



Minutes of the 8th Plenary Meeting of the eSafety Forum

Versailles, France - Part of the i2010 Intelligent Car Event

Tuesday, 18 September 2007 from 14h00 to 17h30

1. Opening Address by Mrs. Viviane Reding, European Commissioner Responsible for Information Society and Media

eCall is now on the verge of becoming a reality. With more Member States signing the Memorandum of Understanding, support for eCall is clearly growing. Field trials have proven that eCall works and soon it will be available to save lives.

With the launch of the second Communication on the Intelligent Car Initiative, two additional issues now need to be considered by the eSafety Forum: one is the creation of incentives to encourage the uptake of electronic safety systems, and the other is the safety of nomadic devices used in vehicles.

An open question with regard to incentives is whether state aid in the form of favourable tax rates will help accelerate the uptake of electronic safety technology. Clear guidance is needed from the eSafety Forum on this matter.

Nomadic devices such as navigation aids are clearly very useful, beneficial and popular. But are they safe? This question does not just relate to their use and issues of driver distraction, but also covers their installation in vehicles and the hazard that the devices can pose for vehicle occupants in the circumstances of an accident.

The market for nomadic devices is very dynamic with new features appearing at a fast pace. At the moment a voluntary approach is being followed with regard to the safety of nomadic devices. If regulation were to be introduced, then this might quickly become outdated given the rate of innovation. What then is the best way to address the safety of nomadic devices? On this matter too, the eSafety Forum needs to provide clear guidance.

On the issue of clean mobility addressed in the second Communication, there is a need to consider climate change and the reduction of vehicle carbon dioxide emissions. So far the debate in this area has been very polarised and there is a need for a more balanced discussion. The role of ICT needs to be considered and the new Working Group that has been established to address this matter must provide practical recommendations and guidance on the contribution of ICT.

ICT will also be an enabler of new services providing for safer, and more energy efficient and comfortable journeys. This will enable citizens to reduce their carbon



footprint while maintaining their essential mobility needs. This is the aim of the Intelligent Car Initiative.

2. Conclusions of the eSafety Workshop, Berlin 5-6 June, Presented by Dr Frank Albrecht, Federal Ministry of Transport, Building and Urban Affairs, Germany

The Berlin workshop considered several eSafety-related issues: Real-time Traffic Information; Human Machine Interfaces; Driver Assistance Systems and the related legal issues. These topics were discussed in depth and several important conclusions emerged:

Free access to safety related traffic management information should be ensured. Improvement to the quality of this information is needed and there should be consistency in the type and quality of information available across the EU. Reliable frequencies are also needed to transmit safety related traffic information. In addition developments are needed in Human Machine Interfaces to enable the safe integration of nomadic devices into vehicles. Importantly, without a common legal framework in place, EU-wide implementation will not happen. The principles developed in the RESPONSE 3 research project should provide the basis for this legal framework. Driver reaction to safety systems is also a critical issue and full responsibility must remain with the driver. Finally, Driver Assistance Systems should be protected from improper use.

The conclusions reached provide a basis for further political work and these conclusions should contribute towards the development of a framework. The German Government has asked the follow-on Portuguese and Slovenian Presidencies to support and act upon these conclusions.

3. The 2nd Commission Communication on Intelligent Car: "Road Map to safer, cleaner and smarter mobility in Europe", Update on Actions Underway, Presented by Dr Rosalie Zobel, Director, Directorate G, DG Information Society and Media, European Commission

Presentation

12 Member States and three Associated States have signed the eCall Memorandum of Understanding. The European Commission's goal is to have all Member States sign by the end of 2007, as this will provide certainty to manufacturers that there will be an EU-wide eCall system. Member States should undertake pilot studies in 2007/2008, and updating of the road infrastructure should be completed by 2010. Completion of the signature process by the end of 2007 will enable the European Commission, in 2008, to start negotiations with EU, Japanese and South Korean



manufacturers' associations on voluntary agreements to include eCall systems in all cars by 2010. If such agreements cannot be reached then the European Commission will consider a regulatory approach.

Within the Communication there is a commitment to accelerate the uptake of Electronic Stability Control and guidelines on incentives to speed-up the availability of safer and more environmentally friendly vehicles need to be produced. Field Operational Testing is also being pursued in FP7, and a number of projects approved in the first call will be working on awareness campaigns and producing documentation to prepare the way for this type of testing.

The impact of ICT in reducing carbon dioxide emissions from vehicles will be addressed, and a method needs to be developed to measure these impacts. Once this has been produced the European Commission will then be able to consider the best way forward in this area. Other topics that are being addressed are the safe installation of nomadic devices in vehicles and their safe interfacing with in-vehicle embedded systems. An architecture that provides interoperability for co-operative systems is also required, and the European Commission intends to maintain support for co-operative systems in the 2009-2010 workprogramme. Radio frequency spectrum issues will also be addressed, and the European Commission will discuss these matters with the Radio Frequency Spectrum Committee.

Discussion

Some of the developments underway are demonstrating that they do not just have a social benefit, but also an impact on European competitiveness, with countries outside the EU beginning to adopt European approaches, thus providing significant markets for European products and services. An example of this is the Chinese adoption of the European Traffic Message Channel. This dual impact, is, of course, part of the logic underlying the European Commission's approach, and it is very important to consider all emerging countries, as these can gain from European developments to the benefit of Europe's industries.

Systems and approaches that require interventions from stakeholders and the European Commission need to be identified to facilitate a more targeted approach to enabling the implementation of eSafety systems in Europe. In essence what is now needed is to look beyond eCall and Electronic Stability Control, to produce a list of priority technologies for future implementation.

Adoption of standards for eCall is very important and this work needs to be accelerated. Priorities for OEMs also need to be identified. Those Member States that have signed the Memorandum of Understanding need to begin to identify the



prerequisites for implementation. An exchange of eCall best practices should also be facilitated.

4. Moderated Panel Discussion 1: Incentives

Moderator: Arnold van Zyl, CEO, ERTICO - ITS Europe

Panellists: David Ward, FIA Foundation; Etelka Barsi-Pataky, MEP; Wolfgang Reinhardt, ACEA; Kerry Malone, TNO; Anders Lie, Swedish Road Administration

The EU needs to focus on safety and energy efficiency, but must be able to create a legal framework that will enable a market. Experience of vehicle end-of-life regulations shows that such legal frameworks can be designed and implemented.

Studies of the effectiveness of awareness and promotion schemes suggest that there is sometimes a mismatch between the perspectives of those who might buy such systems and the awareness and promotion activities pursued. For example, driver concerns over cost and freedom of driving need to be taken more into account in activities aimed at encouraging take-up. Furthermore, there is also a lack of knowledge about the effectiveness of financial incentives and which ones work best. Impact assessment studies are therefore needed.

Incentives such as the feel good factor might provide a way forward. This is a positive approach, but there are also negative ones that involve penalising people, in some way, for not using electronic safety systems. Charging higher insurance premiums for cars not fitted with electronic safety devices is one example. Whatever option is followed however, it is important that the internal market is not distorted.

In the high-end market costs may not be a significant issue, but costs are a big concern in the low-end market. People who buy cheaper cars are probably not willing to pay the extra cost involved and this acts as a barrier to the incorporation of the technologies into low-end vehicles. Tax incentives may be one way to overcome this problem, which might only need to be a temporary measure, since once large-scale penetration is achieved the need for such tax incentives disappears. Possible distortions created by higher tax rates for add-on extras as opposed to lower rates for built-in features, also need to be identified and eliminated. In the end however, given the price sensitive nature of the low-end market, what is needed is a simple message for buyers, and a lower tax rate for electronic safety systems, built-in or added on, may just provide such a message. However, consideration should also be given to younger drivers who are perhaps less likely than more mature drivers to consider the possibility of an accident.



Another perspective is for Governments, through their own fleet purchasing activities, to support and lead the market for electronic safety systems. Perhaps efforts should be focused on all fleet buyers as they tend to have a less emotional approach, being more concerned with financial matters. The prospect of, for example, lower insurance premiums could be a big incentive for such people to opt for electronic safety systems, which would help to create a market and lead to economies of scale.

The above considerations focus on the demand side, but there is also the supply side to consider. A simpler alternative to demand side measures would be to just require that electronic safety devices be fitted as standard, and not to leave the choice to buyers. This would mean that all manufacturers would have to offer the same minimum features.

In conclusion, therefore, it is evident that offering incentives is not a straightforward issue; many factors need to be considered. Further work needs to be undertaken to better understand the impacts of different kinds of incentives, and to highlight inconsistencies in national tax regimes. Incentives also need to be accompanied by improved dissemination of the benefits to buyers, and driver concerns should be better considered in such awareness activities.

5. Moderated Panel Discussion 2: Nomadic vs. Embedded Devices

Moderator: Ivan Hodac, Secretary General, ACEA

Panellists: Wolfgang Reinhardt, ACEA; Juhani Jääskeläinen, European Commission; Annie Pauzie, INRETS; Klaartje Vent, TomTom; Gernot Spiegelberg, Siemens

The number of nomadic devices used in vehicles is increasing along with their functionality. However, the installation and use of these devices is a matter of growing concern. Many of these devices are fitted in unsuitable places such as windscreens, or have fixing methods that cannot withstand the forces experienced in a crash, thus posing potentially severe safety risks to vehicle occupants. Manufactures of such devices clearly have a responsibility for their safe installation and use.

At the present time the lifecycle of nomadic devices is short when compared with systems embedded in vehicles. Also car manufacturers have to comply with vehicle related safety regulations, but there are no such regulations for nomadic device manufactures. Moreover, there is little incentive for car manufacturers to address the safety problems posed by nomadic devices, as most of the benefits of such work would accrue to the nomadic device manufacturers.



There is agreement about the problems and issues. What, however, needs to be done to deal with them, given that nomadic devices are here to stay and will continue to increase in both number and functionality? Moreover, while there is, at the moment, no significant data on the number of injuries and accidents that are caused by nomadic devices, it is imperative that preventative steps be taken now. The approach should be to avoid the data, because such data should not be viewed as statistics, but as lives damaged, pain and suffering inflicted, and the loss of human life.

The problems of safe installation, safe use, and safe integration with embedded systems needs to be addressed. To do this a win-win circumstance needs to be created. The stakeholders need to enter into discussions, and a level playing field needs to be created. The existing European Statement of Principles should be applied. Further research work on the interfacing of nomadic devices and embedded systems needs to be undertaken, and the ergonomics of nomadic displays and their positioning within vehicles should be addressed. Consideration needs to be given to allowing embedded systems to override nomadic devices when the safe use of nomadic devices is not possible. Financial returns for car manufacturers' efforts to provide interfaces and safe fixing points also need to be ensured, perhaps in the form of royalty payments from nomadic device manufacturers.

Given that regulation is on the horizon, both car manufacturers and nomadic device manufacturers have a common interest to create safe installation and use of these devices. To this end further discussion among the stakeholders will have to take place. The next Nomadic Devices Forum meeting on 24th October will be a good opportunity to steer the debate. In addition, the eSafety Forum may need to re-establish the Human Machine Interface Working Group. Scientific assessment of the safety issues is needed, and limits on the access of nomadic systems to vehicle embedded systems, defined. Citizens also need to be better informed about safe installation and use.

6. eSafety Forum Working Groups

6.1 Final Recommendations of the Communications WG Presented by the Chair of the WG: Uwe Daniel, Silicon Networks

The work of the Communications Working Group is focused on issues of standardisation, spectrum requirements, and international co-operation, as they relate to communications in co-operative systems. Several recommendations have been agreed:



With respect to spectrum allocation, there should be an allocation of protected spectrum in the range 5.875 GHz to 5.925 GHz for safety and efficiency related messages. To ensure performance of systems there should be a minimum set of mandatory performance parameters for communications devices. An EU-wide harmonised deployment plan should also be developed; this will help to create market certainty for investors. Standardised interfaces for all devices are an important issue and the development of such will allow for the addition of further applications in the future. A legal framework that will enable the exchange of relevant data among the Member States is necessary. Moreover, Member States should provide free access to safety related traffic data through a standard format. Finally, Member States should adopt a common architecture to allow interoperability across Intelligent Transport Systems.

The Working Group seeks the support of the eSafety Forum for these recommendations and their adoption by the various stakeholders. The Forum is asked to support the recommendations on spectrum allocation, to foster international co-operation to achieve harmonisation, and to encourage standardisation bodies to take into account the Working Groups deliberations and recommendations.

6.2 Final Recommendations of the RTTI WG, Presented by the Chair of the WG: Heinz Friedrichs, Bosch

The Real Time Traffic and Travel Information (RTTI) Working Group has identified and recorded the status of standards relevant to RTTI. It has also documented the worldwide implementation status of Traffic Management Channel, a key enabling technology for RTTI. Business models for the implementation of RTTI services have also been identified and examples described. The Working Group notes that although many countries have undertaken work in the area of RTTI, further improvements are still necessary, including joint implementation strategies to enable wide access and to overcome language barriers. Moreover, legal and business frameworks need to be further developed, and the quality and coverage of RTTI systems need to be improved. Nevertheless, the technologies and standards required for implementation do exist and it is therefore now possible to create a co-ordinated role-out of RTTI. This should be founded on digital distribution channels with adequate capacities and be based on European standards.

The Working Group requests the approval of its work and findings by the eSafety Forum, and recommends that the RTTI Working Group be closed.

6.3 Status of the eSecurity WG, Presented by the Chair of the WG: Christoph Ruland, University of Siegen



The eSecurity Working Group is addressing the security issues of the eSafety vehicle and road infrastructure. The aim is to establish what needs to be done to prevent improper use and malicious attacks. The Working Group held its first meeting on 23rd April 2007. The focus is on technical, legal and organisational requirements. The work that will be undertaken over the coming months will address what actions need to be taken with respect to research and standardisation. The involvement in the Working Group of OEMs and public authorities is critical to success and their representation in the Working Group needs to be increased.

6.4 Status of the Service Oriented Architectures WG, Presented by the Chair of the WG: Volker Vierroth, T-Systems

Service Oriented Architecture is a relatively new paradigm that is based on the concept of composing software-based services from several service (software) providers, to construct and then deliver some desired service capability to end-users (e.g. drivers). The Working Group held its first meeting on 5th July 2007. The focus is on the core service elements and interfaces that are required to enable eSafety services. Issues that will be addressed encompass what is relevant to users, interfaces that support core eSafety applications, and scenarios, processes and data. The main work will be centred on analysis and modelling.

7. Results of the eCall Field Trial in Germany, Austria and Italy, Presented by Johann Grill, Director Consumer Protection and Public Policy, ADAC

A 10-day field test of eCall was undertaken in Germany, Austria and Italy during April/May 2007. Nine vehicles were equipped with test equipment, with a push button being used to manually activate eCall. Approximately 450 predetermined locations were used for the test calls, providing a wide coverage of use conditions (cross border, near border, dense forests, etc.). A total of 834 test calls were made. The SIM cards used ensured that within each country, the tests included SIM cards issued by operators in the other two countries. The results of the test demonstrate very good performance. In each country the success rate of test calls was greater than 90%. Unsuccessful calls only occurred in areas with poor GSM coverage. Voice call quality was good for 96% of the calls up to a GSM signal level of -77dBm. Up to that level all calls were successful. In 95% of test cases the GPS positioning accuracy was 50m or better. In 95% of test cases the call signalling time was 35 seconds or better.

Several conclusions have been reached based on the results of the study. Calls were only unsuccessful in areas with poor GSM coverage. This can be resolved in part by installing GSM repeaters in critical areas such as tunnels. Further studies do however need to be undertaken to ascertain performance in actual crash



circumstances where damage might occur to the eCall equipment. Importantly, it is clear that a cross border Pan-European eCall system is feasible.

8. Conclusions and Recommendations of the 8th eSafety Forum Plenary Meeting

The eSafety Forum welcomes the future actions proposed in the new Communication on the Intelligent Car Initiative.

The need for all Member States to sign the eCall Memorandum of Understanding is noted. Since eCall is now on the verge of the operational phase, future steps by stakeholders need to be prioritised for actions starting in 2008. These could include identifying priorities for OEMs, identifying the prerequisites for implementation, and setting up a means to enable an exchange of eCall best practices. In addition, the adoption of standards for eCall needs to be accelerated.

The eSafety Forum notes the request from Commissioner Reding to address the issue of incentives to support the take-up of electronic safety systems, and the need to resolve the safety problems of nomadic devices.

With respect to incentives, further studies need to be undertaken to better understand the complexities of the subject, the effectiveness of different incentive schemes, and their appropriate use. Incentives also need to be accompanied by improved dissemination of the benefits to buyers, and driver concerns should be better considered in such awareness activities.

Consideration of the safety of nomadic devices will require dialog between nomadic device manufacturers and car manufacturers. A level playing field and a win-win circumstance should be created. More research also needs to be undertaken to resolve the problems of safe installation and safe use. The eSafety Forum will consider whether it would be useful to re-establish the Human Machine Interaction Working Group.

The eSafety Forum also notes the request from Commissioner Reding to provide practical recommendations and guidance on the use of ICT to achieve improved energy efficiency and reduced carbon dioxide emissions.

The recommendations of the Communications and the RTTI Working Groups were accepted.

The eSafety Forum notes the successful results of the eCall field trial undertaken in Germany, Austria and Italy, and the need for further studies to assess performance

under crash conditions, and the requirement to enhance GSM coverage in critical locations.

