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*Committee on Transport and Tourism*

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## **DRAFT REPORT**

on Road safety: bringing eCall to citizens  
(2005/2211(INI))

Committee on Transport and Tourism

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## MOTION FOR A EUROPEAN PARLIAMENT RESOLUTION

### on road Safety: Bringing eCall to citizens (2005/2211(INI))

*The European Parliament,*

- having regard to the Commission White Paper 'European transport policy for 2010: time to decide' (COM(2001)0370), and its resolution of 12 February 2003 thereon<sup>1</sup>,
  - having regard to the Commission Communication 'Information and Communications Technologies for Safe and Intelligent Vehicles' (COM(2003)0542),
  - having regard to the Commission Communication 'Halving the number of road accident victims in the European Union by 2010: A shared responsibility' (COM(2003)0311) and, more recently, its publication 'Saving 20 000 lives on our roads' of October 2004,
  - having regard to Commission Recommendation 2004/345/EC of 6 April 2004 on enforcement in the field of road safety<sup>2</sup>,
  - having regard to the Verona Declaration on Road Safety of 5 December 2003 as well as the conclusions of the Second Verona meeting of EU transport ministers of 2004 and the subsequent commitment given by those ministers to regard road safety as a priority,
  - having regard to the Commission Communication 'i2010 – A European Information Society for growth and employment' (COM(2005)0229),
  - having regard to the Commission's 2nd eSafety Communication 'Bringing eCall to citizens' (COM(2005)0431),
  - having regard to Rule 45 of its Rules of Procedure,
  - having regard to the report of the Committee on Transport and Tourism (A6-0000/2006),
- A. Whereas 43,000 people died in road accidents in the EU of 25 Member States in 2004, and eCall could save up to 2,500 lives a year<sup>3</sup>,
- B. Whereas the total associated annual cost savings are estimated at EUR26 billion (EUR22 billion in annual accident cost savings and EUR4 billion in annual congestion cost savings)<sup>4</sup>,
- C. Whereas the pan-European in-vehicle emergency call service/function, "eCall", is to be welcomed as the first building block of the intelligent car<sup>5</sup> initiative,

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<sup>1</sup> OJ C 43 E, 19.2.2004, p. 250.

<sup>2</sup> OJ L 111, 17.4.2004, p. 75.

<sup>3</sup> [http://europa.eu.int/information\\_society/activities/esafety/call\\_4/index\\_en.htm](http://europa.eu.int/information_society/activities/esafety/call_4/index_en.htm).

<sup>4</sup> [http://europa.eu.int/information\\_society/activities/esafety/call\\_4/index\\_en.htm](http://europa.eu.int/information_society/activities/esafety/call_4/index_en.htm)

<sup>5</sup> Commission Communication 'i2010 - A European Information Society for growth and employment'.

- D. Whereas the large-scale roll-out of eCall by 2009 is a priority of the eSafety initiative,
- E. Whereas considerable progress has been made in the field of eSafety technologies, systems and services,
1. Welcomes the fact that, at the 2nd eSafety High Level Meeting with Member States<sup>1</sup>, four Member States signed the eCall Memorandum of Understanding (MoU), namely, Greece, Italy, Lithuania and Slovenia, joining Finland and Sweden which signed the MoU earlier;
  2. Is encouraged by the commitment of other Member States which have already initiated the process for signing the eCall MoU (Czech Republic, Cyprus, Denmark, The Netherlands and Germany);
  3. Stresses the importance of all Member States signing the eCall MoU as soon as possible, in order to demonstrate a clear commitment to the implementation of eCall to other stakeholders, if eCall is to be fully rolled out in 2009;
  4. Regards the clear commitment given by the automotive industry to eCall as a positive move;
  5. Notes that the eCall system is based on the use of 112 and E112 (location information requirements in public wireless networks for emergency calls);
  6. Recalls that a majority of Member States have been slow in encouraging the use of the single European emergency number 112;
  7. Urges the Member States to promote the use of 112 and E112 and to take steps to provide the appropriate infrastructure in the Public Service Answering Points (PSAPs) such as language training, availability, location identification and call handling to comply with the E112 regulation, which will then allow for incremental upgrading to handle eCalls;
  8. Notes the disparity between the Commission's and the Industry's estimates of the cost of a built-in-vehicle eCall system;
  9. Invites the Commission and Industry to pursue a deeper cost-efficiency analysis for every action to be undertaken to implement eCall;
  10. Is aware that the introduction of many new technologies cannot be instantaneous and therefore encourages the Commission and Industry to look into the large-scale roll-out of eCall through a combination of built-in vehicle systems and alternative systems such as the use of drivers' cellular phones and Bluetooth technology as well as built-in cellular telephones;
  11. Having regard to the potential cost of the eCall system and being aware of the fact that many new technologies may prove costly and that new car buyers (particularly at the budget end of the car market) are not always willing or able to pay the full cost, even

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<sup>1</sup> eSafety Forum, 2nd High Level Meeting with Member States, Brussels 18 October 2005.

though the benefits of the system may outweigh the added cost to the vehicle; calls on all stakeholders to work together to define incentives to speed up the introduction of the eCall system;

12. Is particularly concerned that the cost of eCall may be prohibitively expensive for those with the greatest need, for example those in rural or isolated areas;
13. Welcomes future initiatives and Communications of the European Commission in the field of eSafety;
14. Instructs its President to forward this resolution to the Council, the Commission and the Member States.

## EXPLANATORY STATEMENT

### 1. Presentation of eCall

The eCall scheme is part of the eSafety initiative<sup>1</sup>. It consists of the establishment of a harmonised pan-European in-vehicle emergency call. In case of an accident, the eCall device in the vehicle will transmit an emergency call with data that goes directly to the nearest emergency call centre. eCall can be triggered manually, but in case of a serious accident the car will send the call automatically. The life-saving feature of eCall is the accurate information it provides on the location of the accident site: the nearest emergency centre (the Public Safety Answering Point (PSAP)) is notified immediately, and knows exactly where to go. This results in a drastic reduction in the rescue time<sup>2</sup>.

Some private emergency call systems have been developed in the past, and some are in the market now for some car trades, but its penetration is limited (normally reserved to high-end-vehicles) and failed to ensure the appropriate service when the vehicles cross the borders. eCall aims to be introduced in all vehicles in Europe, for all trades and types, and to work anywhere the vehicle will be in Europe, thus giving service to the more than 100 million persons that travel abroad annually by car.

ECall will be built on the single European emergency number, 112, which was recently generalised in the whole EU<sup>3</sup>. This will ensure interoperability across Europe. In order to improve localisation of emergency calls, the 112 has a complement, the E112, which should allow immediate localisation of the emergency call<sup>4</sup>.

By accelerating the response time to the accident by about 50%, eCall will reduce the severity of the road accidents, thus contributing to the objective of reducing road deaths in the EU<sup>5</sup>. This improvement would meet the objective of reducing road casualties and fatalities that has been fixed in the Commission's European Road safety Action Programme<sup>6</sup> and agreed by the Council.

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<sup>1</sup> Communication on Information and Communications Technologies for Safe and Intelligent Vehicles, COM(2003)0542, 15.9.2003.

<sup>2</sup> An immediate localisation of the accident will allow to treat more injuries in the crucial "**Golden hour**" — an hour of opportunity in which the lives of critically injured people can be saved, or the severity of their injuries reduced, if they are treated by trauma specialists. The Golden hour principle is based on medical findings demonstrating that the death rate of people with heart or respiratory failure or massive bleeding approaches 100 % one hour after the accident.

<sup>3</sup> The 112 was introduced by Council Decision of 29 July 1991 on the introduction of a single European emergency call number (91/396/EEC), Published in the Official Journal L 217, 6.8.1991, p. 31.

<sup>4</sup> Article 26 of the Universal Service Directive adopted in 2002 (Directive 2002/22/EC of 7 March 2002 on universal service and users' rights relating to electronic communications networks and services published in OJ L 108, 24.4.2002) stipulates the obligation that the public network operators make the caller location of all calls available to the emergency services to the extent technically feasible. Commission Recommendation of 25 July 2003 on the processing of caller location information in electronic communication networks for the purpose of location-enhanced emergency call services (E112)

<sup>5</sup> According to E-Merge and the eSafety Driving Group, 5 % to 15 % of road fatalities can be reduced to severe injuries and 10 % to 15 % of severe injuries can be reduced to slight injuries (E-Merge 2004: 49, eSafety group).

<sup>6</sup> European Road Safety Action Programme: Halving the number of road accident victims in the European Union by 2010: A shared responsibility, COM 2003(311) final 2.6.2003. The aim of the Programme is to reduce by 2010 the total number of road deaths from 43 000 to 25 000.

The shorter rescue time - faster arrival of rescue teams, police and towing firms- enables the accident scene to be cleared more quickly, eCall will thus reduce the congestion time and contribute to the efficiency of road transportation in Europe with a reduction of external costs, which could amount to € 4 billion in Europe<sup>1</sup>. The overall savings of eCall related to accident reduction, including social and health costs and lost “public” income calculated for the European Community could amount to nearly €21 billion each year. Taking into account the necessary annual investments on the in-vehicle systems, to upgrade the PSAPs and to train the emergency services staff (estimated € 4.5 billion); a substantial cost-benefit ratio for eCall can be expected. Even with a lower estimated success rate and higher costs the benefit-cost ratio stays positive<sup>2</sup>.

For the global organisation of eCall emergency service, Member States will have the choice between direct management or by delegation of management of PSAP public service.

## 2. Action plan for the implementation of the scheme

An eCall Driving Group was established to produce framework architecture and a business model for eCall, and to define the roles for both the public and private stakeholders. It includes representatives from the Member States, the Commission, telecom operators, PSAP operators, vehicle manufacturers, equipment suppliers, motorway operators, automobile clubs, insurance industry and service providers.

The eCall Driving Group has produced a Memorandum of Understanding (MoU) on implementing eCall.

The aim of the MoU is to ensure that eCall will work in any EU Member State. The MoU is a commitment of the stakeholders to implement the eCall together<sup>3</sup> on the basis of common approved architecture and interface specifications, including the Minimum Set of Data (MSD). The MoU was signed in August 2004 by the European Commission, ACEA on behalf of the automotive industry and the multi-sector partnership ERTICO on behalf of its partners. The MoU has now over 50 signatures among which 6 are from Member States. Other 5 Member States have initiated the procedure for its signature. Switzerland has also signed the MoU.

The eSafety partners have agreed on a Road Map for eCall roll-out, the main milestones are the following:

- a) **By the end of 2005**, agreeing on eCall roll-out plan, business model and standards
- b) **By mid-2006**, full specification of the in-vehicle eCall system and start of development
- c) **In 2007**, full-scale field tests with early adopters
- d) **After September 2009**, introduction of eCall as standard equipment in all vehicles entering the market.

## 3. Was has been done already?

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<sup>1</sup> The evaluation of the reduction in congestion time as been estimated at 10% in the low-impact case and 20% reduction in the high-impact case (see Study on the potential socio-economic impact of the introduction of Intelligent Safety Systems in Road Vehicles (SEiSS) final report 2005, point 5).

<sup>2</sup> See SEiSS study and E-Merge, 2004.

<sup>3</sup> It should however be noted that the MoU does not create any legal obligation between Parties.

- The eCall Driving Group, with the participation of all stakeholders, has advanced in the specification of the performance criteria for the eCall service.
- The Driving Group has produced the first drafts specifications for the different domains of the system (in-vehicle system, interface to mobile networks operators, mobile network, interface to PSAPs, PSAPs)
- The Commission requested ETSI to produce the standard protocols to transmit the minimum set of data associated to an eCall from the in-vehicle system to the PSAPs. ETSI MSG is carrying out this task, and requested 3GPP to investigate the technical requirements for the transmission of the data from the in-vehicle systems to the PSAPs through mobile telephone networks (GSM, GPRS, UMTS). Standards are expected by end of March 2006
- ETSI and CEN have opened a working item to standardise the Minimum Set of Data architecture.
- Some Member States (Finland, the Netherlands) are upgrading their emergency services including eCall functionality. Finland has implemented an eCall testbed.

### **Implementation of emergency n° 112 in the EU Member States**

	<i>Situation in Member States</i>
<b>Availability of 112</b>	Available in all Member States
<b>Call answering and handling (PSAP<sub>5</sub>)</b>	Operational in 15 Member States 10 other Member States have deficiencies in language and/or organisation <sup>16</sup>
<b>Caller location (E112)</b>	10 Member States have completed the process
<b>Information-Promotion of 112</b>	10 Member States have taken sufficient action

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<sup>16</sup> Deficiencies in language is not a major problem for eCall as the relevant information is transmitted automatically

## Implementation of eCall in the EU Member States

<i>Member State</i>	<i>eCall MoU signature</i>	<i>Implementation status</i>
<b>Belgium</b>	Discussion between Ministries	Upgrading and reorganisation of emergency centres
<b>Czech Republic</b>	Procedure started	E112 operational. Candidate for pilot
<b>Denmark</b>	Procedure started	
<b>Germany</b>	Support to eCall. Lander delegated into Federal Ministry	Signature conditioned to solve data privacy issue
<b>Estonia</b>		
<b>Greece</b>	Signed	
<b>Spain</b>	Regional competence	E112 operational. Position paper critical with eCall. Meeting to follow
<b>France</b>	Discussion between Ministries	
<b>Ireland</b>		
<b>Italy</b>	Signed	Upgrading emergency services. Candidate for pilot
<b>Cyprus</b>	Signed	
<b>Latvia</b>		
<b>Lithuania</b>	Signed	Upgrading emergency centres
<b>Luxembourg</b>		
<b>Hungary</b>	Procedure started	Upgrading emergency centres. Expert meeting Spring 06. Candidate for pilot
<b>Malta</b>	Discussion between Ministries	Starting socio-economic study
<b>The Netherlands</b>	Procedure started	Upgrading PSAPs. Implementation on 2006. Candidate for pilot
<b>Austria</b>		
<b>Poland</b>		
<b>Portugal</b>	Discussion between Ministries	
<b>Slovenia</b>	Signed	
<b>Slovakia</b>		
<b>Finland</b>	Signed	Testbed operational. Candidate for pilot
<b>Sweden</b>	Signed	Candidate for pilot
<b>United Kingdom</b>	Subject to financial perspectives	E112 operational. Research on RSQ on UK PSAPs

#### 4. What still needs to be done in order to be ready for 2010?

- Achievement of the operational implementation of 112 and E112 as the one and only emergency number with localisation in Europe.  
In order to have the background service ready for immediate implementation of eCall,

Member States should also insure the viability of their PSAPs -, through equipment and upgrading - so as to operate location-enhanced E112 calls and eCalls. Member States should also ensure that the personnel of PSAPs are capable of adequately handling the eCalls originating from vehicles and that language support is provided. They should also upgrade their whole rescue chain (PSAPs, dispatching, emergency vehicles, and hospital emergency rooms).

- Accelerate the signature of the MoU by Member States in order to give the necessary signal to the industry<sup>1</sup> and citizens. As the industry will be willing to finalise investments and equipment if it is sure that Member states give sufficient guarantee on their share of burden to undertake, the main issue lies on Member States' willingness and readiness for providing the background emergency services for 2009-2010 (mainly setting up suitable emergency stations and rescue response capacity).
- Make sure that stable and viable standards for eCall technology are finalised by ETSI (European Telecommunications Standards Institute) for mid-2006 at the latest.
- Complete the work of the eCall Driving Group defining the specifications of the systems and agreeing on a positive business model.
- Launch extensive Field Operational Test with early adopters.

### **Conclusion of the rapporteur**

As it should save around 2,500 lives per annum in the EU and €26 billion in accident and congestion costs, your rapporteur recommends that this initiative should be encouraged and supported by the European Parliament.

The eCall system should be implemented by 2009 and should not be subject to any unnecessary delay. It is important to note, however, that the automotive or telecommunications industry should not bear any significant costs without the guarantee that public expenditures and actions are also taken at a Member State level along the time line agreed upon in the action plan and the Memorandum of Understanding. This is particularly important with regard to the objective of having operational PSAPs and a viable chain of emergency services based on E112 localisation data by the end of 2007.

If there is a lack of willingness from stakeholders to act, public and private incentive solutions should be examined by Commission.

Your rapporteur considers that a pan-European in-vehicle emergency call system will add value over and above what national means could provide alone.

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<sup>1</sup> Six Member States have already signed the Memorandum of Understanding (MoU) on the phasing-in of the initiative, five other should do so in a near future. For some MS the agreement will take the form of a support letter instead of a proper signature (Germany and France).