



**Recommendations of the DG eCall
for the introduction of the
pan-European eCall**

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Author(s)

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Chapter 1 - eSafety Forum

With fatalities on the road across the EU of more than 40.000 people every year, the European Commission recognises that the current measures towards reducing the fatality number is not enough. In the White Paper on European transport policy from 2001, the European Commission proposed that the European Union should set itself the target of halving the number of road fatalities by 2010.

One of the initiatives from the European Commission is the establishment of the eSafety Forum, which is a joint industry/public initiative for improving road safety by using new Information and Communications Technologies. The overall objective is to join forces and to build up a European strategy to accelerate the research and development, deployment and use of Intelligent Integrated Safety Systems including Advanced Driver Assistance Systems (ADAS) for increasing road safety in Europe.

The eSafety Forum identified 28 recommendations on how road safety could be improved through new technologies.¹ The 28 recommendations have led to the establishment of different working groups under the eSafety Forum, which are developing recommendations towards the implementation of specific technologies or applications.

One of the working groups is the Driving group eCall (DG eCall) established at the end of 2002. The DG eCall 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. These players are members of four large “constituencies”:

- The automotive industry;
- The mobile telecommunication industry;
- The public emergency authorities and associated or cooperating service organisations;
- The public social security organizations, private insurance companies and Automobile Clubs.

eCall was identified as a high priority topic by the eSafety Forum. ERTICO and ACEA, the two co-Chairs of the DG eCall together with the members of the DG eCall and the European Commission have since the establishment worked towards preparing these recommendations that should facilitate making eCall a reality in all Member States and as standard option in all new vehicles type-approved from 1 September 2010 onwards.

¹ eSafety Forum – 28 Recommendations: http://www.esafetysupport.org/en/esafety_activities/28_recommendations/

Chapter 2 - eCall Process

2.1 DG eCall

The DG eCall has today 138 members² from all stakeholder groups involved in the eCall service and value chain.

The DG eCall has organised a large variety of meetings in order to build consensus on the approach towards a full-scale deployment of eCall.³ The meetings had the aim to clarify the state of art, define the functional architecture, specify the system, define the performance criteria for all levels of the service chain, outline the costs and benefits for all stakeholders in the value chain and solve organisational issues. Besides these, several dedicated meetings have been organised with specific stakeholder groups with the objective to obtain specific input or to widely inform about the necessary actions for a specific stakeholder group in the deployment phase of eCall.

Several sub-working groups under DG eCall were also established in July 2005 with the objective to solve different identified open issues related to both the service chain and value chain. A list of the different sub-working groups and the specific objectives can be found in Table 1. The conclusions from the groups are outlined in these recommendations and all reports are attached as appendixes under the relevant chapter.

Name	Objective
Business Case 1 (BC.1)	Create an overview of available studies today
Business Case 2 (BC.2)	Cost / benefits for the Insurance Industry – potential business case
Business Case 3 (BC.3)	Vehicle manufactures to define the costs of the In-Vehicle System
eCall Generator 1 (EG.1)	Identify the performance criteria related to the eCall chain
eCall Generator 2 (EG.2)	High level requirements for a eCall in-vehicle system (Supplier perspective)
eCall Generator 3 (EG.3)	Define the functional requirements and the specifications for the eCall generator
Public Safety Answering Point (PSAP.1)	Define the PSAP requirements regarding receiving and handling eCall
Certification	Define the certification procedure regarding the complete eCall chain

Table 1: Different sub-working groups working under the DG eCall, 2005 onwards

² Total DG eCall membership list, see appendix 1

³ A Complete list of eCall meetings, 2005 onwards can be found in appendix XXX

2.2 eCall Memorandum of Understanding (MoU)

The DG eCall released a Memorandum of Understanding (MoU)⁴ in August 2004 that calls for participants to actively investigate feasible and sustainable eCall solutions and potential business cases. The MoU lists the necessary arrangements for implementing the eCall action plan and sets out the measures to be taken by the European Commission, Member States, the automotive industry, telecoms and insurance industries. The key message in the MoU is that eCall should work in any EU Member State and that eCall (voice and data) should be based on using the single pan-European emergency call number 112.

The MoU has today 59⁵ signatures from different stakeholders, but are still missing major stakeholders such as a large majority of the EU Member States despite the efforts made by the European Commission and different members of the DG eCall to obtain these signatures.

2.3 High-level meetings

Three high-level meetings have been organised by the European Commission, two with the European Member States and one with related Industry. Both the Member States and the Industry focused in the first two meetings on defining a roadmap for the implementation of eCall. The third high-level meeting with the Member States was held as a reaction to a Communication from the European Commission calling for the Member States to sign the MoU and take necessary steps to deploy eCall.⁶

2.4 Directives, Communications and recommendations

The directives and communications relevant for emergency calls in the European Union (112, E112 and eCall) are:⁷

- The Council Decision on the introduction of a single European emergency call number (91/396/EEC)
- The Universal Service Directive 2002/22/EC
- Directive on privacy and electronic communications 2002/58/EC
- Directive on data protection 95/46/EC
- Communication on European Road safety action program C(2003) 311
- The Communication on ICT for safe and intelligent vehicles C(2003) 542
- The Commission Recommendation on processing of caller location information C(2003) 2657
- The 2nd eSafety Communication: Bringing eCall to Citizens C(2005) 431

The latest Communication – Bringing eCall to Citizens has been taken up by the European Parliament who drafted a report on eCall recognizing the importance of the eCall system and provide to the European

⁴ The MoU can be found in appendix 3

⁵ Complete list of MoU signatures can be found in appendix 4 - Last update 15/03/2006

⁶ Main conclusions from the three high-level meetings can be found in appendix 5

⁷ All Communications and Directives can be found in appendix 6



Commission its support by a large majority vote. The European Parliament thereby has requested the EU Member States to take the necessary actions in deploying eCall.⁸

The Universal Service Directive (USD), which includes the obligation for the Member States to ensure an appropriate answer and handling of the calls made to 112, as well as the obligation for the Public Telephone Network Operators to make caller location information available to authorities handling emergencies, to the extent technically feasible, is under revision during the year 2006. Some issues concerning E112 and eCall services may be considered for inclusion in the proposal of the European Commission for the revised USD expected by end 2006.

⁸ Draft Report on Road safety: bringing eCall to citizens by the European Parliament, Committee on Transport and Tourism, Provisional 2005/2211(INI) Rapporteur: Gary Titlet can be found in appendix 7

Chapter 3 - eCall Requirements

DG eCall recommends an eCall architecture, which is based on a quasi-simultaneous voice-data link from an eCall generator to a first level PSAP⁹. The DG eCall recommends that the following essential requirements for transmitting both voice and data through the mobile networks should be adopted:

- Pan-European solution:
 - Roaming capability
 - Belonging to GSM Standards (ETSI, 3GPP) that must be available for long enough to support vehicle life cycle
 - Commonly implemented by all European Telcos & within preferably all GSM modules
- Real time transport mechanism
- Quasi simultaneous voice call and data transfer
- Secure transport and routing mechanism (E112)
- Automatic Acknowledgement

More specific requirements regarding the eCall system have been defined by the stakeholders involved in the DG eCall sub-working groups.¹⁰

3.1 eCall architecture

The DG eCall recommends that the architecture for eCall, as illustrated in Figure 1, is adopted by all stakeholders when implementing eCall. The process is described below.

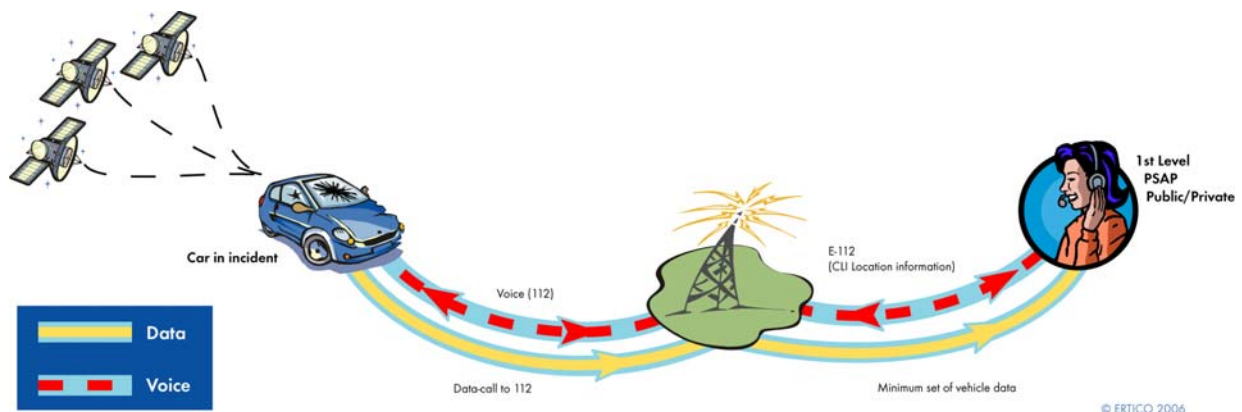


Figure 1: eCall system overview

⁹ A PSAP could be a Public Authority or a private service provider operating under the control of a Public Authority

¹⁰ A PSAP requirements clarification paper can be found in Appendix 8

- 1) The eCall Generator initiate the eCall by sensors triggered and/or manually, send the in-vehicle triggered eCall to a PSAP. The eCall consists of two elements: a pure voice (audio) telephone call based on 112 and the minimum set of data (MSD)
- 2) The eCall (data + voice) carried through the mobile network, is recognized by the mobile network operator (MNO) as a 112 emergency call, and is first handled by the MNO. Based on the 112 handling the MNO enrich the call with the CLI (caller line identification), and at the same time, according to the USD and the E112 recommendation, add the best location available (based on the best effort principle¹¹). After the 112 handling, the telecom operator delivers the 112-voice together with the CLI, mobile location and the **eCall MSD** to the appropriate PSAP.
- 3) The PSAP transmits an acknowledgement to the eCall Generator specifying that the MSD have been properly received.

¹¹ The Commission Recommendation on processing of caller location information C(2003) 2657

Chapter 4 - eCall Performance Criteria

The overall performance criteria for the eCall service chain have been derived from a range of studies and experiences from the various stakeholder groups involved¹². Furthermore, experiences from comparable automatic and manual vehicle emergency or assistance calling systems and current PSAP operation systems and emergency response systems have been taken into account.

4.1 eCall service chain

eCall involves a number of different stakeholders all with separate responsibilities and tasks, which even overlap. In order to provide a clear understanding of the different aspects of the eCall chain six different domains have been identified see Figure 2.

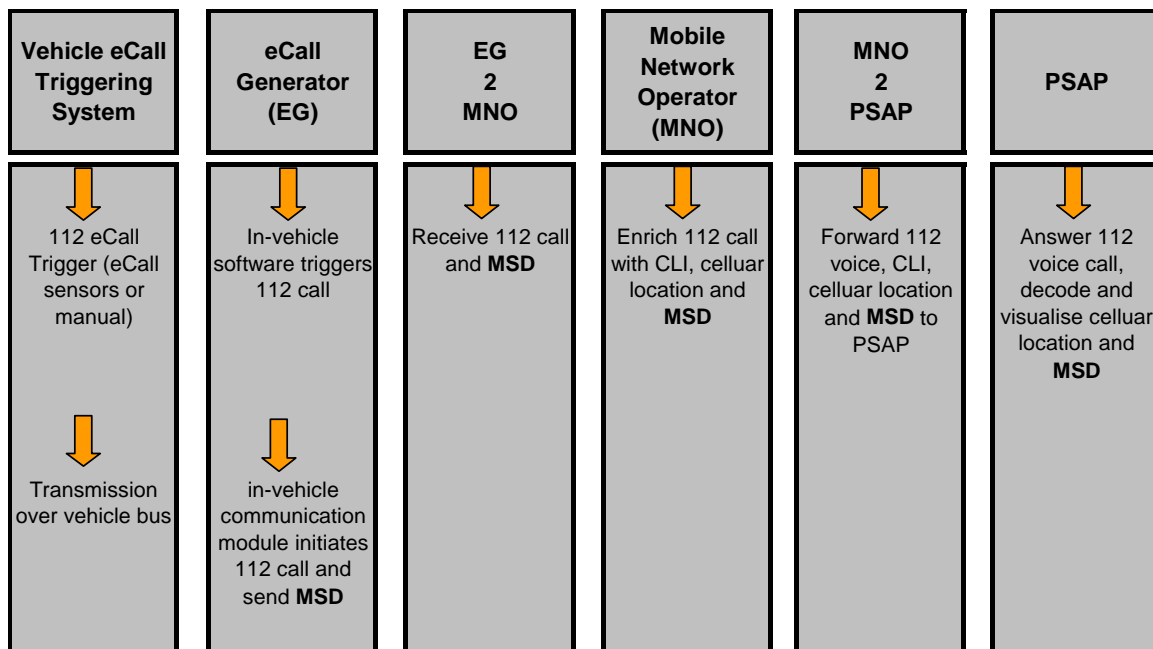


Figure 2: The 6 domains of the eCall service chain

4.2 End-to-end performance criteria

The DG eCall recommends that the minimum target for the overall performance criteria be¹³:

- By 2010 – 85% of all activated and sent eCalls should successfully¹⁴ reach the PSAP
- By 2015 – 89% of all activated and sent eCalls should successfully reach the PSAP
- By 2020 – 92% of all activated and sent eCalls should successfully reach the PSAP

¹² Clarification Paper EG1- eCall Performance Criteria can be found in appendix 9

¹³ Revision clause is added with the objective to evaluate the overall performance criteria in 2014 for 2015

¹⁴ Successful means that, as a minimum, the MSD has to be transmitted and received by the 1st level PSAPs.

4.2.1 Performance criteria end-to-end timing

Shortening the time for response is crucial in emergency handling. The DG eCall recommends that the performance criteria related to the timing in the eCall service chain be kept according to Figure 3.¹⁵

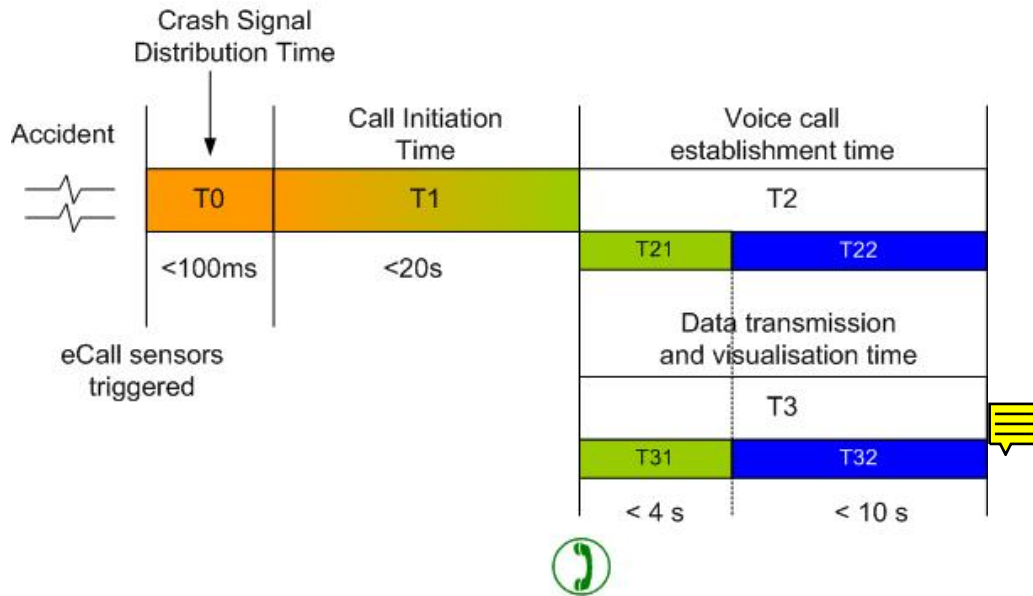


Figure 3 Timing performance criteria for the eCall service chain

4.2.2 Performance criteria – eCall generator

Within the DG eCall, ACEA¹⁶ has taken on the task to define the functional specifications for the eCall generator and invited suppliers, service providers and MNO to a joint workgroup. Another sub-working group lead by Autoliv¹⁷ was established to evaluate technical studies related to this subject and to discuss a number of issues like nomadic or embedded, SIM or SIM-less solutions, manual and automatic activation strategy for the eCall Generator

The DG eCall recommends the following performance criteria target for the eCall generator¹⁸:

- By 2010 – 90% of all accidents with a severity that meets the thresholds for triggering an eCall should successfully¹⁹ be delivered by the eCall generator to the mobile network;
- By 2015 – 95% of all accidents with a severity that meets the thresholds for triggering an eCall should successfully be delivered by the eCall generator to the mobile network; and

¹⁵ The T1 = 20 seconds might need extension in case data protection or network capacity issues require putting the system in a “sleeping” mode.

¹⁶ The full functional specifications of the In-Vehicle system from ACEA can be found in appendix 10

¹⁷ High level requirements for the in-vehicle system by DG eCall sub-working group EG.2 (Suppliers perspective) can be found in appendix 11

¹⁸ Revision clause is added with the objective to evaluate the target for the performance criteria in 2014 for 2015

¹⁹ Successful means that, as a minimum, the MSD has to be transmitted and received by the 1st level PSAPs.

- By 2020 – 98% of all accidents with a severity that meets the thresholds for triggering an eCall should successfully be delivered by the eCall generator to the mobile network.

It is furthermore recommended that the eCall generator is reprogrammable in order to e.g. change the MSD information on the Service Provider

4.2.2.1 Automatic eCall Triggering strategy

The automatic eCall trigger should be safe, roust and designed so that a minimum of false eCalls are generated by the eCall generator.

Therefore the DG eCall recommends that:

- The Automatic eCall trigger signal is generated in the airbag control module and/or a combination of other sensor data (e.g. gyro, radar, axel load, speed);
- The eCall shall be generated to reflect as many different crash types as possible (e.g. front, rear, side and roll crashes);
- Trigger thresholds based on delta velocity could be send as additional optional data to the PSAP, provided that this information can be used in PSAPs with a sufficient level of reliability to evaluate the likeliness of serious injuries; and
- The vehicle manufacturers are responsible for determination of the automatic eCall trigger signal.

4.2.2.2 Manual eCall Triggering strategy

The DG eCall has the following recommendations for manual triggering of an eCall

- Actions should be taken when designing the eCall generator to avoid accidental manual triggering. Different scenarios have been discussed within the DG eCall, such as; holding the eCall bottom down for three seconds to trigger the eCall or push the button twice within 5 seconds;
- The manual trigger strategy depends on the specific human machine interface for the eCall generator and it is recommended that the vehicle manufactures individually design the eCall generator in such a way that unintended activation is minimized;
- If possible a roadside assistance button should be added to the vehicle with the objective to lower the amount of potential irrelevant manual eCalls, but it is also recognized that this might not be possible for low cost eCall solutions; and
- Appropriate education should be given to the users on the right use of the eCall system in order to minimise the number of manual calls without emergency content.

4.2.2.3 Precise Location

The precise location of the vehicle involved in an accident is an important factor for the PSAP operator in making the right risk assessment and dispatching the emergency service vehicles to the correct location. The DG eCall recommends that the target for the precise location should be based on the best performance that satellite based location can provide at any given time. Currently guaranteed as a minimum of:

- ≤ 50 meters (in 50% of all cases); and
- ≤ 150 meters (in 95% of all cases)

4.2.2.4 eCall Minimum Set of Data (MSD)

The requirements to the minimum set of data were set by a group of emergency services involved in the DG eCall. The requirements were based on the information that emergency agencies would need to speed up the response time and to ensure a correct deployment of emergency resources.

The DG eCall recommends that the below MSD content should be standardized by an appropriate standardization body.

Byte No.	Name	Size	Type	Unit		Description
1	Control	1 Byte	Integer		M	Bit 7: 1 = Automatic activation Bit 6: 1 = Manual activation Bit 5: 1 = Test Call Bit 4: 1 = No Confidence in position Bit 3: Entity type could be added Bit 2: Entity type could be added Bit 1: Entity type could be added Bit 0: Entity type could be added
2	Vehicle identification	20 Bytes	String		M	VIN number according ISO 3779
3	Time stamp	4 Bytes	Integer	UTC sec	M	Timestamp of incident event
4	Location	4 Bytes	Integer	milliarcsec	M	GNSS Position Latitude (WGS84)
		4 Bytes	Integer	milliarcsec	M	GNSS Position Longitude (WGS84)
		1 Byte	Integer	Degree	M	Direction of Travel (Based on last 3 positions)
5	Service Provider	4 Bytes	Integer	IPV4	O	Service Provider IP Address
6	Optional Data	106 Bytes	String	To be defined	O	Further data on e.g. crash information encoded in XML Format
	Sum:	140 Bytes				

M – Mandatory data field

O – Optional data field (default blank characters)

Uncertainty exists on whether the PSAPs in all Member States has access to a VIN database for both national and foreign registered vehicles. Therefore the DG eCall recommends that a study is made with the objective to evaluate whether for identifying the vehicle the VIN is sufficient information for the emergency services or e.g. vehicle make and model needs to be added as mandatory fields in the MSD.

For privacy issues the DG eCall recommends that the study also contain the feasibility of masking information in the VIN which is not necessary for answering the emergency call.

4.2.3 Performance criteria – Mobile network

The Mobile Network Operators should treat eCall as an E112 call with the same priority and reliability through their core network. eCall is a pan-European service so full roaming capabilities should be provided by MNOs.

4.2.4 Performance criteria – Public Safety Answering Point (PSAP)

The DG eCall recommends that the performance criteria for the PSAPs regarding handling of all received calls are 99%.

The Operational procedures related to the PSAP operator when receiving an emergency call differ from Member State to Member State but the performance indicators have a common denominator, namely that in all Member States they are laid down in lawgiving regulations. Therefore the DG eCall recommends that these operational procedures be followed when handling an eCall.

4.2.4.1 Map accuracy

In the case of an emergency call, one critical phase is to locate precisely on a map the position of the caller from GNSS coordinates provided in the MSD and to derive a location which can be sent to the emergency service vehicle.

The recommended performance criteria for the mapping accuracy are:

- Road geometry
 - Completeness of the road geometry down to the lowest local level; and
 - Accuracy of the road geometry is precise to 15 meters²⁰
- Road naming
 - In Artery category 1 to 4: 99.9% must have a name;
 - In Artery category 5: 97% must have a name; and
 - Each road name must be the correct.

When possible the DG eCall recommends that the PSAP's use a map-matching tool in order to prevent potential "errors", and thereby increase the accuracy.

4.3 Transport Protocol

In order to facilitate and guarantee roaming, common standardized interfaces and data transfer protocols are needed. As an action to support a full pan-European service the European Commission has requested ETSI to standardize the eCall interface between the eCall generator and the PSAP along with the transport protocol²¹. ETSI_MSG (European Telecommunication Standardization Institute – Mobile Standards Group) has taken on this request and has looked at the different technologies that could be used for transmitting in-vehicle

²⁰ Measured against WGS84.

²¹ 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))

voice and the MSD to the PSAP. The ETSI_MSG has noted that the actual study on the different technical solutions available is carried out in the 3GPP (3rd Generation Partnership Project).

Even though ETSI_MSG has no final response to the European Commission yet, two different solutions are currently on the table:

- In-band modem; and
- USSD – Unstructured Supplementary Services Data

The final decision is expected to be presented to the European Commission at the next ETSI_MSG meeting in May 2006.

GSME has also conducted a study to support the ETSI_MSG work on the transport protocol.²² The conclusion of this study is that the preferred eCall MSD signalling system should be based on a in-band modem/signalling application.

It is strongly recommended by the DG eCall that the European Commission closely follow the standardization work and that they encourage ETSI to provide a standard as early as possible. DG eCall also recommends that representatives from all stakeholders contribute to the standardization activities on eCall.

4.4 eCall Certification

In order to ensure the end user that the eCall service meet the performance criteria outlined in this document a certification procedure has been proposed by the Standardization sub-working group (ST.4) under the DG eCall.²³

In relation to certification of eCall the DG eCall recommends that:

- The vehicle manufactures should be responsible for the certification of the eCall generator using existing certification procedures;
- Mobile Network Operators should be responsible for the certification of their network; and
- The PSAPs should be responsible for the certification of the PSAP system along with the PSAP operators' procedures for handling an eCall.

Furthermore DG eCall recommends that interoperability testing in done with the involvement of all stakeholders in the eCall chain with the objective to ensure that the eCall service performs according to the overall performance criteria.

²² Options for eCall MSD signalling, GSME Position, 21 April 2006 – attached as Appendix 12

²³ Certification sub-working group can be found in appendix 13

Chapter 5 - Other issues

5.1 Status of 112 and E112 implementation

DG eCall recommends that the European Commission ensure that both 112 and E112 is implemented by All Member States, as this is vital for the deployment of eCall. The European Commission has established an Expert Group on Emergency Communications with representatives from telecommunication and Civil Protection from all Member States that are working to ensure that 112 and E112 is implemented as intended. The current status is that 112 is functional in all Member States (although with different quality of services) and that E112 is fully operational in 14 of the 25 Member States. The European Commission has started infringement procedures against 11 countries due to the non-availability of caller location information to emergency.²⁴

5.2 eCall Deployment plan

The Road Map for eCall roll-out has been agreed by DG eCall as outlined and illustrated in Figure 4:

- All key stakeholders shall sign the MoU to ensure progress by end of 2006.
- Full specification of the eCall system and start of development by mid-2007
- Full-scale field tests to be performed from the beginning of 2008
- All key Member States ready with upgrade of PSAPs September 2009
- Introduction of eCall as standard option in all vehicles type-approved from 1st September 2010 onwards

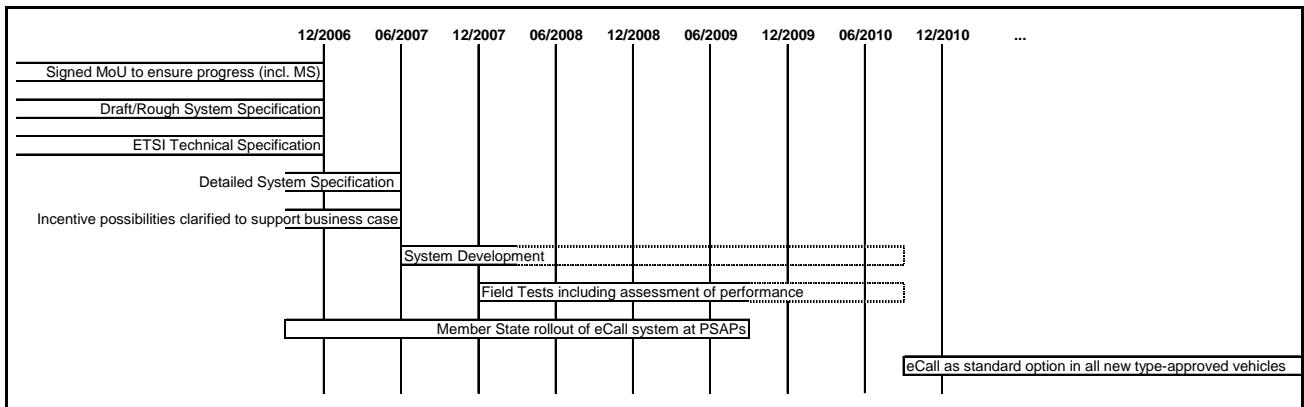


Figure 4: eCall Deployment plan (Road map)

It is recommended by DG eCall that all involved stakeholders follow the agreed Road Map. Delay of any of the above mentioned milestones could have a direct impact on the following milestones and thus delay the eCall introduction.

²⁴ Implementation status of E112 and eCall can be found in Appendix 14

5.3 Privacy

In order to protect the privacy of the citizens DG eCall recommends that eCall is considered as a public service build on top of the pan-European single emergency call number 112, which means that the data controller will be a Public Safety Answering Point, or a private organization appointed by the public authorities to perform that role. DG eCall also recommends that all stakeholders involved will be obliged to comply with all directives related to the protection of data and the privacy of the citizens in relation to 112. The different Directives related to the single European emergency number 112 and data protection can be found in chapter 2.4.²⁵

The DG eCall recommends that the MSD include only the minimum required information needed by the emergency services to ensure an adequate response.

The DG eCall recommends that the citizen will be informed about the existence of the eCall service at the moment of buying/hiring a vehicle, including the information of the data that will transferred to the PSAP, and that the contract will include the explicit acceptance of the citizen of the eCall service. The citizen should have the possibility to ask for a disconnection of the service at the moment of purchase and should have the possible to ask for a re-connection of the service at a later stage.

DG eCall recommends that when implementing eCall it is ensured that it will not be possible to track the vehicle at all times. It is recommended to make eCall a “sleeping” application on the eCall generator that only comes to life when the eCall generator detect an incident serious enough for triggering an automatic eCall or the vehicle occupants generate a manual eCall.

5.4 PSAP structure

DG eCall recommends that PSAPs across Europe implement eCall as soon as possible. It is also recommended that Member States investigate the possibility to potentially revise the current PSAP structures e.g. through public/private partnerships in order to minimize the necessary investments.

The work within DG eCall has identified a number of possible 112 structures across Europe and it has seen that various possibilities exist depending on national laws and regulation and political organizations. The following examples are given on how Member States could build their emergency call structure, acknowledging that many more would be possible:

- Two level of PSAPs, or PSAP1 and PSAP2 served by the same Public body²⁶
- Public operated PSAP1;
- Service provider operating as PSAP1 under the control of a Emergency Agency/Public Authority (e.g. Sweden); and

²⁵ Issues on Privacy by Jan Malenstein 8 April 2005 can be found in appendix 15

²⁶ PSAP1 being the first point of contact for eCall and PSAP2 being the actual emergency operator handling the emergency situation

- Telecom Operator operating as PSAP1 under the control of a Emergency Agency/Public Authority (e.g. UK).

5.5 eCall Business Case

DG eCall, different related projects and Member States has carried out studies in order to define the costs and benefits of deploying eCall.

**All studies carried out demonstrated that benefit to cost ratio
would be between 1.3 and 8.5.²⁷**

The results of the studies has been derived from the following gains:

- Automatic alert and precise location will reduce by an average 10 minutes the rescue time in rural area (50% gain over existing alert), and by 3 to 4 minutes in urban accidents (40% gain). Knowing that most critical accidents occur by night in rural areas, eCall benefit in reducing rescue time is expected in the high of the bracket. This varies from country to country, but all studies (EU and US) raised the conclusion that eCall has a direct socio-economic impact:
- By implementing eCall 3 to 15 % of fatalities can be avoided (large bracket due to country related context, as current rescue efficiency, road and population distribution...)
- By implementing eCall up to 15% of serious injuries can be changed to slight injuries.

The cost benefit ratio has been calculated without taking into account any potential side benefits such as improved traffic management, and efficiency of rescue operations. It has been concluded that the Public sector will obtain most of the benefits, followed by the end users. Non-direct financial benefits such as image building, social care and improved road management, have been left out from all studies

DG eCall acknowledge that eCall could also improve rescue efficiency (then reducing rescue cost per accident) and reduce consequences on traffic.

Furthermore DG eCall acknowledge that the effect of eCall could be further improved in case additional vehicle and personal related information are provided from a service provider, see Figure 5.

Moreover the DG eCall acknowledge that the adoption of the eCall System enriched with information from a service provider could only occur through an agreement between the end user and/or the OEM and the Service Provider and that such an agreement should comply to the regulation on data protection included in chapter 2.4.

²⁷ More details on the different studies can be found in appendix 16

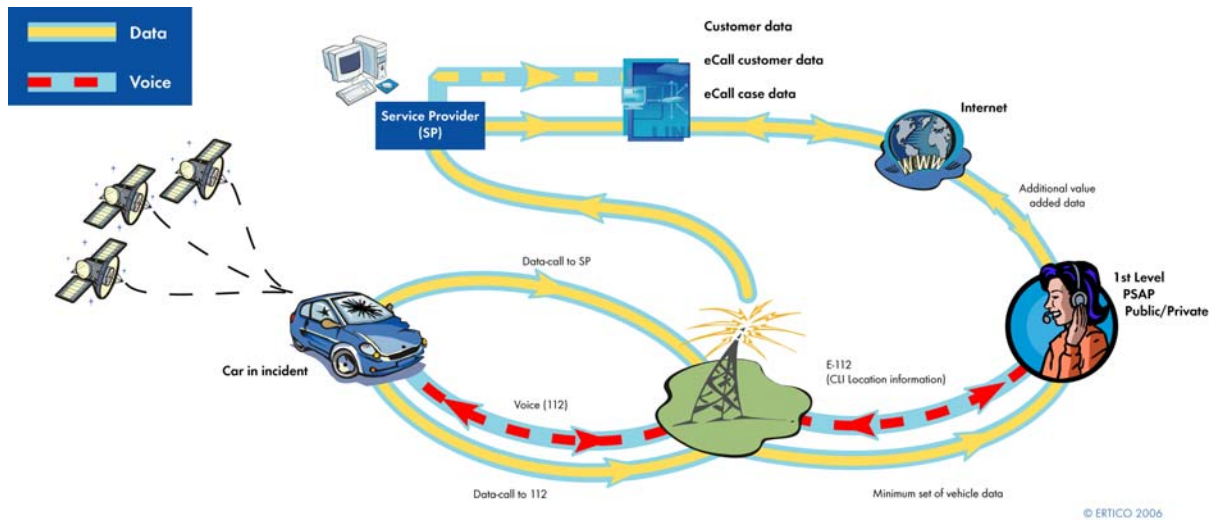


Figure 5: Extended eCall system

DG eCall recommends that a standardised interface between PSAPs and Service Provides should be developed and agreed upon.

Chapter 6 - Final Recommendations

The DG eCall members recommend that the architecture, definitions and performance criteria given in this report should be followed when deploying eCall across Europe by all involved stakeholders.

Furthermore, the DG eCall members call for a number of actions and encourage the eSafety Forum to ensure that these are carried out:

- Calls for Member States to take all necessary decisions and action for deploying eCall including signing the MoU. The DG eCall members favor the voluntary approach currently taken.
- Calls for the European Commission to continue its effort to pursue the deployment of eCall through all available mechanisms including closely following the ongoing standardization work on the transport protocol and encouraging ETSI to provide a standard as early as possible.
- Calls for eSafety Support to continue providing the necessary support on helping Member States and other stakeholder groups in the decision process and the deployment-enabling phase for eCall.
- Calls for Vehicle Makers, Telecom Industry and Equipment Manufactures and other related Industries to prepare for the deployment according to the roadmap given in this report.
- Calls for the establishment of large scale field operational tests and assessments of eCall to be carried out as soon as possible to provide additional data for the costs and benefits of eCall to be used e.g. for deciding potential incentive schemes that could speed up the deployment.
- Calls for the establishment of a permanent group of emergency authorities and other relevant stakeholders that each year should review the deployment status amongst the various stakeholders. This group should be functional at least until 2015.
- DG eCall recommends that the private service providers currently operating a proprietary vehicle emergency call alike systems are consulted for providing experiences when Member States discuss how to deploy eCall.
- Calls for the European Commission, the Member States and other stakeholders to carry out adequate awareness and education campaign to the citizens on eCall

Chapter 7 - Appendix list

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- App. 8** The full PSAP requirements clarification paper
- App. 9** Clarification Paper EG1- eCall Performance Criteria
- App. 10** The full functional specifications of the In-Vehicle system from ACEA
- App. 11** High level requirements for the in-vehicle system by DG eCall sub-working group EG.2 (suppliers perspective)
- App. 12** Options for eCall MSD signalling, GSME Position, 21 April 2006
- App. 13** Certification sub-working group
- App. 14** Implementation status E112 and eCall
- App. 15** Issues on Privacy by Jan Malenstein 8 April 2005
- App. 16** Results from the different studies on business case