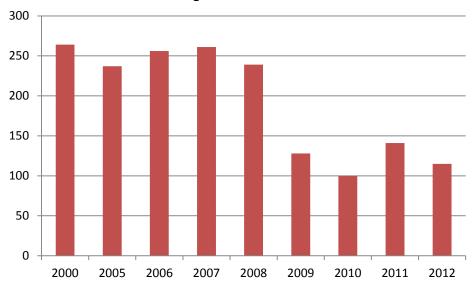


Year	No. of fa	tal injuries	Year	No. of fatal injuries		
rear	Motorways	Ist class roads		Motorways	Ist class roads	
2000	13	264	2009	9	128	
2005	19	237	2010	13	100	
2006	15	256	2011	9	141	
2007	19	261	2012	8	115	
2008	13	239				

No. of fatal injuries on motorways



No. of fatal injuries on Ist class roads



## 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 rural areas. Tables show plans for construction of expressway and motorway network in Slovakia until the year 2020.

	Forecasted annual growth (km)							
	2013	2014	2015	2016	2017	2018	2019	2020
motorways	47.753	36.44	83.73	0	21.77	12.95	22.14	42.57
expressways	28.7	29.45	106.74	193.94	225.38	200.96	158.87	0

# MAIN ASECAP KEY FIGURES

Country: Slovak republic	2012		
Network length	631,083 (418,154 km – motorways)		
No. of km in construction	70,110		
Forecasts of opening section	74,310		
Annual toll revenue	151 264 464 €*		
Permanent staff	1274		
Average daily traffic (LV) on motorways	21 004		
Average daily traffic (HV) on motorways	4 993		
Average daily traffic (LV+HV) on motorways	25 997		
Total number of accidents	615		
No. of personal injury accidents on motorways	115		
No. of dead on motorways	8		
Km travelled (10 <sup>6</sup> x km)	1 010 265 291 km		
No. of toll plazas	no		
No. of lanes	no		
No. of teletoll equipped lanes	no		
No. of teletoll subscribers	no		
No. of rest areas (with stations services)	21		
No. of rest areas	55		
No. of restaurants	34		
No. of hotels	2		

 $<sup>\</sup>mbox{\ensuremath{^{\ast}}}$  This figure excludes the revenue from vignettes