ITS actions in Road Safety developments: e-Safety

Date: Athens, 1Mar11
Meeting: ASECAP Road Safety Event
Speaker and organisation: Rui Camolino - ASECAP COPER III Chair and e-Safety Co-Chair
Agenda

- e-Safety Initiative
  - Organisation
  - Recommendations Update
  - Working Groups (WG) and Task Forces 2010 Results
  - European e-Call Implementation Platform
- RMI Report and main Findings
- ELSA Task Force
- Intelligent Infrastructure WG Conclusions
e-Safety Initiative

E-Safety is a PPP (Public Private Partnership) aiming the increase of road safety, energy efficiency, traffic flow and the reduction of pollution, namely CO2, through the use of information and communication technologies.
e-Safety Initiative

Organisation

Steering Group
Chairs:
- J. Jääskeläinen, EC
- H. Hodor, ACEA
- H. Meyer, ERTICO – ITS Europe
- R. Cano, ASECAP

Nomadic Devices Forum
Chairs: M. Schmitz, Medion
- T. Kamalski, TomTom

European eCall Implementation Platform
Chairs: H. Meyer, ERTICO – ITS Europe
- J. Urbán, Czech Republic

International Co-operation
Chairs:
- F. Op de Beeck, TNO
- C. Passmann, BOSCH

Research and Development
Chairs:
- A. Cost, EUCAR
- J.P. Meunier, INRETS

Implementation Road Maps
Chairs:
- H.J. Mäurer, D EKRA
- R. Kalouška, VTT

SafetyForum
ICT for safe, smart and clean road mobility

Active Horizontal Groups
Other active bodies under eSafety Forum

ASECAP
Association Européenne des Concessionnaires d’Autoroutes et d’Ouvrages à Pèage
e-Safety Initiative

Recommendations Update

Following the initial 25 recommendations that have been followed by e-Safety Fórum Members since 2000 till 2010, the actual Steering Group decided to review them and a set of new 23 recommendations have been defined and should be finally approved by the Forum on next 6Apr11, after the Steering Group approval on the 30Mar11.
e-Safety Initiative

- Working Groups (WG) and Task Forces 2010 Results

✓ Nomadic Devices Forum was created
✓ European e-Call Implementation Platform elaborated a questionnaire and interpreted its answers as a first step to the report concluded recently and to be submitted in next plenary meeting in Mar11
✓ Research and Development WG approved its last report
e-Safety Initiative

- Working Groups (WG) and Task Forces 2010 Results
  - Implementation Road Maps WG approved its last report
  - Service Oriented Architecture WG approved its last report
  - e-Security WG approved its last report
  - Intelligent Infrastructure WG approved its last report
  - ELSA Task Force (TF) approved its last report
e-Safety Initiative

European e-Call Implementation Platform

The EeIP is a platform created under the coordination of Ertico aiming to assist the development of eCall service in Europe.

ASECAP is particularly involved in TF3 dealing with the definition of the protocol between the PSAP and the traffic control centres to inform these of the e-Calls generated so that required means are timely mobilized to the incident location.
Last Report Main Findings

- The most apparent problem concerning the eSafety actions is the slow implementation rate concerning the existing applications and services. This is partly being addressed in the ongoing Field Operational Tests, where a successful outcome will be a strong motivator for raising awareness among the key potential customer groups;

- Concentrate on existing technologies and applications and prioritise their deployment;
Implementation Road Maps WG

Last Report Main Findings

- Further recommendations are suggested to the European Commission, the Member States, Industry and Other Stakeholders besides the Road Operators;
- Also recommendations per system are presented and we suggest the reading of the report, that is publicly available, to the interested parties;
- Next slides will refer to recommendations to the Road Operators as the most interesting for this fora;
Last Report Main Findings

A strong recommendation to the road operators is to cooperate with other actors in the road transport system to develop new knowledge about the impact of eSafety systems. So far, the knowledge about the traffic safety effects of the majority of vehicle-based systems has been mainly with the vehicle manufactures. This is especially valid for systems such as blind spot monitoring, automatic head light activation, adaptive head lights, and adaptive brake lights;
Last Report Main Findings

When it comes to systems like lane departure warning and traffic sign recognition it is important to establish a constructive dialogue between the car manufacturers and the road operators to define the minimum standards on lane marking and traffic signs (harmonization across Europe) to ensure a good functionality of the systems. Lane departure warning (LDW) shows a higher grade of maturity and also larger benefits than traffic sign recognition.
Implementation Road Maps WG

Last Report Main Findings

It is recommended that the road operators frequently maintain the lane markings and keep updated information about the current standard of lane markings on the network. During winter time many markings, however, can disappear or systems become temporarily unusable with strong back lighting;
Last Report Main Findings

RTTI is an important service to the motorists and to other road users. Methods for collection of traffic data and all other data that is used to provide RTTI services can be improved to give the customers more relevant information of high quality. New traffic data methods come with the implementation of the latest cellular telecom systems like 3G and LTE (4G). It is recommended that all actors in the RTTI value chain intensify their work to improve the quality parameters of the traffic and travel data;
Implementation Road Maps WG

Last Report Main Findings

Concerning eCall it is recommended to support the initiatives taken by the European Commission, to follow the recommendations of the European eCall Implementation Platform (EeIP), to set up national deployment platforms and to actively promote the standardization process through national standardization authorities.
Intelligent Infrastructure WG

- Final Report Conclusions
  - Road authorities and/or operators should take a leading role in the intelligent infrastructure, but it is important for all stakeholders to find a good way to collaborate.
  - The stakeholders have to cooperate in a strategic way, for example by establishing a platform aimed at the development of a common vision and business models.
Final Report Conclusions

The figure below illustrates the different elements in the deployment process:
Intelligent Infrastructure WG

Final Report Conclusions

The main recommendations were identified as being the following ones:

- Cooperative systems/services should be regarded as a tool supporting the policy objectives of public authorities and strategic objectives of the private sector. The choice of the priority services should reflect a balance of both objectives with an emphasis on those of the deployment partners.

- Special attention should be paid to the growth of electric vehicles and their related requirements for the intelligent infrastructure.
Intelligent Infrastructure WG

Final Report Conclusions

The main recommendations were identified as being the following ones (cont.):

- Clustering of services is recommended to introduce cost-efficiency
- Infrastructure operators and the automobile and device manufacturers need to ensure sound and sustainable solutions for the collaborations
- Road authorities and/or operators should take a leading role in the intelligent infrastructure deployment
Final Report Conclusions

The main recommendations were identified as being the following ones (cont.):

- Facilitate future deployment of services. It should create a
  - common vision covering the importance of Cooperative services for each stakeholder
  - business models covering the interests of all strategic stakeholders for the implementation of the various CS and a road map which:
    - provides understanding of I and V on how each party participates in the process
Intelligent Infrastructure WG

Final Report Conclusions

The main recommendations were identified as being the following ones (cont.):

- Facilitate future deployment of services. It should create a
  » business models covering the interests of all strategic stakeholders for the implementation of the various CS and a road map which:
    - explores the common denominators
    - agrees on converging visions, and Related strategy (ies)
Final Report Conclusions

The main recommendations were identified as being the following ones (cont.):

- Facilitate future deployment of services. It should create a
  » business models covering the interests of all strategic stakeholders for the implementation of the various CS and a road map which:
    - establishes attuned objectives and
    - selects the first generation joint cooperative services
Intelligent Infrastructure WG

Final Report Conclusions

The main recommendations were identified as being the following ones (cont.):

- A strategic long-term cooperation platform should be established to facilitate undelayed start of deployment of cooperative services
Final Report Conclusions

The conclusions point to a Proposal of an ELSA characterized by:

- Technological areas:
  - Connected cars and connected travellers
  - Cooperative vehicle infrastructure systems in combination with smart and ecological traffic management
  - Proactive network operation and mobility management
  - Co-modal information services for travellers and goods
  - European wide service platform for advanced traffic information services
ELSA Task Force

Final Report Conclusions

The conclusions point to a Proposal of an ELSA characterized by (cont.):

- Technological areas (cont.):
  - Internet of the future
  - Green freight and intelligent freight transport on corridors and in urban areas
  - Electric vehicles
ELSAs Task Force

Final Report Conclusions

The conclusions point to a Proposal of an ELSA characterized by (cont.):

- Bringing together ITS + ICT
- Link with ITS Action Plan
  - Optimal use of road, traffic and travel data
  - Continuity of traffic and freight management ITS services
  - ITS road safety and security applications
  - Linking the vehicle with the transport infrastructure
ELSA Task Force

Final Report Conclusions

The conclusions point to a Proposal of an ELSA characterized by (cont.):

- Development and testing will take place in test-beds throughout Europe
- Each test bed offers a home to subsequent ‘activities’
- Each activity has the aim to bring technologies closer to the market, with scaling up in testing, evaluation and go/no-go
- Timeframe: 8Y with 2Y activities
Final Report Conclusions

The conclusions point to a Proposal of an ELSA characterized by (cont.):

- Cooperation between authorities and industry essential
- Simultaneous development of business models
- Funding from European, national and regional level
- Format of PPP (link with Green Car PPP, Future Internet PPP)
Thanks for your attention.

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