

#### Intelligent Transport Systems

## The UNECE perspective on Intelligent Transport Systems (ITS)

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#### ITS is the future

- Over the past two decades ITS have integrated advanced-information based technologies
- The future: smart vehicles on smart roads and agent based ITS control

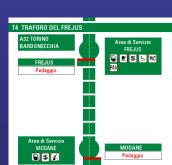


## ITS & safer mobility management

- ITS methodologies allow to monitor the traffic and weather conditions.
- They are of relevant importance in cases of particular events as queues, accidents, tunnels traffic management, where it is crucial to deliver to the users real-time alerts and activate emergency procedures



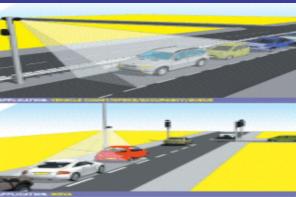




# ITS and the Traffic Management ITS already offer trust worthy solutions, for example:

- In Traveler Information Services, real time traffic information as well as information during the journey (on-trip)
- In Traffic Management Services real time guidance information, detecting incidents and emergencies









#### Issues and challenges

- Investment needs to facilitate the integration of vehicles in transport infrastructure (LDW case)
- Lack of interoperability and compatibility
- Lack of commonly agreed definitions of ITS





#### Liability

- In regards to driver controllability the Vienna Convention on Road Traffic states: "Every driver of a vehicle shall in all circumstances have his vehicle under control..."
- Where does this matter of liability lead us in view of ITS devices?



#### What role UNECE could play

 A Growing number of UNECE member states are intensively developing and implementing ITS

 UNECE legal instruments already include ITS – they could be further developed



#### WP.29 - Intelligent Vehicle Systems

In-Vehicle Intelligent Transport Systems in the UNECE for legal instruments for effective, reliable, harmonized deployment at global level:

- Electronic Stability Control Systems
- ABS
- Cruise Control
- On Board Diagnostic
- Adaptive Front-Lighting Systems
- Airbags
- Automatically commanded braking
- Cornering lamps
- Brake assist systems (BAS)

most significant life saving potential since the advent of the seat belt:

• i.e. ESC reduces single-vehicle crashes of passenger cars by 34 per cent and single-vehicle crashes of sport utility vehicles (SUVs) by 59 per cent.



#### WP.29 - ADAS

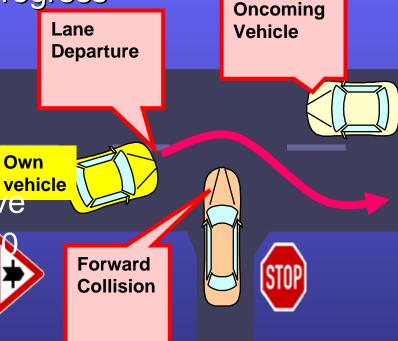
Other UNECE umbrella projects of Advanced Driver Assistance Systems (ADAS) technologies are in progress

to curb road fatalities:

lane departure systems

 advanced emergency braking systems

Mandatory measures can save around 5,000 lives and 35,000 serious injuries per year across EU27





#### VARIABLE MESSAGES (VMS)

Ad-hoc group of experts on variable Messages proposes to WP.1 the restructuring of the 1968 Convention according to:

- Road markings
- Posted signs
- Electronic signs

Need of controlled change in order to keep cohesion on the road displays whatever the signing domain, particularly between posted and electronic signs (shapes, design principles, contents).







## ITS and dangerous goods (WP.15)

 Working party on the transport of dangerous goods (WP.15)

Informal working group on telematics



#### ITS deployment

- How governments, international organizations and UNECE, can support ITS deployment?
- What are the key policies and actions that should be undertaken and pursued?
- Setting common targets ?



#### About ITS ROAD MAP

 Development in progress of a road map in the different areas of the UNECE Transport Division in the field of ITS technologies and their deployment in the future.

### UNECE – your partner for ITS

Thank you for your attention!

- For more information please visit:
- www.unece.org/trans/welcome.html