

Road safety techniques in Hungary according to EU directives

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Abstract: The EU directives had an impressive effect on safety of road transportation and on the decrease of pertinent social cost. Road accident as a part of the externalities according to the EU guideline: „Users should pay the bill” should be internalized and indicated in the cost of transportation. Hungary is following the EU tendencies, as a member state of EU.

Keywords: road safety, externalities, internalization, EU tendencies

1 INTRODUCTION

Generally the road safety has increased in the EU thanks to the new initiatives, there are less lethal accidents, less pertinent social cost. For further increasing of safety or efficiency of safety a social level of agreement is necessary. The increase of safety of road transportation is closely connected to strategical economical regulations, so the „users should pay the bill” EU guideline is equitable and economically explainable as a link between economy and the increase of road safety.

2 INFORMATION

The increasing of road safety is a very important part of the EU common transport policy. Four areas can be separated:

- Building or Rebuilding of road infrastructure
- Vehicle construction (active and passive safety)
- Traffic control and monitoring
- Controlling of driver behaviour

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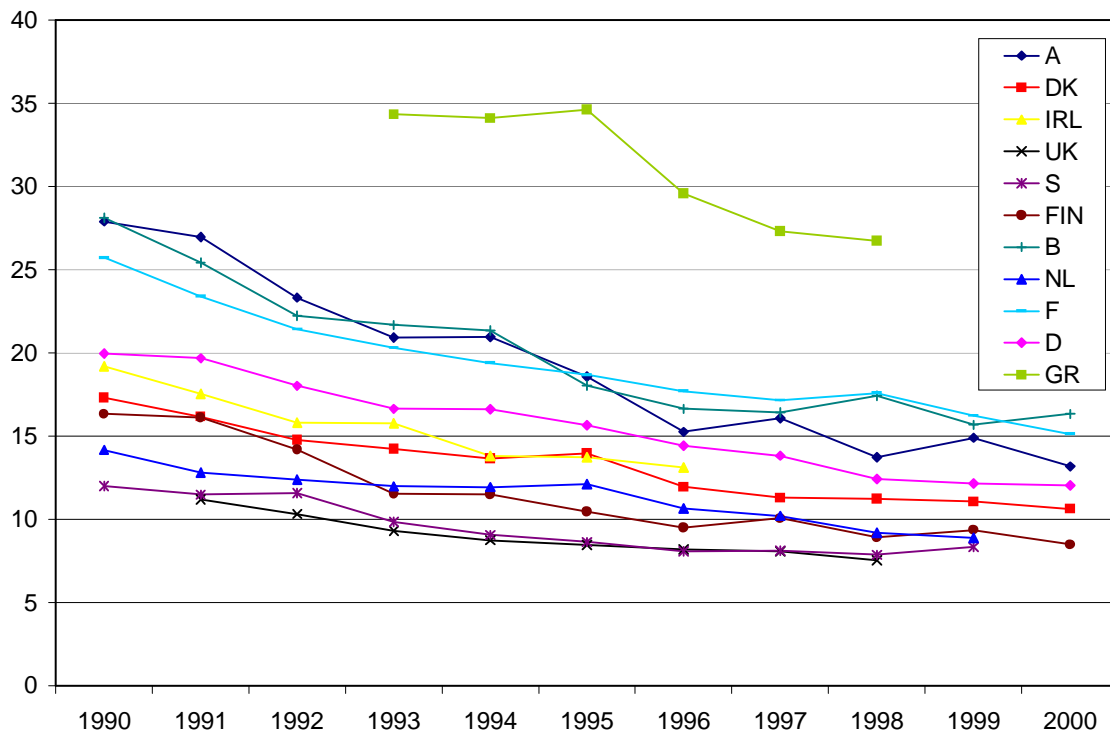


Figure 1. Casualties per 1 billion personkm

Promoting Road Safety in the EU action program has been held until 2001 (Figure 1.). After 2001 EU Directorate has started a new action program ends 2010, which based on a purpose of CBA separated in the following topics:

- The better application of safety regulations and the harmonization of connected control and punishment
- Introduction of new technologies in the vehicle industry and the development of road infrastructure
- Continuous innovation in driver training
- Standardization of technical requirements at infrastructure development

Four below listed elements supported by the new resource program of road safety:

1. Increasing safety of road transportation.

Development of the real „user” behaviour with standardization, knowledge spread advertisement, driver tests and trainings, better machine – human interface. With knowledge spread advertisement, driver trainings and better machine – human interface the driving would be easier and much more safer. The transportation would cause less accident, which would lead to lower social cost of transport. As the EU tendency – the user should pay –

come much more real and real, with the internalization of externalities the lower social and accident cost can rise the opportunity of road transportation in the competition of transport modes.

2. Safer vehicles

Wider usage of telematics and driving aid methods. With usage of telematics the driving can be much more easier. Much more information can be given to the driver or the dispatcher or distributor as well. Nowadays the driver aid electronics are not integrated into one unit, several different units are located in the cabin. In the car of future one integrated unit will be in the cabin, which collect much more information about the vehicle than the one's today.

3. Development of road infrastructure's safety

.The tight sections should be solved by the EU White Book by constructing new infrastructure or expand the old ones. Increasing safety in road infrastructures with the stricter control and .with the usage of better quality elements

4. Establish a statistical accident database and standardized evaluation method. A database should be established and maintenance based on parameters of accidents, that leads to development of different risk management strategy. That lead to a standardized and harmonized EU method and database about analysing the road accidents.

The EU in the next 10 years, should reach that ambitious aim that the road accidents leads to death are halved. This can only be reached by synchronous tasks also with the human factor and also with improving the vehicle and the infrastructure as well.

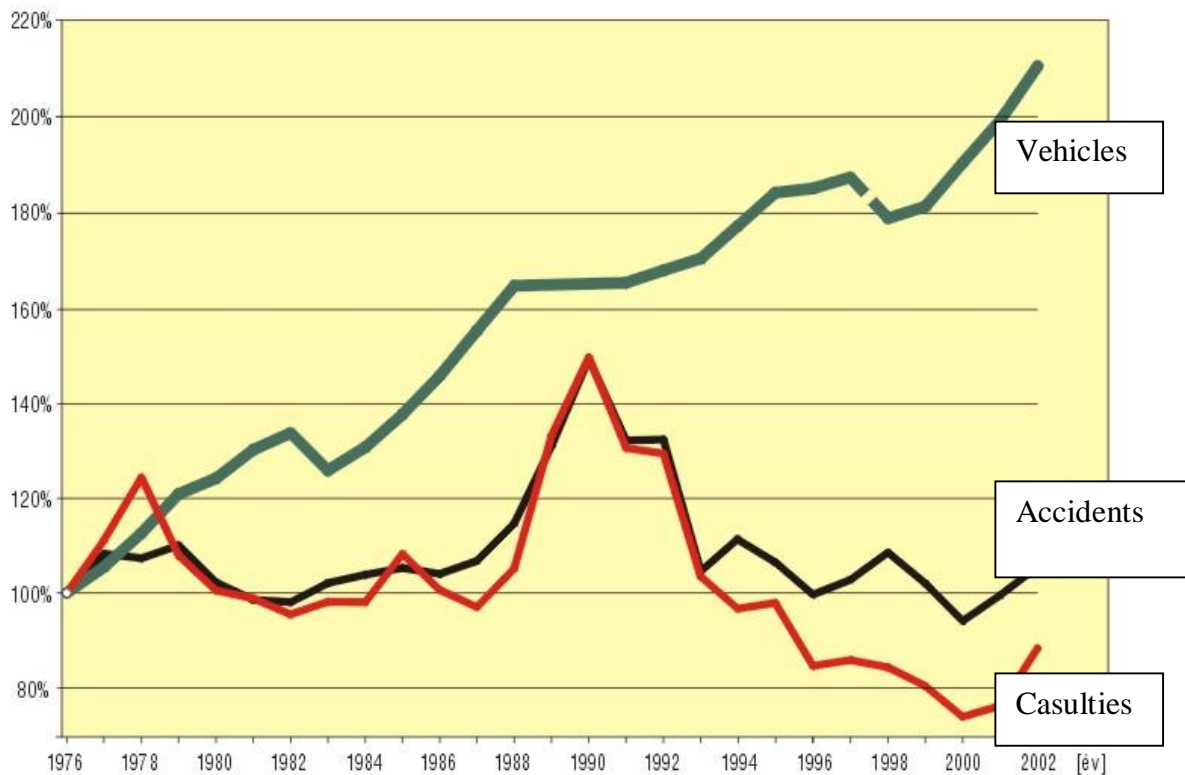


Figure 2. Accidents in Hungary

The controls and punishments became more efficient by the technological developments, with the automatic methods and the driving aid tools. Because of the development of car informatics the parameters of an accident can be recorded, faster processed, faster prosecuted with smaller costs. UN (UN ECE 13) has accepted a proposal that the vehicles more than 5t mass and more than 9 person capacity the usage of retarded is obligatory.

3. CONCLUSION

Road safety is a very important, up-to-date topic, related to health care. The cost of improving road safety – road vehicles and standards, the development of road infrastructure, to avoid the casualties and injuries in road transportation should be shown in the tolls and shadow tolls, so the externalities should be internalized. Hungary is following the EU tendencies, but with arrears because of the lower motorisation ratio. So Hungary has to be aware of the problem of the developing motorisation, the development of road traffic.

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This paper deals with up to date themes highlighted in Hungarian as well as in European transport policies. Road safety is one of the major problems in Hungarian transport system so it is vital to have well established strategies coping with it. These strategies can rely on R&D activities aiming at gathering, processing and analysing accident data, furthermore deriving recommendations on how to identify and implement appropriate measures. From this point of view, the theoretical and practical results presented by the authors can contribute to effectively assist road safety related policy making.