Autonomous Driving and Road Safety

Spanish Strategy

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Content

• DGT COMPETENCES
• DGT ROAD SAFETY VISION
• DGT ROAD SAFETY CONTEXT
• DGT APPROACH:
  – Autonomous driving and road safety
  – Actions
Directorate General for Traffic – Ministry of Interior

Exclusive competence for:

- Design, definition and assess of road safety policy;
- Traffic rules inside and outside urban areas;
- Traffic management and enforcement outside urban areas;
- Driving licensing;
- Penalty point system;
- Vehicle registration;
- Coordination of research on road safety;
- National registers of drivers, vehicles, accidents, sanctions, penalty points.
VISION 0

- 0 injuries
- 0 congestion
- 0 emissions

Spanish Road Safety Strategy 2011-2020

- To protect the most vulnerable users.
- To promote safe mobility in urban areas.
- To improve the safety of motorcyclists.
- To improve safety on single carriageways.
- To improve safety on work-related trips.
- To improve behaviours related to alcohol and speed.
- EU Fatality rate:

- Spain´s rate: 36 dead per million inhabitants

- Flat trend: new measures are needed

Source: CARE (EU road accidents)
Approach

- Social patterns are rapidly changing
- Based on new technological advances and ITC’s
- People are continuously demanding immediate services
- Youngters’ new way of living and moving
- Aging population
- Inclusive mobility
- Health (accidents and pollution)
Autonomous driving

- Is a major technological advancement that will transform mobility.
- Benefits on:
  - Road safety
  - Quality of life: congestion and social inclusion

- The automated driving features are a reality in nowadays cars:
  - Advanced Driver Assistant Systems (ADAS)
Main benefits:

- **Improve road safety:**
  - 30% of fatalities caused by distraction (500 less victims)
  - 26% of dead drivers alcohol level over limits

- Efficiency and environmental objectives

- Comfort

- Social inclusion

- Accessibility
Socio-economic

- The economic impact projected for autonomous driving for the years to come ranging up to €71bn in 2030.
- The estimated global market for automated vehicles is 44 million vehicles by 2030.
- The industrial sector and the legal framework needs to evolve and adapt in a fast pace to stay ahead in global competitiveness.
What role has to play a national traffic administration?

- Neutral
- Regulation
- Testing
- Research
- Public awareness
- Ensure reliability
DGT – Current actions

- Legislation
- Testing
- Gain OEM’s and R&D involvement
DGT - Testing

- Regulatory framework for testing autonomous vehicles:
  - Urban and non urban areas.
  - Previous vehicle safety certification by a recognized laboratory.
    - Document inspection.
    - Vehicle inspection.
    - Dynamic test.
  - Incident report.
  - Operator
- DGT’s Strategy

- Working groups – legal framework
  - Draft of a new Vehicle code including autonomous driving
  - Future of driving licenses
  - Insurance and liability

- Promoting real tests of AV in Spain/Europe

- Workshops
A.V. can contribute to achieve main goals on mobility policy by 2050

Traffic authorities should promote their use by:

- Adapting regulation
- Approving live-saving safety innovations (systems)
- Gaining public acceptance
Thanks for your attention