New Services in Mobility: C-ITS

UNECE ITS Workshop, 07th of October 2015, Bordeaux

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• **President Juncker**: a target of at least 40% emission reduction by 2030, compared to 1990 levels
• Energy Union launched
• ITS has been recognised, in particular: **Cooperative-ITS (C-ITS)**
Why C-ITS?

Cooperative Systems understood as "connected mobility":
- More than V2V and V2I
- Connecting all the elements of the transport chain (including public transport and vulnerable road users: pedestrians, cyclists, motorcyclists)

Contribution to a plurality of policy objectives:
- improving road safety
- enhancing mobility & reducing congestion
- optimising performance & capacity of transport infrastructure
- improving efficiency of logistic operations
- and hence: **reducing energy use & environmental impacts**
A sense of urgency...

- C-ITS: clear movement from R&D to deployment
- Need for coordination to ensure interoperability and coherent deployment
- International dimension
- Competitiveness, growth and jobs
Need for a shared vision on deployment in the EU!

The instrument - Public-Private Engagement: The Platform for the Deployment of C-ITS in the European Union
The C-ITS Platform

- Open Call for applicants in 2014, currently over 100 members
- The C-ITS Platform is a "Commission Expert Group", and as such the official procedures have been followed for its establishment.
- DG MOVE chairs and manages the platform, however several Commission services and other EU institutions are actively engaged:
  - DG MOVE
  - DG CNECT
  - DG GROW
  - DG RTD
  - DG JUST
  - JRC
  - EDPS
  - etc.
The C-ITS Platform

- **Objective:** "Developing a shared vision and a roadmap for the Deployment of Cooperative Systems in the EU"

- **Outcome:** Building blocks for a "Communication by the European Commission on the Deployment of C-ITS" in 2016:

  ➔ A Master Plan for the deployment of interoperable C-ITS in the EU
Objectives of the C-ITS Platform

- **C-ITS Master Plan for deployment**
  - Agreed Roadmap, ensuring common approach across the EU
  - Mapping out barriers & enablers and ways to address them (technical, legal, privacy, organisational, policy, administrative,...)
  - Integration within International context (EU-US-AsiaPac)
  - Focus on "Day-1" applications

- **Following up on initial deployments**
  - for instance ITS Corridor NL-DE-AT, SCOOP@F, Amsterdam Group activities, etc.
List of Day1 services - Summary

Hazardous location notifications:
- Slow or stationary vehicle(s) & Traffic ahead warning
- Road works warning
- Weather conditions
- Emergency brake light
- Emergency vehicle approaching
- Other hazardous notifications

Signage applications:
- In-vehicle signage
- In-vehicle speed limits
- Signal violation / Intersection Safety
- Traffic signal priority request by designated vehicles
- Green Light Optimal Speed Advisory (GLOSA)
- Probe vehicle data: CAM Aggregation
- Shockwave Damping
GAP ANALYSIS: WHAT IS TO BE DONE FOR C-ITS DEPLOYMENT?

- WP1 COST BENEFIT ANALYSIS
- WP2 BUSINESS CASES FOR DEPLOYMENT

WP3 LEGAL ISSUES
WP4 SYSTEM’S GOVERNANCE & PRIVACY
WP5 SECURITY & CERTIFICATION
WP6 TECHNICAL ISSUES
WP7 STANDAR DISATION ISSUES
WP8 PUBLIC ACCEPTANCE
WP9 IMPLEMENTATION ISSUES

Standardisation → Horizontal Topic

- WP10 INTERNATIONAL COOPERATION
- WP11 ROADMAP FOR DEPLOYMENT OF C-ITS
Current topics... (1)

- **Cost-Benefit Analysis**: Supporting study launched – "what services and where, which fleet and how?", consolidated List of Day 1 Services available

- **Open legal issues**:
  - Vienna Convention – not an issue for Day 1
  - Liability: function of degree of automation – preliminary conclusion that not an issue for Day 1

- **Data protection and privacy**:
  - C-ITS messages: "Personal data"
  - How to process data? "Consent"

- **Frequencies**:
  - How to ensure co-existence between C-ITS-G5 (5.9 GHz) and DSRC (5.8 GHz) – amendments of ETSI standards
  - Co-existence (proposed) with RLAN in 5GHz band – monitoring of situation
Current topics... (2)

- **Access to in-vehicle data**
  - Agreement on guiding principles on access to in-vehicle data
  - Analysis of different models on how access to data could be granted

- **Security & Certification:**
  - 1 common trust domain needed for all of Europe
  - How to design the necessary compliance assessment processes

- **Public Acceptance:**
  - Common approaches to issues shared by different user groups
Funding schemes

- Horizon 2020 (Research and Innovation)
- Connecting Europe Facility - CEF (Infrastructure Funds)
  - Upcoming call - Nov 2015: Exclusive focus of ITS on Cooperative Systems
  - Expected budget: 70 M€

What would the EC expect and like to see?

- Coherent approach with general policy framework under development
- Demonstrating interoperability!
- Cooperation between existing projects and initiatives and new ones: common elements, cross-site tests are highly encouraged
Thank you for your attention!

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