
	<h2 style="text-align: center;">eScope – eSafety Observatory</h2>
<b>Draft</b>	<b>D1.6 Final Report</b>

<b>Author(s)</b>	Jacob Bangsgaard, ERTICO			
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<b>Project Manager</b>	Jacob Bangsgaard ERTICO-ITS EUROPE Tel: +32 2 400 07 38 E-Mail: j.bangsgaard@mail.ertico.com			

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## Chapter 1 - eSCOPE DESCRIPTION

eSafety is a joint industry-public sector initiative driven by the European Commission with the aim to promote the implementation and use of advanced technologies and intelligent transport systems (ITS) for greater road safety throughout Europe.

eScope – eSafety Observatory is funded by the European Commission – DG Information and Society. The project period was January 2004 – December 2005. eScope has monitored and encouraged eSafety Forum progress and activities and served as an easily accessible and up-to-date resource for information on priority eSafety topics. National experts from all Member States were linked to the project as observers of national eSafety activities.

The main objectives of eScope were:

- To monitor progress on the implementation of the 28 eSafety Recommendations and eSafety “Road Maps” to be agreed;
- To provide and maintain an overview of European, national and industry-level emerging results on the eSafety priority topics;
- To support eCall activities;
- To promote and disseminate key eSafety topics and activities through a dedicated eScope website, electronic newsletters, and other printed materials.

### 1.1 The eScope website

Dissemination was one of the main objectives of the eScope project. In order to raise awareness for eSafety, eScope undertook a number of activities which included the building of the eScope website, contributions to eSafety events, distributing information through online newsletters and printed newsletters and active participation in conferences and workshops worldwide.



The eScope website was the main source of dissemination used by the project. It was made public in February 2004 and became the main platform for dissemination of eSafety activities on National, European, and International level. The website served as the focal point for communications internally and externally. The website covered a number of areas:

- Information about eSafety related activities including the eSafety Forum and Working Group meetings;
- eSafety related news;
- Updates on eSafety related events at European and International level;
- A comprehensive list of links to projects related to eSafety;
- Descriptions of eSafety systems;
- eScope presentations;
- The “eCall toolbox” consisting of a set of all the aspects and issues surrounding the in-vehicle emergency call (eCall).

In total the eScope website received more than 65.000 visits, demonstrating that the eScope website became the reference website for information concerning eSafety. Many of the website visitors used the eScope website as a tool to obtain the latest documentation from meetings and events as well as the latest news about eSafety.

## 1.2 Presentations and participation in events

eScope participated and presented its activities in all major eSafety events throughout Europe. Presentations took place in conferences and workshops worldwide with the objective of informing about eSafety developments.

eScope used European events related to eSafety as a channel for information distribution and public outreach. The project actively participated in the relevant meetings, seminars, and workshops within the eSafety Forum Working Groups and in all Steering Group meetings, High Level meetings, and Plenary Meetings organised in 2005. eScope was present with a stand at the ITS Europe congresses (Budapest, Hungary and Hanover, Germany) and at the ITS World Congresses (Nagoya, Japan and San Francisco, USA)

## 1.3 User Outreach

The User Outreach Working Group covered the field of user outreach and worked on a plan for future activities, which resulted in the elaboration of a paper, which suggested the creation of a Communication Platform for eSafety. The main task of the Communication platform would be to improve, coordinate and harmonise the end-user communication of the different stakeholders and raise awareness of eSafety systems to support its deployment.

## 1.4 Working Groups

Since the launch of the eSafety activities in April 2002, the European Commission has initiated 12 Working Groups that, with strong support from different European stakeholders, has undertaken a significant role and made valuable contributions to the eSafety initiative. The eSafety Working Groups focus on domain-specific priority areas that are important for the implementation of the eSafety recommendations. A number of Working Groups have completed, activities published and recommendations made to eSafety Stakeholders. eScope has followed the activities of the working groups and has been giving input to the recommendations. The following Working Groups have finalised their work: Accident Causation Data, Digital Maps, Heavy Duty Vehicles, Human Machine Interaction (HMI), and Real-time Traffic and Travel Information (RTTI). The Working Groups who continue their activities in 2006 are: User Outreach, Communications, Research and Development, eCall Driving Group, Implementation Road Maps, International Cooperation, and Service Oriented Architecture (see also Chapter 3).

## 1.5 Advisors and Observers

A panel of EU Member State representatives, invited to report on national eSafety activities, constituted the Observers group. In addition a panel of advisors was organised in order to monitor the progress of eScope and to guide the work to secure consistency and assure that the project was in line with the needs of the eSafety stakeholders.

The following meetings were organised:

- Advisor meeting – Brussels, 5 May 2004
- Advisor and Observer meeting – Brussels, 28 September 2004
- Advisor and Observer meeting – Helsinki, 14 April 2005
- Advisor and Observer meeting – Brussels, 21 November 2005

Furthermore, eScope invited all national ITS organisations to join the meetings in 2005. This was done to include the views of SMEs and national industry interest in the Observers group.

A dedicated area for the Observer and Advisor activities was made available on the eScope website. All minutes, list of participants, and presentations could be downloaded here.



### eScope Observers

Country	Name	Organisation
Austria	Mr Klaus Machata	Kuratorium fuer Verkehrssicherheit
Belgium	Mr Rene Jacobs	Belgium Road Research Centre (BRRC)
Cyprus	Mr Kyriacos Mouskos	Cyprus Transport and Logistics, LTD
Czech Republic	Mr Petr Bureš	Czech Transport Telematics Association
Denmark	Mr Michael Vendelbo	National council for road safety
Estonia	Mr Alar Ehasalu	Ministry of Transport and Communications
Finland	Mr Antti Rainio	ITS Finland
France	Mr Simon Cohen	INRETS
Germany	Mr Norbert Schuldt	Federal Ministry of Transport
Greece	Mr Alex Rousopoulos	National Committee of Road Safety
Hungary	Mrs Ágnes Lindenbach	Hungarian Ministry of Informatics & Communication
Ireland	Mr Martin Heffernan	National Safety Council (NSC)
Italy	Mr Cesare Raviglione	ISMB
Latvia	Mr Alvis Pukitis	Ministry of Transport
Lithuania	Mr Gintautas Ruzgus	Ministry of Transport and Communications
Luxemburg	Mr Claude Liesch	National certification and homologation authority
Malta	Ms Lara Baldacchino	Malta Transport Authority
Poland	Mr Andrzej Grzegorzcyk	Ministry of Transport and Maritime Economy
Portugal	Mrs Isabel Ortins De Bettencourt	Interior Ministry - DG for Traffic (DGV)
Slovakia	Mr Pavol Kirchmayer	Ministry of Transport, Posts and Telecommunications
Slovenia	Mr Dean Herenda	Ministry of Transport
Spain	Mrs Monica Colas Pozuelo	Direccion General del Traffico (DGT)
Sweden	Mr Anders Lie	Swedish National Road Administration (SNRA)
The Netherlands	Mr Rob Eenink	SWOV
United Kingdom	Mrs Cathy Jenkins	Department for Transport

### eScope Advisors

Name	Organisation
Mr Frazer Goodwin	European Transport Safety Council (ETSC)
Mr Dean Herenda	Slovenia Ministry of Transport
Mr Henrik Forsgren	Volvo Car Corporation
Mr Fritz Bolte	Bundesanstalt fuer Strassenwesen (BASt)
Mr Martin Hill	Office of the UK Deputy prime Minister

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## 1.6 Progress of the 28 eSafety Recommendations

eScope has been following the progress of the 28 recommendations and the results can be found in the deliverable D3.2 Progress note. The progress note provides an overview of the achievements within each recommendation. A summary can be found in Chapter 5.

## 1.7 Support to eCall

One of the working groups under the eSafety Forum is the Driving Group on eCall, which is working on an integrated strategy for Pan-European emergency service. This service is built on the location-enhanced emergency services being implemented in the Member States on the basis of the recently adopted Recommendation on the implementation of E112. Furthermore, they include provisions for more accurate location information and additional safety information. Established at the end of 2002, the eCall WG (at that point transformed into the eCall Driving Group) identified the key players involved in the eCall process in mid-2003 and outlined the functionalities of the interfaces to be established between the players. The work of the eCall DG has been closely followed by eScope and as the focus on eCall accelerated during 2005 a dedicated budget was allocated for this action.

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## Chapter 2 - PROJECT MILESTONES

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The eSafety initiative has made substantial progress in recent years. Based on the results from the eSafety Working Group and other consultations, the European Commission adopted the first eSafety Communication, “Information and Communications Technologies (ICT) for Safe and Intelligent Vehicles” in September 2003. The Communication brings forward 11 actions proposed by the Commission to accelerate the development, large-scale deployment, and use of eSafety systems. It also marked the launch of the eSafety Forum and its Working Groups.

The second milestone is the work towards implementation of new services such as the in-vehicle emergency call (eCall). eCall has become the showcase of eSafety and has already demonstrated huge potential for socio-economic benefits. The key stakeholders are now working towards 2009 as the target date for eCall to be implemented in all new cars. In September 2005 the second eSafety Communication “Bringing eCall to Citizens” was adopted. It deals with the urgent and practical actions needed to roll-out eCall. Six EU Member States have already signed the eCall Memorandum of Understanding under which all new cars in Europe are to be equipped with eCall technology as soon as 2009, and five more have indicated they would be ready to sign in the near future.

Another milestone of eSafety is the continuous international recognition the initiative is gaining. The EC, US and Japan are actively pursuing international collaboration on safety issues to make eSafety global. This is an important and essential part of the eSafety Forum, as it strengthens synergies and avoids duplication of regional efforts.

The work completed by the eSafety Working Groups is a major achievement for the eScope project. Based on voluntary participation, the Working Groups completed a number of recommendations made to eSafety Stakeholders that include Member States, European Commission and Industry. The eSafety Forum should in the future aim at supporting the implementation of these recommendations.

In November 2004, the European Commission published a Communication on the challenges to be addressed by a European Information Society strategy up to 2010. This Communication highlights the need to increase research and investment in information and communication technologies, and to promote their take-up throughout both public and private sectors. The “intelligent car” is one of three i2010 “flagship initiatives” that aim to show how information and communication technology (ICT) can improve our public services and quality of life (the other two are “technologies for an ageing society”, and “digital libraries”). The “Intelligent Car” initiative, which will be officially launched in February 2006, will be a milestone for future research and technological development of eSafety applications.

## Chapter 3 - eSAFETY WORKING GROUPS

The eSafety Working Groups focus on domain-specific priority areas that are important for the implementation of the eSafety Working Group recommendations, and in line with the actions brought forward by the eSafety Forum.

A number of Working Groups have completed their activities and published their final reports in which recommendations are made to eSafety Stakeholders. The Working Group recommendations have been closely followed by eScope.

The following description is summarising the conclusions from some of the Working Groups and the findings as they have been observed by eScope.

<b>Working group</b>	<b>Status</b>
Accident Causation	Final report released in January 2005.
Human Machine Interface	Has identified and listed HMI-related problems from available Member State reports and other relevant sources and clustered these around thematic areas. A new draft version of the ESoP has been produced and is planned to be adopted in 2006.
Research and Development	Has established a mechanism for monitoring, aligning and steering projects related to eSafety so as to maximize synergies and disseminate results.
International cooperation	Priority-defining work has been performed to focus on eSafety issues of international importance. This work is done in close cooperation with key stakeholders from the USA, Japan, China, India, and Australia.
Digital Maps	Published its Final Report - Recommendations in November 2005.
eCall Driving Group	Released an MoU which was signed in August 2004 by the European Commission, ERTICO, and ACEA. This MoU sets the objectives and outlines the route to complete the launch phase of a European wide eCall by 2009. Several Members States have now signed the MoU. A specific eCall Toolbox was available on the eScope website to support the implementation process. The

	<p>2<sup>nd</sup> eSafety Communication was published in September 2005 and focus on the strategies for the implementation of eCall towards 2009.</p>
Real-time Traffic and Travel Information	<p>Has produced a technical and economical model for implementing the RTTI services. The RTTI Working Group submitted its final report in March 2005.</p>
User Outreach	<p>Define strategies for dissemination of eSafety research to the end user and propose eSafety campaigns to promote eSafety. The main conclusion from the Working Group is that there is a need to increase the effort on user outreach to support the deployment of eSafety. One proposal from the group has been to create a Communication Platform for eSafety outreach.</p>
Communication	<p>Has been created for vehicle to vehicle and vehicle to infrastructure communications. The work started at the end of 2005.</p>
Implementation Road Maps	<p>Has created tables for autonomous vehicle-based systems as well as the vehicle and infrastructure based systems of e-Call, extended environmental information, RTTI, dynamic traffic management (VMS), local danger warning, and Speed Alert. A table has been drafted showing the eSafety functions against their technical prerequisites. The work will continue in 2006 to expand on the existing work performed.</p>
Service Oriented Architecture	<p>Under establishment.</p>

### 3.1 Accident Causation Data

Was established in 2003 and finalised its tasks in December 2004. The recommendations from the Accident Causation Analysis Working Group were published in December 2004. The Working Group was asked to carry out the relevant recommendations that were agreed at the first Forum meeting in November 2002. The recommendations were:

1. Consolidate analyses from the existing EU, Member States and industry road accident data, which give information on the cause and circumstances of the accidents, for allowing the determination of the most effective countermeasures, starting from the most frequent accident types.
2. Define a common format and structure for recording accident data in the EU countries. Develop jointly a European Accident Causation Database covering all EU and enlargement countries, and provide open access to industry and public agencies.

The Working Group activities have been partly continued through activities within the 6<sup>th</sup> Framework Programme, IST, Call 4.

## 3.2 Digital Maps

The Working Group was established in 2005 and completed its activities by end 2005. The Working Group agreed on the following working approach for their work:

- Phase 1 focused on cooperation (supply of safety attributes)
- Phase 2 dealt with quality assurance (Quality guidelines and improvement procedures)
- Phase 3 dealt with optimisation (standardisation)

### **Phase 1: Cooperation**

In Phase 1 cooperation between public authorities and map providers in the provision of the safety attributes and their updates was implemented. The goal of the cooperation was to realise the supply of safety attributes without additional costs for the public authorities. Public authorities are requested to deliver only those safety attributes that are available and in their current form. The costs associated with the logistics of attribute delivery will be borne by the map providers.

It was agreed by the Working Group that the list of the safety attributes that has been agreed in the EU funded project “MAPS&ADAS” will form the basis of safety attributes considered by this WG. MAPS&ADAS will provide definitions of the individual safety attributes according to European Standards. This output will be provided to the European Commission as the reference document for safety attributes towards the public authorities. The WG strived to create synergies with the other related EU funded projects like EuroRoadS, SpeedAlert, Highway and INSPIRE and examine conflicts.

Proposed Recommendation for Phase 1:

1. The safety attributes list will be made available to the member states by the European Commission. They will be categorised as high, medium or low priority.
2. Upon receipt of a request by a mapping company/organisation, public authorities will indicate what data they have from that list to the mapping companies and make the safety-related data available (as far as it is reasonably possible and at their own convenience). Alternatively, they will place the information (the names of the datasets and/or the information within that dataset) on a publicly accessible website. If they do not have responsibility for a particular dataset (within their own geographic area) they may suggest the name of the public (or other) authority that does.
3. Public authorities will fill in and maintain the list of the attributes that they own, to be made available either upon request or on their website. For data that is presently categorised as high priority, where they have incomplete datasets they will endeavour - as far as is reasonable - to collect and maintain the complete set of information.

4. For datasets with high priority safety attributes, public authorities will make updates available to the mapping companies when they become available.
5. For datasets with high priority safety attributes, the safety attributes will, as far as possible, be made available to the mapping companies at cost of their compilation and delivery.
6. If the national government wishes, it may compile a register of the available safety attributes data. Reference to this register should be made on the public authorities' websites.
7. None of the above (items 1-6 as they apply to a particular dataset) applies where a national government deems that a database containing the relevant dataset already exists (e.g. one prepared by a mapping agency) and is available at reasonable cost.
8. Private and public sectors will seek to work together to improve the accuracy of routing information, so that navigation systems do not route vehicles illegally (banned turns) and that public authorities can fulfil their road safety and congestion reduction objectives.
9. When public authorities introduce new database or asset management systems, consideration should be given to the introduction of new fields for the safety attributes, even if there is currently no intention to collect that data. This WG will maintain and actively provide to public authorities a current list of safety attributes — this list must be maintained and agreed with in an appropriate manner through consultation with the public authorities.

## **Phase 2: Quality assurance**

Phase 2 defined guidelines and procedures to qualify the safety attributes. Focus will be on testing the output of the public authorities. In Phase 2 it will be determined whether these tests will be performed by a third party, through self certification or by the map providers. Quality assurance of the information delivered will:

- Lead to an increased quality improvement of eSafety maps and cost reduction of map production;
- Help public authorities improve their data output quality and their methods related to the safety attributes collection, registration, maintenance, etc.

The issue of quality assurance of data should be studied in more detail based on experience and the outputs from other programmes, projects and initiatives.

In order to be able to perform proper quality assurance through output testing a certain degree of standardisation is necessary. This degree needs to be restricted to the minimum in order to limit undesirable cost consequences for the public authorities. It is therefore recommended to restrict standardisation to the information that is transferred. Standardisation of the medium or the format with which the information is transferred is left outside the scope of Phase 2 and will be subject of Phase 3. Cost consequences of the chosen solution need to be considered in Phase 2, which might lead to the installation of funding mechanisms for the public authorities. The WG has complied with the SpeedAlert specifications. It will not be specified whether these information have to be delivered in an Excel sheet on a CD, on a paper map or in any other format or on any other medium.

### 3.3 Heavy Duty Vehicles

The Working Group has completed its activities. The Final Report was presented in October 2005. The Working Group put forward a number of recommendations to the Member States and the EC:

- The differences between passenger cars, vans and heavy-duty vehicles create a need for a special treatment to ensure a further increase of vehicle safety of heavy-duty vehicles.
- Due to the high mass of heavy-duty vehicles the avoiding of accidents (primary safety) should have a higher priority than the reduction of accident consequences (secondary safety). Surely the combination of both measures will have the highest impact in reducing fatalities.
- The broad market penetration of available or ready to market vehicle safety systems is hindered by a missing business case.
- The member states should promote the market penetration of safety systems by granting incentives.

#### Proposed action items for the EC

Commission Action	Explanation / Progress
The Commission will actively promote the introduction of incentives for Safety Systems in Heavy Duty Vehicles (HDV).	The main obstacle for the introduction of safety systems in the market for HDV is the cost aspect. The Commission should promote the introduction of incentives for Safety Systems that affect main accident fields. Incentives may be the adoption of taxes and tolls or other non-financial advantages.
The EC will urgently clarify whether or not it will adopt legislation on mass and dimensions for a time frame of 2008 to 2012 to support an advanced passive safety system.	A Safety System that may have significant impact on fatalities is the Extended Flexible Underrun Protection Device. The Extended Flexible Underrun Protection Device needs an extension of 300mm of the vehicle length and an additional weight of 100-150 kg. The extension of the length and the additional weight need a change of the legislation (mass and dimensions) to be successful in the market. This change of legislation should allow additional length and weight as long as particular crash compatibility is achieved.
The Commission will investigate the socio economic impact of high rated Safety Systems for Heavy Duty Vehicles.	The following Safety Systems may contribute significantly in the reduction of fatalities: Primary Safety: High Performance Braking Systems, Emergency Braking System, Vulnerable Road User Detection, Warning and Braking system, Intersection Assistance, Inter Vehicle Communication Secondary Safety: Extended Flexible Underrun Protection Device
The EC will promote further investigations on heavy-duty vehicle accidentology in order to create a comparable databases.	

### 3.4 Human Machine Interaction

Established in 2003. The Working Group has completed its activities. A final report was produced in 2005. The final report “Recommendations from eSafety-HMI Working Group” recommends the following:

- In general the current version of the ESoP lacks a clear allocation of relevant standards, rules and directives to the individual principles. (...) Looking at the “Expansion of Principles” issued in June 2001 reveals that, in many cases, the application of a specific principle requires compliance with well defined ISO-standards, rules and directives. Therefore the Expansion should be used as a basis for a revised European Statement of Principles.
- In order to address the Focus of Service Providers – which is closely linked to the issue of nomadic devices – the Working Group recommends development of a Safety Agreement starting with a workshop planned by ERTICO within the AIDE framework.
- The third focus area addresses Fleet Managers/Owners and Employers. Their responsibility should be clarified in respect of existing Health and Safety Directives and they should be adequately informed by the EC and Member States.

According to the HMI Working Group, authorities should:

- Ensure the ESoP dissemination;
- Provide general information to drivers on safe use of in-vehicle information and communications systems and promote self-commitment of ESoP compliance for manufacturers;
- Monitor the impact of the ESoP on the market for aftermarket and nomadic devices;
- Evaluate the safety impact of in-vehicle information and communications systems;
- Take measures to ensure fixing of devices according to ESoP, hands-free use of nomadic devices and the inaccessibility of movies, TV and video games by the driver while driving.

The HMI Working Group identified specific research needs on the phenomenon of driver distraction itself as well as on assessment methods, which help to quantify contributing factors and the overall effect on driving performance.

#### **Research and standardization needs**

There is an urgent need of research for a workload assessment and testing methodology, which provides valid and reliable results and is economically applicable already in early phases of the HMI design process.

#### **Recommendations for specific actions by focus area**

The role of the EC and Member States and the role that each will play will depend on existing directives and laws in specific areas. There is a lack of knowledge concerning the ESoP, and HMI principles in some parts of the industry. Therefore, wider dissemination and use of the ESoP could be beneficial along with continued monitoring of its impact.

### 3.5 Implementation Road Maps

Established in July 2003. The Final report and Recommendations of the Implementation Road Map Working Group presented at the eSafety Forum High Level meeting, 18 October 2005.

Recommendations regarding the updating of the Road Map:

- 1) The present Implementation Road Map Working Group is the platform used for the updating, pending that the members are available to continue their participation.
- 2) Preparatory work for the annual updating of the simplified road map is carried out by designated Working Group members responsible for monitoring the implementation issues concerning specific systems and/or parts of the eSafety matrix.
- 3) The actual updating should be carried out annually in two meetings. In the first, each responsible person will present the needs for updates and these will be discussed with the aim of having a common view. After the first workshop, the proposal for an updated road map will be discussed within various actors' organisations and umbrella organisations such as eSafety Support, ACEA, CEDR, FIA, etc. At the second meeting, the updates are agreed upon on the basis of feedback received.
- 4) The updated version should preferably include information from other than European Automotive manufactures like U.S., Japanese and Korean. This requires an extension of the monitoring scope to other markets and the involvement of experts from such manufacturers.
- 5) The updated road map will be made public in such a manner that those utilising the road map will be informed about the update. This will be elaborated upon after the publication of the first road map.

**The following recommendations were given for in-vehicle systems:**

1. The automobile industry, the European Commission, the Member States and other stakeholders should enhance the customer awareness of the safety benefits of such systems in vehicles through well-structured and harmonized European campaigns.
2. The Member States and insurance companies should give financial/fiscal incentives to customers to buy vehicles equipped with such systems. For this purpose, the discussion should start without further delay to clarify the possibility for incentives given by insurance companies or public agencies.
3. All stakeholders should develop feasible sustainable business models for each application on the principle that those who benefit from the introduction in the form of reduced accident-related costs should share these benefits with those who have to carry the investments and costs. These should also cover nomadic devices.

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### **Recommendations for autonomous vehicle systems:**

In order to increase and accelerate the market penetration of eSafety systems with highest safety benefits:

1. EuroNCAP should incorporate such systems into their rating as soon as proven technology and safety benefit data becomes available, and the functionality of the systems can be adequately tested. ESP and Speed Limiter are on the list today.
2. The European Commission and the Member States should consider regulatory actions (such as making a system mandatory equipment in new vehicles) only as a last option, when such action is judged as essential and beneficial for both industrial and public stakeholders. Socio-economic reasons and respecting the principle of subsidiarity are other important decision criteria. Voluntary solutions should be favoured.
3. The Member States and the industry should follow the recommendations of the HMI working group to ensure future user acceptance and a safe application and function of the systems during their whole life cycle.
4. The automobile industry, the European Commission, the Member States and other stakeholders should continue R&D efforts to develop new technologies and solutions for in-vehicle safety systems as well as to evaluate the effects of eSafety system on safety, economy and employment.

### **Recommendations for infrastructure-related systems:**

In order to increase and accelerate the deployment of safety beneficial infrastructure-related eSafety systems,

1. The Member States should ensure the deployment of socio-economically feasible systems and services according to their responsibility and in line with the requirements accepted on the European level.
2. The European Commission should support the deployment of infrastructure-related systems on the TERN as well as other key parts of the road networks with the instruments at their disposal (e.g. TEN-T programme).
3. The industry, the European Commission and the Member States should together take actions to ensure that digital maps with the information required by the eSafety systems would be developed for all roads in the Member States.
4. The European Commission and the Member States should agree on actions and instruments to increase the willingness of countries and regions to take on the role as “early adopters” for eSafety systems.
5. The European Commission and the Member States should continue R&D efforts to develop new technologies and solutions for infrastructure-related safety systems as well as to evaluate the effects of such systems on safety and other socio-economic factors.

## **eCall**

1. The European Commission, the Member States and the industry should follow the recommendations of the eCall Driving Group Concerning RTTI.
2. The European Commission, the Member States and the industry should follow the recommendations of the RTTI Working Group Concerning dynamic traffic management and local danger warnings.
3. The road authorities and operators should develop together a European vision and strategy for the deployment and operation of dynamic traffic management and local danger warning systems in co-operation with vehicle and telecommunications industry.

## **Speed alert**

1. Concerning speed alert, the European Commission and the other stakeholders should solve the currently open issues and utilise the implementation roadmap produced by the SpeedAlert project.

### 3.6 Real-time Traffic and Travel Information (RTTI)

The Working Group has completed its activities. The Final Report and Recommendations of the Working Group for Real-time Traffic and Traveller Information (presented at the High Level meeting, 18 October 2005) provides the following results and recommendations:

- 6) All interested parties should support the TMC-Forum to promote the safety-related service features of TMC.
- 7) The operators of RDS/TMC services should take steps to ensure roaming and interoperability across Europe for the RTTI-services.
- 8) In many countries the public authorities such as the governmental highway operators provide already some existing RTTI data to operators and broadcasters. Whenever this is not the case, the authorities should be requested to do so to accelerate the deployment of RTTI services.
- 9) Traffic Management Centres should be requested to operate European Standards such as TMC-encoding of the data. It is recommended that tenders for new or for the extension of existing Traffic Management Centres should ask for a mandatory use of these standards.
- 10) Broadcasters should be requested to carry the RDS/TMC-service.
- 11) Frequency spectrum and broadcast capacity should be made available for advanced broadcast services such as DAB, DRM, DVB-T and eventually satellite DAB as soon as they have been standardized. Some support ought then to be given to install those services using these broadcast schemes and mobile radio (e.g. 3G).
- 12) RTTI-WG should make a proposal for a letter to the European Transport Ministries to ask for their position against these recommendations of the RTTI-WG.
- 13) 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 and Traveller Information Services in their countries. By the year 2010 more than 80% of all population should be served with adequate, standardized services.”

## Chapter 4 - eCALL ACTIVITIES

Early 2004 it was decided that if the pan-European emergency call eCall were to become a success the first thing to be done was develop a Memorandum of Understanding for the common principals in the eCall architecture. The MoU sets out to actively contribute to the development and agreement of feasible implementation and business plans conforming to the agreed principles for pan-European eCall as defined (voice and defined minimum set of incident data sent directly to Public Safety Answering Point).

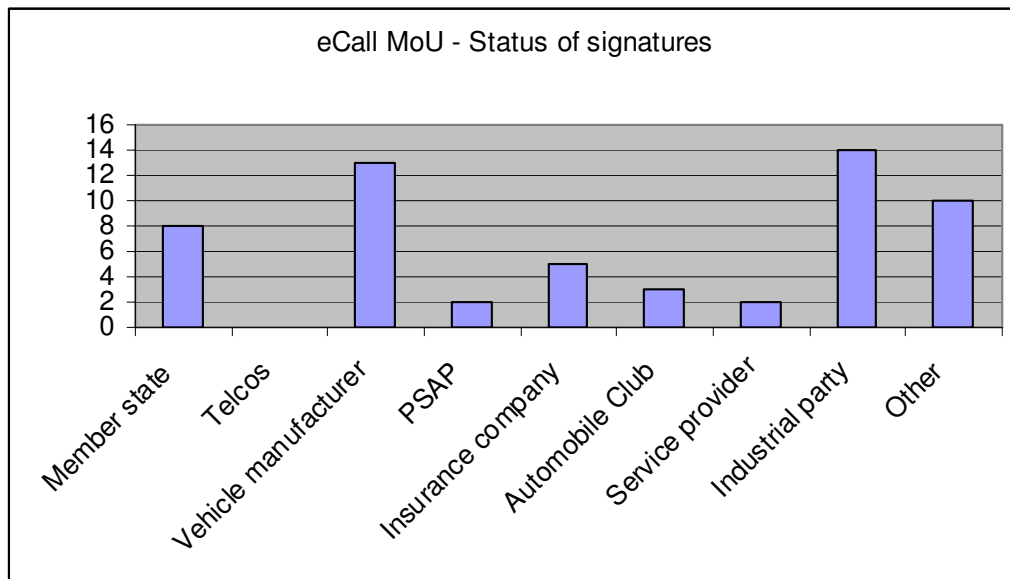
The MoU was released and signed first by Mr Fabio Colasanti, Director-General at the European Commission's Information-Society Directorate-General, ERTICO and ACEA. The MoU, to date has been signed by 57 parties from industrial and public sector stakeholders, provides for a solid basis for the partners to actively contribute to the development and implementation of the eCall in potentially all new vehicles sold in Europe. Below you can see both a list of all signatures and a graphical presentation of the amount of signatures from the different stakeholder groups.

### eCall Memorandum of Understanding

Status of signatures

	Organisation	Address	Name	Position/Title	Date of signature
1	ACEA	Rue du Noyer 211, BE-1000 Brussels	Mr Ivan HODAC	Secretary General	27/08/2004
	ACEA on behalf of: BMW GROUP DAF TRUCKS NV DAIMLERCHRYSLER AG FIAT S.p.A FORD OF EUROPE GmbH GENERAL MOTORS EUROPE AG MAN NUTZFAHRZEUGE AG PORSCHE AG PSA PEUGEOT CITROËN RENAULT SA SCANIA AB VOLKSWAGEN AG VOLVO AB				27/08/2004
2	ADAC e.V.	Am Westpark 8, DE-81373 Munich (contact person Bernhard Labudsk)	Mr Peter MEYER	President	30/11/2004
3	Airbiquity Inc.	915 Hildenbrand Lane, NE, Suite 240, Bainbridge Island, WA 98110 USA	Mr Kamyar MOINZADEH	President & CEO	18/10/2005
4	Allianz AG	Koeniginstrasse 28, DE-80802 München	Mr Jacques AMSELEM	Mondial Group Development Manager	27/06/2005
5	ARC Transistance S.A.	Av. des Pléiades, BE-1200 Brussels	Mr Andrew JOHNSON	Chief Executive	06/10/2004
6	BOSCH				27/08/2004
7	CapGemini Finland OY	Niittymäentie 9, FIN02200 Espoo	Ms Anne-Maria HAUTALA	Chief Financial Officer	20/09/2004
8	City of Oulu Finland	PO Box 1, FIN-90015 Oulun Kapunki	Mr Kari NENONEN	Mayor	21/09/2004
9	ERTICO - ITS European Emergency Number Association - EENA	Av Louise 326, BE-1050 Brussels	Mr Olivier MOSSE	Chief Executive Officer	27/08/2004
10	112	Chaussée de Saint-Job, BE-1180 Brussels	Mr Olivier PAUL-MORANDINI	Founder	31/08/2004
11	Finnish Road Administration	PO Box 33, FIN-00521 Helsinki	Mr Aulis NIRONEN	Director	22/09/2004
12	Hellenic Institute of Transport	6th Km Thessaloniki-Thermi Rd, GR-57001 Thessaloniki	Mr George GIANNOPOULOS	Director	30/08/2004
13	Indagon OY European Commission, Information Society Directorate-General - DG	Neijamiestentie 5A, FIN-00400 Helsinki	Mr Nikko WECKSTRÖM	Vice President/CTO	21/06/2004
14		BU24 3/43, BE-1049 Brussels	Mr Fabio COLASANTI	Director-General	27/08/2004
15	ITS - Sweden	Stationsgatan 22, SE-784 33 BORLÅNGE	Mr Christer KARLSSON	CEO	19/05/2005
16	KLPD - The Netherlands National Police Organisation Kokom - National Centre of Emergency Communication in Health	PO Box 100, NL-3970 AC Driebergen	Mr Pim MILTENBURG	Director of Police, Police Commissioner	30/09/2004
17		Haukelandsbakken 9, NO-5005 Bergen	Mr Egil BOVIM	Director	28/04/2005
18	LSP Hungary	Debrecen Erzsébet u. 48 Hungary	Dr Graeme P SMITH	Managing Director	23/11/2004

19	Ministry of Communications and Works, Cyprus	28 Achaean Street, CY-1424 Nicosia	Mr Harris THRASSOU	Minister	08/12/2005
20	Ministry of Economy and Transport, Slovenia	Kotnikova 5, SI-1000 Ljubljana	Mr Matiaž JANŠA	Director General	18/10/2005
21	Ministry of Innovation and Technologies, Italy	Via Isonzo, 21b, IT - 00198 Roma	Mr Settimio VINTI	Director	18/10/2005
22	Lithuanian Emergency Response Centre	Svitrigailos str. 18, LT-03223 Vilnius	Mr Arturas KEDAVICIUS	Director	18/10/2005
23	Ministry of Transport and Communications Finland	PO Box 31, FIN-00023 Government Finland	Mr Harri KAVÉN	Director-General	22/09/2004
24	Ministry of Transport and Communications Greece	2, Anastasseos Street GR-10191 Cholargos, Attiki	Mr Anastasios NERANTZIS	Deputy Minister	18/10/2005
25	Mobisoft OY	Hatanpäävaltatie 26, FIN-33100 Tampere	Mr Heikki KARINTAUS	Managing Director	23/09/2004
26	Mondial Assistance Group	37, rue Talibout, FR-75009 Paris	Mr Alain DEMISSY, Ms Ida LUKA-LOGNONE	President / Member of the Executive Committee	27/06/2005
27	Motorola	21440 West Lake, Cook Road, Deer Park, Illinois US	Mr Marios ZENIOS	Senior Vice President & General Manager	11/02/2005
28	Navigo B.V.	De Run 1115, NL-5503 LB Veldhoven	Mr Chris PETERS	VP Finance Europe	17/09/2004
29	Omnis-Online Elias SA TIC/PSAP	72-74 Salaminos, 17675 Athens	Mr Dimitris COBOPOULOS	Managing Director	02/12/2004
30	Peiker acoustic GmbH & Co. KG	Max-Planck-Strasse 32, DE-61381 Friedrichsdorf	Mr Frank-Horst SCHANK, Mr Lutz P. RICHTER	General Manager, Head of Product Strategy	24/03/2005
31	RACC - Reial Automòbil de Catalunya	Av. Diagonal 687, ES-08028 Barcelona	Mr Josep MATEU NEGRE	Managing Director	14/02/2005
32	Sagem Communication	La Fontaine de Paris, 27, rue Leblanc, FR-75512 Paris Cedex	Mr Thierry BUFFENOIR	Chief Executive Officer	28/05/2005
33	Siemens VDO Automotive AG	Siemensstrasse 12, DE-93055 Regensburg	Dr W.S. STEGER	Executive Vice President, Strategy, Marketing and Advanced Technologies	08/09/2005
34	Siemens Wireless Modules	Haideauplatz 1, DE-81667 Munchen	Mr José COSTA SILVA	CEO	10/05/2005
35	Swedish Road Administration	SE-78187 Borlänge	Mr Ingemar SKOGÓ	Director General	20/06/2005
36	Swiss Federal Roads Authority	Worbentalstrasse 68, Ittigen, CH-3003 Bern	Mr Rudolf DIETERLE	Director	22/11/2004
37	T-Trac Scandinavia AB	Box 5299, SE-40225 Göteborg	Mr Johan BJÖRKMAN	Vice-President	04/05/2005
38	TeleAtlas NV	Montstraat 132, BE-9000 Gent	Mr Ad BASTIAANSEN	SR VP Business Development	02/09/2004
39	Telit Communications SpA	Via Stazione di Prosecco 51B, IT-34010 Sgonico (TS)	Mr Dominikus HIERL	Managing Director Data Roadmaps	17/08/2005
40	TISPOL The European Traffic Police Network	PO Box 201, Hoddesdon, UK-EN11 8WX	Mr Ad HELLEMONS	President of the Tispol Organisation, Police Commissioner	30/09/2004
41	Thomas Miller & Co Ltd	International House, 26 Creedchurch Lane, UK-EL3A 5BA London	Mr B. M. KESTERSON	Director	04/07/2005
42	VTT Building and Transport	PO Box 1800 FIN-02044 VTT	Mr Juho SAARIMAA	Executive Director	20/09/2004
43	Wavocom	3, esplanade du Foncet, FR-92130 Issy les Moulineaux	Mr Olivier BEAUJARD	VP Marketing	06/04/2005
44	WirelessCar	Kajskjul 107, SE-41707 Göteborg	Mr Torbjörn SUNDSTRÖM	Director Marketing & Sales	14/09/2004

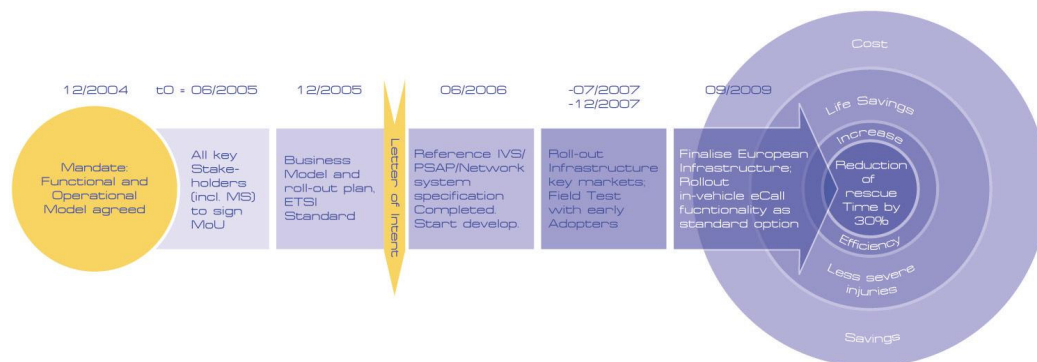


## 4.1 eCall Driving Group

At present time, discussions related to eCall deployment are carried out in the eCall Driving Group, which is co-chaired by ERTICO and ACEA. Anyone with an interest in eCall deployment can participate in this Group, whose members represent all the different sectors involved in eCall implementation.

The objective for the DG eCall is to support the implementation of the pan-European emergency call eCall by getting all stakeholders to agree on a common architecture and technical solution. In order to do this the DG eCall has arranged a large range of meetings during the last two years both within the forum of the DG eCall but also arranging meeting with experts within a specific area.

Early 2005 a roadmap for eCall deployment was developed and agreed by all involved stakeholders, see the figure below.



The first step in the roadmap was to secure the signatures of all stakeholders to the MoU by June 2005 aiming at introducing eCall as standard in all vehicles by 2009. In July 2005 the DG eCall saw that more concrete steps were needed in order to reach the different deadlines and milestones in the agreed roadmap. A meeting was called for that month where a more detailed work plan was developed but more important five different sub-working groups were established. The overall objectives with creating the different sub-working groups were to get a clear view of where the different stakeholders were in their investigation regarding eCall. This would be done through the development of clarification papers from the sub-working group outlining the open issues related to the different stakeholders; see below for a description of the different sub-working groups.

eCall Generator		
EG.1	Identify the performance criteria related to the eCall generator	Define what information would be needed from the PSAPs in order to define the requirements for the eCall generator (IVS or nomadic device)
EG.2	Define the high level functional requirements for a in-vehicle system and a nomadic device as the eCall generator	Fact finder study on requirements for the In-Vehicle System and a nomadic device based on the results from “PSAP.1”

EG.3	Define and specify the in-vehicle system	Define the functional requirements and the specifications for the eCall generator (only IVS) based on the results in EG.2 and EG.3
<b>Public Service Answering Point</b>		
PSAP.1	Define the PSAP requirements regarding receiving and handling eCall	Fact finder study regarding the PSAP requirements based on the paper developed in EG.1
<b>Business Case</b>		
BC.1	To get an overview of available studies today	Collect results and create overview regarding the different studies regarding the eCall business case
BC.2	Develop the eCall business case	Insurance companies to define costs & benefits

The defined actions related to the sub-working groups above need to be completed, so that the obstacles related to the different stakeholders can be identified and a way forward can be planned. It was the DG eCall's opinion that 2005 was a time to agree on a common ground between all stakeholders in order to move forward. A champion was appointed for each sub-working group with the main responsibility to make sure that the intended work was done and that the deadline was kept. However that did not necessarily mean that the Champions should do all the work. The work plan can be seen below.

#### Action list DG eCall - 2005

Tasks	Year	2005					
		Month	July	August	September	October	November
Milestones					<i>M1 - High-level meeting 18 October</i>		<i>M2 - eCall expert meeting Zurich</i>
eCall generator - EG		<i>EG.1</i>			<i>EG.2</i>	<i>EG.3</i>	
PSAP					<i>PSAP.1</i>		
Business case - BC				<i>BC.1</i>			<i>BC.2</i>

During the eCall expert meeting in Olten, Switzerland 2 December 2005 it became clear that the different sub-working groups needed more time for completing the different clarification papers. Even though a draft version of the papers were ready it has not been presented to the DG eCall for consensus and right way forward. After this meeting it was decided to update the existing work plan and extend the deadline until end February 2006 for the completion of the clarification papers. See revised work plan below.

**Action list DG eCall - 2006**

Tasks	Year	2006				
		January	February	March	April	May
Meetings		ETSL MSG workshop 23/01 BC.4 meeting 24/01	ACEA meeting 7/2 Performance Criteria meeting 13/02 eCall expert meeting for MS March PSAP expert meeting March		DG eCall meeting April/May	
General		Intermediate eCall positioning paper - eSafety Support / Paper eCall flyer - eSafety Support / Flyer Strategy for preventing fals calls - GST RESCUE / Paper Data Protection - eSafety Support / Paper			Final eCall Paper - eSafety Support / Paper eCall Toolbox as point of reference - eSaf	
eCall generator - EG		Performance Criteria - EG.1 / Paper SIM/No SIM and MSD - ACEA / Paper In-Vehicle System - ACEA / Paper In-Vehicle System - EG.2 / Paper				
Standardisation			Transport Protocol - ETSL MSG / Paper MSD Content - ISO TC204 / Paper			
PSAP			PSAP requirements - PSAP.1 / Paper Set up formal PSAP working group			
Business case			Insurance viewpoint on eCall - BC.1 / Paper			

The intention with the revised work plan is to finalise all initiated clarification papers by end February, circulate them to the DG eCall members and then have one final DG eCall meeting in April/May 2006 where the two co-chairs will try to create a consensus for the present open issues. After this meeting a final report from the DG eCall will be released in June 2006.

## 4.2 EU Member States

The Member States play a very important role in relation to eCall implementation, as the eCall architecture is built on the single European emergency number 112 - and specifically, the enhanced 112, which also provides the location when an emergency call is made from a cellular phone.

Over the last two years several meetings have been organised in different EU Member States with the objective to provide information to the Member States on eCall but equally important having the different Member States present their concerns or questions to the eCall experts within the DG eCall. eCall expert meetings have been held in Finland, Sweden, the Netherlands, Spain, Portugal, Denmark UK, Switzerland and another expert meeting is planned for Hungary in 2006.

This has resulted in 6 EU Member States plus Switzerland signing the eCall MoU; Sweden, Finland, Greece, Italy, Lithuania and Slovenia and five other Member States; Cyprus, Czech Republic, Denmark, Germany and The Netherlands have indicated that they will sign early 2006.

Sweden, Finland and the Netherlands are considered as early adopters of eCall. They have all been working on defining how their national Public Service Answering Point (PSAP) can be upgraded to receive and handle eCalls.

Finland had decided to restructure the emergency services and decided to implement eCall at the same time based on the early recommendations for from the eCall DG. A live web-based test-bed has been active in Finland since May 2005 where all stakeholders could test the In-vehicle System against a Finnish virtual PSAP. Moreover a comprehensive study regarding the benefits that eCall brings has also been carried out in Finland with the involvement of medical professionals and looking at accident statistics. Similar studies have also been done in the Netherlands and Sweden. All three Member States contribute to the further dissemination of eCall to other Member States through national channels and through eScope.

### 4.3 European Commission

The European Commission plays an active role in the implementation discussions. The COM(2005) 431 Final from September 2005 Called “The 2nd eSafety Communication – Bringing eCall to Citizens” outlines the importance of a pan-European automatic emergency call system such as eCall, the key decision taken today regarding the architecture, and technical specifications. Moreover it provides the EU Member States with clear actions on how their role is when deploying eCall.

### 4.4 Standardisation

In order to facilitate roaming and pan-European service, common standardized interfaces and data transfer protocols are needed. As an action to support a full pan-European service the European Commission requested ETSI to standardize the interface between the In-vehicle System and the PSAP along with the transport protocol in a letter from the European Commission to ETSI on 5 January 2005<sup>1</sup>.

The ETSI\_MSG (European Telecommunication Standardization Institute – Mobile Standards Group) technical working group has taken on this request by the European Commission and looks at the different technologies related to the transport protocol that should be standardized for transmitting in-vehicle voice and data to the PSAP. The ETSI\_MSG has noted that the actual study on the different technical solutions will be carried out in the 3GPP (3rd Generation Partnership Project).

In addition to the standardization of the transport protocol for eCall ISO TC204 WG1 has also looked at standardizing the content of the Minimum Set of Data. The ISO TC204 WG1 group has a very strong link with DG eCall and will put the agreed MSD content through the standardization process.

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<sup>1</sup> The implementation of a pan-European in-vehicle emergency call (eCall): Need for standards, 5. January 2005, Letter from European Commission Director-General Information Society (INFSO-C5/AV/JJ/es D(2004) 550885 to Mr. Karl Heinz Rosenbrock ETSI Director-General.

## 4.5 eCall Toolbox

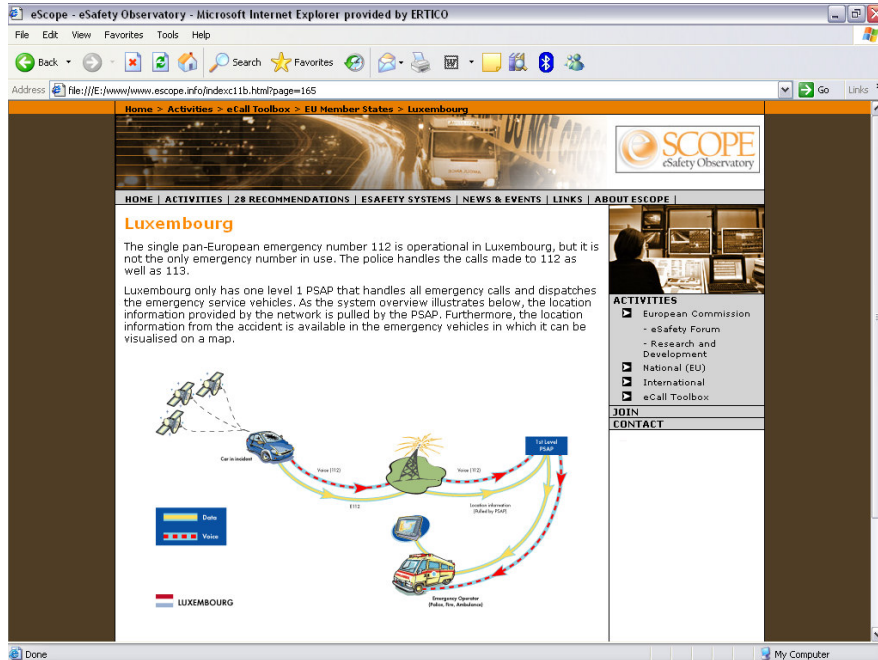
In order to establish a common platform for all stakeholders to retrieve information regarding eCall the “eCall Toolbox” was created on the eScope website. It contains all public documents on a European level and more specific information regarding the progress of the different Member States. The eCall toolbox is structured with the following sub-pages:

- Directives, Communications and Recommendations;
- EU Member States
- Memorandum of Understanding (MoU)
- Meetings & Events
- Press Releases
- Articles
- Related Projects and Studies
- Socio-economic Studies
- Driving Group eCall

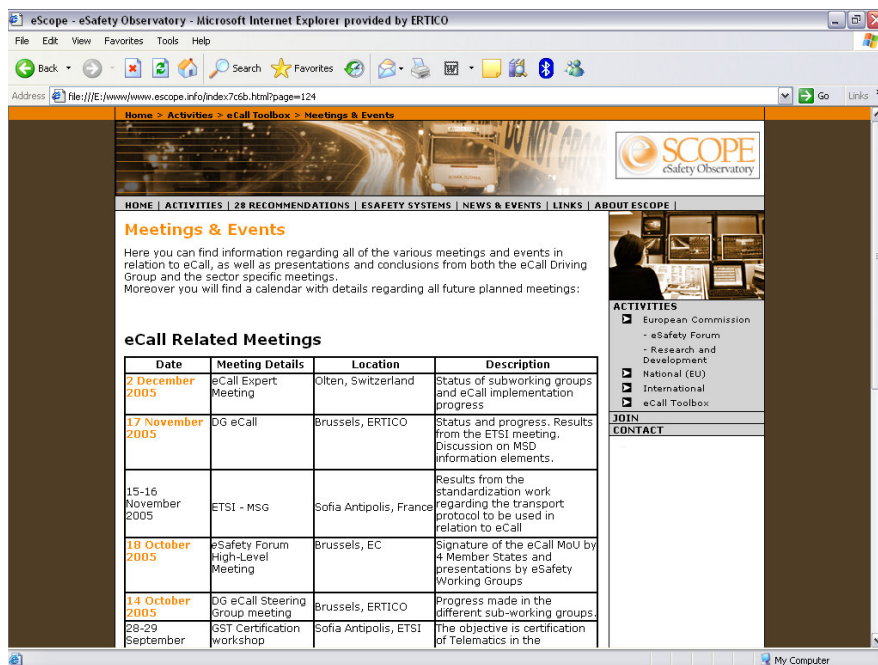
### Example of the eCall Toolbox – EU Member States



Below Luxembourg has been chosen as an example. As shown on the figure a description of the status of E112 and eCall implementation is both shown with words and illustration. This gives the user of the eCall toolbox a quick overview of the Status and it can easily be used when looking at the implementation status in other Member States because the same structure on the web page is used and the illustrations follow the same format.



### Example of the eCall Toolbox – Meetings & Events



Another example of the eCall toolbox is the Meetings & Events folder. Here a short description of location and objectives can be found in relation to the different meetings or events. Furthermore both past and planned meetings are posted here.



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## Chapter 5 - THE 28 RECOMMENDATIONS

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The eSafety High-Level meeting on 25 April 2002 called for the establishment of a Working Group, to be tasked to further elaborate the European strategy, to recommend actions. The Commission services established this Working Group, which met four times in 2002 on 7 June, 8 July, 9 September and 8 November. The final report of the eSafety Working Group from November 2002 lists 28 recommendations for further actions within the following eSafety related topics:

- Accident Causation Data
- Impact assessment of safety systems
- Human-Machine Interaction
- Road Map for Intelligent Integrated Safety
- Intelligent Passive Safety Systems
- Intelligent Integrated Road Safety Systems including ADAS
- The European Safety Map database
- Emergency Calls (e-Calls) and E-112
- Real-time Traffic and Traveller Information (RTTI) for road safety
- Motor vehicle type-approval legislation
- Safety systems standards and regulation in the EU: State of the art
- Legal issues of market introduction of Intelligent Integrated Road Safety Systems
- Ultra wide-band 24 GHz short range radar
- Societal aspects
- The different business cases
- User Outreach
- The eSafety Forum

The following table give a short status of each of the 28 Recommendations as it has been observed by eScope.

Nr	Recommendation	Status
1	Consolidate analyses from existing EU, Member State and industry road accident data.	Information on national and international data has been disseminated to the different eSafety Working Groups.
2	Develop jointly a European Accident Causation Database covering all EU countries, and facilitate access to it.	However, the comparison of data is difficult and several of the WGs are investigating how to best make use of this data. The WG on Implementation Road Maps has compiled some of the results in order to list technologies according to the impact on road safety in Europe.
3	Develop a methodology to assess the potential impact of intelligent integrated road safety technologies in Europe. Develop a validation methodology and procedures for vehicles equipped with intelligent integrated road safety systems.	Aims in the short term, to analyse accident causation data using the existing European databases. This analysis can be used for defining the most effective countermeasures. In the long term, the group is expected to make recommendations for further actions that are required for effective, homogeneous accident causation data collection and analysis, liaising with the IP SafetyNet. On the basis of the recommendations of the Working Group, the Commission has launched a study of impact assessment and accident causation analysis using existing data sources in the FP6 IST, Call 4.
4	Set up a coordinated validation framework for operational tests in the Member States.	Some concrete testing has been performed for example, for ESP systems. The automotive press has published the results and the plan is to broaden tests to include more eSafety technologies in the future. The User Outreach Working Group is looking into this area and has suggested preparing a pilot project based on the promotion of ESP.
5	Assess the reports by the Member States on the Commission recommendation, and decide on further actions. Urgent action is needed to assess the risk of portable (nomadic) devices.	The Working Group on HMI has identified and listed HMI-related problems from available Member State reports and other relevant sources independently from the state of the art of present technologies. This list of HMI-related problems has been clustered around the following six thematic areas: 1. Risks and benefits, 2. Users, 3. Markets/Implementation, 4. Research, 5. Nomadic devices, 6. Criteria and Verification Procedures on HMI.
6	Develop workload assessment, testing and certification methodology for complex in-vehicle working environments.	
7	Develop Road Maps with technical steps and economic implications for the introduction of intelligent integrated road safety systems in Europe.  The public sector Road Maps should indicate the investments required for improvements in the road networks and information infrastructure.	Tables have been produced for autonomous vehicle-based systems as well as the vehicle and infrastructure based systems of eCall, extended environmental information, RTTI, dynamic traffic management (VMS), local danger warning, and Speed Alert. The tables will be validated in consultation with the key stakeholders. A table has also been drafted showing the eSafety functions against their technical prerequisites.
8	Analyse existing accident causation data and possible countermeasures and determine clear goals and priorities for further RTD.	More than half of the R&D efforts analysed focus on electronic systems and enabling technologies for accident prevention and protection systems within vehicles. From the analyses it emerges clearly that the present European "eSafety research activities" do not reflect the necessary systems approach. Research activities in accident causation, road and telecommunications infrastructures; eCall and issues concerning cost benefit analysis and efficacy of safety measures need more R&D investment. European research activities should be structured to be complementary to activities in other regions (US, Japan).

9	Where necessary, develop specifications for interfaces and communications protocols for vehicle-to-vehicle and vehicle-to-infrastructure communications.	Both Japan and the USA have invested heavily in R&D programmes for intelligent road infrastructure and integrated vehicle-infrastructure systems. The IST 4 <sup>th</sup> call has launched three new European activities dealing with cooperative systems.
10	Pursue international cooperation.	Priority-defining work has been performed to focus international cooperation on eSafety issues of international importance. This work is done in close cooperation with key stakeholders from the USA, Japan, China, India, Brazil South Africa, etc. The next step is to involve emerging markets where road safety has been a key issue for long and where eSafety now has become a major priority.
11	Define requirements for a European digital road map database, with agreed road safety attributes. Create a public-private partnership to produce, maintain certify and distribute this database.	At its 24 June 2005 meeting, The European Council's Environment Committee reached a unanimous policy agreement on the adoption of a draft of the INSPIRE (Infrastructure for Spatial Information in Europe) Directive, which creates a legal framework for the establishment and operation of a geographical information infrastructure in Europe. Its purpose is twofold: First, to make top-quality geographical data available at all levels across the European Union, in order to better implement community policies; and, second, to give the public access to the information. European R&D: ActMAP, MAPS&ADAS, EuroRoadS, SpeedAlert, HIGHWAY, SafeMAP.
12	Adopt the Commission Recommendation on the introduction and implementation of E-112 in Europe.	Having recognised the absolute necessity that all eCall players agree on a common functional objective and a common project timing, the eCall DG has drafted an MoU which is now open for signature and has been signed by some of the main stakeholders. This MoU sets the objectives and outlines the route to complete the launch phase of the eCall project by 2009. The MoU was signed in August 2004 by the European Commission, ERTICO, and ACEA.. Since then, Finland, Sweden, Greece, Italy, Lithuania and Slovenia have also signed the MoU. Five further Member States (Cyprus, Czech Republic, Denmark, Germany and The Netherlands) have indicated that they would be ready to sign in the near future. A "toolbox" for eCall, including the list of organisations that have signed the MoU can be found on <a href="http://www.escope.info">www.escope.info</a> .
13	Establish a European Emergency Communications Forum to continue the CGALIES work.	
14	For in-vehicle emergency calls (e-Calls), establish data requirements and data transfer protocols. Establish interfaces and e-Call routing and handling.	
15	Analyse the Member States' responses to the RTTI Recommendation and draw up further actions.	RTTI is the first area of a new generation of telematics services for drivers and other travellers to achieve appreciable success. Currently, this is due to the fast-growing implementation of services and products based primarily on existing RDS-TMC broadcast technology. In the future, supplementary technologies such as digital bearers will enhance the service possibilities. By delivering traffic data messages promptly to a suitable in-vehicle terminal, TMC upgrades static navigation to real-time, i.e. dynamic route guidance, or "electronic traffic avoidance" while giving safety benefits by alerting drivers to accidents, congestion and hazardous driving conditions.
16	Create public-private partnerships to capture, process and provide real-time traffic, travel and road condition data including Floating Vehicle Data.	
17	Support the wider use of the pan-European RDS/TMC network for safety-related traffic information. Provide a report with required actions to the European Commission on the status of RDS/TMC implementation and the remaining bottlenecks.	
18	Determine what actions may be required for bringing rapidly forward road safety improvements obtainable with intelligent	Proposals to amend the UN-ECE Regulation on steering systems to remove the requirements for a mechanical link and to specifically permit certain steer-by-wire

	integrated road safety systems in vehicles.	functions have been agreed and entered into force in 2005 from when it can be used for the purposes of obtaining EC Whole Vehicle Type Approval.
19	Analyse specific needs and priorities of intelligent integrated safety systems for standardisation in ISO, CEN and ETSI. Promote accelerated standardisation.	The ITSSG Strategic Framework document was finalized in November 2004. The EC is responsible for mapping eSafety areas onto standardisation requirements; this work is in progress. The document is available for download at: <a href="http://www.itscb.org">www.itscb.org</a> .
20	Develop a methodology for risk-benefit analysis, achieve a consensus on a European Code of Practice, and establish guidelines for facilitating market introduction of intelligent integrated safety systems.	The basic research work in this area was done by the projects Response 1 & 2 (FP4 & 5). Response 1 carried out a detailed analysis of “non-technical” questions regarding market introduction. Response 2 established a deeper understanding of possible future market introduction scenarios for active safety systems, including risk-benefit-analysis. This analysis includes an evaluation of possible methods to identify and quantify the risks and benefits of ADAS.
21	Take the necessary actions for removing regulatory barriers to the use of the 24 GHz band for short-range radar in Europe.	The Commission decision, which allocates a specific radio frequency band to short-range radar devices, is the result of a two-year drive by the Commission and EU radio spectrum and road safety experts. All new SRR devices would have to use the 77 GHz band (or any other designated permanent band) while the operation of existing SRR systems would remain authorised in the temporary band to the end of their operational lifetime.
22	Undertake the standardisation in ETSI for the 24 GHz UWB radar.	On the basis of the CEPT report, the Commission will bring a decision concerning this spectrum range to the RSC in 2004. The 79 GHz range band has been identified by CEPT as the most suitable band for long term development and deployment of SRR.
23	Estimate the socio-economic benefits, which can be obtained through the reduction of fatalities, injuries and material damage.	The Commission launched in July 2004 an exploratory study on the potential socio-economic impact of the introduction of Intelligent Safety Systems in road vehicles (SEiSS). The Commission initiated this exploratory study in order to: <ul style="list-style-type: none"> <li>➤ Provide a survey of current approaches to assess the impact of new IVSS;</li> <li>➤ Develop a methodology for assessing the potential impact of IVSS in Europe;</li> <li>➤ Provide factors for estimating the socio-economic benefits resulting from the introduction of Intelligent Vehicle Safety Systems;</li> <li>➤ Identify the major indicators influencing market deployment and develop deployment scenarios for selected technologies/regions.</li> </ul>
24	Stimulate and support road users and fleet owners to buy vehicles equipped with intelligent road safety systems.	The User Outreach Working Group currently undertakes this task. Through the eSafety Communication Platform, the User Outreach Working Group plans to provide marketing support to vehicle manufacturers in the pre-competitive field.
25	Identify best practices for positive business cases to promote the introduction of intelligent integrated road safety systems.	An exploratory study on the potential socio-economic impact of the introduction of Intelligent Safety Systems in Road Vehicles (SEiSS) was completed in January 2005. The socio-economic impact was preliminarily estimated for a certain number of cases showing a positive Benefit-Cost ratio in the long term. A survey on “Incentives schemes applied by the Member States in the Transportation Sector” was also conducted in 2005 so as to design a strategy to support the adoption of eSafety. This survey collected experiences from the Member States in the application of financial or fiscal control incentives in the transportations field as an instrument to speed up the introduction of improved or new technologies, especially in conjunction with regulatory requirements.

26	Support the eCall business model by implementing the full service chain and ensuring interoperability and compatibility with E-112.	The need for a positive business case for eCall has been identified at the high-level meeting 3 February 2005 and should be elaborated through a private-public partnership. The European Commission has been requested to make an in-depth analysis on the possible use of fiscal incentives (reduction of vehicle taxes). To support the business model it will be necessary for the main stakeholders to sign the agreed MoU.
27	Design and execute awareness campaigns that explain the benefits, functioning and use of the intelligent integrated road safety systems to the consumers.	The Working Group on User Outreach is currently defining strategies for dissemination of eSafety research to the end user and eSafety campaigns to promote the eSafety systems available on the market.
28	Create an eSafety Forum with the objective to monitor and promote the implementation of these recommendations, and support the development, deployment and use of intelligent integrated road safety systems.	Four Plenary Sessions have been organised. The third Plenary Session (March 2004) finalised the 2003 eSafety Forum Summary Report, and issued the first set of Forum Recommendations. The fourth Plenary session focussed on "Deploying eSafety". In September 2004 the Forum organised a High Level meeting for the public authorities, another High Level meeting took place on 3 February 2005 focusing on the private sector and the last High Level meeting was organised for the Member States on 18 October 2005. The European Commission organises Steering Group meetings, High Level meetings, and Plenary Meetings, participates in the Working Groups and offers the secretarial support to eSafety activities.

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## Chapter 6 - CONCLUSION

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The main task of eScope throughout the last two years has been to support all activities initiated by the eSafety Forum. eScope has been the eSafety Observatory in this period and has been used by the main stakeholders as one of the key providers of eSafety “state-of-the-art” information, background documents, links, and contacts. It has also acted as the main dissemination tool of eSafety policy initiatives and has been present with eSafety information at stands during major eSafety events throughout the year.

The Observatory has been acting on requests from the users in relation to upload of information on the website and towards providing cross-reference between Forum activities in cooperation with the European Commission. Close contact between eScope and the Working Group chairs, projects and member states has resulted in quick access to information on national and European activities which has been updated on the website and been used to track the progress of the 28 Recommendations.

The main dissemination has been undertaken electronically. This has been estimated as the most effective channel to reach as many stakeholders as possible. Furthermore, paper material as the eScope flyer and the eSafety brochure have been produced to attract interest and to make interested parties visit the eScope website. The website has been more successful than expected with more than 200 visits a day in average.

The guidelines for the work in 2005 have been established by the eScope Advisor Group, the eScope Observers and the European Commission. No fixed frame has been created concerning the activities of the Observatory. The strategy has been to provide a flexible tool that can react to the changing needs of the eSafety stakeholders of the Forum. The Observatory has maintained a full independence from any sectors or any political interests. This has been the main priority in the strategy for the project in order to obtain a strong objectivity in the information flow and to maintain the support of all players.

During 2004 and especially 2005 more focus has been given to eCall. This is mainly due the fact that an eCall Memorandum of Understanding was created in 2004 stating the overall architecture for the pan-European eCall. The eCall MoU was initially signed by the European Commission, ACEA and ERTICO, which meant that eCall had now a strong official support from both the European Commission, Vehicle manufactures across Europe and an organisation representing the ITS industry as well as the public authorities in all Member States. Furthermore the eCall deployment strategy was presented at two high-level meeting organised by the European Commission with support of eScope, the strategy was agreed as a common roadmap for both the Member States and European industry. The roadmap set September 2009 as the deadline for introducing eCall as a standard in all new vehicles.