connected automated driving.eu

In-Vehicle Technology Enablers

In-vehicle technologies are key enablers for connected and automated driving (CAD). The foundation for current developments is driven by decades-long technical advances in Advanced Driver Assistance System (ADAS). These advances have contributed to recent Highly Automated Driving (HAD) developments

Challenges

- Societal expectations: Improved road safety, and reduction of pollution and congestion.
- Costs / Complexity: Significant safety relevant system changes and extensions are required; must support alignment of developments digital/communication and automotive industries; mixed traffic challenges.
- Time to market: Regulations could slow down development and deployment of automated driving.

Statements

- The physical change – "driver no longer drivers anymore"
- The responsibility change - "from driver to vehicle"
- The change of the vehicle towards being a part of the communication network - "vehicle talks to other vehicles & the cloud"

Research Needs

- Common safety assessment methodologies and regulations, based on real-world data.
- Accelerate European harmonization and standardization process.
- Develop cutting-edge, robust, reliable, and cost-efficient systems.
- Collaboration between telecommunication and automotive

Expected Impact

- Technical: The ongoing developments in CAD will result in crucial changes to the in-vehicle system boundaries.
- Societal and legal: Fundamental change in the driver-vehicle responsibility relationship.
- Market: Developments will occur while reducing costs and time to market.

connectedautomateddriving.eu @Europe_CAD connected-automated-driving-in-europe

CARTRE PROJECT IS FUNDED BY THE EUROPEAN UNION HORIZON 2020 WORK PROGRAMME