

# REPORT 2015

## INTRODUCTION

The German Federal Government has decided to cover the costs for the upgrading and maintenance of the transport infrastructure by introducing a distance-based toll for all heavy goods vehicles and goods vehicle combinations on the entire motorway network and selected federal roads.

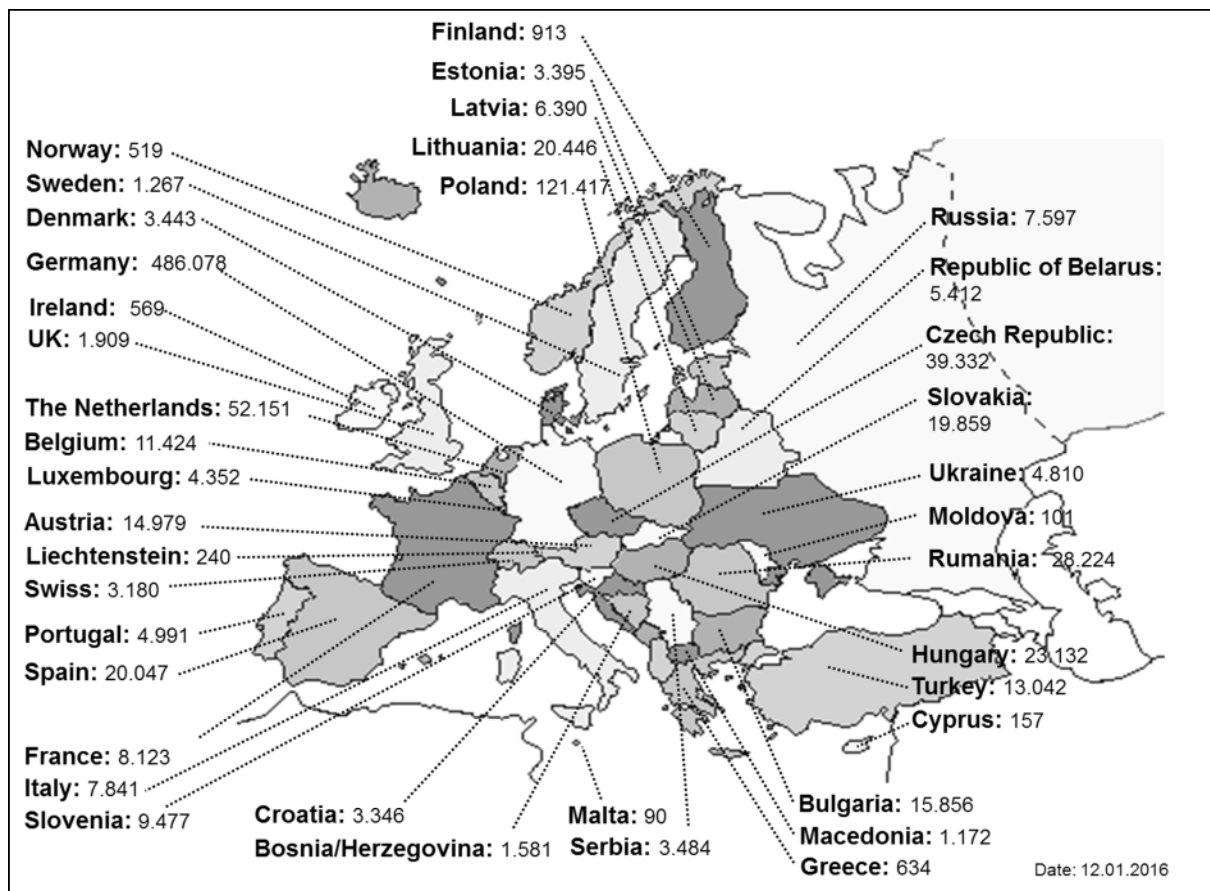
The system opened on 1<sup>st</sup> January 2005. It is a dual system, comprising a satellite-based automatic tolling and a manual booking option (at terminals and via internet) for non-discrimination purposes.

Starting from 1st October 2015 the German Federal Government lowered the toll requirement to the gross vehicle weight from at least 12 tons down to at least 7.5 tons.

The automatic system uses a combination of satellite navigation and mobile communications technology to achieve a free flow system.

94% of the revenues are made through customers using the automatic system. 951.000 OBUs are installed in trucks by the end of 2015. Figure 1 shows the distribution of installed OBUs per country.

**Fig. 1: Installed German OBU per country**



## NETWORK LENGTH

Since the introduction of the tolling scheme the tolled network has been updated to include new sections and new junctions simply by way of data transfer via the mobile communications network (GSM).

The German tolled network is divided into 8.550 sections and has a length of 15.252 km (including federal roads) by the end of 2015.

Since 1<sup>st</sup> August 2012 the toll was introduced to the federal roads with four and more lanes.

The federal roads currently represent 3.030 sections and 2.304 km. To add the new toll roads to the system, the OBUs received a wireless update with the new network information through mobile communication.

## TRAFFIC

On motorways the average daily traffic / km of trucks subject to toll has increased from 5.806 in 2014 to 6.065 in 2015. The calculation is made by dividing the total travelled kilometres on motorways by the length of the motorway network and by 365 days (although truck traffic is restricted on the weekend).

## SAFETY

In 2014 there were 3.377 persons who died within 30 days as a result of the accident on the German road network (including roads in town/village, out of town/village and on motorways).

## TOLLS

### Light vehicles

Light vehicles are paying vehicle and fuel tax, but generally no toll.

The so called Trave tunnel and Warnow tunnel make an exception. The use of both tunnels has to be paid by all vehicles.

### Heavy vehicles

Tolls are charged according to the distance travelled, the number of axles, and the pollution category of the truck.

Subject to the road toll are all goods vehicles or goods vehicle combinations exclusively intended for road haulage whose maximum permissible weight - including trailer - is 7,5 tons or more.

### Toll exempt heavy vehicles

Pursuant to Section 1 (2) of the Act on the Levying of Distance-Related Charges, the following vehicles are not subject to the HGV toll:

- buses and coaches,
- vehicles belonging to the armed forces, the police authorities, civil defence and emergency response organizations, the fire brigade and other emergency services, plus Federal Government vehicles,
- vehicles used exclusively for road maintenance purposes, including road cleaning and winter maintenance,
- vehicles which are used exclusively for the transport of circus and funfair equipment,
- vehicles which are used by non-profit or charitable organizations to transport humanitarian relief supplies to alleviate an emergency situation.

## TOLL RATES AND REVENUES

Since the opening in 2005 the tolls were differentiated by pollution classes. As shown in Fig. 2: with the same number of axles, a “polluting” truck can pay up to 102% more toll than a “clean” truck. One will notice that a truck can be classified in a “better” category if it has a filter to reduce its particle emission.

By the end of 2015, toll revenues in the amount of 4,37 billion Euros had been generated, which corresponds to 29,7 billion travelled kilometres.

Fig. 2: Toll rates valid from 1st October 2015

Emission classes according to the German Federal Trunk Road Toll Act (BFStrMG)						
	Category A	Category B	Category C	Category D	Category E	Category F
Emission class	S6	EEV class 1, S5	S4, S3 with particulate reduction class* 2	S3, S2 with particulate reduction class* 1	S2	S1, no emission class
Euro emission class	Euro 6	EEV 1, Euro 5	Euro 4, Euro 3 + particulate reduction class* 2	Euro 3, Euro 2 + particulate reduction class* 1	Euro 2	Euro 1, Euro 0

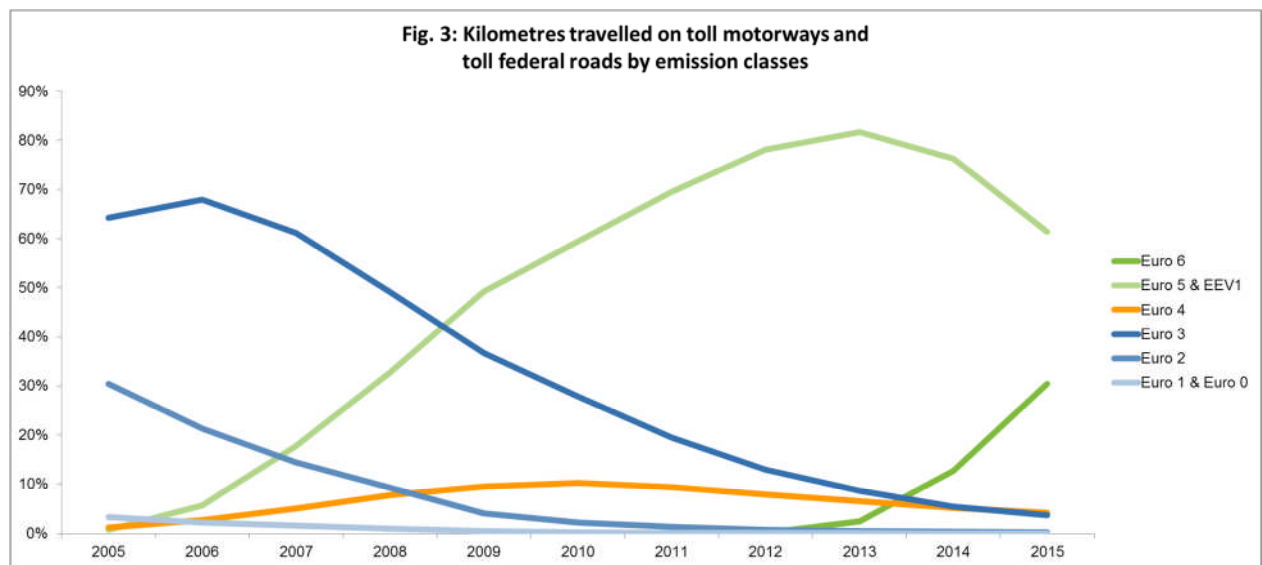
  

Toll rates per kilometre from 01 October 2015				
Category	Proportion of toll rate (in cents) Costs for air pollution	Number of axles**	Proportion of toll rate (in cents) Costs for Infrastructure	Toll rate (in cents)
A	0	2	8.1	8.1
		3	11.3	11.3
		4	11.7	11.7
		5 or higher	13.5	13.5
B	2.1	2	8.1	10.2
		3	11.3	13.4
		4	11.7	13.8
		5 or higher	13.5	15.6
C	3.2	2	8.1	11.3
		3	11.3	14.5
		4	11.7	14.9
		5 or higher	13.5	16.7
D	6.3	2	8.1	14.4
		3	11.3	17.6
		4	11.7	18.0
		5 or higher	13.5	19.8
E	7.3	2	8.1	15.4
		3	11.3	18.6
		4	11.7	19.0
		5 or higher	13.5	20.8
F	8.3	2	8.1	16.4
		3	11.3	19.6
		4	11.7	20.0
		5 or higher	13.5	21.8

\* PMK – particulate reduction classes are retrofit standards to reduce particulate emissions.

\*\* Axles – a tandem axle counts as two axles, a tri-axle counts as three axles.

As shown in Figure 3, the share of cleaner vehicles rose substantially.



**MAIN ASECAP KEY FIGURES  
GERMANY**

<b>Country : Germany</b>	<b>2015</b>	<b>2014</b>
Tolled network length in KM (incl. 2.304 KM federal roads)	15.252	14.136
No. of KM in construction (only new road sections)	Not yet available	477
No. of KM put in toll service	1.116	72
Forecasts of opening motorways sections in 2016 (length in KM):	-	-
Annual toll revenue in million Euros	4.370*	4.457
Permanent staff (FTE)	586	585
Average daily traffic (LV)	-	-
Average daily traffic (HV)**	6.065	5.806
Average daily traffic (LV+HV)	-	-
Total number of accidents	-	-
No. of personal injury accidents	-	-
No. of dead	Not yet available	3.377 <sup>a)</sup>
KM travelled in million KM (HV)	29.702	28.032
No. of toll plazas	0	0
No. of lanes	0	0
No. of GNSS toll sections	8.550	6.809
No. of GNSS OBU Subscribers in thousands	951	819
No. of rest areas (with stations services)	-	-
No. of rest areas	-	-
No. of restaurants	-	-
No. of hotels	-	-

\* Preliminary Value for 2015

\*\*HV >= 7,5t, calculation: average daily charged KM / network KM on motorways

<sup>a)</sup> Number covers in town/village, out of town/village, and on motorways.