

PARALLEL SESSION: DEVELOPING NEW TECHNOLOGIES FOR ROAD SAFETY

Session Conclusions

George Yannis

New technologies have contributed considerably to accident and casualties reduction during the last decades and today present an even greater potential to address all crash risk factors, with even greater impact in Low and Middle Income countries. Key considerations are summarized below:

New technologies in vehicle active and passive protection

- Technologies embedded in the car have driven safety progress the last decades and should continue
- Seat belt reminders changed and improved habits and should be compulsory in all new vehicles
- Anti-distraction devices can address the highly risky use of mobile phone and other devices during driving
- OEMs should work more for technology solutions against distracted driving
- Current and new systems with clear proven safety benefit should be mandatory (ESC, ISA, etc.)
- New systems should be further explored (lane departure warning, etc.)
- Communication V2V, V2I and V2X should be promoted also for safety reasons
- Automation is fast approaching (L5 is coming) available, soon scaled but global penetration might require 20-30 years
- Focus more on the safety functions of technologies than on systems and techniques

New technologies can support and improve behaviour

- We should stop letting drivers decide the speed and intelligent speed adaptation systems should be implemented gradually in all new and old vehicles
- New technology safety solutions should also focus on Vulnerable Road Users (pedestrians, cyclists, motorcyclists), with focus on how to save people outside the car
- Cameras and automated radars for speed enforcement can be proved highly efficient road safety measures (e.g. lower speed limits at interurban network 80km/h)
- Geofencing technologies are easy to implement with important safety benefits
- Integrated systems (vehicle, road, user) understanding people behaviour

New technologies support road safety management

- Technology should complement and substitute policing
- Innovation and regulation should have a common pace, with innovation driving regulation changes
- The fleet cycle should be shortened with motives for vehicle renewal and low cost of new safety devices
- Integrated new technologies solutions for safety, sustainability and the environment
- Road safety technology deployment should be combined with related road safety awareness campaigns
- Industry should not compete on safety they should all be 5-star vehicles
- Need for values change for OEMs by redefining standards
- Private fleets should be front runners in road safety best practice, as professional drivers safety support is easier to implement
- Cooperation between Industry and Authorities is necessary
- New technologies allow for democratization of safety solutions, being available to all
- New technologies will allow road safety to be more pro-active (safe system), like e.g. aviation safety

New technologies support road safety data

- GPS solutions can enhance the spatial dimension of road safety data
- Data from mobile phones should be exploited to provide risk exposure and road safety Key Performance Indicators (KPIs)
- Need for data driven best practice
- New technologies allow for big and quality road safety data of all types: crash data (addressing also under-reporting), exposure data (traffic, etc.) and KPIs on behaviour of users/roads/vehicless
- New data can better support decisions of Authorities and the industry, but also allow for feedback to the driver and the road user

New technologies in Low and Middle Income countries (LMIC)

- Need for regulation for not importing old technology vehicles in LMIC
- Low cost technologies should be foreseen for LMIC
- LMIC Governments should invest in technology promotion
- New technologies good practice from best performing countries should be transferred and adjusted in LMIC
- Private sector should contribute to technology investments in LMIC
- Need for campaigns to convince the LMIC population about the need for vehicles safety devices
- LMIC should already benefit from new technologies before automation comes
- LMIC should get prepared for the technology changes

Panelists

Moderator

Anders Lie Special Advisor | Ministry of Infrastructure | Sweden

Introduction

Matthew Baldwin European Coordinator, Road Safety, Deputy Director-General | European Commission

Panel participants

Akaki Saghirashvili Deputy Minister | Ministry of Economy and Sustainable Transport | Georgia

Dagmawit Moges Minister of Transport | Ministry of Transport | Ethiopia

Mark Rosekind Chief Safety and Innovation Officer | Zoox

Maria Krafft Traffic Safety Director | Swedish Transport Administration