

4. Smart Vehicles (Antonio Perlot)

Quote: "Rethink the status of the car, in terms of its protective features and role in society"

Short & Medium term: eCall and General Safety Regulation

Long term: Connectivity and automation opportunities (new vehicles and retrofiting)

Background

Maintaining a positive road safety trend is important for the European region that prides itself on designing, producing and placing on the market safe, comfortable and efficient vehicles in probably one of the most demanding markets in the world.

Most of systems introduced in vehicles support improved safety for the ego vehicle user, some others are increasingly aimed at protecting vulnerable road users.

Short and Medium term: eCall and General Safety Regulation

Preventive safety - The General Safety Regulation is currently under revision. A report with 19 measures that are most likely to be cost effective has been published, just to mention few which will be expected to have a positive impact on Vulnerable Road Users: Automated Emergency Braking, Lane Departure Warning, Safety-belt reminder (all seats), Intelligent Speed Adaptation. The EC proposal is expected in 2018.

Tertiary safety - A system benefiting all users is eCall, emergency call systems, which must be installed in all new car and van models from 31 March 2018 onwards.

Future transport systems

Looking further ahead, connected and automated vehicle technologies offer great potential to improve road safety, including for Vulnerable Road Users. Connectivity is considered a key enabling technology to boost and support the wider automation of vehicles, the automotive industry is currently working on the introduction of Day 1 services outlined by the C-ITS platform.

As Europe is moving towards connected and automated vehicles, this requires transportation systems being ready to operate in a mixed traffic environment where a portion of vehicles are automated (partially or fully), others are only connected and the remaining vehicles are not equipped at all. This mixed traffic, including its consequences for vulnerable road users, is one of the main challenges to be faced by EU Member States.

Recommendations to the automotive industry

- Prioritise research and development in innovative vehicle technology, supporting improvements to the road safety of both vehicle occupants and other road users (in particular Vulnerable Road Users)
- Support dialogue within the automotive industry and with other stakeholders (including Vulnerable Road Users) to ensure interoperability of solutions in the field of connected and automated vehicles
- Rethink the status of the car, in the direction of lighter and safer vehicles in the future. Encourage progressive, higher availability of different safety systems on a wide range of vehicles, including via voluntary commitments

Recommendations to EC

- Follow an appropriate policy mix, combining regulatory and other measures that boost the innovation and reinforce the competitiveness of the European automotive sector
- Increase Global Harmonisation efforts towards harmonised requirements (UNECE)
- Foresee research opportunities at EU level, within H2020 and beyond, to accompany the industry' efforts towards safer and more advanced vehicles
- Initiate further legislative action to enable C-ITS deployment from 2019

Recommendations to Member States

- Put in place necessary infrastructure (PSAPs), fully enabling the eCall European initiative and a seamless emergency service chain
- Support vehicle fleet renewal, offering for example incentives to individual users or fleet companies embracing new vehicles equipped with safety features or retrofitting of existing vehicles
- Take part in European field operation tests with connected and automated vehicles, with suitable digital and physical infrastructure, paving the way to C-ITS deployment in Europe

Vehicle technology is important, but to be effective, road safety policy needs to consider the full range of factors, such as human behaviour, education, training and road infrastructure.