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CLEPA position on Road Safety

CLEPA fully supports the EU Commission's Road Safety Programme 2011-2020 with the target of halving the number of road deaths by 2020 and with the strategic aim to reduce the severity of injuries resulting from road accidents. CLEPA agrees that an integrated approach with actions regarding all aspects of the road traffic system, i.e. vehicles, infrastructure and road users is the way forward. A commitment to road safety is fundamental to all automotive suppliers. A higher vehicle safety level for all road users is one of the cornerstones of CLEPA members' development plans, which will support a reduction of the number of fatalities and injuries in road traffic.

The record is impressive. Safety-belts are a proven life-saving device with an overall effectiveness of more than 50%¹, which becomes even higher with additional functions, such as pre-tensioning and load-limiting. Frontal and side impact airbags have further significantly reduced the number of fatalities to date. Research findings show that the avoidance effectiveness of electronic stability control (ESC) is more than 30%² in fatal single vehicle accidents and more than 50% if looking at wet road accidents.

Passive safety

With regards to protecting people in crashes, also known as passive safety, CLEPA believes that more attention should be given to other than usually front seated populations, like children and small statured occupants, to the ageing population in the EU, to new and evolved types of vehicles (e.g. light weight design, two wheelers and electric vehicles) and to vehicle collision compatibility. The protection of pedestrians is already addressed through EU regulations, but the protection of other vulnerable road users, in particular cyclists, should be considered in the light of being a major concern in many Member States. Accident statistics show that there is also a need to protect interacting car occupants in side impacts.

Active safety

When it comes to mitigation and avoidance of crashes, also known as active safety, new systems have entered the market. Recent research findings show that the new systems, such as forward collision warning combined with autonomous emergency braking (FCW/AEB) and lane departure warning combined with lane keep assist

¹ EC study at:

http://ec.europa.eu/transport/road_safety/specialist/knowledge/esave/esafety_measures_known_safety_effects/seat_belt_reminders.htm plus various US studies

² EEVC 05-0135- June 2005, NHTSA DOT HS 810 794 July 2007, IIHS May 2010,

(LDW/LKA), have a significant potential to further mitigate crashes and reduce the frequency of various crashes. AEB addresses rear end crashes which have a share of 15% of all accidents with casualties and shows an effectiveness in rear-end collisions avoidance up to 70%. LDW prevents up to 7% and LKA up to 26% of all relevant accidents with casualties³.

Driver assistance

Available road accident statistics through many years show that many accidents are related to the field of human factors. Driver assist systems, such as the aforementioned FCW, AEB, LDW and LKA, as well as night vision, adaptive lighting, detection of vulnerable road users and blind spot detection, all have a substantial potential to improve drivers' performance and should be promoted further. Driver state monitoring including drowsiness and distraction detection is developing quickly and has, in particular combined with the other driver assist systems, also a large life-saving and injury reducing potential and should therefore be supported.

Although many accidents are caused by human mistakes, there is a part of accidents that are caused by wild animals, tyre bursts and the like. They are not frequent, but often result in severe consequences. Most driver assist systems address them by the mere fact that the systems aim to alert the driver about a particular situation. Night vision and adaptive lighting, for example, support detection of pedestrians and animals on country roads and reduce the number of this type of accident. Burst tyres are most often preceded by low tyre pressure, which is detected by tyre pressure monitoring systems (TPMS). An extension of the TPMS regulation to light and heavy commercial vehicles is supported by CLEPA.

As a support to traffic rules compliance, safety-belt reminders have already proven to be highly effective, showing a decrease of 80% of the unbelted rate⁴. However they have only become mandatory for the driver seat in European vehicles, inclusion of other seating positions should be considered. The deployment of speed assist devices (by ITS applications or camera-based systems) and vehicle integrated alcohol detection systems should be further supported. It is estimated that 5000 lives would be saved annually in EU if alcohol limits were respected⁵. The importance of keeping posted speed limits is a recognized safety aspect since long.

Post crash

Certain ITS applications have promising effects on both road safety and protection of the environment and should be encouraged. For example vehicle based eCall systems, which address both the time for injured persons to get to a hospital for

³ GIDAS Data and Bosch studies.

⁴ ESV 2007, Paper 07-0388 : INTELLIGENT SEATBELT REMINDERS: DO THEY CHANGE DRIVER SEAT BELT USE IN EUROPE

⁵ Drink driving: Towards zero tolerance- ETSC- April 2012

medical care and the time to resolve road congestion due to an accident. Life-saving ITS applications should be implemented and become mandatory once the necessary ITS infrastructure is operational in all Member States.

Recent research also shows that active and passive safety systems complement each other and should not be substituted one for the other. The way forward is an integrated approach, combining active and passive safety potentials to gain even further improvements in the safety of vehicle occupants and of other road users.

Besides the development and installation of new vehicle safety systems, which results in safer vehicles, it is important to continue to promote the safe vehicles in the EU through Euro NCAP and other programs. This is in the view of CLEPA particularly important in Member States with high fatality and injury rates. Also the continued enforcement of traffic rules and improvements to the infrastructure in the EU remain as major keys to reach the goal of halving the number of road fatalities. Nevertheless each technology could be effectively only if human behavior will be considered in the whole process of traffic safety. In principle, a balanced approach between advanced vehicle technology, driver behaviour and well-developed infrastructure is needed to reduce traffic accidents permanently.

Europe has an established leadership in safety innovations and technologies which should be supported. Most of the above discussed systems developed by CLEPA's member companies are produced in Europe and have thus a large positive side effect for the whole European automotive industry in economic terms.