

eSafety Project Status Report

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eSafety Working Groups

The eSafety Forum:

- **Part of the wider context of dealing with the general problem of road safety**
- **Dealing with the problems of introducing intelligent vehicle safety systems including the business rationale**
- **Working Groups to focus on the domain-specific priority areas**
- **Provide recommendations**



eSafety Working Groups

Seven Groups so far established

- eCall
- Real Time Traffic Information
- HMI
- International Cooperation
- Accident Causation Analysis
- Research and Development
- Road Maps



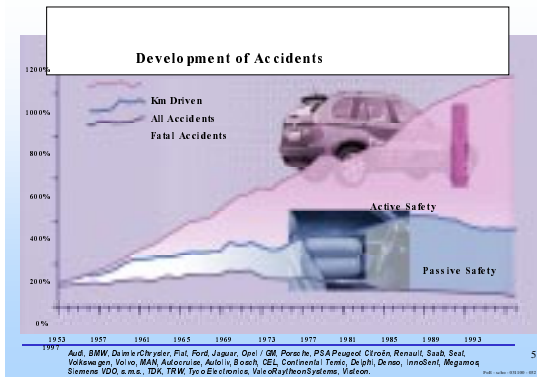
In-Vehicle Emergency Call (eCall) Driving Group

Chairs: Patrice d'Oultremont (Belgacom), Wolfgang Reinhardt (ACEA)

Objective: Implementation across Europe

Progress:

- **Agreement to use 112 and to build on E112 (EC Recommendation)**
- **Endorsment of a common eCall architecture**
- **Endorsment of a common message and routing**
- **Investigation of the economic model**
- **Legal issues identified – privacy and liability**
- **Securing commitment**



Accident Causation Analysis Working Group

Chair: Mike Hollingsworth, ACEA

Objective: Investigate current status and usage potential, define future information needs and methodology for evaluation

Progress:

- **Concentrated on short term objectives, within long term context, to get results fast**
- **Analyzed twelve existing data sources**
- **Obtained a mixed picture**
- **WG convinced that shared analysis of existing data sources can help to give better understanding**
- **Ensured that this is not currently being done in projects**
- **Defined the task to be done**



Real-Time Traffic & Traveller Information Working Group

Chair: **Gert Siegle, Bosch**

Objective: **Make RTTI happen – also in cities**

Progress:

- **TMC (Traffic Message Channel) services on European main routes are increasing**
- **But no coverage in urban areas where most accidents occur**
- **Drivers unwilling to pay – difficult business models**
- **Traffic data are patchy – lacking in urban areas**



Road Maps Working Group

Chairs: **Risto Kulmala, VTT and Hans-Juergen Maeurer, DEKRA**

Objective: **Road map with technical steps and socio-economic implications for the introduction of ITS systems in Europe as well as public sector road maps**

Progress:

- **Inventory of relevant eSafety systems which will reach the market before 2010 created**
 - Dynamic control systems, Run flat indicators or enhanced tire pressure monitoring systems, vision enhancements, Blind spot and driver condition monitoring, traffic sign recognition, obstacle and collision warning, urban drive assistant, high quality congestion/traffic warning, infrastructure based warning systems, lane keeping/departure warning, etc
- **Analysis of vehicle fleet changes up to 2010**



Human-Machine Interface Working Group

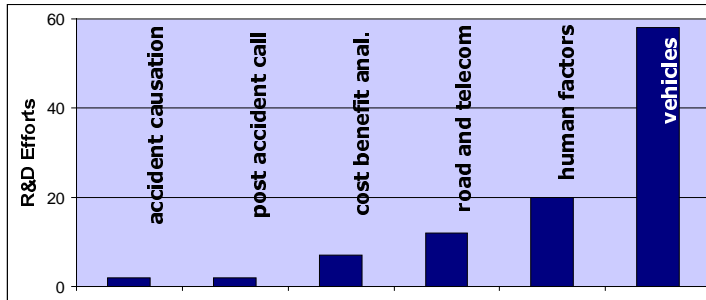
Chair: **Annie Pauzie, INRET,F, Alan Stevens, TRL, UK, Christhard Gelau, BaSt, D**

Objective:

- **To identify HMI related problems likely to negatively impact on safety or markets for in-vehicle systems including “Nomad Systems”**
- **To further develop existing EU Statement of Principles (ESoP) based on latest and future technological developments and applications**

Progress:

- **Identification, listing and clustering of HMI related problems from available Member State reports and other relevant sources, “Problem Statements” for each cluster elaborated**



Research and Technology Development Working Group

Chair: Arnold van Zyl, ACEA

Objective: Identify and map eSafety related Regional, National and European research, technology and demonstration projects

Progress:

- **More than half of R&D efforts focus on safety systems within vehicles**
- **European “eSafety Research Activities” do not reflect a systems approach**
- **European research activities should be structured to be complementary to activities in the USA and Japan**
 - Accident causation, road and telecommunications infrastructures; post accident call, cost benefit analysis and efficacy of safety measures need more R&D investment



International Cooperation Working Group

Chairs: Martin Rowell, NavTech

Objectives:

- **Support international dialogue - seek synergies, avoid duplication**
- **Identify issues where cooperation is needed**
- **Make recommendations to accelerate progress**

Progress:

- **First analysis of 28 recommendations and identification of areas for cooperation**
- **Fuller analysis to follow to identify priorities of each region as basis of future work and recommendation**

Next Steps



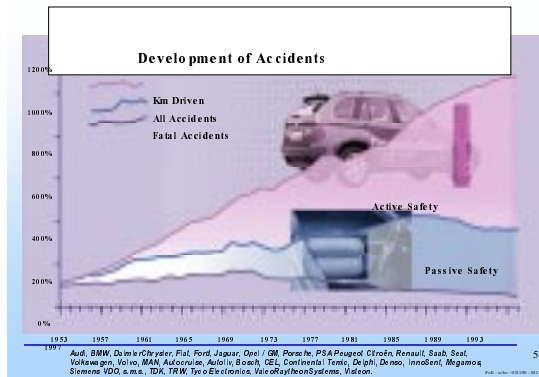
In-Vehicle Emergency Call (eCall) Driving Group

Realisation is possible, subject to:

- **Parallel commitment from all stakeholders to act (and invest)**
- **Agreement on economic model**

Recommendations:

- **A European MoU (public-private partnership) to secure commitment:**
 - message and routing
 - technology and interfaces
 - implementation plans
 - economic model



Accident Causation Analysis Working Group

Recommendations:

- **Adopt the WGs definition of the task as a basis for the necessary work.**
- **Carry out the work in the shortest possible time as a matter of urgency**
- **Put funding in place to have the task carried urgently so that final results can be expected within 2 years. This may be around €1.5**



Real-Time Traffic & Traveller Information Working Group

Recommendations:

- **Initiate a European project to:**
 - Secure Europe-wide agreement on access to public data
 - Organise & pool real-time traffic data
 - Develop Europe-wide interoperability
 - Develop long-term strategy starting from TMC today
 - Develop innovative public-private business model



Road Maps Working Group

Recommendations:

- **Finalise eSafety Matrix and start to work on potential qualitative and quantitative safety benefits of selected systems**
- **Point out requirements to road and information infrastructure**
- **Identify realistic scenarios for implementation models and clearly indicate chances and obstacles for all involved parties**
- **Allow competition to push innovations**



Human-Machine Interface Working Group

Next Steps:

- **Need to improve safety of people and ensure industry freedom to innovate and differentiate**
- **Mechanism should be based on consensus – No legislation**
- **Treatment of nomadic devices – Difficulty to identify suppliers**
- **The European Statement of Principles on HMI is a good starting point but more Member States' feedback is required**

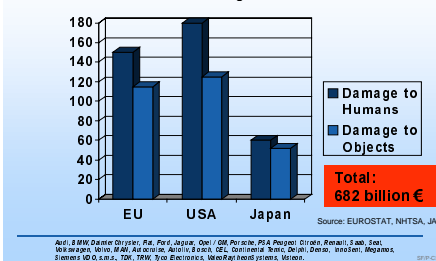


Research and Technology Development Working Group

Recommendations for further research activities:

- **Normal driving:**
 - aspects of collective/interactive road use
 - Common understanding of road traffic and error compensation mechanisms
- **Accident Causation:**
 - Analysis of present data and demographic aspects
- **Road Infrastructure**
 - Vehicle to infrastructure communication, HMI aspects
 - Interrelationship road infrastructure and new vehicle technologies
- **Telecom Infrastructure**
 - How could Galileo, UMTS and other electronic systems improve preventive safety technologies

Total Social Economic Damage of Traffic Accidents 1998



Research and Technology Development Working Group

Recommendations for further research activities:

- **Vehicle Architecture**
 - Standard protocols for v2v and v2I, ensure EMC compatibility of communication components
- **HMI**
 - Adaptation of driver behaviour to new technological systems
 - Acceptability of technologies
- **Vehicle Technologies**
 - Interaction of systems
 - Life-cycle aspects
- **Quantification of Impacts**
 - EU wide assessment/verification of efficacy on safety measures and systems



International Cooperation Working Group

Possible Topics:

- accidentology, aspects of HMI, certification and testing methodology/procedures, harmonisation and standardisation requirements, legal issues, socio-economic benefit analysis, benchmarking and best practice.

Recommendations:

- International cooperation essential to eSafety
- Focus on coordinating international aspects
- Accelerate exchange of information
- Regular focused meetings
- Other WG members to be invited to provide expertise