

Autonomous Driving and Road Safety

Spanish Strategy

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- 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 reduce the socio-economic impact of road traffic accidents.

1. To protect the most vulnerable users.

2. To promote safe mobility in urban areas.

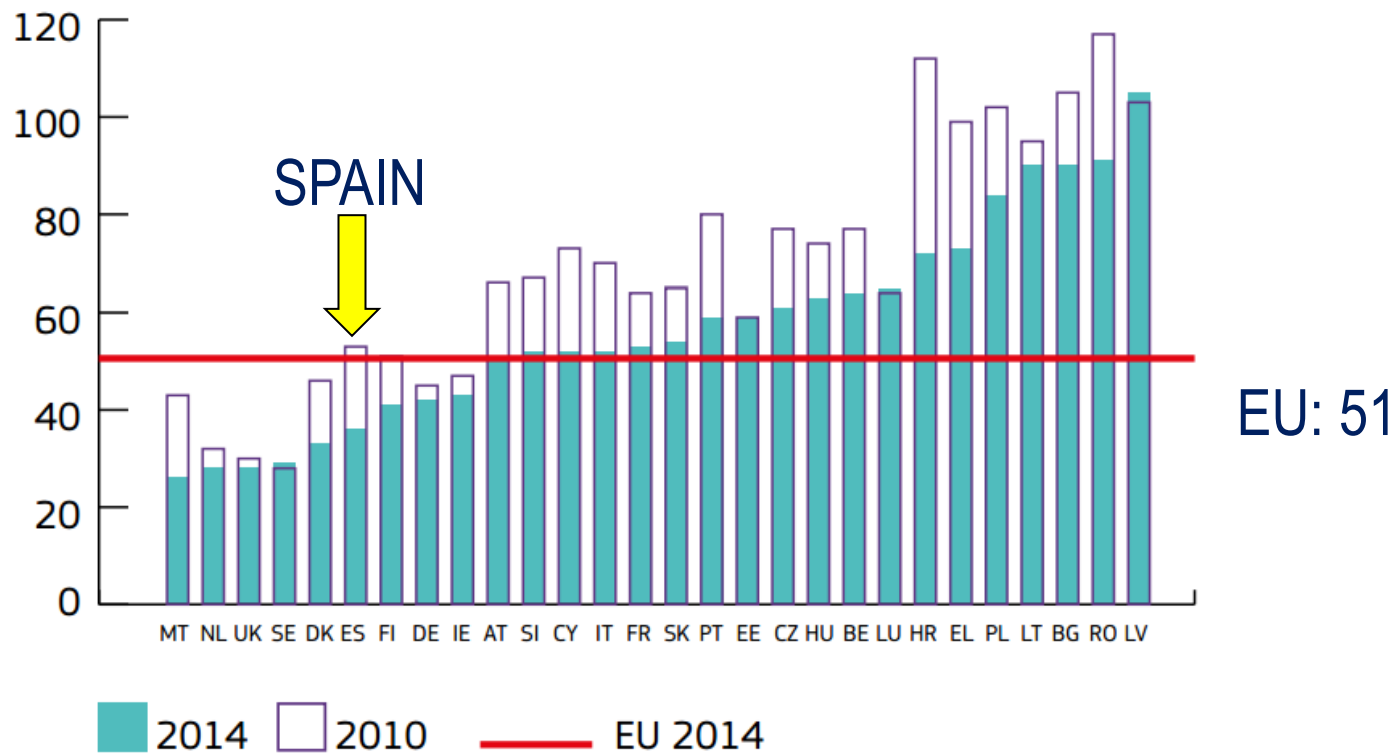
3. To improve the safety of motorcyclists.

4. To improve safety on single carriageways.

5. To improve safety on work-related trips.

6. To improve behaviours related to alcohol and speed.

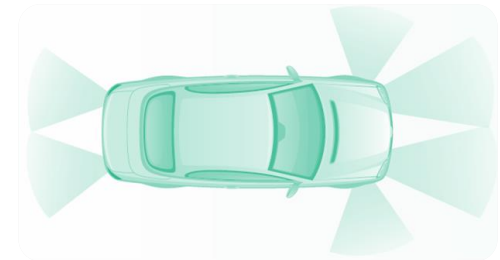
- EU Fatality rate:



- Spain's rate: 36 dead per million inhabitants
- Flat trend: new measures are needed

Approach

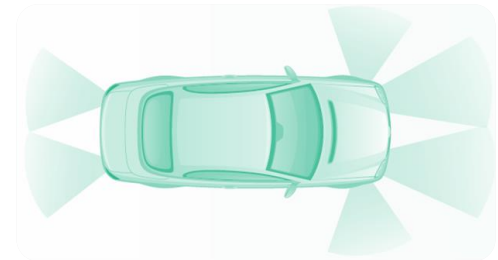
- Social patterns are rapidly changing
- Based on new technological advances and ITC's
- People are continuously demanding immediate services
- Youngsters' new way of living and moving
- Aging population
- Inclusive mobility
- Health (accidents and pollution)



Autonomous driving

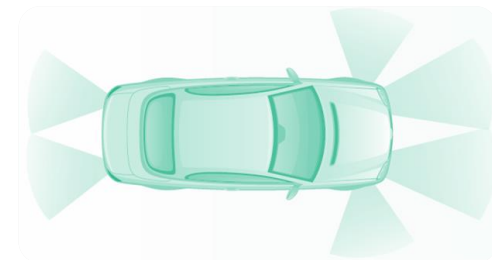
- Is a major technological advancement that will transform mobility.
- Benefits on:
 - Road safety
 - Quality of life: congestion and social inclusion

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



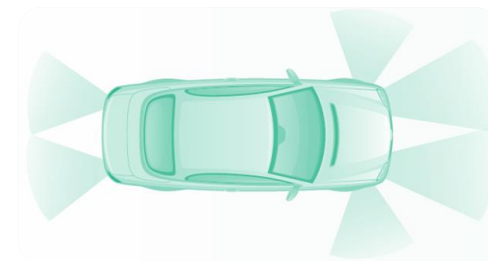
Main benefits:

- 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



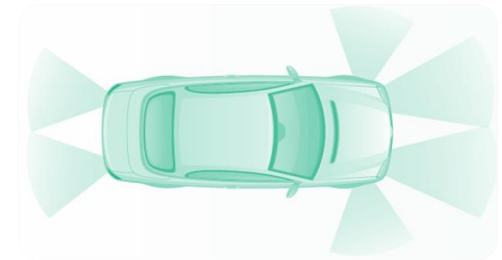
Socio-economic

- 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.



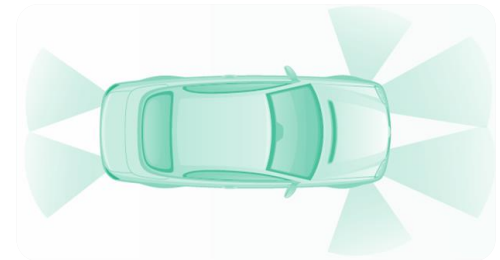
What role has to play a national traffic administration?

- Neutral
- Regulation
- Testing
- Research
- Public awareness
- Ensure reliability



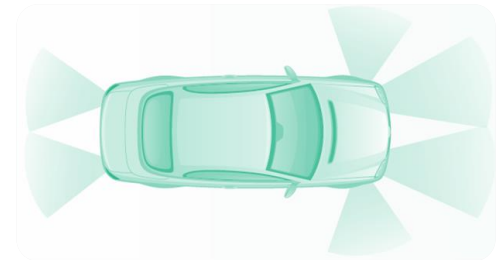
DGT – Current actions

- Legislation
- Testing
- Gain OEM's and R&D involvement



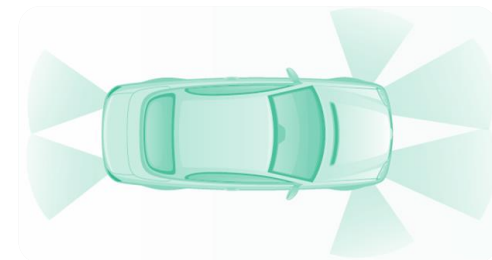
DGT - Testing

- 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



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