EUROPEAN PARLIAMENT

2004 *2009*

Session document

FINAL
A6-0072/2006

27.3.2006

REPORT

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

Committee on Transport and Tourism

Rapporteur: Gary Titley

CONTENTS

Page

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[1],

– having regard to the Commission Communication 'Information and Communications Technologies for Safe and Intelligent Vehicles' (COM(2003)0542),

– having regard to the Commission Communication 'European Road Safety Action Programme - Halving the number of road accident victims in the European Union by 2010: A shared responsibility' (COM(2003)0311) and 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[2],

– 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 (A6-0072/2006),

A. Whereas, in 2004, 43 000 people died in road accidents in the EU-25 Member States and a pan-European in-vehicle emergency call service/function, eCall, could save up to 2 500 lives a year and bring about a reduction of up to 15% in the gravity of injuries,

B. Whereas the introduction of the eCall system would reduce the annual external costs of road traffic by up to EUR 26 billion, thus relieving citizens of a burden of up to EUR 26 billion; whereas efforts should be made to reduce, not internalise, external costs,

C. Whereas the eCall system has the potential to reduce the response time to accidents by approximately 40% in urban areas and approximately 50% in rural areas,

---

[1] OJ C 43 E, 19.2.2004, p. 250.
[2] OJ L 111, 17.4.2004, p. 75.

D. Whereas the eCall system is to be welcomed as the first building block of the intelligent car initiative[1],

E. Whereas the large-scale roll-out of eCall by 2009 is a priority of the eSafety initiative,

F. Whereas considerable progress has been made in the field of eSafety technologies, systems and services, and the development of Galileo also offers potential for the future,

1. Welcomes the fact that, at the 2nd eSafety High Level Meeting with Member States, four Member States signed the eCall Memorandum of Understanding (MoU), namely, Greece, Italy, Lithuania and Slovenia, joining the existing signatories Finland, Sweden and, most recently, Cyprus;

2. Is encouraged by the commitment of other Member States which have already initiated the process for signing the MoU (the Czech Republic, Denmark, the Netherlands and Germany) and calls on those which have not already done so to demonstrate the political will to do so;

3. Stresses the importance of all Member States signing the 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. Suggests that, having regard to the agreed schedule of the Galileo Programme, the full roll-out of eCall should be synchronised with the fully operational phase of the Galileo satellite positioning system, which starts in 2010;

5. Believes that, in order for real progress to be made, the MoU should be converted into a letter of intent, signed by all stake holders, as soon as possible;

6. Urges the authorities of the Member States, therefore, to include information about eCall in the material for their public road safety campaigns;

7. Welcomes the motor industry's unambiguously positive position towards the introduction of the eCall system;

8. Notes that the eCall system is based on the use of 112 and E112 (location information requirements in public wireless networks for emergency calls);

9. Recalls that a majority of Member States have been slow in encouraging the use of the single European emergency number 112; calls on the Commission to evaluate the implementation by the Member States of Directive 2002/22/EC of the European Parliament and of the Council of 7 March 2002 on universal service and users' rights[2] in relation to the appropriate answering and handling of calls to the single European emergency call number, including the caller location ;

[1] COM(2005)0229.
[2] OJ L 108, 24.4.2002, p. 51.

10. Urges the Member States to complete the implementation of E112 as soon as possible, to promote the use of both 112 and E112 and to take steps to provide the appropriate infrastructure in the Public Service Answering Points 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;

11. Notes the disparity between the Commission's and industry's estimates of the cost of a built-in vehicle eCall system;

12. Invites the Commission and industry to pursue a deeper cost-efficiency analysis for every action to be undertaken to implement eCall;

13. Is aware that the technology needed for eCall will facilitate early adoption of other innovative active safety applications by lowering the marginal costs of their introduction;

14. Is aware that the introduction of many new technologies cannot be instantaneous and therefore encourages the Commission and industry to look into the gradual introduction and large-scale roll-out of eCall through a combination of built-in vehicle systems and alternative systems such as the use of drivers' mobile telephones and Bluetooth technology as well as built-in mobile telephones, while having special regard to the right of privacy of drivers and passengers;

15. Having regard to the potential cost of the eCall system, which may be higher in regions affected by permanent constraints, and being aware of the fact that many new technologies may prove costly and that new car buyers (particularly at the cheaper end of the market) are not always willing or able to pay the full cost; calls on all stakeholders to work together to define incentives to speed up the introduction of the eCall system (such as a link with insurance systems);

16. 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;

17. Welcomes future initiatives and Communications of the Commission in the field of eSafety;

18. Instructs its President to forward this resolution to the Council, the Commission and the governments and parliaments of the Member States.

EXPLANATORY STATEMENT

1. Presentation of eCall

The eCall scheme is part of the eSafety initiative[1]. 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[2].

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[3]. 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[4].

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[5]. 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[6] and agreed by the Council.

---

[1] Communication on Information and Communications Technologies for Safe and Intelligent Vehicles, COM(2003)0542, 15.9.2003.

[2] 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.

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

[4] 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)

[5] 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).

[6] 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[1]. 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[2].

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[3] 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?

[1] 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).
[2] See SEiSS study and E-Merge, 2004.
[3] 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

	Situation in Member States
Availability of 112	Available in all Member States
Call answering and handling ($PSAP_5$)	Operational in 15 Member States 10 other Member States have deficiencies in language and/or organisation[1]
Caller location (E112)	10 Member States have completed the process
Information-Promotion of 112	10 Member States have taken sufficient action

[1] 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

Member State	*eCall MoU signature*	*Implementation status*
Belgium	Discussion between Ministries	Upgrading and reorganisation of emergency centres
Czech Republic	Procedure started	E112 operational. Candidate for pilot
Denmark	Procedure started	
Germany	Support to eCall. Lander delegated into Federal Ministry	Signature conditioned to solve data privacy issue
Estonia		
Greece	Signed	
Spain	Regional competence	E112 operational. Position paper critical with eCall. Meeting to follow
France	Discussion between Ministries	
Ireland		
Italy	Signed	Upgrading emergency services. Candidate for pilot
Cyprus	Signed	
Latvia		
Lithuania	Signed	Upgrading emergency centres
Luxembourg		
Hungary	Procedure started	Upgrading emergency centres. Expert meeting Spring 06. Candidate for pilot
Malta	Discussion between Ministries	Starting socio-economic study
The Netherlands	Procedure started	Upgrading PSAPs. Implementation on 2006. Candidate for pilot
Austria	Supports eCall in general, but ongoing internal coordination process	Signature related to clarification on data protection question
Poland		
Portugal	Discussion between Ministries	
Slovenia	Signed	
Slovakia		
Finland	Signed	Testbed operational. Candidate for pilot
Sweden	Signed	Candidate for pilot
United Kingdom	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[1]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 *e*Call 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

[1] 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).

value over and above what national means could provide alone.

PROCEDURE

Title	Road safety: bringing eCall to citizens
Procedure number	2005/2211(INI)
Committee responsible Date authorisation announced in plenary	TRAN 17.11.2005
Committee(s) asked for opinion(s) Date announced in plenary	ITRE 17.11.2005
Not delivering opinion(s) Date of decision	ITRE 23.11.2005
Enhanced cooperation Date announced in plenary	
Rapporteur(s) Date appointed	Gary Titley 11.10.2005
Previous rapporteur(s)	
Discussed in committee	25.1.2006 21.2.2006
Date adopted	21.3.2006
Result of final vote	+ 32 - 3 0 2
Members present for the final vote	Inés Ayala Sender, Etelka Barsi-Pataky, Philip Bradbourn, Paolo Costa, Michael Cramer, Arūnas Degutis, Petr Duchoň, Emanuel Jardim Fernandes, Roland Gewalt, Mathieu Grosch, Ewa Hedkvist Petersen, Stanisław Jałowiecki, Georg Jarzembowski, Jaromír Kohlíček, Rodi Kratsa-Tsagaropoulou, Fernand Le Rachinel, Jörg Leichtfried, Bogusław Liberadzki, Michael Henry Nattrass, Seán Ó Neachtain, Willi Piecyk, Luís Queiró, Reinhard Rack, Ulrich Stockmann, Georgios Toussas, Marta Vincenzi, Corien Wortmann-Kool
Substitute(s) present for the final vote	Zsolt László Becsey, Guy Bono, Nathalie Griesbeck, Zita Gurmai, Anne E. Jensen, Jelko Kacin, Ioannis Kasoulides, Sepp Kusstatscher, Francesco Musotto, Luis Yañez-Barnuevo García
Substitute(s) under Rule 178(2) present for the final vote	
Date tabled	23.3.2006
Comments **(available in one language only)**	