



**eSafety Forum: 6th Plenary Meeting
8th November 2006
Meeting Report**

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1 Introduction

The HA EUWATCH project is providing intelligence for the Highways Agency on developments related to Intelligent Transport Systems (ITS) in Europe and is carried out by TRL Limited on behalf of the HA. The project summarises key information for decision makers and practitioners on activities related to ITS in Europe and identifies opportunities for the HA to become more involved in Europe.

In response to an invitation from the eSafety Forum, HA EUWATCH attended the 6th plenary meeting of the eSafety Forum on behalf of the Highways Agency.

The 6th plenary meeting took place in Brussels on the 8th of November 2006 and was attended by approximately 100 people. The delegates included road operators and authorities, national ministries, the European Commission, national R & D institutes, motor manufactures, equipment suppliers, ITS organisations, standardisation bodies and mapping agencies. The aim was to strategically review progress towards the overall goal of fatality reduction and also to reflect on future plans. The programme, list of delegates, presentations and other information are available from the eSafetySupport web site: http://www.esafetysupport.org/en/esafety_activities/esafety_forum/

For background, there are still approximately 41,000 deaths per year in the EU, and in the new Member States the death rates (per km) are twice as high as in the UK. The eSafety initiative encompasses a range of projects and approaches to provide a forum for a comprehensive and consistent approach to improving safe mobility.

2 General Remarks and Keynote Address

Opening remarks were made by representatives of the European Commission (Fabio Colasanti), ERTICO (Monica Sundstrom), and ACEA (Ivan Hodac for the vehicle manufacturers). The main points raised were:

- eSafety is doing work “at the Coal face” within Working Groups but there is also growing wider recognition of the importance of the eSafety initiative as demonstrated at the i2010¹ high-level meeting in Helsinki in September, the ITS Forum in London and in the mid-term review of the White Paper on transport.
- The EC particularly welcome the strategic research agenda (see below).
- There is a need to move from mitigating the consequences of accidents to prevention.
- There is also a greater need for deployment; this needs technology, organisational structures and framework conditions (e.g. standards, public awareness and explanation of benefits).

Ivan Hodac from ACEA then made a number of significant remarks:

- The automotive industry is the largest private provider of R&D and welcomes FP7.
- CARS21, the high-level report on regulation and development of the vehicle industry, contributes to safety but needs to be complimented by suitable policies (such as enforcement) by Member States.
- ACEA will not commit to the European Statement of Principles on the Human Machine Interface (HMI) of in-vehicle information systems until there is parallel commitment from the nomadic devices industry and from the Member States.

¹ i2010: European Information Society 2010 for growth and employment” was adopted by the EC in June 2005 as a comprehensive strategy to promote the digital economy.

- eCall is being held up as the UK and Germany have not yet signed the Memorandum of Understanding

A keynote address was made by Rudolf Strohmeier of the European Parliament. His main points were:

- There is a real need to get users on-board by demonstrating practical benefits. The Intelligent Car Initiative was one of three flagship initiatives under i2010 and was launched in February 2006 as a policy framework to guide and accelerate deployment of intelligent vehicle systems. It is focussing on three areas: eSafety activities, Research and Technology Demonstration and User Awareness. The aspect of user awareness was especially promoted at the recent Helsinki conference.
- In reviewing progress towards the transport White Paper, the contribution of eSafety and ITS has been properly recognised.
- eCall will feature in the 3rd communication from the EC to the parliament (see Section 3.2 below).
- The Parliament is going to take a wider view on stimulating eSafety applications e.g. services on the TERN, the competitiveness and innovation programme (e.g. funding for eCall pilots); structural funding will include ITS. There could also be funding for cities to act as customers for eSafety services.
- The EC will support the eSafetyAware! platform both politically and through activities but has to retain the status of “observer” (see Section 3.10 below for more details of eSafetyAware!).

He also provided an overview of a recent Euro-Barometer survey of 25,000 participants concerning attitudes to eSafety functions. This will be publicly available soon. Among the highlights were:

- No major differences were identified between countries
- Data privacy is not considered a major issue
- Safety features are expected when choosing a car, but purchasers are not prepared to pay extra for it
- Uses and benefits have to be simply expressed.

There was also a presentation on Finnish priorities by Mattie Roine from the Finnish ministry. Nationally, the priorities were expressed as:

- Strong support for R&D
- ISA and alcohol-locks
- Automated enforcement

For the Finnish Presidency in 2006 the priorities are:

- Innovation including in logistics
- ITS as an essential element in transport policy
- Safety, security and co-operative systems
- eSafety implementation roadmap as a suitable basis for R&D
- eCall (with a remark criticising the slow response of some Member States).

3 Progress through Working Groups

As at November 2006, there are six active and two new eSafety Working Groups, although there were also reports from other groups as indicated below. Results and presentations from the individual groups are available on the eSafety Support website (see the

bibliography below for details). A brief summary of the main issues presented and discussed during the meeting is provided below.

3.1 RTD (active) - Strategic Research Agenda for ICT in FP7

This working group, led by EUCAR, is called “RTD” Research and Technology Demonstrations. It has surveyed R&D activities at regional, national and European level and made recommendations for priority research and demonstrations. It has developed a set of research priorities and proposals for “ICT for Mobility” in the European Commission’s Seventh Framework Programme (FP7) as a deliverable to the EC (see the bibliography in Section 6 for details). This was formally adopted by the eSafety community.

The main areas are:

- Mobility services for people
- Mobility services for goods
- Intelligent vehicle systems
- Co-operative systems
- Field Operational Tests
- Horizontal issues.

This will be an important document for the ICT calls in FP7, providing much more detail than the Commission text. For the FP7 1st Call aspects of co-operative systems proposed include road maps/planning, simulation & testing, communications, integration, enhanced digital maps and small-scale testing.

3.2 eCall (active) “Bringing eCall back on track”

Previous cost-benefit estimates from the SEiSS project (Socio-Economic Impact of Intelligent Safety Systems) have been questioned but a more recent study in Finland confirms a 4.7% improvement in fatalities. Further evidence is being looked for in the eIMPACT project and field tests by Member States.

The 2nd eSafety communication included “bringing eCall to citizens”. Since then, the eCall driving group completed its work and there has been a European Parliament resolution on eCall. Also, standardisation is ongoing.

The initial eCall deployment plan was for 2009 but with delays the new plan is for 2010 deployment.

To date, only seven Member States and two associated states have signed the MoU commitment to introduce eCall. The Member State delays have been mostly organisational as not all Member States have automated call answering facilities. In summary, Member States are not on track for implementing the necessary infrastructure. ACEA criticised the UK and Germany, particularly, for not yet signing the MoU. ACEA said that they will not take any further steps until there is a clear commitment from Member States. The next (3rd) Communication is expected to be adopted on 23rd November and will attempt to re-engage both Member States and industry.

3.3 Road Maps Implementation (active): eSafety effects database and survey on deployment

Risto Kulmala presented the eSafety effects database (www.esafety-effects-database.org) which is based on published papers, articles and conference presentations on effects of eSafety systems. The database controllers provide some quality screening and also provide

links to source material where possible. There was a strong invitation to contribute costs and benefits information to the database.

The Working Group also want information on progress with implementation of eSafety systems and has sent a questionnaire to Member States in July 2006. The UK questionnaire was sent to TTI Division of DfT, but there has not yet been a UK response.

3.4 Real-Time Traffic and Travel Information (active): Status report

The Working Group (WG) on Real Time Traffic and Travel Information (RTTI) has recently been re-launched; it has 17 members and has had 3 meetings.

The group believes that RTTI will increasingly be used to improve vehicle energy efficiency and also have potential for safety. The WG want the EC to co-ordinate Member States' national solutions based on pan-EU requirements on content, quality and utilisation.

They have identified a need to distinguish between travel-relevant, traffic-relevant and safety-relevant messages which have different requirements in terms of message quality standards. They are also are discussing business models and what information is free or chargeable.

A preliminary report is anticipated in the first quarter of 2007.

3.5 Communications (active): Status Report

This WG was formed in autumn 2005 to focus on spectrum allocation, standardisation requirements and international co-operation. The main motivation is that Vehicle to Vehicle and Vehicle to Infrastructure communication can save lives (and also save fuel and ease congestion).

The most relevant EC projects were identified as COMeSafety, CVIS, Coopers, GST and Safespot. Applications of communications include intersection safety and co-operative driving.

At present, the main issue is common "protected spectrum" allocation (across Europe and, ideally, also US/Japan) for the 3 classes of applications that have been identified:

- Safety of life
- Safety critical
- Information/traffic management.

Quality of service includes a maximum signal delay time which needs freedom from interference. The WG is planning draft recommendations for mid 2007.

The Communications WG has strong representation from the automotive industry and would welcome involvement from road operators and Authorities.

3.6 International Cooperation (active)

International co-operation with the US and Japan is being pursued through the eSafety International Working Group that meets during ITS World Congresses. In such discussions, the better meetings have been highly focussed on specific issues. ACEA has stated that this group has failed and needs to be re-focussed.

15 replies have been received from international questionnaire on activities of the WG but unfortunately no clear focus was generated. A number of varied topics were suggested and a range of countries and regions beyond Europe and a range of organisations were also suggested. Specific missions or visits could be another activity of the WG.

3.7 Service Oriented Architecture (new)

The motivation for this new WG is to re-launch the telematics market in Europe by supporting the move towards co-operative systems allowing loose coupling among interacting software agents by using a small set of simple and ubiquitous interfaces. This aims to build on material available in the GST project (that is working on architecture and “service aggregators”) and involve new projects such as CVIS, Safespot and Coopers.

Draft terms of reference have been proposed but ACEA commented that there should be an even greater focus on market/business issues and political issues before technology is deployed.

A chair and co-chair have not yet been appointed but there have been a number of expressions of interest from industry. However, (as with the failure of the telematics market previously) the market cannot be generated by the automotive industry alone. Additional support from public authorities would be particularly welcome.

3.8 ICT for Clean Mobility (new)

This new WG is being co-chaired by ACEA and ERTICO. The idea is to investigate the potential contributions of information and communication technologies for cleaner and more efficient mobility for people and goods. The group is still in its formation stage and is still refining its terms of reference and objectives. It will identify applications with strongest environmental benefits and tackle educational tools to encourage “Eco-driving”. It will also promote ICT for integrated traffic management.

An example was quoted of a Dutch study looking at speed and lane control for safety purposes that also found a 5% environmental benefit.

A kick-off meeting is planned for 6th December and membership is invited along with ideas for activities.

3.9 Digital Maps (completed): Realising the eSafety map

This WG was only active between April and December 2005. The objectives were to define a business model for public-private partnerships to ensure the availability of safety-related attributes within digital maps and to create the necessary public/private co-operation to maintain, certify and distribute those attributes. The eSafety attributes and qualities need to be identified, e.g. speed limits, signs, lane information, traffic lights, crossings, gradients, accident hot-spots. One problem is the very many local, regional and national authorities in Europe and different data and quality definitions.

The WG think the public sector can contribute to the eSafety map through information flow to mapping organisations. The WG have proposed a 3-phase approach:

- Co-operation (Public Authorities supply maps in their current form)
- Quality Assurance to improve data
- Optimisation of co-operation through standards

Various attempts to obtain external funding for a project called ROSATTE on digital map enhancement have not yet been successful, though a bid will be re-submitted for FP7; the UK has already expressed interest in this.

For further information on ROSATTE, the contact is Vincent Blervaque at ERTICO.

3.10 eSafety Aware! (active) – the eSafety communications platform

This WG has created a “communications platform” to inform the public and improve the demand and take-up of eSafety systems in order to reach safety targets. A Public-Private Partnership was formed in June 2006 with financial support from the FIA foundation (International Federation of the Automobile).

Consumers are concerned about high prices, HMI issues and are confused by abbreviations. The platform will undertake targeted communications pre-commercial promotion campaigns. This will involve external communication directed to the general public (media, website, fairs) and more targeted communication directed, for instance, to vehicle dealers and driving schools. Clear, simple messages are required to avoid overloading the consumer with technical details. The platform proposed that Electronic Stability Program (ESP) – also called Electronic Stability Control (ESC) – will be the first example.

3.11 Human-Machine Interaction (completed)

The WG-HMI completed its work in 2005 with a revised European Statement of Principles (ESoP) and two other documents: Recommendations for Safe Use (RSU) and Implementation Actions. All three will be annexes of an EC Recommendation or Communication that has been accepted, is in translation, and is expected to be published in December 2006.

As noted previously, ACEA will not commit to the European Statement of Principles on the HMI of in-vehicle information systems until there is parallel commitment from the nomadic devices industry and from the Member States. So, the EC will seek letters of support from all Stakeholders including Member States, fleet managers, employers, nomadic device providers etc.

The EC committed to a dissemination campaign in 2007 to get the voluntary agreement of stakeholders within 9 months and will evaluate and monitor for 18 months. They will also seek to have international harmonisation with Japan and the US who have similar documents. Also, consideration will be given to issues related to ADAS following the publication of the RESPONSE Code of Practice (see Section 4.1 below).

4 Other Presentations

4.1 The RESPONSE Code of Practice

RESPONSE3 is a sub-project of PReVENT which has just completed and published its Code of Practice for the development and evaluation of driver assistance systems (TRL has been working within this project on behalf of DfT).

The aim of the Code of Practice is to reduce the manufacturer’s risk in introducing ADAS to the market by defining a process that represents a common understanding of what is required to develop sufficiently safe systems that remain controllable by the driver. Such a Code of Practice could help to defend a product liability case assuming it becomes a commonly accepted document.

The Code of Practice recommends hazard analysis in the early stages as well as expert testing and field tests before product launch. It is now a publicly available document from the PReVENT web site (www.prevent-ip.org).

4.2 Road map of the i2010 Intelligent Car Initiative

The three “pillars” of activity within the Intelligent Car Initiative (ICI) are the eSafety activities, Research and Technology Demonstration and User Awareness. A brief presentation of completed and planned activities in each of the areas was given, including:

- 1st pillar: Co-ordination through the eSafety forum including adoption of commission communication on the “intelligent car” in February 2006
- 2nd pillar: Research in FP6 (e.g. started CVIS, Coopers & Safespot) and FP7
- 3rd pillar: Dissemination and the establishment of eSafety Aware!

4.3 Common communications Architecture : COMeSafety

There was a short presentation on the COMeSafety project which is an EC Specific Support Action. The aim is to co-ordinate development of a communications architecture (Vehicle-Vehicle, Vehicle-Infrastructure) particularly for safety applications. A specific question is whether CALM (Continuous Air-interface Long and Medium range) is applicable for safety applications.

5 Recommendations for the Highways Agency

There is a lot of activity in the broad area labelled as “eSafety”. Briefings in advance of this meeting by HA indicated that specific areas of interest would be:

- Co-operative vehicle-infrastructure systems CVHS/CVIS
- Any impacts reported on network effects as well as safety
- Implications or future demands relevant to network managers, e.g. eCall.

It is also presumed that HA will be interested and involved in FP7. In this regard, the document from the RTD Working Group will be an important document for the ICT calls in FP7, providing much more detail than the Commission text. It is therefore strongly recommended that this document be reviewed to help identify priority FP7 interests for the HA and that initial contacts concerning potential partners be made.

As well as maintaining an overview of eSafety activities, the Working Groups that appear most relevant are:

- Implementation
- RTTI
- Digital Maps
- eCall
- ICT for clean mobility
- Communications
- Service-Oriented Architecture

A report by TRL on the previous eSafety plenary recommended that the Implementation Road Map on priority systems related to infrastructure was studied and related to the HA’s own future visions and priorities. The systems identified by the working group include eCall, extended floating car data, RTTI, dynamic traffic management, local danger warnings and speed advice. This recommendation is reiterated here.

In addition, it is recommended that the Implementation group’s database of benefits is supported by contributing a number of studies of benefits of ITS systems. Examples could include M25 Variable mandatory speed limits, bus lane enforcement and Active Traffic Management.

It was previously suggested that if the HA wanted to become more involved in eSafety, then the WG-RTTI should be considered. However, since this group is now well underway, it is now recommended that its results be awaited before further involvement is considered.

Digital map data underpins many of the applications of interest to the HA and would be an element of any pilot trials of co-operative systems, but there are a number of difficult issues concerning data access for Local and National Authorities to consider. It is recommended that the HA liaise with DfT on digital map data provision to external mapping suppliers (e.g. over static and dynamic speed limits) and extend its own work on location referencing to study how its static and dynamic geo-referenced data could interface with external mapping systems.

eCall is a high-profile issue and the UK (DfT) were criticised by some other stakeholders for inactivity. In fact it is understood that the DfT commissioned work on eCall in the UK has been completed although no policy position has yet been established. If the UK were to adopt eCall, then this would have an impact on HA operations. HA is in discussion with DfT and an HA project will be defined once the outcome of the DfT project is known.

ICT for clean mobility may be of interest to HA as it is attempting to extract environmental and network benefits as well as (or on the back of) safety priorities. A kick-off meeting is planned for 6th December and membership is invited along with ideas for activities.

The Communications WG has strong representation from the automotive industry and would welcome involvement from road operators and Authorities. The work concerns spectrum allocation for future services. At this stage the benefits of HA involvement in the group are still not clear. It is recommended that HA EUWATCH monitor the progress of the group and review the benefits of involvement for the HA as part of this on-going monitoring.

Service Oriented Architectures is another area for potential involvement of the HA, particularly since there appears to be synergies with CVIS architecture work and because involvement of road operators would be especially welcomed. However, priority may be considered lower than some other activities and monitoring rather than active involvement is recommended at this time.

The HA EUWATCH project is available to support the Highways Agency in taking forward these recommendations.

6 Bibliography

Stakeholders' contribution to the development of FP7 workprogramme on ICT for mobility. September 2006 Final Draft.

SEiSS project final report:

http://europa.eu.int/information_society/activities/esafety/doc/call_4/final_seiss.pdf

eSafety effects database: www.esafety-effects-database.org

RESPONSE 3 Code of Practice for development and testing of Advanced Driver Assistance Systems: http://www.prevent-ip.org/en/prevent_subprojects/horizontal_activities/response_3/response3_deliverables.htm

The presentations made at the conference are available online at:

http://www.esafetysupport.org/en/esafety_activities/esafety_forum/plenary_meetings/6th_esafety_forum_plenary_meeting_8_november_2006.htm

7 Glossary

ADAS	Advanced Driver Assistance Systems
ACEA	European vehicle manufacturers association
ASECAP	European association of motorway operators
CALM	Continuous Air-interface Long and Medium range – standards designed to provide flexible interface between service provision and service receipt, enabling services to be largely media-independent
CARS21	European report on regulation and development of vehicle industry
CVHS	Cooperative Vehicle Highway Systems
CVIS	Cooperative Vehicle Infrastructure Systems
EC	European Commission
eCall	System for automatic notification in the event of a vehicle accident
eSafety	An EC initiative encompassing a range of projects and approaches to provide a forum for a comprehensive and consistent approach to improving safe mobility
ERTICO	European organisation of ITS stakeholders
ESoP	European Statement of Principles comprising HMI design guidelines
ESP	Electronic Stability Program (on a vehicle), also called DSC – Dynamic Stability Control and ESC – Electronic Stability Control
EU	European Union of 25 Member States
EUCAR	European Council of Automotive Research and Development
FIA	European vehicle R&D charity supported by Formula 1 racing
FP7	7 th Framework programme of (future) European research
HMI	Human Machine Interface
i2010	European strategy to promote the digital economy
ITS	Intelligent Transport Systems
ICI	Intelligent Car Initiative - one of three flagship initiatives under i2010

ISA	Intelligent Speed Adaptation
MoU	Memorandum of Understanding
PReVENT applications	European Integrated Project developing and testing preventative safety applications
RESPONSE Advanced Driver Assistance Systems	European project to develop a code of practice for developing and testing Advanced Driver Assistance Systems
RSU	Recommendations for Safe Use
RTD	Research and Technology Demonstration
RTTI	Real Time Traveller Information
TERN	Trans European Road Network
WG	Working Group (within the eSafety forum initiative)