

Solutions providers for ever better Active and Passive Safety

Where do we come
from and what is still in
the pipeline?



What is CLEPA?

CLEPA - the European Association of Automotive Suppliers - brings together over **120 global suppliers** of **car parts, systems** and **modules** and more than **20 national trade associations** and European **sector associations**.

What does CLEPA do?

CLEPA is the **voice of the EU automotive supplier industry**, linking the sector to policy makers.



Key past and future road safety technologies

ACC adaptive cruise control
Adaptive front lights
Airbags
Antilock braking systems
Anti-skid traction control
Automatic parking
Autonomous valet parking
Blind spot detection

Brake assist
Child restraint systems
Collapsible steering column
Cruise control
Crumple zone/frame Energy absorption
Drowsiness alert
Electronic stability control
Forward collision warning/assist
Frontal/lateral/pole impact protection

What is Active and Passive safety?



Active safety - refers to safety systems that **help avoid accidents**, such as good steering and braking but has the last years been expanded with many **new systems** such as forward collision warning system and autonomous emergency braking.

Passive safety - refers to **components of the vehicle** (primarily airbags, seatbelts and the physical structure of the vehicle) **that help to protect during and after a crash.**



General Safety Regulation (GSR)

- Every 3 years the European Commission must make a report to the European Parliament and Council concerning news safety measures, if appropriate.
- New measures should meet the objectives of CARS 2020 and the EU policy Orientations on Road Safety.
- A legislative proposal for the new safety requirements is expected in early 2018.
- Main topics:
 - New measures for active safety, for example: Lane Keep Assistance extension to Light Duty Vehicles, Monitoring Driver Drowsiness and Distraction, Intelligent Speed Adaptation and Emergency Braking Display, Tyre Pressure Monitoring System TPMS (for Vans and Heavy Duty Vehicles), Vulnerable Road Users visibility and detection
 - New measures for passive safety, including Frontal Crash Full Width (only Light Duty Vehicles), Side Impact elimination of exemptions (only Light Duty Vehicles), Pole Impact (only Light Duty Vehicles) and Rear tank protection (only Light Duty Vehicles)



- Head restraints
- Highway autopilot with lane changing
- Interior fittings
- Lane departure warning
- Lane keeping assistance
- Materials flammability protection
- Night vision
- Park assist
- Pedestrian protection

- Rear view camera
- Roll-over protection
- Safety belts
- Safety glazing
- Seat belt reminders
- Surround view systems
- Tyre Pressure Monitoring System
- Traffic jam autopilot
- Urban autopilot

CLEPA position

The European automotive suppliers are fully supportive of the European Commission’s **ambitious target of halving by 2020 the number of annual fatalities** in the EU compared to 2010, not exceeding 15.000. CLEPA is actively involved in the regulatory process and welcomes real-life innovations placed on the market in Europe, aimed at increasing **safety**.



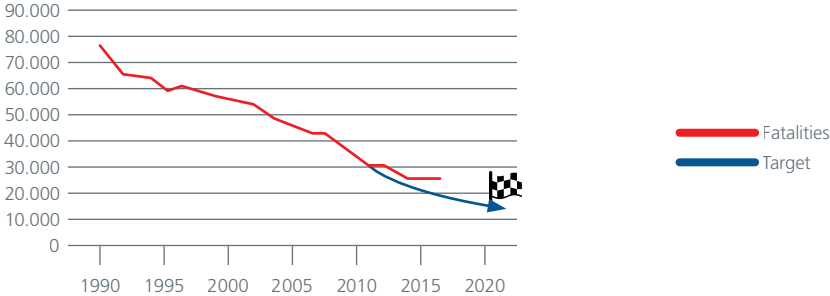
CLEPA however also highlights the fact that an **integrated approach** including vehicles, infrastructure and road users is the only way forward to make drastic progress in road safety.

Great **progress** has been made in the past, thanks to the implementation of seat belts, airbags, ESC stability control and other important safety technologies.



In terms of **passive safety**, CLEPA would welcome more attention focused on children, the increasingly **ageing population** but also cyclists which are still very vulnerable. Increasingly popular vehicles such as **2-wheelers, electrical scooters** should also be a part of the equation.

Road safety evolution in the EU



Source: CARE (EU road accidents adatabase) or national publications. European Commission/Directorate General Mobility and Transport

Which initiatives from CLEPA members are already on the market, and what's in the pipeline?

Together with EU policy makers, CLEPA members have actively introduced various systems and technologies into the market over the last 15 years, which have drastically reduced the number of fatalities and casualties in EU traffic. Examples are:

- passenger car frontal or lateral crash safety
- pedestrian protection provisions
- electronic stability control systems on all vehicles
- tyre pressure monitoring system for passenger cars
- advanced emergency braking systems and lane departure warning systems, on trucks and buses
- driver safety belt reminder
- ISOFIX connectors to safely install child seats
- daytime running lamps
- Intelligent Speed Adaptation
- Driver Drowsiness and Distraction
- Vulnerable Road Users Visibility and Detection

When it comes to **passive safety**, a lot of new systems have recently entered or will soon enter the market, showing very promising results.



LDW (Lane departure warning): monitors the vehicle's position in the lane



LKS (Lane Keeping Support): track the vehicle and brings it back to the center of the lane



AEB (automatic emergency braking): addresses rear end crashes (15% of all accidents with casualties)



Driver aid systems: night vision, adaptive lighting, TPMS, safety belt warning for rear seats



Radar and video based active cruise control: measures gap/distance

