

7th International Workshop on Vehicle Communications for Safety and Sustainability

Executive Summary

The 7th International Workshop on Vehicle Communications for Safety and Sustainability, organised by COMeSafety2 Project, took place in Orlando, Florida on 21 October 2011, one day after the ITS World Congress. The event was opened by Søren Hess (C2C-CC) and co-chaired by Peter Sweatman (UMTRI). Juhani Jääskeläinen (EC DG INFSO) Yasuhiro Okumura (MLIT) and Shelley Row (US DoT ITS Joint Program Office) welcomed the more than 120 Workshop participants from all regions and expressed their expectations on the meeting.

The fulltime workshop was divided into five sessions, each with panellists from all three regions: Europe, Japan and the USA. Moreover three keynote presentations enriched the workshop.

The core results of the workshop have been noted by different participants of the audience. At the end of the day Søren Hess and Peter Sweatman summarised these results as follows:

Session 1: Global vehicle safety

- Automated intervention for crash avoidance is strongly supported
- Strong support for aftermarket devices
- Clear distinction between different types of aftermarket devices is needed
- The differences between “hard safety” and “soft safety” is very important and have to be clearly defined, e.g. “hard safety” will rely on communication and vehicular sensors
- “Soft safety” applications could help avoid many risky situations but clear data is not available to support this
- The collected data in FOTs can be used for “hard safety” and “soft safety”

Session 2: Sustainable driving

- Sustainable driving requires to consider the whole range of transportation
- Sustainable driving needs to involve both the automotive industry and the road operators with their suppliers
- Safety messages are a good starting point for sustainability, but needs to be complemented by additional data elements and/or messages
- Harmonization of country specific legal issues, privacy and data usage is needed

Session 3: Security and Privacy issues for cooperative ITS

- Common understanding (US/JP/EU) of the baseline for security measures (pseudonyms for privacy and certificates for authorization, based on same cryptographic primitives)
- Agreement that for mandatory systems privacy must be ensured
- Security and privacy is not only a technological solutions, but also a basic political issue:
 - Intensify policy discussions to tailor the systems to be deployed
 - Intensify operational discussions. Thereby also take into account the valuable experiences from Japan (EasyWay).
- Common test procedures for verification, validation and certification are important

Session 4: Global standards harmonization

- In addition to the harmonization of data elements of the BSM (SAE J2735) and CAM/DENM (ETSI TS 102 637-2 and TS 102 637-3) message sets, existing protocols for I2V like TMC/TPEG and Datex for I2I should be considered.
- Also with respect to cross border issues, harmonized event lists / cause codes are needed to avoid conflicting interpretation.
Example: end of traffic jam message sent via V2V and via “Traffic Service Providers” shouldn’t be conflicting.

Session 5: Stakeholder requirements and involvement

- Reason for existence of Private Public Partnership (PPP): Private solutions can contribute to policy and societal issues
- Define clear PPP vision and governance based on understanding, respect, voluntary, mutual contract, shared investment
- Ensure long term commitment but define backup mechanisms if it fails
- Each party should be aware of what it needs to do/fund before/during and after deployment (shared cost, investment program, resources, interdependence,...) – qui pro quo or carrot idea? Real issue: business cases for each of the actors
- Is the PPP only focusing on deploying IRS/RSU? Should PPP be more ambitious and aim at “*connected mobility*” integrated with the other mobile data networks
- Need of a step-by-step approach without excluding further options
- European Innovation Partnerships: combine research with large scale testing and deployment (e.g. smart cities)
- Challenge for next year: first workshop on partnership for cooperative mobility deployment

Announcement of next workshop

The concept of the workshop was in general appreciated. The next similar further improved workshop will be organized related to the next ITS World Congress 2012 at Vienna.