calibration, cards,
tachonet, control officers,
workshop, move sensor

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POSSIBILITY OF USING THE DIGITAL TACHOGRAPH SYSTEM TO CONTROL OF RAOD TRANSPORT

The paper presents main legal rules introducing the digital tachograh system main requirments which must be fulfilled by producers of digital tachographs in order to get the type approval, possibility of future requirements of digital tachograph, main functions of digital tachograph, characteristics of participant of digital tachograpfs system and their tools of the identification, acting and setting of authorize workshops in Poland and Europe Union, accessible methods of check and calibration of digital tachographs and their description, based on Commission Regulation (EC) No 1360/2002 of 13 June 2002, replacing the Annex 1B and Polish law. These paper also presents current level of implementation of digital tachografph system in European Union countries and in all Europe.

MOŻLIWOŚĆ WYKORZYSTANIA SYSTEMU TACHOGRAFÓW CYFROWEGO W KONTROLI TRANSPORTU DROGOWEGO

Artykuł zawiera główne akty prawne wprowadzające system tachografów cyfrowych, przedstawiające główne wymagania jakie muszą spełnić producenci tachografów cyfrowych w świetle homologacji typu, dostępnych funkcji, cech charakterystycznych do stosowania go w systemie tachografów cyfrowych, a także w świetle funkcjonowania warsztatów tachografów cyfrowych, w Polsce i w Unii Europejskiej. Wszystkie wymagania muszą być zgodne z wymaganiami rozporządzenia Komisji (WE) nr 1360/2002 z 13 czerwca 2002 roku, aneks IB i polskimi przepisami. Artykuł przedstawia teraźniejszy poziom implementacji systemu tachografów cyfrowych Unii Europejskiej i we wszystkich krajach Europy.

INTRODUCTION

The legal basis for the introduction of such system is Council Regulation (EEC) No 2135/98 of 24 September 1998 amending Regulation (EC) No 3821/85 of 20 December 1985 on recording equipment in road transport. Annex 1B of this Regulation contains the technical specification for digital tachographs.

Commission Regulation (EC) No 1360/2002 of 13 June 2002 replacing the Annex 1B is an actual detailed technical specification for digital tachographs. In accordance with new regulations the inspection system consists of the following elements:

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- a digital tachograph VU (*Vehicle Unit*), recording the driver and vehicle operation performance,
- a speed sensor, supplying the vehicle unit with relevant data concerning the vehicle speed and distance travelled,
- chip (data) cards intended for recording the data and identification of the system users.

For the conformity reasons all admitted equipment must fulfil three stages of tests:

- security test – test verifying the fulfilment of all requirements concerning the security, as listed in Annex 10 to the Commission Regulation (EC) No 1360 of 13 June 2002,
- functional test – test verifying the requirements concerning the functionality of the equipment; the tests are specified in Annex 9 to the Commission Regulation (EC) No 1360/2002 of 13 June 2002,
- interoperability test – test for verifying the abilities of a considered equipment to interoperate with other equipment; such tests are performed by only one laboratory under the supervision of the European Commission (this task is given to the Joint Research Centre at Ispra); only equipment fulfilling these two tests mentioned above can be admitted to this test.

LEVEL OF IMPLEMENTATION OF DIGITAL TACHOGRAPH SYSTEM

Level of introducing the system of the digital tachograph, leading it, was divided into the following elements:

- issue of digital tachograph's card,
- connect to TACHOnet system,
- approved of digital tachograph workshop,
- trained and equipped control services.

States which do not issue cards in the system of digital tachographs:

- Croatia (January 2009 start to issue cards),
- Serbia,
- Kosovo (the first half of 2009 will begin issuing cards),
- Cyprus.

States don't connected to the tachonet: system

- Czech Republic,
- Denmark,
- Greece,
- Portugal,
- Kosovo,
- Serbia,
- Croatia.

States, which have not started methods of checking and calibrating digital tachographs:

- Greece (it passed requirements determining functioning of methods of the digital tachograph),
- Malta (it adopted the Italian system, drivers are going to Italy to carry checking and calibrating digital tachographs),
- Kosovo,

- Serbia,
- Croatia,
- Cyprus.

Almost all states accomplished training and equipping of control officers, with the exception:

- Greece,
- Portugal,
- Romania,
- Serbia,
- Croatia,
- Kosovo,
- Cyprus.

At present they are being led widely snitch works above introducing the system of digital tachograph in such states as Russia, Ukraine or Moldova.

Level of implementation of digital tachograophs system is presented in table 1 and in figure 1-13. They present situation of each country and connected do TACHOnet system, number of issued cars (driver, company, workshop, control), number of approval workshop in country of Europe and situation with malfunction, stolen or lost cards.

Table 1. Countries connected to TACHOnet system

Countries are connected to TACHOnet system	
Austria Belgium Bulgaria Czech Republic Cyprus Greece Estonia Finland France Germany Iceland Ireland Italy Latvia	Lithuania Lichtenstein Luxembourg Malta Norway Poland Romania Slovak Republic Slovenia Spain Sweden Switzerland The Nederlands UK Hungary
Countries not yet connected to TACHOnet system	
EU countries Hungary is in test phase. Denmark is not yet involved. Portugal will connect in start of 2010.	
Non EU-AETR countries: Andora is in test phase. Monaco is in phase test	

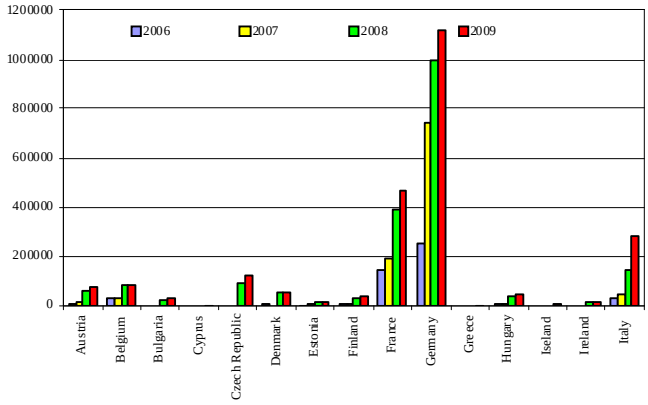

Fig. 1. Number of issued driver cards in Europe in 2006–2009 (part 1)

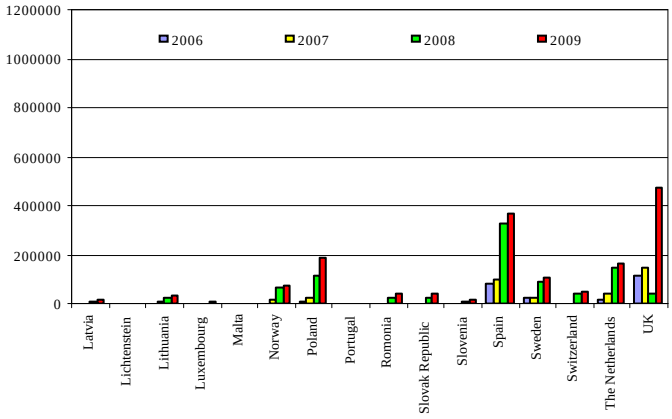

Fig. 2. Number of issued driver cards in Europe in 2006–2009 (part 2)

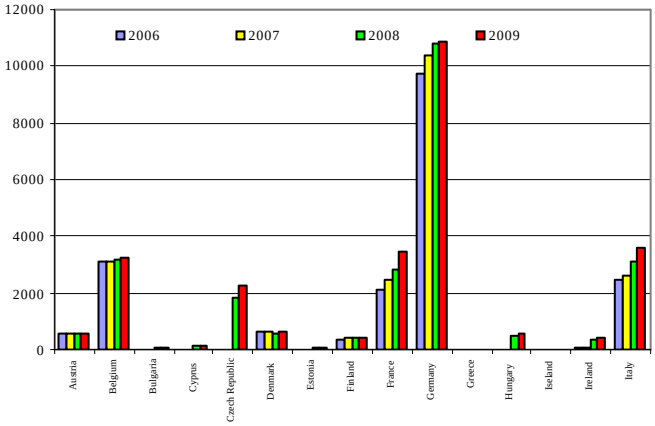

Fig. 3. Number of issued control cards in Europe in 2006–2009 (part 1)

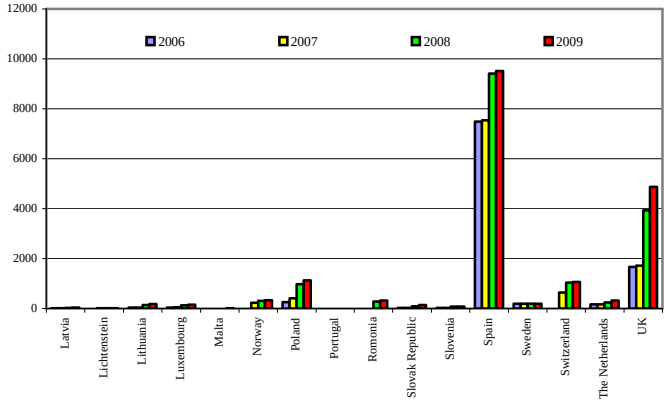

Fig . 4 Number of issued control cards in Europe in 2006–2009 (part 2)

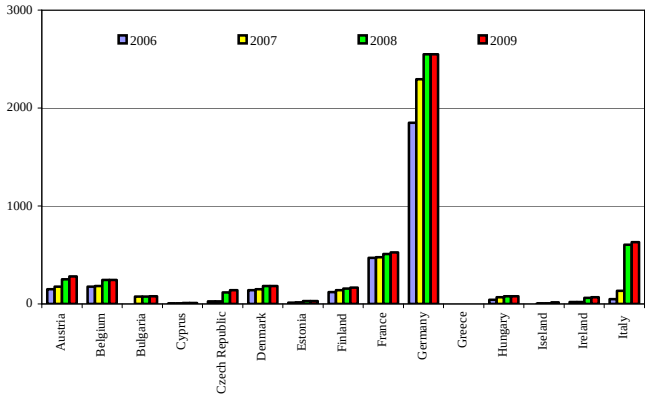

Fig. 5. Number of issued workshop cards in Europe in 2006–2009 (part 1)

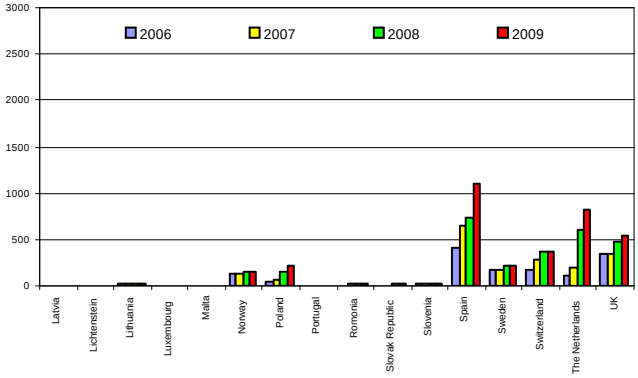

Fig. 6. Number of issued workshop cards in Europe in 2006–2009 (part 2)

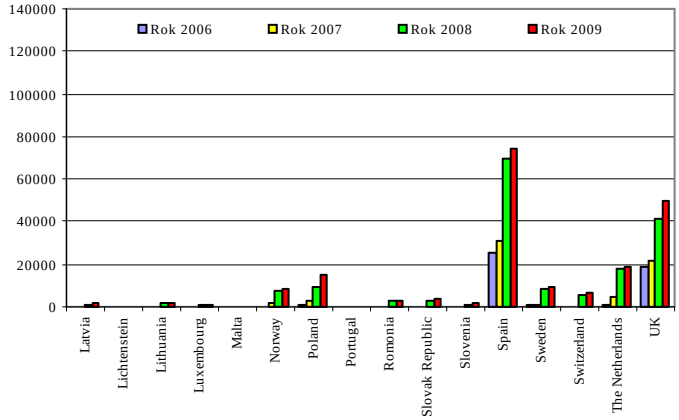

Fig. 7 Number of issued company cards in Europe in 2006–2009 (part 1)

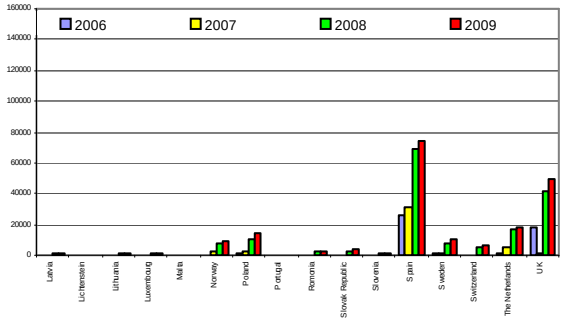

Fig. 8. Number of issued company cards in Europe in 2006–2009 (part 2)

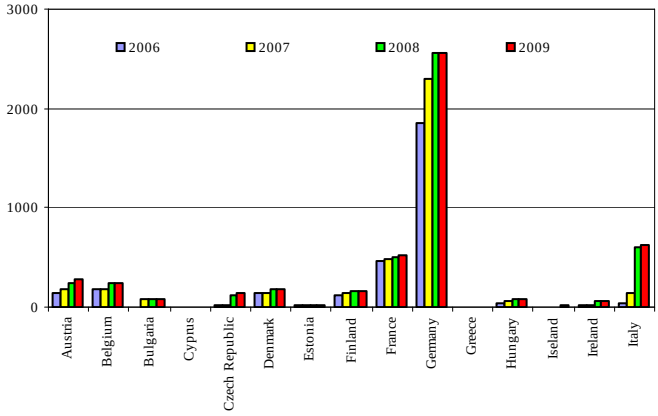

Fig. 9. Number of approved workshops in Europe in 2006–2009 (part 1)

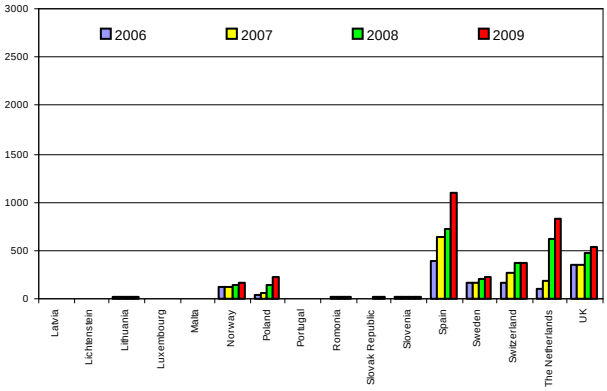

Fig. 10. Number of approved workshops in Europe in 2006–2009 (part 2)

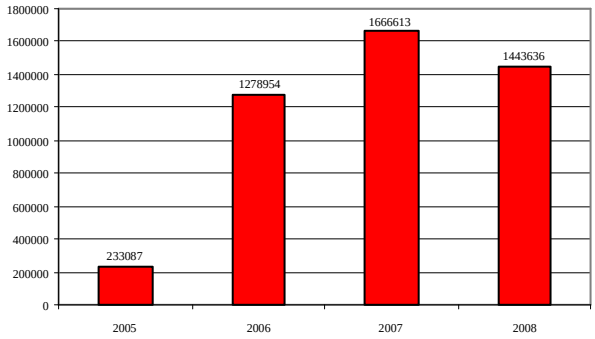

Fig.11. Number of issued cards in Europe to the end of 2008 by 32 card issuing

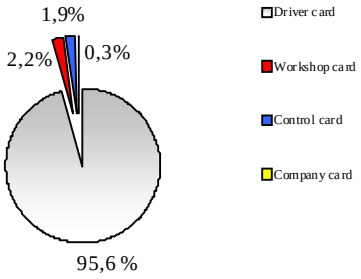

Fig. 12. Percentage participation of malfunction cards in issued all cards (2,1% of issued cards)

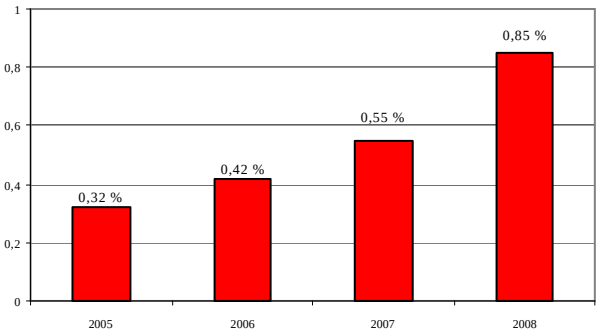

Fig. 13. Percentage participation of lost or stolen issued cards in 2005–2008

Conclusion

A certain group of vehicles is excluded from this obligation (these exclusions are stated in the Regulation (EC) No 3821/85 of 20 December 1985, Article 4). Such exclusion can be considered as a certain departure of the Annex 1B provision no 243 which states. The vehicle manufacturer and the workshop are obligated to activate the installed recording equipment before a vehicle leaves a place where installation took place.

References

[1] Commission Regulation (EC) No 1360/2002 of 13 June 2002 adapting for the seventh time to technical Progress Council Regulation (EEC) No 3821/85 on recording equipment in road transport.
[2] Act of digital tachograph system of 29 July 2005. Dz. U. 180 position 1494.
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[5] Documents of EU-MIDT.