

A stylized map of Italy with a network of blue lines representing motorways. The map is set against a light blue background with a grid pattern and a large, faint circular graphic behind it.

**ITALIAN MOTORWAYS NETWORK
AS FOR 31.12.2017**

XLVI ASECAP Study and Information Days

Ljubljana - Slovenia

**ITALIAN NATIONAL REPORT
ASECAP STUDY AND INFORMATION DAYS
LJUBLJANA, 6 - 8 JUNE 2018**

Network length

Tolled Motorways Network in 2017	km 6.003,4
2 x 2 lanes	km 4.070,6
2 x 3 lanes	km 1.802,0
2 x 4 lanes	km 129,0
2 x 5 lanes	km 1,8
Tunnels (*)	km 865,2
Bridges (*)	km 1.034,6

(*) *Lenght > 100 m*

Tolled Motorways Network in 2016	km 6.003,4
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Traffic

The overall km run along the network in 2017 amounted at 83,8 Billions vehic-km, with an increase of +2,2% compared to 2016; the traffic level therefore is back to the maximum levels recorded in 2007, before the financial crisis.

A main contribution to the result came from the heavy vehicles component (+3,5%) that confirms the trend recorded in the previous two years and that, by the way, shows a confirmation of the improved performances of the industrial sector.

Also the light vehicles component marked an increase (+1,8%) although smaller than the ones of the years 2015 and 2016.

The traffic split on monthly basis is not unlike the normal distribution along the year, although it has to be highlighted an

influence from the extraordinary snowfalls that, in the first months of 2017, hit many regions in central Italy, especially on the east of the nation.

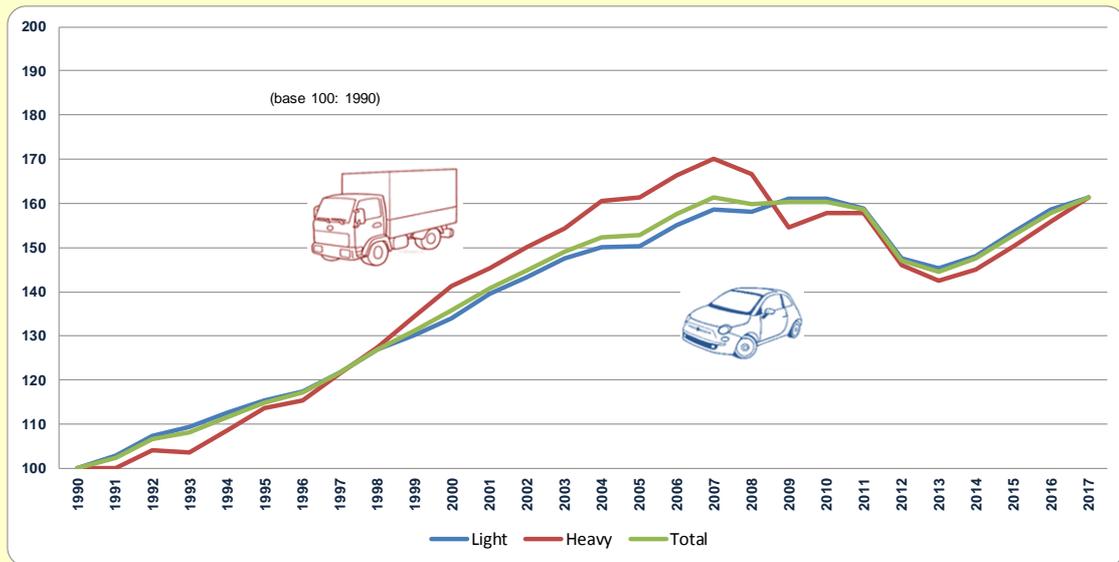
As for the light vehicles, the usual trend of growth can be noted, with a growth from the minimum in the month of February to the peaks in the holiday season, July and August; in 2017 those months had particularly positive traffic trends.

The heavy vehicles component had a rather stable distribution, with the exception of some decreases, in the months of April (Mainly due to a series of holidays starting with Easter) and, naturally, of August.

- **2017:** 83.832 (10^6 x km)
- **2016:** 82.024 (10^6 x km)

Traffic: annual percentage increases and index values 1990 – 2017

	1990	1991	1992	1993	1994	1995	1996	1997	1998	1999	2000	2001	2002	2003	2004	2005	2006	2007	2008	2009	2010	2011	2012	2013	2014	2015	2016	2017
Light	+2,8	+3,0	+4,2	+1,9	+3,0	+2,5	+1,8	+3,6	+4,2	+2,6	+2,9	+4,1	+2,7	+2,9	+1,7	+0,2	+3,2	+2,3	-0,5	+2,0	-0,1	-1,4	-7,1	-1,5	2,0	3,7	3,3	1,8
	100	103	107	109	113	115	118	122	127	130	134	140	143	148	150	150	155	159	158	161	161	159	148	145	148	154	159	161
Heavy	+9,4	+0,0	+3,9	-0,4	+4,9	+4,6	+1,6	+5,1	+5,1	+5,4	+5,1	+2,8	+3,4	+2,9	+3,9	+0,6	+3,0	+2,4	-2,1	-7,3	2,2	-0,1	-7,5	-2,3	1,8	3,6	3,6	3,5
	100	100	104	104	109	114	116	121	128	134	141	145	150	154	160	161	166	170	167	155	158	158	146	143	145	150	156	161
Total	+4,3	+2,3	+4,2	1,4	+3,4	+2,9	+1,8	+3,9	+4,4	+3,3	+3,4	+3,8	+2,9	+2,9	+2,2	+0,3	+3,1	+2,3	-0,9	-0,2	0,4	-1,1	-7,2	-1,7	1,9	3,7	3,3	2,2
	100	102	107	108	112	115	117	122	127	131	136	141	145	149	152	153	158	161	160	160	160	159	147	145	147	153	158	161



Tolling system and related technologies

The Italian Motorways tolling system is inter-connected, i.e. it removed almost the totality of the toll plazas at the concessionaires' border points, and it is fully interoperable along the whole National territory. ETC is based on DSRC technology, at the frequency of 5,8 GHz.

Tariffs

The average toll tariffs along the whole network in 2017 were:

- LVs: 0,0796 Euros
- HLs: 0,1412 Euros

Toll incomes

The positive results of the traffic in 2017, as described in the above chapters, affects of course also the overall toll revenues.

The operation in 2017 recorded therefore a higher gross income compared to 2016, of 8 Billions €, of which 5,9 Billions € are revenues directly pertaining the concessionaires.

As for the toll components, the “Additional Fee” due to ANAS, the national road agency, also increased, to 653 Millions €, and the VAT (set at 22%) amounted at 1,45 Billions €.

Also in 2017 it has to be noted the decision by the competent ministries to somehow limit the toll tariffs increases due to the toll concessionaires, thus continuing in a policy, started in 2015. of cooling down the increases.

The tariffs adjustment is therefore based only on the 2016 concessions data calculations, and it does not include any of the amounts of the previous years, in which some adjustments were frozen or applied in part only. Those adjustments have also been bound to the effective entry into force of the new financial planning for those concessionaires that were in the process of renewing it.

Upon request of the competent Ministry of Transport and of Infrastructures, also for the year 2017 it was confirmed the discount on the applicable tolls for the commuters using the ETC for the toll payment; the modalities remained the same, i.e. discount in proportion to the monthly trips, on the same route, of the maximum length of 50 km. Furthermore, in the perspective of

allowing a relief for some specific categories, on the basis of a specific agreement between the same ministry and AISCAT an experimental phase started in the second half of the year, of a tariff modulation scheme for motorbikes; the scheme brings a tariff reduction of 30% to motorbikes, on the condition that they use the ETC for the payment.

**Net toll incomes of the concessionaire companies
(Millions of Euros)**

- **2017** = 5.944
- **2016** = 5.733

Safety

	<i>Definition and method of calculation</i>	<i>In number for 100 millions-km travelled in 2017</i>	<i>Variation in % in 2016/2017</i>
<i>Personal injury rate</i>	Persons having injuries following the accident	12,91	-3,6
<i>Fatal accident rate</i>	Accidents in which one or more deaths occurred among the injured persons within 30 days by the date of the accident	0,23	4,5
<i>Rate of dead</i>	Persons having, after the accident, such severe injuries to cause their death at the moment of the accident or within 30 days from the date of the accident	0,27	12,5

Even though the performance in terms of safety in 2017 was good, especially in the general framework of the national road data, some increase was recorded in the number of accidents and

in the number of fatalities compared to 2016; to be noted though that the year 2016 recorded the best safety rates ever.

Also to be noted that on the overall fatalities data (228 deaths, 0,27 the ratio) a big influence comes from a single accident, occurred at the beginning of 2017, in which a Hungarian bus was involved, and in which many of the passengers died.

The 2017 data seem to confirm the trend of the last years, mainly oscillating around a median, yet it is interesting to compare the data with those of 10 years ago, when the traffic levels where similar.

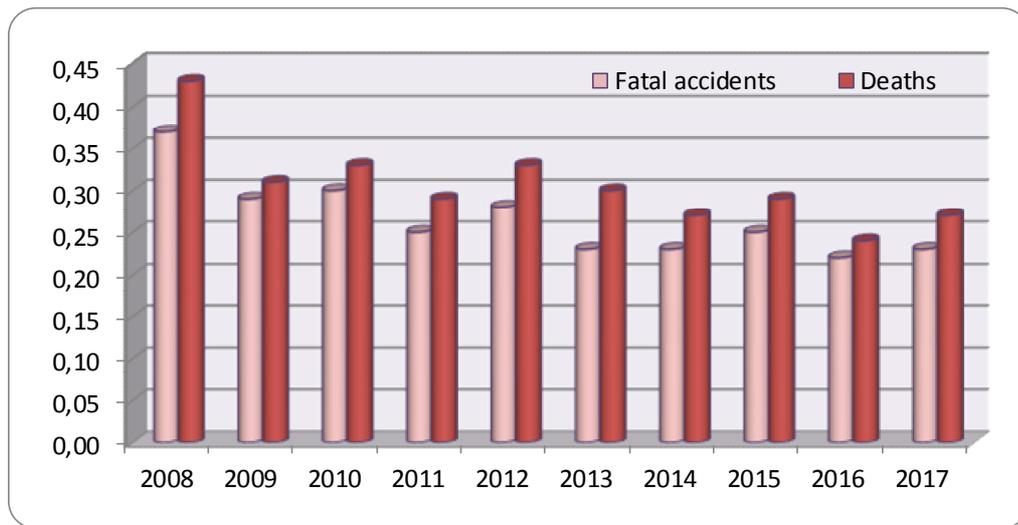
Compared to 2008, the year 2017 marks 2.100 less accidents (-25%), 130 less fatalities (-36%) and 3.263 less injured (-23%), notwithstanding the fact that traffic volumes are comparable.

Then, even though the accidents ratio records its historical low (Due to the traffic increase), the motorway system is not immune from a more generalized pattern of increase of the number of the accidents and of the fatalities, pattern that is characterizing the entire national road system (urban and rural) and also many European countries. This consideration brings the competent authorities to analyzing new and more effective strategies (e.g. against the cases of distraction due to the use of smartphones while driving).

RATE OF ACCIDENTS ***(values per 100 million vehicle-km)***

	2008	2009	2010	2011	2012	2013	2014	2015	2016	2017
Accidents (1)	10,19	9,97	9,56	8,90	8,45	8,49	8,18	8,02	7,66	7,56
Fatal accidents	0,37	0,29	0,30	0,25	0,28	0,23	0,23	0,25	0,22	0,23
Deaths	0,43	0,31	0,33	0,29	0,33	0,30	0,27	0,29	0,24	0,27

(1) - Accidents with injuries and/or deaths



Long term forecasts and trends

The return of the traffic to the pre-financial crisis levels marks an important point upon which to base the toll motorways sector future activities; as a matter of fact, their role as a fundamental instrument for the country economy is confirmed.

The objectives of the Italian concessionaires are now mainly focused on operation and maintenance, since the network has a pretty stable configuration, large extensions in terms of length are not expected, and since it has now again to cope with important traffic flows, requiring ever increasing levels of safety and of reliability.

The strategy analysis have therefore focused on the most effective operation modes, in terms of co-operation with third entities, e.g. with the Police forces with which the collaboration is active at central as well as at peripheral level.

Among the most interesting subjects for the next future, one is of course the application of the European legislation on innovative fuels, subject that is also linked to the role of our sector in dealing with electric vehicles, and also interesting is the management of the safety and traffic related information, on which AISCAT and the Italian concessionaires have been for long time engaged in the national institutional coordination of the activities.

KEY FIGURES

Country: ITALY		DATI 2017
Network length (km)		6.003,4
2 x 2 lanes (km)		4.070,6
2 x 3 lanes (km)		1.802,0
2 x 4 lanes (km)		129,0
2 x 5 lanes (km)		1,8
Number of km in construction		39,7
Forecasts of opening motorways section		N.A.
Annual toll revenues* (in millions of Euros)	Included the additional fee given to ANAS and the VAT	8.050
VAT % (Indicate the VAT % percentage to the toll revenues)		22%
Permanent staff		13.111
Average daily traffic (light vehicles)		30.751
Average daily traffic (heavy vehicles)		9.114
Average daily traffic (total = light + heavy vehicles)		39.865
Total number of accidents		23.329
Number of personal injury accidents		6.336
Number of dead		228
Fatality rate		0,23
Kilometres travelled (10 ⁶ x km)		83.832

Country: ITALY		DATI 2017
Number of toll transactions (Total)		1.609.636.156
Number of toll transactions (light vehicles):		N.A.
Number of toll transactions (heavy vehicles):		N.A.
Number of toll stations		525
Number of toll lanes		4.452
Number of ETC lanes		2.562
Number of ETC subscribers (Total):		9.600.000
Number of ETC subscribers (light vehicles):		N.A.
Number of ETC subscribers (heavy vehicles):		N.A.
Number of service areas (equipped with petrol stations)	Included 2 service areas temporarily closed because of re-structuring	409
Number of rest areas		245
Number of restaurants		170
Number of hotels		8