

Keynote Lecture

Interaction of Research, Legislation and Consumer Information

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The European "White Paper" (2001) target of halving the number of road fatalities within the EU until 2010 ([1], [2]) has not been reached. Consequently the „Roadmap to a single European Transport Area“ (2011) of the EC [3] is targeting a further reduction of 50% of road fatalities within the EU from 2011 until 2020. The German national road safety action programme (2011-2020) and the European programme are addressing similar targets [4] (reduction of 40% of road fatalities in Germany).

However, still about 28.000 people died on European roads in 2012 [5]. Looking at a bigger picture about 1.3 million people are killed worldwide per year due to road traffic accidents and about 20 to 50 million more are injured. About 46% of those are vulnerable road users. Road traffic injuries have become the leading cause of death for people aged 15 to 29 years [6].

The United Nation General Assembly proclaimed the UN "Decade of Action for Road Safety 2011-2020" [7] in a landmark resolution co-sponsored by 100 countries in 2010. The Decade of Action for Road Safety 2011-2020 was launched on May 11th, 2011 [8]. The aim is to stop the increase and to decrease the number of fatalities and injuries in road traffic accident significantly by 2020. If all actions will be successful it is expected that about 5 million lives will be saved until 2020.

One of the activities within "The Decade" was to establish a Global New Car Assessment Program (Global NCAP) and to promote additional NCAP programs. It is also the intention to harmonize regulations and to establish global standards (like UNECE Global Technical Regulations GTR) as far as possible.

In addition to these aims several stakeholders in Europe are targeting "Vision Zero" which means no people shall be killed by road traffic accidents anymore. Legal activities - like those by the European Enhanced Vehicle Safety Committee EEVC and the UNECE - and consumer test programs (as e.g. Euro NCAP, JNCAP) are frequently being influenced by each others in both ways. One of the reasons is that some members of Euro NCAP are also members of EEVC and UNECE GRSP working groups. However, the budgets available for road safety research of more and more governments are limited. As a consequence European Governments cannot maintain own research institutes anymore (exception BAST). Thus, the financial engagement in EEVC by the participating countries was more and more reduced and EEVC was partially inactive in various fields.

Within the framework research programs of the European Commission several research projects are funded by the EU-Commission and are used for (co-) funding regulation related research (e.g. in the fields of compatibility, dummies etc.). New dummies and test procedures are being developed and partially validated within EU-projects (like APROSYS, ASSESS, FIMCAR, THORAX, EPOCH, IMVITER, AsPeCSS). Some of the results of those research projects are used in the discussions within the UNECE working groups and Euro NCAP.

Regulations related to vehicle safety are an international effort. As from November 1st, 2014 on, the General Safety Regulation (GSR, Regulation (EC) No. 661/2009) repeals, amongst others, 50 EC Directives and Regulations that are associated with M1 vehicles by consolidating all of the technical requirements from these 50 "separate" Directives into the new Regulation by including references to the corresponding UN (ECE) Regulations. This means that UN regulations shall be mandatory for type approval and technical requirements for motor vehicles shall be laid down in UN regulations in the future, only.

As a consequence the input from the international research community like IRCOBI needs to be put forward to the working groups at UNECE in Geneva for the improvement and further development of regulations related to the protection of vehicle occupants and vulnerable road users.

From a regulatory point of view future challenges are for example the implementation of new dummy generations like the THOR and related injury risk curves or the introduction of numerical simulation and the use of harmonized and validated human body models.

Euro NCAP has recently published its road map until 2020 [9]. One focus is on the interaction of vehicle occupants during side impact and another on the introduction of a new frontal impact test procedure including the THOR dummy.

EEVC under its new regime is willing to play an important role and can act as an interface between research and regulatory activities as well as with regard to consumer protection programs.

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