

Priorities, processes and validation of new vehicle safety systems - how can we be effective, transparent and efficient in a market driven safety development?

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Summary

Improved vehicle safety is one of the major contributors to the EU target of halving the road toll over ten years. The net effect of replacing a 10-15 year old car to a new car is now larger than ever, and increasing.

The development has taken place as a result of both regulation and market demand, but gradually, the market driven process dominates over regulation. Consumers, both individual and fleet buyers, are both increasingly expecting a higher and higher level of safety, also in terms of driver support systems.

In order to stimulate the future demand for effective systems and technologies, evaluation of real life benefits are essential and the most important step in the market process. Without sound evaluations demonstrating significant safety contributions, the market cannot function in a logical and constructive way.

Unfortunately, there are very few evaluations conducted, leaving consumers in a rather confusing situation where lots of safety systems are marketed without any predictions of safety, and leaving policy makers with uncertainty about what systems that should be promoted. This is a situation where major benefits could be disregarded and on the contrary where major investments could be spent on systems with virtually no effect.

More recently, only Electronic Stability Control (ESC) has been evaluated in a systematic way. As the benefits were in general much higher than expected and well communicated, the market penetration in some countries were extraordinary fast. In Sweden, the new car equipment rate increased from 15 to 85% in just 30 months. The benefit from high scores in Euro NCAP has also been evaluated and communicated with good results.

A large number of technical safety systems are now being introduced, or have already been introduced. No systematic evaluations have yet been published for brake assist, lane departure warning, pre-safe systems, seat belt reminders, intelligent cruise control etc. This is not acceptable, and several stakeholders should take steps to facilitate such evaluations. There does not seem to be a lack of data, but rather analyses. Multicenter studies and using instrumentation of cars should be methods used more frequently. Car manufacturers and suppliers should also take steps to conduct follow up studies.