ITS and Road Safety: SoA Technologies & Challenges
Outline

- Road Safety
  - EU targets & Statistics

- Intelligent Transportation Systems
  - State of the Art (SoA)
  - Challenges / Implementation Issues

- Expectations from ITS
Road Safety is a major societal issue. In 2011, more than 30,000 people died on the roads of the European Union.

For every death on Europe's roads there are an estimated 4 permanently disabling injuries such as damage to the brain or spinal cord, 8 serious injuries and 50 minor injuries.

EC set an ambitious Road Safety Programme: To halve the number of fatalities between 2010 and 2020

The programme set out a mix of initiatives, at European and national level, focusing on improving vehicle safety, the safety of infrastructure and road users' behaviour.
Road Safety – Statistics

The EU has the **safest roads** in the World yet **70 people are still dying every day**.
4th Conference 2018

“Intelligent Transport Systems in Greece: Latest developments”

ITS SoA Technologies

**ADAS evolution**
Towards Automated Mobility

**Cooperative ITS**
Towards Connected Mobility

**eCall**
Emergency services
Hybrid Connectivity (ITS G5, Cellular, LTE-V2X, …)

Source: https://itsg5-ready-to-roll.eu/

Cyber-security & Data privacy
Automated Mobility

Technologies

Application areas

4th Conference 2018
“Intelligent Transport Systems in Greece: Latest developments”
Connected & Automated Mobility

“Convergence”

Connected

Automated

Connected & Automated
Challenges / Implementation issues

- **Regulations and legislation**
  - with respect to the spectrum (ETSI ITS G5 and toll interference 5.9GHz)
  - with respect to automated vehicles

- **Privacy and cyber-security** issues
  - GDPR compliant systems

- Large-scale **testing** of ITS (esp. in real driving conditions)

- **Interoperability** / Cross-border testing

- Accurate **positioning**
  - Galileo/EGNOS will help in this direction

- **Cost** of RSUs and equipment is general (both at the vehicle and the infrastructure side)
Thank you for your attention!
Ευχαριστώ για την προσοχή σας!

Any Questions? / Ερωτήσεις;

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