Consumer Information Based on State-of-the-Art Evaluation

Michiel van Ratingen

Joint Belgium-UNECE Inland Transport Committee workshop on Intelligent Transport Systems Towards a new transportation culture: technology innovations for safe, efficient and sustainable mobility.
November 18, 2014, Brussels
Road to Accident Free Driving

From assisted to automated driving

- Assisted: Emergency Brake
- Partially Automated: ACC Lateral/Longitudinal, Traffic Jam Assist, Lateral Collision Avoidance
- Fully Automated: Parking Scenarios, Construction Sites
- Highly Automated: Construction Sites, Stop&Go, Cruising, 0-130km/h
- Fully Automated: All driving scenarios

Technological Enablers: Functions, Technologies

Today
Technical Enablers

- Night Vision
- Adaptive Cruise Control
- Driver Monitoring
- Forward Collision Warning and/or Autonomous Emergency Braking
- Blind Spot Monitoring
- Pedestrian Detection
- Crossing Assistant
- Speed Assistance Systems
- Lane Departure Warning and/or Keeping

Automation will be gradual and based on progressive improvements in ADAS & connectivity...
Market for Collision Avoidance & ADAS

Growth Drivers

- Push for greater road safety
- Need for new features
- Consumers interest is growing
- Prices are coming down

Market Restraints
Growth Drivers

- Consumers’ interest is growing
- Prices are coming down

Market Restraints

- Consumer reaction to any system “failures”
- Pushback on technology
- Pricing strategies – economic crisis
- Lack of market incentives
Consumer Ratings

Promoting the importance of available avoidance technology
NCAP Agenda

- Identify key safety technologies
- Promote “best practice”
- Increase consumer awareness
- Influence uptake
- Pave the way for mandatory fitment
Approach

Field data drives the development of the safety rating

Industry dialog

- Real-world Experience
- System
- Safety Potential
- Accident Mechanism
- Target Performance
- Tests & Criteria
- Expected Benefit
- What is the consumer feedback? Perceived value of ADAS?
- What performance is needed and achievable? Role of the driver?
- How to test and rate systems?
- What systems deliver a real benefit?
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Updating the Safety Rating

Inclusion of driver support systems

2009: Overall Safety Rating
2011: ESC Performance
2013: Intelligent Speed Assistance
2014: AEB City, Inter-urban and Lane Support
2016: AEB Vulnerable Road Users
2017: 2018: ...

Roadmap 2020
Addressing crossing and junction crashes, cyclists, road departure, driver impairment, etc.
Validating Vehicle Safety through Meta Analysis (VVSMA)

Increasing need to estimate “a posteriori effectiveness” of existing safety functions

Current in-depth accident data collection inapt or too slow
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