

# REPORT 2014

## INTRODUCTION

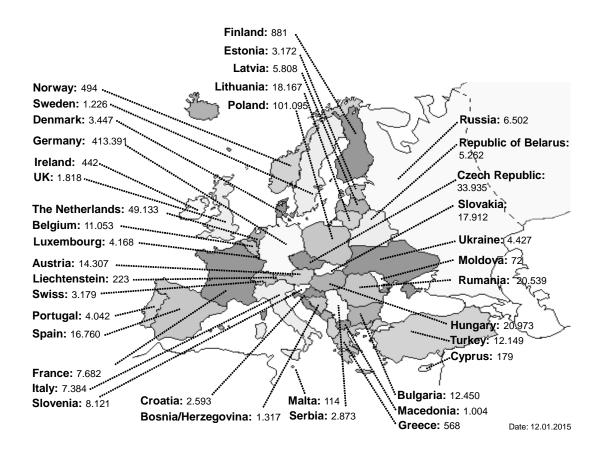
The German Federal Government has decided to cover the costs for the upgrading and maintenance of the transport infrastructure by introducing a distance-based truck toll for all heavy commercial vehicles and vehicle combinations with a permissible total weight of 12 tons or more on the entire motorway 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.

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

90% of the revenues are made through customers using the automatic system. 819.000 OBUs are installed in trucks by the end of 2014. 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 tolling 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 6.809 sections and has a length of 14.136 km (including federal roads) by the end of 2014.

Since 1<sup>st</sup> August 2012 toll truck was introduced to the federal roads with four and more lanes which have a direct connection to a motorway in Germany.

The federal roads currently represent 1.309 sections and 1.244 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 which have a total permissible weight of at least 12 tons has increased from 5.644 in 2013 to 5.806 in 2014. 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 2013 there were 3.339 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, 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 vehicles or vehicle combinations exclusively intended for road haulage whose maximum permissible weight - including trailer - is 12 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 66% 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 2014, toll revenues in the amount of 4,46 billion Euros had been generated, which corresponds to 28,03 billion travelled kilometres.



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

		Category A	Category B	Category C	Category D	Category E	Category F
Emission class		\$6	S5, EEV class 1	S3 with particulate reduction class*, S4	S2 with particulate reduction class*, S3	52	S1, no emission class
Euro emission class		Euro 6	Euro 5, EEV 1	Euro 3 + particulate reduction class*, Euro 4	Euro 2 + particulate reduction class*, Euro 3	Euro 2	Euro 1, Euro 0
oll rates	per	kilometre fr	om 1 Janua	ry 2015			
Category	(In	roportion of toll rate n cents) osts for air pollution		Number of axles**	Proportion of toll rate (in cents) Costs for infrastructure		Toll rate (In cents)
A	0		up to 3	12.5		12.5	
			4 or higher	13.1		13.1	
В	2.1		up to 3	12.5		14.6	
-				4 or higher	13.1		15.2
С		3.2		up to 3	12.5		15.7
			4 or higher	13.1		16.3	
D		6.3		up to 3	12.5		18.8
			4 or higher	13.1		19.4	
E	7.3		up to 3	12.5		19.8	
			4 or higher	13.1		20.4	
F	8.3		up to 3	12.5		20.8	

<sup>\*</sup> 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.

4 or higher

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

federal roads by emission classes 100% 90% 80% Euro 1 & Euro 0 70% -Euro 3 60% Euro 2 50% Euro 5 & EEV1 & Euro 6 40% Euro 4 30% 20% 10% 0% 2010 2005 2006 2007 2008 2009 2011 2012 2013 2014

Fig. 3: Kilometres travelled on toll motorways and toll