Intelligent Transport Systems

The UNECE perspective on Intelligent Transport Systems (ITS)

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Mr. Edoardo Gianotti
UNECE Transport Division
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
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.
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