TOLL COLLECT
service on the road

REPORT 2011

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 1st 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. 704.400 OBUs are installed in trucks by the end of 2011. Figure 1 shows the distribution of installed OBUs per country.

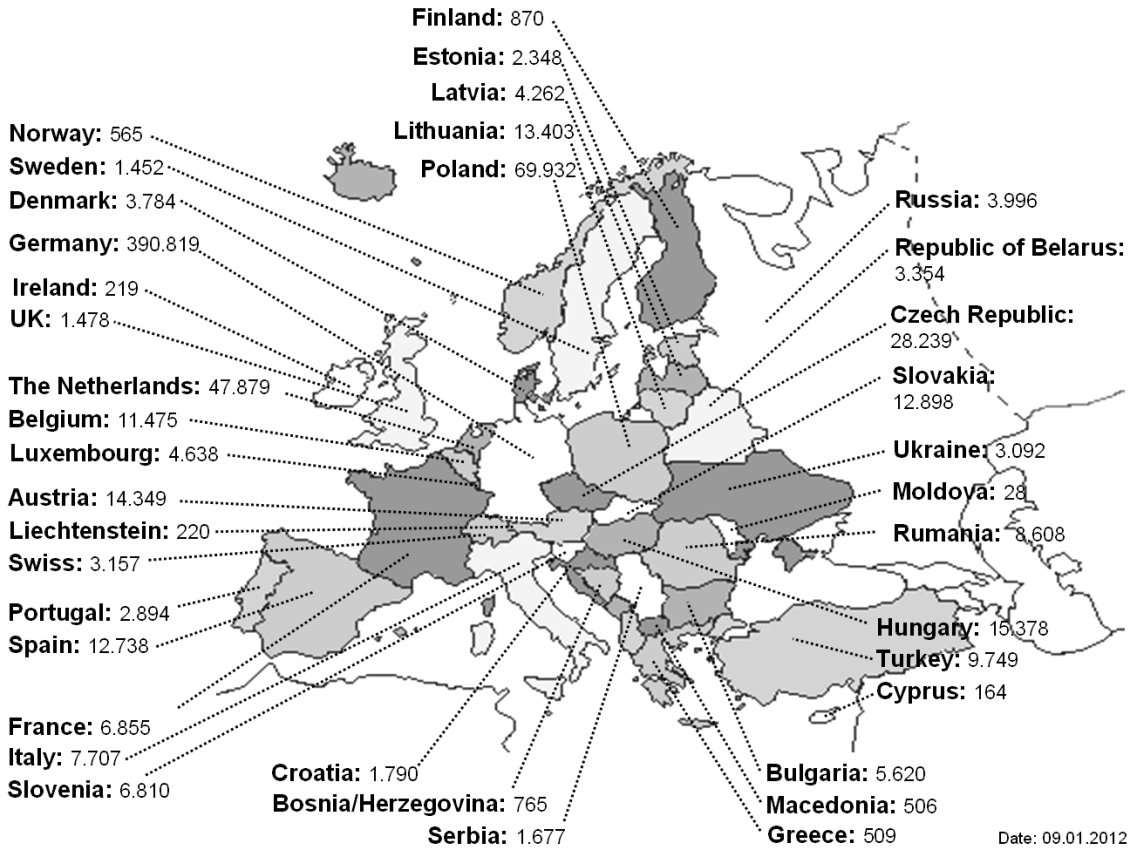

Fig. 1: Installed Onboard Units (OBU) for automatic tolling per country

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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 5.531 sections (including federal roads) by the end of 2011.
Since 1st January 2007 toll truck was introduced to selected federal roads. The main purpose was to bring back on the tolled motorway network the trucks that diverted to toll-free roads in order to avoid paying tolls.
It concerns the federal roads

- B75 between the Hamburg-Marmstorf access to the A7 motorway and the A253 motorway
- B4 from the Hamburg-Eidelstedt access, north of the A23 motorway, to Bad Bramstedt
- B9 between the German-French border and the Kandel-Süd access to the A65 motorway

The federal roads currently represent 98 sections and 42 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

The average daily traffic / km of trucks which have a total permissible weight of at least 12 tons has increased from 5.514 in 2010 to 5.706 in 2011. The calculation is made by dividing the total travelled kilometres by the length of the network and by 365 days (although truck traffic is restricted on the weekend).

TOLLS

Light vehicles

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

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.

*Change of assignment to emissions classes by PMK**

	Without PMK*	PMK* 1	PMK* 2	PMK* 3	PMK* 4
S3	Category C	Category C	Category B	Category B	Category B
S2	Category D	Category C	Category C	Category C	Category C

Toll rates per kilometre

			From 1 Jan. 2009
Category A	S5, EEV class 1	up to 3 axles **	€ 0,141
		4 axles or more **	€ 0,155
Category B	S4, S3 with PMK 2, 3 or 4	up to 3 axles **	€ 0,169
		4 axles or more **	€ 0,183
Category C	S3 without PMK, S2 with PMK 1, 2, 3 or 4	up to 3 axles **	€ 0,190
		4 axles or more **	€ 0,204
Category D	S2 without PMK, S1 and vehicles not assigned to a pollutant emission category	up to 3 axles **	€ 0,274
		4 axles or more **	€ 0,288

Fig. 2: Toll rates

*PMK – particulate reduction classes are retrofit standards to reduce particulate emissions. The particulate reduction classes PMK 1 or PMK 2 will generally be considered for (heavy) goods vehicles subject to tolls.

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

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.

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

Since the opening in 2005 the tolls were differentiated by pollution classes. This has been stressed on the 1st January 2009: with the same number of axles, a "polluting" truck can pay up to 94% more toll than a "clean" truck, as shown in Fig. 2. One will notice that a truck can be classified in a "better" category if it has a filter to reduce its particle emission.

REVENUES

In 2010 toll revenue totalled 4,5 billion Euros (gross).
By the end of 2011, toll revenues in the amount of 4,5 billion Euros had been generated. There is no difference of toll revenues during the last year even though more kilometres have been driven. This is because of a decrease of the average toll price per kilometre due to the fact of an increase of environmental "cleaner" trucks as shown in figure 3 below.

Fig. 3: Kilometres travelled on toll motorways by emission classes