
eSafety Forum

DRAFT

Recommendations

The 3rd Plenary Session of the eSafety Forum

Brussels 25 March 2004

eSafety Forum

Accident Causation Analysis WG

Having regard to

- The absolute need for consistent EU accident causation analysis;
- The work done so far by the EU, Member States, industry groups, institutes and relevant input from global sources on accident causation;
- EU-funded projects (for example MAIDS, SafetyNet and ETAC).

The eSafety Forum,

- Stresses the importance of European accident causation analysis to make a safety diagnosis and assess impacts;
- Takes note of the preliminary work done by the working group to analyse existing data sources;
- Takes note of the restrictions that exist that make simple aggregation of existing accident data sources impractical;
- Takes note that nevertheless, real opportunities exist to make parallel analysis;
- Takes note of the definition from the working group of the task necessary;
- Takes note that this task is substantial and cannot be undertaken on a voluntary basis;
- Takes note that longer term requirements will also be necessary to provide a complete picture on accident causation.

And recommends that:

- The short term task be carried out by the end of 2005;
- EU funding be identified to have this task carried out in the shortest possible time;
- That the working group continues with the defined task through a workshop to prepare agreed questions;
- That this work be supported by Member States, industry, user groups and other stakeholders;
- That work continues on the development of the longer term needs.

eSafety Forum

eCall (In-vehicle Emergency Call)
Driving Group

Having regard to

- Agreement of a harmonised architecture for pan-European in-vehicle emergency call (eCall)
 - Starting point being the project E-MERGE on an end-to end system and service architecture, specification of the required interfaces and the successful demonstrations of eCall;
 - Taking into account the Commission Recommendation on the caller processing that entered into force in July 2003.
- Drafting of a MoU (now MoI) to secure parallel commitment;
- Definition of parts of potential business models with the identification of benefits for all stakeholders.

The eSafety Forum

- TAKES NOTE of the automotive industry's position, the position papers received from Germany and UK, and available information regarding the status in NL, Sweden and Finland; and the need to restructure and enforce the eCall Driving Group;
- STRESSES the importance of keeping the time-table for the deployment of eCall in all new vehicles in Europe as a first example of the eSafety implementation, and the importance of committing all key stakeholders to a common, concrete rollout plan for eCall;
- EMPHASISES the need to have a clear understanding on the exact status of E112 implementation in the Member States, and the necessary incremental investments for realisation of eCall.

And recommends that:

- The eCall Driving Group reinforces its membership by inviting new members from public authorities, insurance industry, mobile telecommunications and aftermarket equipment and system suppliers;
- The eCall Driving Group seeks immediately parallel signatures to the eCall Memorandum of Intent, drafted on the basis of the MOU, to secure the parallel commitment of all stakeholders to create a concrete roll-out plan;
- The Commission sets up the Public Safety Officers Communication Forum without delay, and invites it, as a priority, to discuss the actions for implementing E112 and eCall;
- ERTICO invites its Public Authorities Platform to review the eCall Mol from the perspective of the Member States, and to agree national eCall implementation strategies through national Memorandum of Understandings.

And recommends that:

- the FP6 Integrated Project GST undertakes a study on the status of the implementation of E-112 in the 25 Member States and the incremental costs to implement eCall on top of E112;
- the Commission organises a High-Level meeting with the Member States, inviting both transport and interior ministries, to discuss eCall implementation road map;
- the automotive industry, the Member States and other key stakeholders commit to the development of the eCall rollout plan by signing immediately the Memorandum of Intent upon its release for signature.

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Real-Time Traffic and
Technological Development

Having regard to

- The need of road users to have access to the most actual traffic information throughout Europe;
- The relevance of this information to improve the safety on the streets and the flow of traffic as well as to reduce the stress during driving;
- The work done so far in some, but not all countries of the European Union to establish the relevant traffic information services firstly for the main roads and even to extend them regionally to urban applications, already;
- The understanding that the transmission of the standardized service called "Traffic Message Channel" within the FM-broadcasting system (RDS/TMC) has proven at the time being to be the most cost effective solution to reach all vehicles on major roads.

The eSafety Forum,

- Recommends that RTTI should be expanded as fast as possible to have a seamless service in all countries of the European Union.
- This requires the whole chain of traffic information which consists of
 - Data collection and interpretation (i.e. the transfer to an already agreed set of standardized event codes together with a code for the localisation),
 - The encoding of these messages for the transmission via all possible means (cable, fax, two-way communication and - preferably - broadcasting);
 - Receivers/car radios to decode the information and allowing dynamic navigation by recognition of the RTTI Service.
- And broadcasting by FM - or/and DigitalRadio - either free of an extra charge or encrypted to allow the collection of a direct or indirect fee from the customer.

And recommends that:

- The Council of the Transport Ministers of the European Union should decide at one of their next reunions that
 - " All countries within the European Union should agree or should be advised to enable and to extend the installation of the chain of road information and to establish Real-Time Traffic Information Services in their countries, to have 80% of all population throughout Europe able to be served with adequate, standardized services by the year 2010."

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Research and Technological
Development WG

Brussels 25 March 2004

Having regard to

- The fact that a wide range of Regional, National and European research, technology and demonstration projects are being carried out;
- The fact that these activities may contribute to addressing the recommendations of the High Level Group on eSafety.

The eSafety Forum,

- Has analyzed, in an intensive consultation process, the current RTD activities in this area at the Regional, National and European level with the aim of :
 - Establishing mechanisms for monitoring, aligning and steering such projects so as to maximize synergies and disseminate results;
 - Identifying the priorities for research areas for integrative European research, technology and demonstration projects in the field of eSafety.
- On the basis of this analysis, the RTD gaps were identified and recommendations for future research priorities were derived.
- It has been observed that the more than half of R&D efforts analysed focus on electronic systems and enabling technologies for accident prevention and protection systems within vehicles. The present European “eSafety research activities” does not reflect the necessary systems approach.

And recommends that:

Further EU wide R&D programs focus on an integrated approach involving the vehicles, the infrastructure as well as the driver. In particular, the focus should be in the following areas:

- Accident causation R&D including the development of a EU wide methodology for the analysis of present data and demographic aspects;
- R&D into the required technical architecture and structure for post accident incidents, civil protection and emergency management;
- EU wide assessment and verification (with international comparison) of efficacy of safety measures and systems implemented in vehicles and infrastructure – including the establishment of methodologies for a comprehensive cost benefit analysis including Models, simulation and pilot studies for the evaluation the influence of new technologies;
- Human Factors - Analysis of collective interactive road use, collective understanding of road traffic and error compensating mechanisms as input for technology development;
- Systematic assessment of the impact of intelligent road and telecommunication infrastructure on safety for all road use - Especially study opportunities of cooperative infrastructure to vehicle communication and the inter-vehicle communication systems.

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Road Maps for implementation
WG

Orientation

- eSafety matrix covering all systems
 - Technical readiness;
 - Readiness for markets;
 - Readiness for infrastructure deployment;
 - Effects on safety, total and by 2010.
- 1st priority: systems, which
 - Are effective in reducing fatalities by 2010;
 - Have wide agreement on implementation.
- 2nd priority: systems, which
 - Are effective in reducing fatalities 2010.

Priorities

- Vehicle based systems
 - Electronically controlled stability program (ESP);
 - Advanced surroundings perception devices (24 GHz etc.).
- Infrastructure based systems
 - Dynamic traffic management (Variable Message Signs);
 - Local Danger Warning;
 - In-vehicle technology to improve data basis for traffic management and danger warning.

Recommendations

- Concerning 1st priorities
 - Vehicle manufacturers: increased availability of ESP in next two years;
 - Increase awareness of ESP benefits;
 - Surroundings perception sensors market introduction obstacles need to be removed;
 - Uniform in-vehicle telematics platforms.
- Concerning future work
 - Identify strategies for promoting 1st priority systems;
 - Identify further priority systems;
 - Develop road maps monitoring and updating.

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Human-Machine Interaction WG

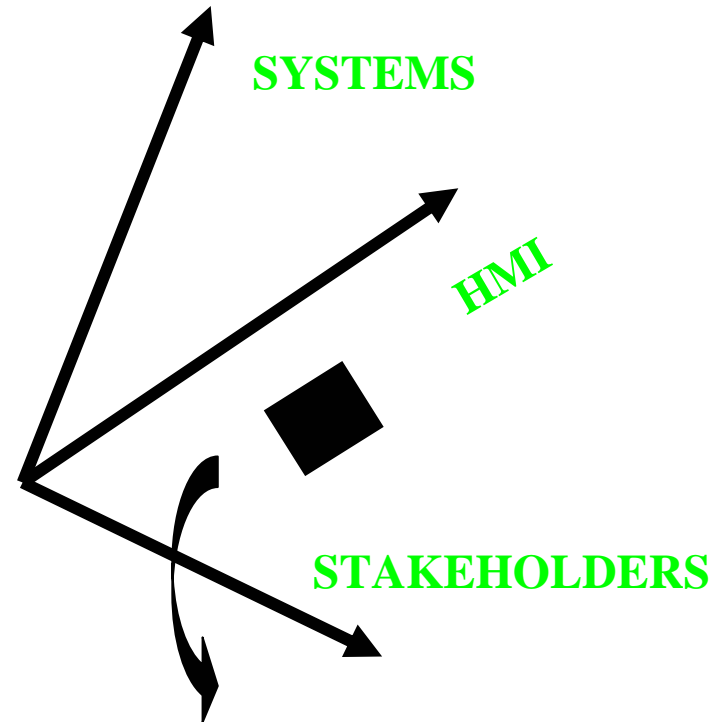
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The WG-HMI is:

- Strengthening its Membership;
- Identifying HMI related problems;
- Developing Solutions.

Solutions Matrix

- SYSTEMS:
 - Nomadic
 - Aftermarket
 - OEM installed
 - Integrated
- HMI:
 - Installation
 - Info. Presentation
 - Interaction Modes
 - Use
- STAKEHOLDERS:
 - Vehicle Manufacturers
 - System Manufacturers
 - Service Providers
 - Fleet Owners and Employers
 - Drivers
 - Authorities



In each box:

- Who is Responsible?
- How can we ensure safety ?

2004 Activities

- Technical
 - Complete Matrix (e.g. provide definitions, link with identified problems)
 - Prioritise Cells for in-depth treatment (major cells presently on Nomad Devices, Employers and Fleet Managers, Service Providers)
 - Consult on robust solutions
- Meetings
 - WG-HMI (April, June, Sept, Oct, Dec)
 - Budapest Congress (May)
- HMI Workshop
 - 8th June, Brussels
- Final Report Dec 2004

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International Co-operation WG

Brussels 25 March 2004

Having regard to

- Global efforts in eSafety are being coordinated in the spirit of MoU's between ERTICO and ITS-America and ITS Japan;
- There is strong interest for international collaboration, which is seen as essential to help achieve eSafety goals;
- There is a need to strengthen synergies and apply best practices, avoiding possible duplication of effort;
- There is the call to coordinate international aspects of the eSafety Forum and its Working Groups;
- The IC-WG met July 17 / 03 in Paris, Nov 18 / 03 in Madrid and Mar 10 / 04 in Detroit.

The eSafety Forum,

- Notes that the IC-WG is focusing on promising cooperation themes based on the Nov 2002 report of the eSafety WG with 28 recommendations, which include:
 - Accident Causation Analysis;
 - Cost Benefit Analysis;
 - Human Machine Interaction;
 - Co-operative Systems (Vehicle-Vehicle-Infrastructure).
- Emphasizes the need to identify international best practices, whose introduction could support achievement of eSafety targets;
- Welcomes expert correspondents from outside Europe as members of eSafety WG's;
- Notes that Informal WG meetings are useful to drive the process faster.

And recommends that:

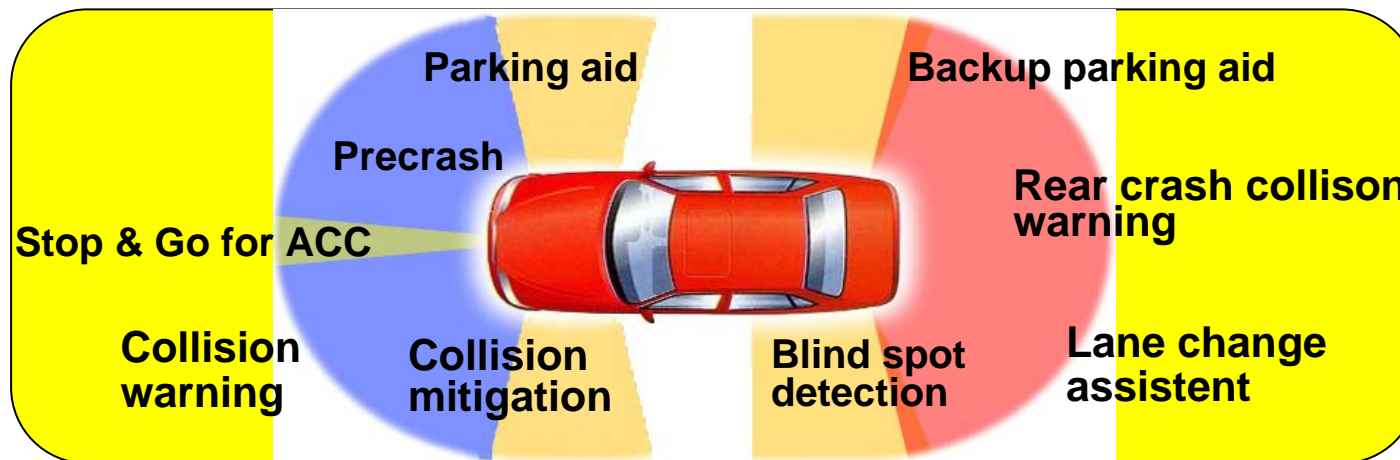
- There be wider international presence at the 2004 IC-WG meetings in Parma (June 17) and Nagoya during the ITS World Congress in October;
- A list of proven near-term-applicable accident-reducing techniques /policies be assembled;
- eSafety demonstrations be identified and publicized , e.g. during the 2004 and 2005 World and European ITS Congresses , as well as those held in USA, Japan and other nations;
- The IC-WG join with the other WG's to coordinate action that aim at deployment of larger volume eSafety technologies in 2005 and beyond.

eSafety Forum

24 Ghz Short-Range Radar (SRR)

24 Ghz Short-Range Radar

- SRRs are key for active and passive safety Driver Assistance Systems through high spatial resolution SRRs
- 24 GHz SRR's are mature and ready for deployment today
- SRR's are economical, - not limited to high end cars
- SARA comprises 32 companies and is resolving regulatory and standardization issues of SRR's



SRR's technology is expected to give a significant contribution to the enhancement of road safety

24 Ghz Short-Range Radar

- The Paragr. 4 of the Final e-Safety Working Group Report “Adapting Regulations and Standards” has defined:
- REC. (21) *“Take necessary Actions for Removing Regulatory Barriers to the Use of the 24 GHz Spectrum for Short Range Radar in Europe”*
 - » CEPT/ECC completed sharing studies in 24 GHz Range and is in process of defining new Regulations (see p.3)
- REC. (22) *“Undertake Standardization in ETSI for the 24 GHz UWB Radar by Implementing the EU Mandate”*
 - » ETSI TG31B, Automotive RADAR released the 24 GHz draft Standard EN 302 288 in March 2004 for public enquiry. Publication schedule is 4.Q. 2004

24 Ghz Short-Range Radar

- CEPT/ECC: Develops a 24 GHz decision as a “package solution”
 - GOAL: Ensure Co-Existence with other Radio Services in the same Frequency Bands
 - STATUS: CEPT/ECC has defined a Draft Report to the EC:
 - First Generation: at 24 GHz starting from 2005 with maximum car parc penetration of 8.3 %, ending Year 2014
 - Second Generation: Final solution at 79 GHz from 2010 onwards
 - ECC decision for a new 79 GHz SRR Allocation agreed
 - Draft ECC and EC decisions pending for 24 GHz
- **Continued support needed to overcome regulatory hurdles**

24 Ghz Short-Range Radar

- The Commission proceeds with appropriate legal initiatives (a new draft 24 GHz EC decision);
- The Automotive industry endorses a 24/79 GHz “package solution” for first and second generation of SRR’s;
- The automotive industry co-operates with the Commission and member states to provide the required control measures and legal certainty as per ECC request;
- Once the draft ECC 24 GHz decision is approved, the EC decision will be published, member states will take all necessary legislative, regulatory or administrative measures for the implementation of SRR’s.