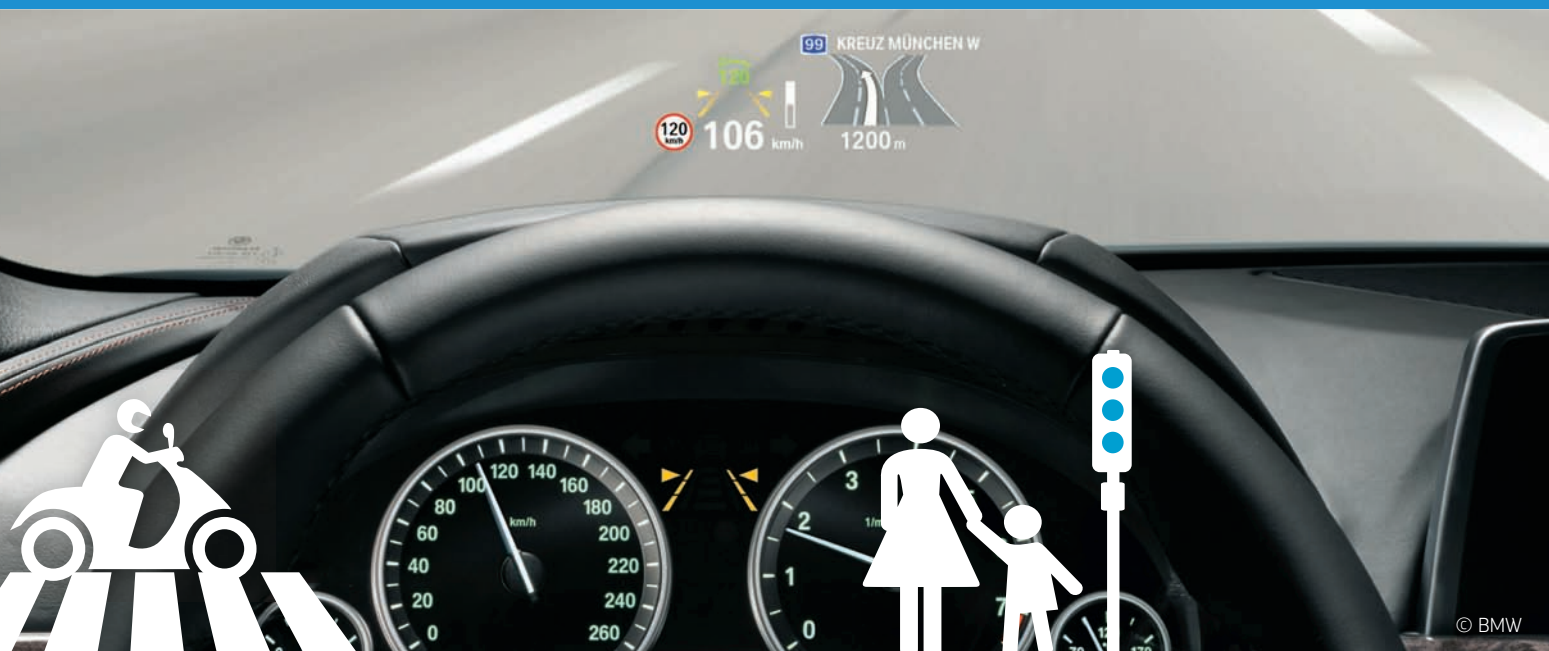




Road Safety Newsletter



Smarter transport systems mean safer roads

Road accidents remain a major cause of death and injury in Europe in spite of considerable improvements over the past decade. The European Commission recognises the important role which intelligent transport systems (ITS) can play in making Europe's roads safer still.

ITS relates to the application of ICT on road transport infrastructure and operations and includes a range of systems to detect incidents, support traffic supervision and manage or provide real-time information to road users and hauliers, among other things. Recently ITS have taken a prominent place in EU transport policy, and more specifically in the road safety policy orientations for 2011-20, which aim to promote and accelerate deployment of innovative technology in order to improve road safety.

Cooperative systems allowing communication between vehicles, from vehicles to road infrastructure and between infrastructure – thereby enabling travellers to remain connected at all times – have all the potential to accelerate deployment of advanced driver assistance systems.

The importance of modern technology to achieving transport objectives led the Commission to develop an Action Plan for deployment of ITS in Europe. This helped pave the way for the adoption in 2010 of an ITS Directive that aims at accelerating coordination and deployment

of ITS in road transport.¹ The Directive sets out four priority areas and lists six priority actions for which targeted specifications enhancing interoperable deployment will be developed.

Most of these priority actions have a direct impact on road safety, as they are related notably to improved traffic information and in particular to the widest possible provision of minimum road safety-related traffic information, free of charge to users, to multi-modal information services, to provision of an EU-wide interoperable eCall rescue system and information and reservation services for safe and secure parking for trucks and commercial vehicles. It is hoped that relevant technical, organisational and functional specifications should be developed for all priority areas by the end of 2014.

For more information, please visit:

http://ec.europa.eu/transport/its/road/road_en.htm

1. Directive 2010/40/EU



Big advances in driver assistance

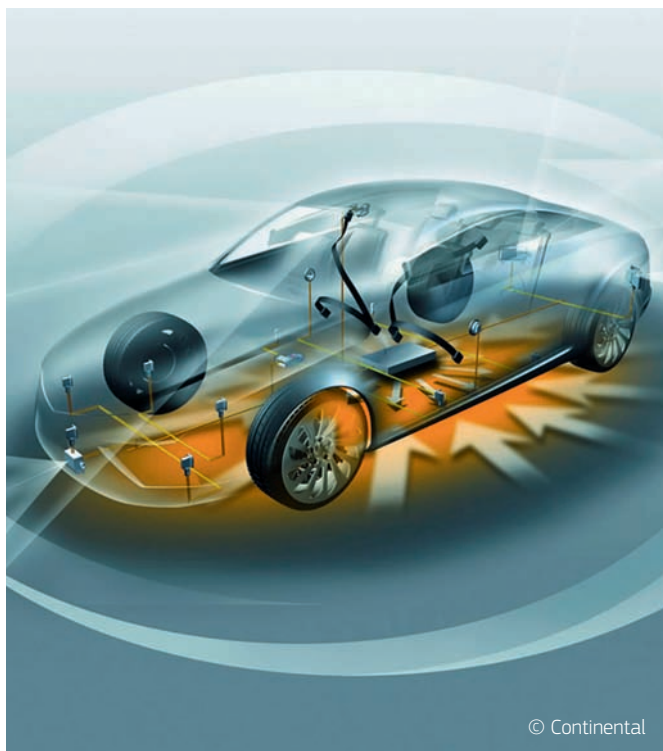
Research and practical experience have shown the importance of advanced driver assistance (ADAS) and other safety-related systems in making Europe's roads safer. However, if these systems are to fulfil their potential, their deployment must be as wide as possible. The European Commission acknowledges the need to accelerate deployment and promote market take-up of these applications in its road safety policy orientations.

To illustrate the benefits which could accrue from these systems, one should consider that it is estimated that 5 000 lives a year could be saved in the EU if electronic stability control and advanced emergency braking systems alone are fully deployed. However, the full range of ADAS is much wider and also includes lane departure warning, lane change assistance, collision warning and pedestrian recognition systems, as well as intelligent cruise control.

The EU is phasing in inclusion of ADAS such as automatic emergency braking, lane departure warning systems, electronic stability control and ABS brake assist as pre-requisites for new vehicles in certain four-wheel passenger and goods categories.² It is hoped that compulsory fitting of these systems on all new vehicles and vehicle types within the relevant categories will be introduced by late-2015.

However, to achieve full deployment of these systems it is also necessary to ensure that they are retro-fitted to all used vehicles. Partly to this end, the EU is to launch an assessment study on ADAS and other safety-related technologies which takes account of this possibility.

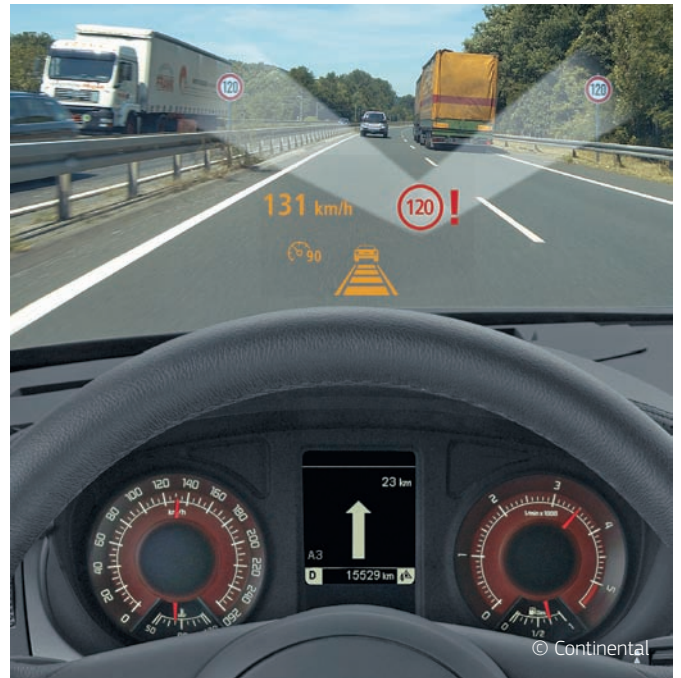
2. Regulation (EC) No 661/2009



© Continental

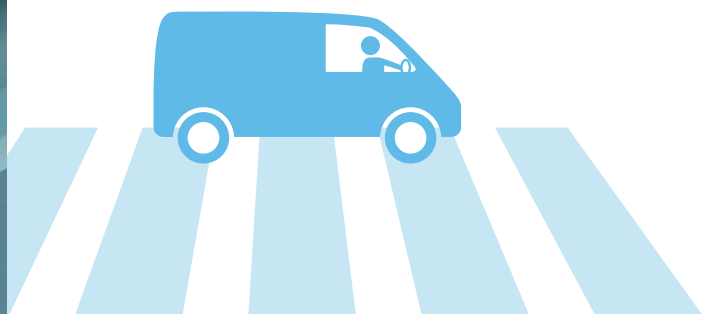
Killing speed

Speed remains one of the main causes of accidents on European roads and is a particular danger to vulnerable road users³ such as pedestrians, cyclists, motorcyclists and people with reduced mobility. Speed adaptation and limitation systems are types of ADAS which may play a more prominent role in vehicle safety in the future and the Commission intends to further assess the possibilities for their implementation.



Further progress is necessary to increase deployment of ADAS across all vehicle categories. One category not covered by the provisions mentioned above is that of powered two-wheelers. The Commission is preparing proposals for implementation of ADAS in this category. They are expected to be published in late-2012.

3. See also a recent published study related to the vulnerable road users: http://ec.europa.eu/transport/its/studies/doc/2011_05-safety-and-comfort-vulnerable-road-user.pdf





Accelerating emergency services



© iStockphoto

The basic pan-European eCall service, is an emergency service based on the toll free 112 number. In case of accident, the satellite-based positioning and other relevant vehicle information are transmitted to the Public Safety Answering point (automatic or manual activation). The Commission's aim is for a fully functional 112-based eCall service to be in place all over the European Union (as well as Croatia, Iceland, Norway and Switzerland) by 2015. Once widely deployed, eCall will save several hundred lives in Europe every year, and reduce the severity of injuries and trauma in tens of thousands of cases.

For more information, please visit:

http://ec.europa.eu/transport/its/road/application_areas/vehicle_safety_systems_en.htm

Better communication between vehicles and infrastructure

While advanced assistance to drivers helps them to better control their vehicles, added benefits can come by enabling vehicles to communicate both with each other and with road infrastructure. Development of cooperative systems is essential for this.

Co-operative systems are based on the real time transfer of information from vehicle to vehicle (V2V), vehicle to infrastructure (V2I) or infrastructure to infrastructure (I2I) via radio interface. As the capacity and flexibility of information technology and communications increases, and costs decrease, it becomes feasible to develop such systems.

The EU recognised the benefits of such systems in its road safety policy orientations, undertaking to further assess them with a view to identifying the most beneficial applications and recommending measures for their deployment. The overarching aim is the development of a harmonised and interoperable European cooperative communication system.

The work on cooperative systems was started in Europe under the Research Framework Programmes, leading notably, based on the results of the COOPERS, CVIS and SAFESPOT projects, to the adoption by the European Telecommunications Standards Institute of standards for communication architecture for cooperative systems and validation of their technical feasibility.

A large-scale field operation test under the FP7 project DRIVE C2X is validating the technical feasibility of cooperative systems.

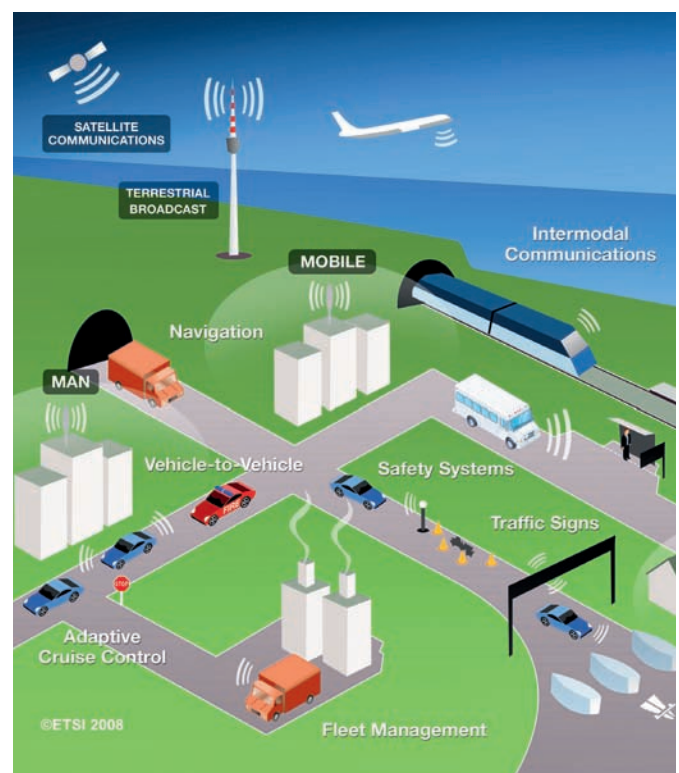
Aside from legislative action, the European Commission supports a range of initiatives which work to enhance development of cooperative communication systems, be they V2V, V2I or I2I. One such initiative is the EASYWAY project, which lists improvements in road safety as one of its key objectives.

The EASYWAY4 project, which focuses on EU-wide deployment of interoperable information and communication technology infrastructure, is in particular addressing the identification of the priority cooperative services to be deployed and the required infrastructure able to support them on all principal European road transport corridors. The ITS Directive would subsequently be instrumental in establishing and enforcing, through specifications, the needed infrastructure requirements (functional or operational) for cooperative systems.

For more information, please visit:

http://ec.europa.eu/transport/its/road/application_areas/cooperative_systems_en.htm

4. www.easyway-its.eu





A new definition for road injuries

Numbers of injuries on the EU's roads have dropped by 36% over the last decade. However, injury rates remain unacceptably high and almost 1.5 million people were injured as a result of traffic accidents in the EU in 2010. Member State figures indicate that around a quarter of a million of these were serious injuries.

Fatality levels are often used as the benchmark for defining the safety of roads. However, for every death on Europe's roads, there are an estimated four permanently-disabling injuries such as damage to the brain or spinal cord, ten serious injuries and 40 minor injuries.

The EU has made reductions in the number of traffic injuries a priority for this decade. The High Level Group for Road Safety, a forum which brings together the European Commission and Member State representatives to review road safety policy has underlined the importance of injuries as a key factor in defining safety. It has thus made the subject the main focus of its next meeting, which is scheduled for June 2012 in Copenhagen.

There is unanimous agreement of the need to reduce the numbers of people injured on Europe's roads and the severity of injuries that do occur by making vehicles and infrastructure safer and improving first-aid and rehabilitation services. At the same time, the importance of injury rates as one of the key safety indicators is highlighted by the widely-held but erroneous view that fewer deaths simply mean more injuries.



© iStockphoto

No common definition

For any such indicators to be accurate, it is necessary to differentiate between degrees of injury. Unfortunately there is as yet no common European definition for severe and minor injuries, with Member State definitions currently based on differing factors such as length of time spent in hospital or extent of trauma or invalidity.

The European Commission is taking steps in this direction with the launch of a public consultation aimed at gathering views on collection of injury-related data and differentiation between seriousness of injury. Common definitions should facilitate the setting of EU and national injury reduction targets, which can then be added to the road safety policy orientations. They will also make it easier to compare situations in different Member States.

On the basis of a common definition, it should be possible to pinpoint ways of improving injury prevention and intervention. As well as reducing the rate and severity of injuries, action in this area should also help to cut the socio-economic impact of accidents. This is highly pertinent in the present economic climate, especially given that the annual loss to society from traffic accidents currently stands at an estimated EUR 130 billion.

Any further promotion of the Road Safety website <http://ec.europa.eu/roadsafety> is welcome.

We would like as many people as possible to be aware of the site and the important information it contains about staying safe on the road.

Thank you in advance for helping to keep Europe's roads safe and for raising awareness of Road Safety Europe.

© European Union, 2012

Reproduction is authorised provided the source is acknowledged.

Published by: Directorate-General for Mobility and Transport | European Commission – BE-1049 Brussels
http://ec.europa.eu/transport/index_en.htm

Legal notice:

The contents of this newsletter are prepared by officials of the Mobility and Transport DG and represent their personal views on the subject matter. These views have not been adopted or in any way approved by the European Commission and should not be relied upon as a statement of the Commission or the Mobility and Transport DG.