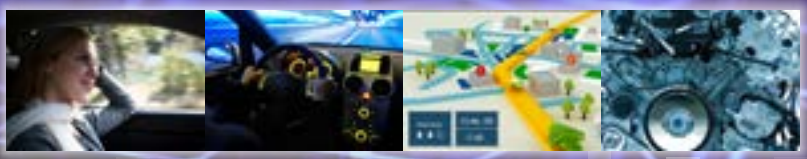
mAutomotive



eCall Update: European Parliament Shows its Support for eCall Implementation by 2015

On June 19th, the European Parliament's Committees on the Internal Market (IMCO) and Transport (TRAN) adopted a resolution that all new cars sold after 2015 should be fitted with eCall devices. This resolution underlines the Parliament's priority for eCall deployment and urges the European Commission to finalise outstanding legislation so as to meet the planned 2015 launch.

This communiqué, prepared by the GSMA mAutomotive team, is an executive summary for all European operators to ensure a common awareness and understanding of the importance of timely deployment of eCall, as well as the opportunity it represents in facilitating connected car services. European operators have a responsibility to engage and be ready to implement the eCall 'flag' by December 31st 2014 as requested by the EC Recommendation. The GSMA not only firmly supports this initiative but wishes to actively encourage greater co-operation amongst all stakeholders for successful deployment.

eCall rollout will enable the widespread installation of embedded technology in all new vehicles in Europe from 2015

eCall is an opportunity to increase the use of embedded technologies in all new type approved vehicles across Europe from 2015 onwards and to facilitate the introduction of a new generation of telematics services. eCall will result in mandatory vehicle fitment of connectivity, creating the opportunity to deploy additional commercial sustainable value added services for customers. In 2015, the total annual sales volume in Europe is expected to be around 17 million vehicles, 15% of which are expected to be new type approvals. By 2020, 75% of sales will be based upon new type approved vehicles and hence fitted with embedded technologies.[1]

What is pan-European eCall?

eCall does not prevent accidents, but speeds up the arrival of emergency teams by an estimated 40% in urban areas and 50% in rural areas.[2]

In the event of a severe crash, an eCall-equipped vehicle, will automatically trigger an Emergency call. Even if passengers cannot speak, a minimum set of data with information on the incident will be sent to relevant emergency services, including the exact location of the accident. eCall may also be activated manually.

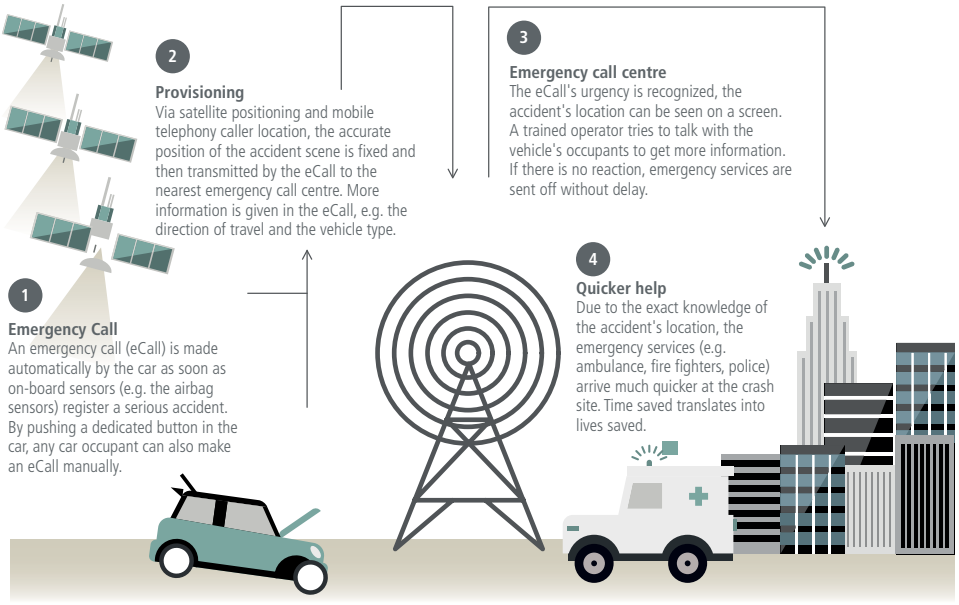
What are the components of pan-European eCall?

Three main elements are needed for the deployment of eCall:

- Vehicle and equipment manufacturers should include an in-vehicle system capable of bundling the Minimum Set of Data and triggering the eCall
- Mobile Network Operators should transmit the eCalls (voice and data) to the emergency call response centres (PSAPs)
- Member States should upgrade their Public Safety Answering Points (PSAP) in order to manage the eCalls

Successful eCall roll-out demands stakeholder collaboration and commitment by all the players and not primarily mobile operators. It is important that Member States provide their roadmaps on PSAP deployment as soon as possible.

eCall:How it works



Source: European Commission

1 GSMA & SBD: 2025 Every Car Connected: Forecasting the Growth and Opportunity, 2012

2 Clarification Paper BC1 - Overview of available studies on proven or assessed benefits of e-Call (August 2005) by the Safety Forum

What is the European Commission's Role?

eCall has been an EC priority in the context of road safety since 2002. As the voluntary deployment of eCall has so far been insufficient, the Commission initiated legislative action for its mandatory introduction by all stakeholders. Firstly, the EC issued the recommendation for Mobile Network Operators and for Member States.

EC Recommendation for Mobile Operators

A European Commission Recommendation was issued for mobile operators (the 8th of September 2011), which requires:

- Implementing the eCall discriminatory "flag" in all networks (as part of Release 8)
- Routing eCalls to the Public Safety Answering Points
- Handling eCalls as any other 112/E112 emergency call

This same recommendation also cites Member States to:

- Define Emergency Call infrastructure to receive the eCalls
- Communicate the most appropriate public safety answering point to route eCalls
- Report to the Commission on the implementation status by 31 March 2012

These deployments have to be completed by December 2014.

Legislative measures for Automakers and Member States

Member States and Automakers have important, onerous requirements for eCall.

For Automakers:

- Regulation under the vehicle type-approval legislation for the mandatory introduction of the in-vehicle part of the eCall service to ensure that all new cars will have to be equipped with eCall devices complying with agreed European standards (already approved by CEN and ETSI). This regulation is expected to be formulated by the fall 2012. Both the European Council and the European Parliament have indicated their support for mandatory implementation of eCall by 2015

For Member States:

- Delegated act to be adopted by the end of 2012 under the ITS Directive setting common specifications for upgrading the Public Safety Answering Point (PSAP) - to ensure emergency centres and rescue services are equipped for processing the data transmitted by the eCall

These three legislative acts are there to ensure an introduction of the eCall service across the European Union, plus Croatia, Iceland, Norway and Switzerland. Dates for live services are targeting end of 2015 – early 2016.

> "The paradigm of the 'connected vehicle' will become a reality... the same platform can be easily made available to support many other commercial ITS services whenever not busy generating an eCall."
>
> **Marco Annoni, ETSI TC ITS Vice Chairman, Telecom Italia**

If eCall implementation is further delayed what are the risks?

Any remaining uncertainty on eCall implementation needs to be removed as soon as possible, both because:

- The past uncertainty on deployment has stalled the decision on embedded connectivity for vehicles (because it was not clear what solution would be adopted) and hence, blocked the launch of connected vehicle services over the last eight years.
- Any further delays could result in changes in the solution to be adopted, with, potentially, significant impacts on operator resources for the new deployments.

Operators specifically run the following risks from non-compliance:

- More stringent regulations (using the Universal Services Directive to mandate eCall for operators)
- Associated increased financial burden to the new regulation
- Decline in operator reputation

Future Diary Date – GSMA eCall Webinar: Thursday 13th September 2012
Operators actively engaged in meeting the EC Requirements to deploy eCall will present their experiences and outlook to the larger European regulatory and operator community. This webinar will also include a Q&A session where operators can openly pose questions and considerations on eCall in greater detail.
To register your interest for this webinar or to be considered as a speaker or request a particular topic is addressed, please send an email to **mautomotive@gsm.org**

The GSMA supports eCall

In 2009 the GSMA formally expressed its support and commitment to collaborate with other stakeholders to realise the pan-european eCall service by signing a Memorandum of Understanding with the EC. GSMA Public Policy and our European Office in Brussels participated in this dialogue.
Importantly, eCall:

- Supports commercial opportunities for: Third Party eCall Services and SIM issuance.
- Supports a single harmonised solution for interoperability, minimum cost and availability of service.
- Limits liability for placing eCalls, to the same level of those for existing emergency calls.

The GSMA mAutomotive project

The GSMA mAutomotive project, part of the Connected Living programme, has brought eCall onto the agenda through the GSMA Connected Car Forum. The project aims to accelerate the development and deployment of telematics and infotainment services, by increasing the connectivity of cars, and reducing the barriers to adoption on a global scale. The GSMA Connected Car Forum is the platform where automakers and mobile operators meet on a regular basis to:

- Conduct trials and / or service launches for value-add services
- Showcase operator value assets in support of connected car services (such as split, service based charging and end-user payment)
- Support critical enablers
- Identifying requirements and next steps for connectivity barriers, for example eCall

The GSMA provides a reference for all European operators on eCall developments. The GSMA seeks to:

- Create awareness and understanding of the opportunities to drive the deployment of eCall and possible new revenue streams
- Enable collaboration between operators through knowledge sharing, which will speed up the readiness for deployment
- Facilitate resolution of deployment obstacles

How have eCall style services been implemented elsewhere?

Private, voluntary eCall services exist in many geographies, but their uptake is quite limited.

Regulatory approaches to emergency services are also being pursued in Russia with ERA-GLONAS.

Russian "eCall": ERA-GLONASS Deployment Planned January 2015 for Passenger Vehicles

What is ERA-GLONASS?

Russia has begun implementing an emergency call service, which builds upon common elements of European eCall, extending the approach to include additional features such as: GLONASS GNSS positioning, back-up data transmission mechanism using SMS.
Yaroslav Domaratsky, Director, Subscriber Equipment, NIS GLONASS underlines "We assume ERA-GLONASS will stimulate the market in Russia for both B2B and B2C segments resulting in telematics services growth."

ERA-GLONASS is committed to include both original equipment installations, as well as aftermarket / retrofit installations. Furthermore, ERA-GLONASS strives to evolve to address additional services beyond the basic emergency call, including: fleet management systems, stolen vehicle recovery systems, toll road system, digital tachographs, and on-board navigation equipment.

Yaroslav Domaratsky, goes on to underline that "ERA-GLONASS shall give new opportunities for mobile operators as this new market is enabled. NIS invites all operators to cooperate".

"eCall is a public pan-European emergency service that has been discussed, standardized, developed, and tested for a long time and certainly has the maturity for a European wide roll-out.

The GSMA can provide support to its members by creating the opportunity for open discussions about the possible technical, pre-operational and operation issues in order to achieve internal consensus to be jointly supported in the standardisation and regulatory environments."

Marco Annoni, ETSI TC ITS Vice Chairman, Telecom Italia

When will it be deployed?

Back-end ERA-GLONASS systems are planned for operation by the 1st quarter of 2014. First deployments will be targeting dangerous cargo transportation and collective passenger transportation by October 2014. All new passenger vehicles (e.g. automobiles and light vehicles) getting new (first) type approval will be required to have the ERA-GLONASS In-Vehicle System (IVS) installed from January 2015.

What is the status of the standards?

In December, 2011 by Order of Federal Agency of Technical Regulating and Metrology (ROSSTANDART) there were four approved national standards:

- GOST R 54620-2011 " Global navigation satellite system. Road accident emergency response system. In-vehicle emergency call system. General technical requirements"
- GOST R 54721-2011 "Global navigation satellite system. Road accident emergency response system. Base service description"
- GOST R 54618-2011 "Global navigation satellite system. Road accident emergency response system. Compliance test methods for electromagnetic compatibility, environmental and mechanical resistance requirements of In-Vehicle Emergency Call System"
- GOST R 54619-2011 "Global navigation satellite system. Road accident emergency response system. Protocol of Data Transmission from In-Vehicle Emergency Call System to Emergency Response System Infrastructure"

The following national standards are planned for approval by the end of 2012:

- GOST R draft "Global navigation satellite system. Road accident emergency response system. Functional test methods of In-Vehicle Emergency Call System and data transfer protocols" (includes functional test methods and data transfer protocols)
- GOST R draft "Global navigation satellite system. Road accident emergency response system. In-vehicle emergency call system. Requirements to determine the mechanism of the road accident, the algorithm determining the events and methods of testing in-vehicle system in the definition of the road accident"
- GOST R draft "Global Navigation Satellite System. Road accident emergency response system. Test methods for wireless communication module of In-Vehicle Emergency Call System"
- GOST R draft "Global Navigation Satellite System. Road accident emergency response system. In-Vehicle Emergency Call System. Compliance testing for the requirements for quality speakerphone in a vehicle"
- GOST R draft "Global Navigation Satellite System. Road accident emergency response system. Test methods for navigation module of In-Vehicle Emergency Call System"

Two remaining national standards are planned for approval in 2013:

- GOST R project "Global navigation satellite system. Road accident emergency response system. General terms"
- GOST R project "Global navigation satellite system. Road accident emergency response system. Terms and Definitions"

Useful Links

Useful References for eCall deployment:

- The European Parliament IMCO (Internal Market and Consumer Protection) and TRAN (Transport and Tourism) committees are drafting an own-initiative report on the regulatory introduction of eCall. www.europarl.europa.en/meetdocs/2009_2014/documents/cj06/pr/897/897390/897390en.pdf
- European eCall Implementation Platform (EeIP) - The EeIP is the coordination body bringing together all relevant stakeholders interested in the implementation of the pan-European eCall. www.icarsupport.eu/ecall/european-ecall-implementation-platform-eeip/
- HeERO (Harmonised eCall European Pilot) project - HeERO is an international pilot project preparing the general roll-out of the EU-wide seamless eCall service and includes nine European countries. www.ertico.com/heero

Technical:

- The list of standards related to Pan-European eCall can be found at http://ec.europa.eu/information_society/activities/esafety/doc/ecal/standards/annex_list_status.pdf

Other:

- The eCall Program Overview and Design Considerations by Sierra Wireless. www.gsma.com/connectedliving/the-ecall-program-overview-and-design-considerations/

GSMA Connected Living

About the Connected Living programme

Connected Living is a three year market development initiative whose mission is to help mobile operators accelerate the delivery of new connected devices and services. Our target is to assist in the creation of 700 million new mobile connections, whilst stimulating a number of service trials and launches in the Automotive, Education and Healthcare sectors. We also have a special focus on Smart Cities to support Barcelona becoming the Mobile World Capital.

www.gsma.com | connectedliving@gsm.org

June 2012