

**ASECAP STUDY AND INFORMATION DAYS
6-8 June 2018 in Ljubljana (Slovenia)**

***Narodna diaľnicna spoločnosť, a.s. - SLOVAK REPUBLIC
(National Motorway Company)***

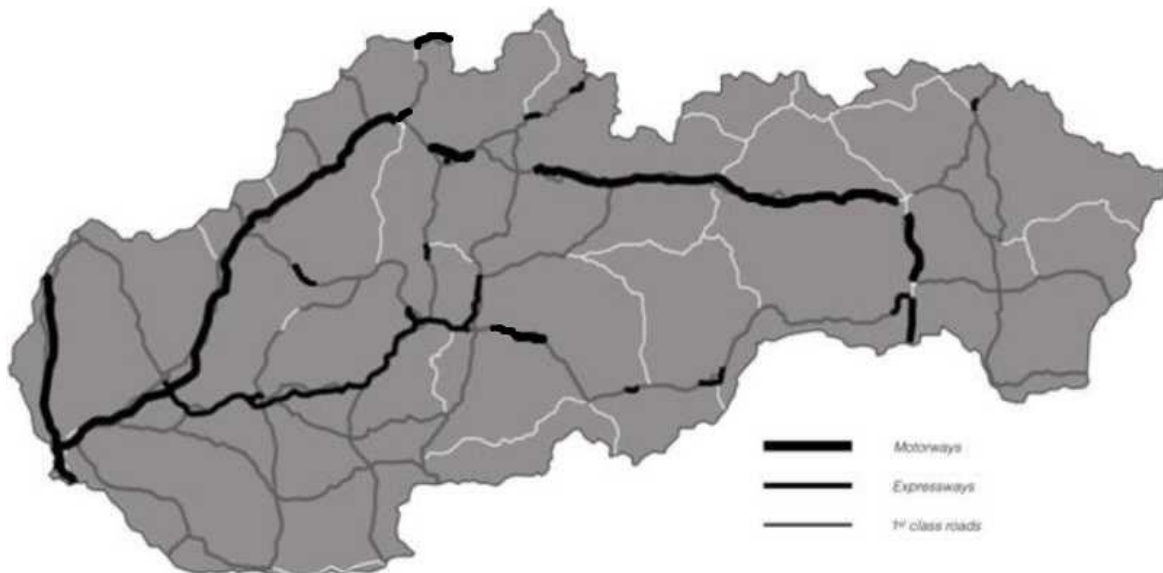
Network length

In January 2010, 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. Subject of charging is motorway, expressway and selected 1st class roads. From 1 January 2016, vignette system also has also changed; from the paper one to electronic. By E-vignette, there are motorways and expressways charged in Slovakia.

Currently charged road network in the Slovak Republic

category	motorways	expressways	1st class roads	bypasses outside residential areas	residential areas
under 3.5 t	V	V	x	x	x
over 3.5 t	V	V	V*	V	x

approx. 49% of 1st class road network



Type of road	Road specification	2016 (km in operation)	2017 (km in operation)
Motorways	D1	357.316	357.316
	D2	70.699	70.699
	D3	8.905	28.442
	D4	6.995	6.995
Expressways	R1	164.322	164.322
	R2	54.945	63.415
	R3	17.756	17.756
	R4	24.184	24.402
	R6	2.251	2.251
1 st class roads*	I/10	19.817	19.817
	I/11	27.117	26.277
	I/12	3.057	3.057
	I/13	10.930	10.930
	I/15	35.154	34.988
	I/16	163.572	163.448
	I/17	11.348	11.348
	I/18	198.464	196.182
	I/19	56.347	55.648
	I/2	51.489	51.367
	I/20	11.919	11.919
	I/21	37.172	37.172
	I/35	8.067	8.067
	I/49	9.433	9.433
	I/51	114.316	114.316
	I/59	72.711	71.911
	I/61	120.083	119.635
	I/62	32.789	32.552
	I/63	67.235	67.109
	I/64	66.915	65.878
	I/65	99.020	99.020
	I/66	77.122	77.122
	I/69	10.923	10.923
	I/70	10.911	10.618
	I/72	31.991	31.991
	I/75	93.806	93.806
	I/76	41.381	43.381
	I/79	65.673	65.673
I/9	87.071	87.071	
Total length		2343.206	2366.257

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

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 1st 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

Road	Tunnel		Bridge	
	Number	Length (m)	Number	Length (m)
Motorways	8	17 313	493	64 388
Expressways	0	0	266	25 020
Total	8	17 313	759	89 407

Investments

Narodna dialnicna spolocnost, a.s. (NDS) invested to new sections construction in **2017**:

511,268,000 €

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

68,864,000 €

For **2018**, there is planned for new sections construction:

715,684,000 €

and for reconstruction, maintenance and operation:

79,693,000 €

Building sites in operation as for the 31.12.2017

Name of the section		km
D1	Triblavina, intersection	1.63
	Hricovske Podhradie - Lietavska Lucka	11.32
	Feeder Lietavska Lucka – Zilina, II. stage	2.59
	Lietavska Lucka - Visnove - Dubna Skala	13.51
	Hubova - Ivachnova	15.28
	Presov West – Presov South	7.87
	Budimir - Bidovce	14.40
D3	Cadca, Bukov - Svrčinovec	5.67
Total length in km		72.27

New building sites to be opened in 2018

Name of the section		km
R2	Mýtna – Lovinobaňa, Tomášovce	13.500
R3	Tvrdošín – Nižná	4.400
R4	Prešov – severný obchvat I. etapa	4.300
Total length in km		22.200

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.

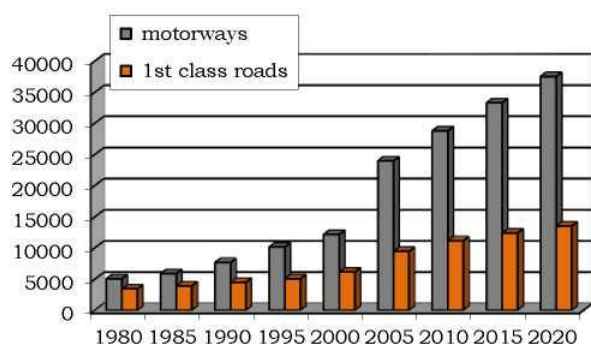
Traffic

Year/GDP	I. quarter (mil. €)	II. quarter (mil. €)	III. quarter (mil. €)	IV. quarter (mil. €)
2016	18 523,6	20 242,1	21 256,1	20 837,9
2017	19 047,1	20 895,5	21 913,1	21 580,8

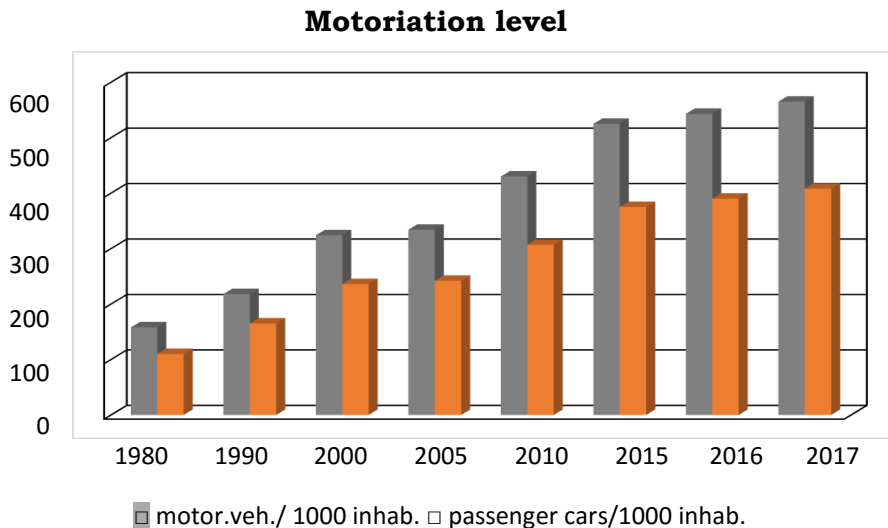
Traffic growth in Slovakia is in accordance with the Gross Domestic Product. Data on traffic development are from the State Traffic Counting performed every 5 years. Data for the year 2020 are forecasted.

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



Year	no. of inhabitants (thous.)	no. of vehicles (thous.)	no. of light vehicles (thous)	motor.veh./ 1000 inhab.	Passenger cars/ 1000 inhab.
1980	4996	790	552	158	110
1990	5311	1156	876	218	165
2000	5403	1752	1274	324	236
2005	5389	1801	1303	334	242
2010	5435	2339	1669	430	307
2015	5424	2844	2035	525	375
2016	5434	2949	2121	543	390
2017	5443	3077	2223	565	408



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 2016, vehicles were divided into 2 groups according to weight of vehicle:

1. below 3.5 t (E-vignette system)
2. over 3.5 t (Electronic toll collection system)

1. Vignette system

In 2016 the Slovak Republic commissioned the electronic system of vignette payment collection and records for the use of the specified sections of motorways and expressways. Switching the system of vignette payment collection and records into electronic form meant a change in the vignette form - the physical motorway stickers were replaced by vignettes in electronic form.

Types of vignettes for the year 2017 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.

The electronic vignette system is based on entering vehicles or trailed vehicles that are subject to electronic vignette payment in the records of electronic vignette payments, which among other things include data of the specific vehicle and the type and the validity of the paid electronic vignette.

A customer can pay for the electronic vignette through electronic business channels - the web portal and the mobile application for mobile devices or within the points of sale network (most often petrol stations) or through self-serve devices located especially at border crossings. Payment for an electronic vignette can be carried out using a bank payment card (paying at points of sale, by the web portal, the mobile application and the self-serve devices) or in cash (in case of payment through points of sale).

E-vignettes for 2017

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:

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 2017, ETC system continues to operate more than 17,000 km of roads, integrated in the system since 2014. Besides that it expanded on about 27 km of newly built sections.

Toll rates

Since 2014, ETC system continues using specified tolling strategy - favouring higher emission class vehicles, as well as reducing avoidance primary road network through parallel 1st class roads (by equalization of toll rates on 1st 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 1st class road network, total 2nd and 3rd 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	
Heavy vehicles	3.5 t - to 12 t	0.103 €	0.093 €	0.080 €
	2 axles	0.220 €	0.199 €	0.172 €
	12 t and more	0.232 €	0.210 €	0.181 €
	3 axles	0.232 €	0.210 €	0.181 €
	4 axles	0.241 €	0.218 €	0.188 €
Busses	5 axles	0.232 €	0.210 €	0.181 €
	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
Heavy vehicles	3.5 t - to 12 t	0.103 €	0.093 €	0.080 €
	2 axles	0.220 €	0.199 €	0.172 €
	12 t and 3 axles	0.232 €	0.210 €	0.181 €
	more 4 axles	0.241 €	0.218 €	0.188 €
	5 axles	0.232 €	0.210 €	0.181 €
Busses	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
Heavy vehicles	3.5 t - to 12 t	0.080 €	0.072 €	0.062 €
	2 axles	0.172 €	0.156 €	0.133 €
	12 t and 3 axles	0.181 €	0.164 €	0.140 €
	more 4 axles	0.185 €	0.167 €	0.143 €
	5 axles	0.181 €	0.164 €	0.140 €
Busses	3.5 t - to 12 t	0.040 €	0.030 €	0.020 €
	12 t and more	0.080 €	0.070 €	0.040 €

Revenues

Toll collection		2016	2017	% growth
Heavy vehicles	3.5 t - 12 t	13 583 677	13 110 224	-3,49%
	over 12 t	174 432 600	182 969 083	4,89%
Busses	3.5 t - 12 t	270 654	284 756	5,21%
	over 12 t	5 070 720	4 780 269	-5,73%
Total		193 357 651	201 144 333	4,03%

Vignette	2016	2017	% growth
Yearly	41 243 815	43 661 562	5,86%
Monthly	5 693 648	6 633 676	16,51%
10 days	20 742 520	22 334 112	7,67%
Total	67 679 985	72 629 351	7,31%

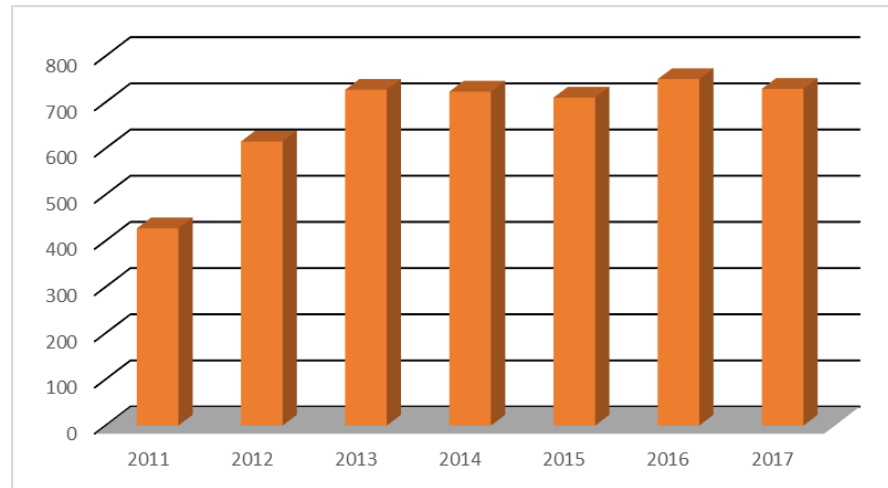
There is a total rise in revenues of vignettes 7.31 % and rise in revenues of toll 4.03 % comparing years 2015 and 2016. Revenues only from motorways and expressways are **67,06%** of whole toll revenue.

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

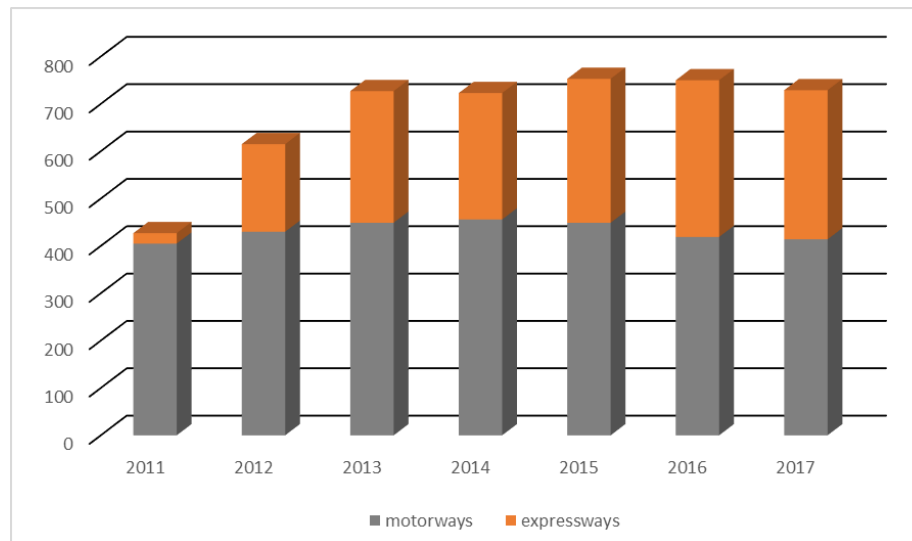
Number of accidents

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
2016	750	14	38	206
2017	729	24	37	212



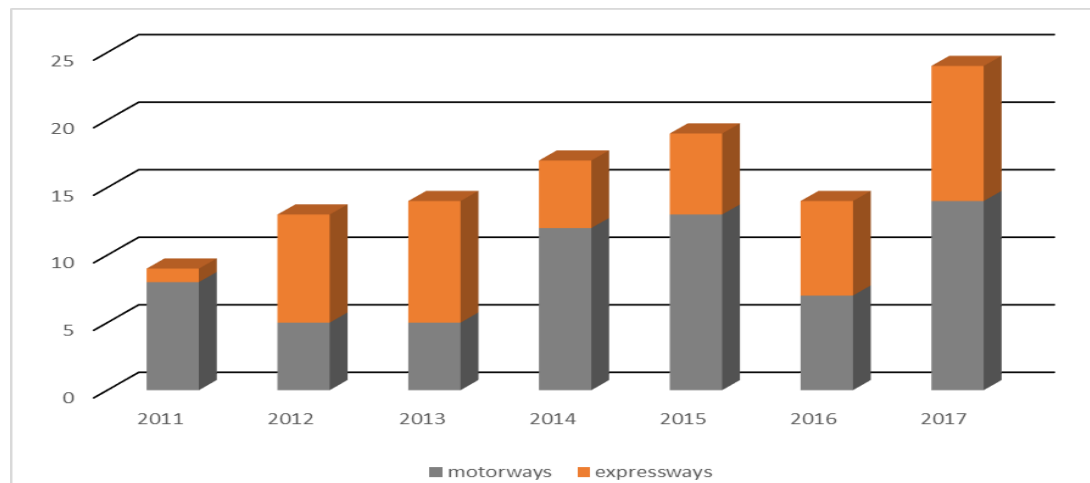
Number of accidents separately on motorways and expressways

Year	No. of accidents	
	Motorways	Expressways
2011	405	22
2012	430	185
2013	449	278
2014	456	267
2015	449	304
2016	419	331
2017	414	315



Number of fatal injuries

	No. of fatal injuries	
	Motorways	Expressways
2011	8	1
2012	5	8
2013	5	9
2014	12	5
2015	13	6
2016	7	7
2017	14	10



	Definition and method of calculation	In number for one billion kilometres travelled in 2015*	2014	2015	Variation in % in 2014/2015
Personál injury rate	People that have received any injury except for one time treatment that do not require specialists examination or sick absence	x	273	244	-12 %
Fatal accident rate	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	x	19	14	-36%
Rate of dead*	No measuring of this figure	x	x	x	x

* 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 personál vehicles (vehicles under 3.5 t)

Country: Slovak Republic	Indicate below how you calculate each figure provided in the “2017” column	2017 Figure
Network length (Km)	Figure include motorways and expressways	765 km
Number of km in construction	Summary of lengths of each building site in operation	72,27 km
Forecasts of opening motorways section	Summary of lengths of each section planned to be opened in 2018	0,0 km
Annual toll revenues* (in millions of Euros)	Summary of all revenues from vignettes and ETC	273.77 mil. €
Annual ETC revenues from motorways and expressways* (in millions of Euros)	Summary of revenues from ETC for motorways and expressways only	134,90 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	1 598
Average daily traffic (light vehicles)	Average of measured data between individual intersections	20 085
Average daily traffic (heavy vehicles)		6 170
Average daily traffic (total = light + heavy vehicles)		26 255

Total number of accidents	Total number of accidents when the police forces were called	729
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	249
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	24
Fatality rate		x
Kilometres travelled		1 756 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	670,9 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	279 072

Number of service areas (equipped with petrol stations)	Number of service areas on both sides of motorways and expressways	28
Number of rest areas	Number of all rest areas on both sides of motorways and expressways with or without any services	65
Number of restaurants	Number of restaurants on both sides of motorways and expressways	36
Number of hotels	Number of hotels on both sides of motorways and expressways	3

*please provide the figure VAT and other taxes excluded.