THE POTENTIAL OF NEW VEHICLE SAFETY STANDARDS FOR DELIVERING EU ROAD SAFETY TARGETS

> 4 October 2018 Vilnius Antonio Avenoso Executive Director



European Transport Safety Council



THE 3RD MOBILITY PACKAGE



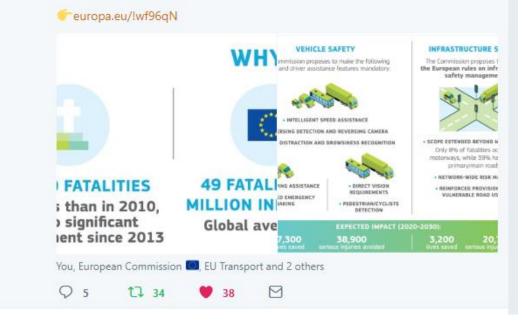


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Violeta Bulc 🥝 @Bulc_EU · May 17 #RoadSafety needs a fresh approach. Our new measures for #MobilityEU aim to:

1

- Halve the number of deaths & serious injuries by 2030
- Make a number of new vehicle safety technologies mandatory
- Improve rules on infrastructure safety management



THE 3RD MOBILITY PACKAGE

Two legislative proposals

- Revision of the General Safety 2009/661 and Pedestrian Safety 2009/78 Regulations
- Revision of the Road Infrastructure Safety Management Directive 2008/96

Two communications

- Strategic Action Plan on Road Safety
- Strategy on Automated Driving

https://ec.europa.eu/transport/modes/road/news/2018-05-17-europe-on-themove-3_en

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EU VEHICLE SAFETY STANDARDS

- Death figures would have been significantly higher without vehicle safety measures already taken by the EU
- Vehicle safety standards: exclusive power to legislate (Article 114 of the EU Treaty)
- Last revision of common EU vehicle safety rules in 2009
- 17 May 2018: the European Commission proposed to make 15 new vehicle safety measures mandatory on all new vehicles





- Advanced emergency braking (cars)
- Alcohol interlock installation facilitation (cars, vans, trucks, buses)
- Drowsiness and attention detection (cars, vans, trucks, buses)
- Distraction recognition / prevention (cars, vans, trucks, buses)
- Event (accident) data recorder (cars and vans)
- Emergency stop signal (cars, vans, trucks, buses)
- Full-width frontal occupant protection crash test improved seatbelts (cars and vans)
- Head impact zone enlargement for pedestrians and cyclists -safety glass in case of crash (cars and vans)
- Intelligent speed assistance (cars, vans, trucks, buses)
- Lane keeping assist (cars, vans)
- Pole side impact occupant protection (cars, vans)
- Reversing camera or detection system (cars, vans, trucks, buses)
- Tyre pressure monitoring system (vans, trucks, buses)
- Vulnerable road user detection and warning on front and side of vehicle (trucks and buses)
- Vulnerable road user improved direct vision from driver's position (trucks and buses)

PRIORITY MEASURES



- Overridable assisting ISA on all new vehicles, default ON
- Standard interface to allow (if needed) fitment of alcohol interlocks
- Autonomous Emergency Braking (AEB) for cars and vans with cyclist/pedestrian protection
- Improved pedestrian protection for cars (crash test changes)
- Improved direct vision to allow truck drivers to see pedestrians and cyclists
- Event Data Recorders (EDR)

BENEFITS OUTWEIGH THE COSTS



Cost-effectiveness analysis of Policy Options for the mandatory implementation of different sets of vehicle safety measures – Review of the General Safety and Pedestrian Safety Regulations

Technical Annex to GSR2 report SI2.733025

Final Report

TRL report II 04/2018

https://publications.europa.eu/en/publicationdetail/-/publication/ed4aff17-49c5-11e8-be1d-01aa75ed71a1/language-en

HUGE LIFE-SAVING POTENTIAL

deaths on the road could be prevented by the introduction of new vehicle safety measures announced today.

Over the period 2022-2037 according to analysis by TRL https://bit.ly/2/N9/tl



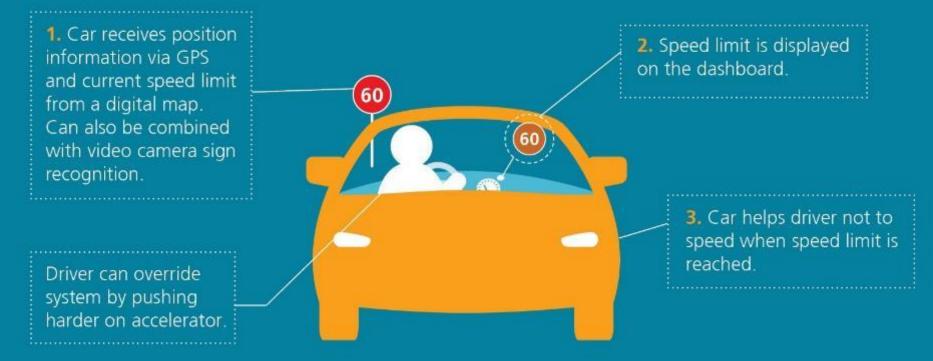
SPEED

"Speed remains a very important risk factor. It has a greater effect on the number of accidents and injury severity than almost all other known risk factors."

Rune Elvik, The Power Model of the relationship between speed and road safety: Update and new analyses (2009)

INTELLIGENT SPEED ASSISTANCE

WHAT IS INTELLIGENT SPEED ASSISTANCE?



ETSC video 'Fit Safety as Standard'

https://www.youtube.com/watch?v=SoZLrZTnUGs&t=26s

INTELLIGENT SPEED ASSISTANCE

ISA COULD CUT **COLLISIONS** BY **30%** AND **DEATHS** BY **20%**





EuroNCAP awards extra points to cars fitted with ISA 78% of road users 64% of car drivers say they support in-vehicle speed limiters (SATRE 2012)

+ ISA helps drivers avoid speeding tickets !

PAVING THE WAY FOR AUTONOMOUS CARS

- ISA is a building block for future autonomous driving. Respecting speed limits is a pre-requisite for vehicle automation.
- Semi-automated systems are already available and approved for use and have the potential to save many lives today.

Fitting **#SafetyAsStandard** as soon as possible

AUTOMATED EMERGENCY BRAKING

- AEB detecting a vehicle in front
- AEB systems with pedestrian and cyclist detection
- AEB can reduce rear-end collisions by 20% to 57%
- Regular AEB systems are compulsory for all new lorries and buses in the EU





25%

of all road deaths in the EU are alcohol-related

Source: EC

ALCOHOL INTERLOCKS

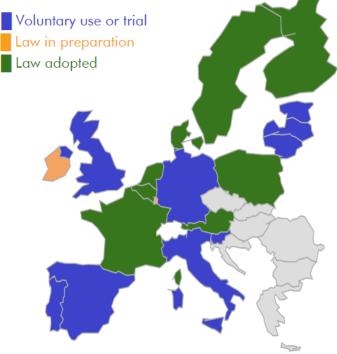
- Increasingly used across Europe
- Reoffending rates in Finland reduced from 30% to 6% with use of interlocks
- Already compulsory on school buses in France and Finland
- Should be mandatory for professional vehicles and all cars should have a standard interface to enable use when needed



ALCOHOL INTERLOCK REHABILITATION PROGRAMS

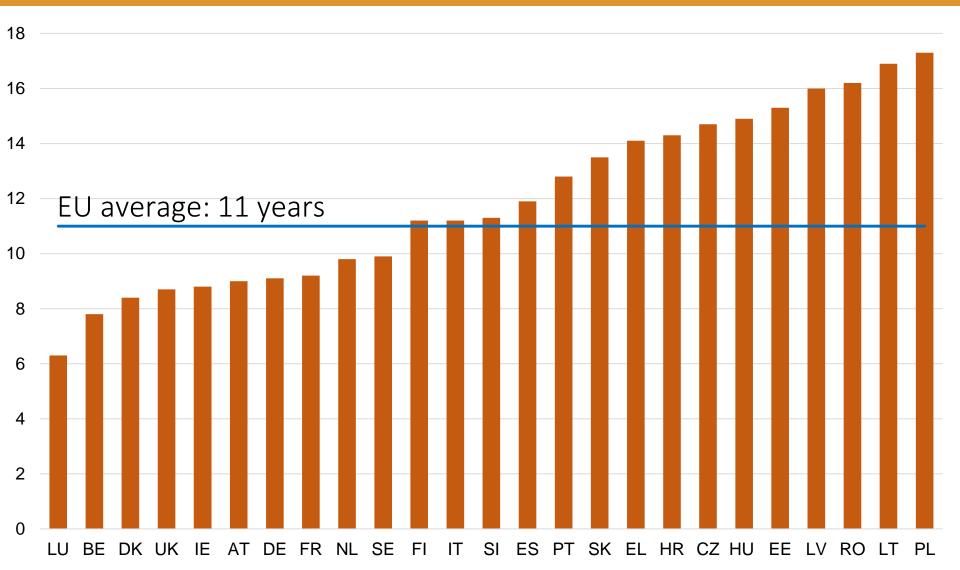
Increasingly used across Europe for professional drivers and in rehabilitation programs for drink driving offenders Alcohol Interlocks in the EU

December 2017





AVERAGE AGE OF PASSENGER CARS IN THE EU



CONCLUSIONS

- Vehicle fleet renewal is a long process
- A need to introduce new highest level vehicle safety standards without delay
- GSR promises a major breakthrough: it's as important for saving lives as the introduction of the seatbelt
- New mandatory vehicle safety measures = lives saved and injuries prevented
- Both passive and active safety should be improved

THANK YOU FOR YOUR ATTENTION









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