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COM(2013) 315 final

2013/0166 (COD)

Proposal for a

**DECISION OF THE EUROPEAN PARLIAMENT AND OF THE COUNCIL**

**on the deployment of the interoperable EU-wide eCall**

(Text with EEA relevance)

## **EXPLANATORY MEMORANDUM**

### **1. CONTEXT OF THE PROPOSAL**

This proposal addresses the part concerning the Public Safety Answering Points (PSAPs) infrastructure in the Commission strategy on eCall, based on a three-pronged regulatory approach encompassing the in-vehicle system, the telecommunications networks and the PSAPs.

#### **1.1. General context**

Road safety is one of the major elements of the European Union's transport policy. In 2011 around 30 000 people were killed and more than 1.5 million injured in about 1.1 million traffic accidents on EU roads. In addition to the tragedy of loss of life and injury, this also carries an economic burden of around EUR 130 billion in costs to society every year. The EU is fully committed to reducing the number of road accidents (through accident prevention or active safety), mitigating the consequences of accidents when they occur (passive safety), and improving the efficiency of the emergency services and the effectiveness of post-accident medical care (tertiary safety). In this context, eCall can significantly contribute to the reduction of road fatalities and alleviation of severity of road injuries.

Every minute is crucial to save lives and reduce the severity of injuries when emergency services are called to a road accident. eCall devices alert emergency services immediately, even if the driver or passenger is unconscious or otherwise unable to call, and speed up the arrival of emergency teams by an estimated 40% in urban areas and 50% in rural areas. eCall can also have a significant impact on the reduction of the congestion caused by the traffic accidents and thus the overall congestion of the European roads.

Therefore, the harmonised implementation of an interoperable EU-wide eCall service in the EU has been in the agenda of the Commission since 2005 and has become now a priority action for the improvement of road safety and the deployment of ITS in Europe.

As part of a voluntary deployment approach, the Commission in its 2005 Communication — entitled 'Bringing eCall to Citizens'<sup>1</sup> — strongly urged national and regional governments to act and to invest in the necessary emergency infrastructure for eCall, with a view to launching the full pan-European service in 2009. The Commission also asked the European Standardisation Organisations (ETSI, CEN) to draw up the necessary common European standards and provided support to this end.

On 21 August 2009 the Communication 'eCall: Time for Deployment'<sup>2</sup> reported on the progress in introducing eCall and concluded that the voluntary approach had not been sufficient. The Commission indicated that unless significant progress was made by the end of 2009, it would consider regulatory measures to ensure that eCall standard equipment was installed in all new vehicles in Europe, starting with certain categories (passenger cars and light commercial vehicles).

In August 2010, Directive 2010/40/EU of the European Parliament and of the Council of 7 July 2010 on the framework for the deployment of Intelligent Transport Systems in the field of road transport and for interfaces with other modes of transport<sup>3</sup> entered into force with 'harmonised provision for an interoperable EU-wide eCall' as one of the six priority actions identified for the adoption of specifications.

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<sup>1</sup> COM(2005) 431 final

<sup>2</sup> COM(2009) 434

<sup>3</sup> OJ L 207, 6.8.2010, p. 1.

In its non-legislative resolution ‘report on eCall: a new 112 service for citizens’<sup>4</sup> adopted on 3 July 2012, the European Parliament stated the following:

- ‘Considers that eCall should be a public EU-wide emergency call system, embedded in the vehicle and based on 112 and on common pan-European standards’,
- ‘Recalls that the Commission’s impact assessment shows that the adoption of regulatory measures to enforce the mandatory introduction of eCall is at present the only option to achieve all positive effects’,
- ‘Urges the Commission to submit a proposal within the framework of Directive 2007/46/EC in order to ensure the mandatory deployment of a public, 112-based eCall system by 2015 in all new type-approved cars and in all Member States’,
- ‘Welcomes the Commission’s recommendation of 8 September 2011, and urges the Member States and the Mobile Network Operators (MNOs) to implement its required measures and upgrades at the latest by the end of 2014; regrets, however, that only 18 Member States responded in time; calls on the remaining Member States to do so as soon as possible’,
- ‘Urges the Commission to adopt the common specifications for PSAPs within the framework of the ITS Directive by the end of 2012, and to propose a directive on the implementation of eCall’.

The deployment of eCall will also constitute a delivery of the CARS 2020 Action Plan, which is included in the Communication of 8 November 2012 ‘CARS 2020: Action Plan for a competitive and sustainable automotive industry in Europe’<sup>5</sup>.

On 26 November 2012, the Commission adopted the Delegated Regulation (EU) No 305/2013 supplementing Directive 2010/40/EU of the European Parliament and of the Council with regard to the harmonised provision for an interoperable EU-wide eCall<sup>6</sup> which establishes the specifications for upgrading the Public Safety Answering Point (PSAP) infrastructure required for the proper receipt and handling of eCalls, in order to ensure the compatibility, interoperability and continuity of the harmonised EU-wide eCall service.

## **1.2. Grounds for the proposal**

Given the absence of any significant progress in the voluntary deployment of eCall by the end of 2009, the Commission decided to conduct an Impact Assessment in order to assess the most appropriate policy option to implement the EU-wide eCall service in Europe.

As explained in the Impact Assessment<sup>7</sup>, eCall requires three types of measures: the fitting of a specific system in vehicles, the ability of mobile network operators to transmit messages in a certain format and, lastly, the capacity of the emergency call response centres (also known as PSAPs — Public Safety Answering Points) to handle these messages. The system can only be operational if all three parts are in operation simultaneously.

The Impact Assessment concluded that the best option to implement eCall effectively is a ‘regulatory’ approach. eCall will then be based on the installation of type-approved equipment for the Single European Emergency Number 112 in all vehicles, starting with certain categories of vehicles, and a framework for handling eCalls in the telecommunication networks and PSAPs. This approach will make eCall available to all citizens in Europe as an

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<sup>4</sup> P7\_TA(2012)0274

<sup>5</sup> COM(2012) 636 final

<sup>6</sup> OJ L 91, 3.4.2013, p. 1.

<sup>7</sup> SEC(2011) 1019 final

EU-wide service, accelerate take-up and realise the full potential of eCall to save lives and mitigate the severity of injuries. Building on or coexisting with this 112 standard factory equipment, additional in-vehicle emergency and/or added value services may be provided to the end-user giving further safety and economic benefits.

Accordingly, the Commission unveiled on 8 September 2011 its strategy on regulatory measures for eCall, together with the adoption of the first part of this strategy, which consisted of a Commission Recommendation<sup>8</sup> on support for an EU-wide eCall service in electronic communication networks for the transmission of in-vehicle emergency calls based on 112 ('eCalls').

In order to complete the implementation of its eCall strategy and ensure timely and parallel implementation of the eCall service based on 112 by the three stakeholder groups involved (mobile network operators, public emergency services and automotive industry) by 2015, the Commission proposes the following:

- In-vehicle system: a proposal under the framework provided by Directive 2007/46/EC to mandate eCall in all new types of M1 and N1 vehicles (passenger cars and light duty vehicles).
- Mobile communication networks: the above-mentioned eCall Commission Recommendation.
- Public Safety Answering Points: the adoption of the above mentioned Delegated Regulation as a delegated act under Directive 2010/40/EU in order to address the specifications for the PSAPs.

Article 6(2) of Directive 2010/40/EU requests the Commission to present at the latest 12 months after the adoption of the necessary specifications for a priority action, where appropriate and after conducting an impact assessment including a cost-benefit analysis, a proposal to the European Parliament and the Council in accordance with Article 294 of the Treaty on the Functioning of the European Union (TFEU) on the deployment of that priority action.

This is the specific object of this proposal, which completes the 'PSAP' part of the Commission strategy on eCall.

These different texts are complementary and together will allow for the 112 eCall service to be fully operational by 1 October 2015.

## **2. RESULTS OF CONSULTATIONS WITH THE INTERESTED PARTIES AND IMPACT ASSESSMENTS**

### **2.1. Consultations with interested parties**

This proposal is the result of extensive consultations with major stakeholders:

It takes into consideration all the consultations in the course of the eCall Impact Assessment. These included, in particular, extensive contributions from stakeholders involved in several fora such as the European eCall Implementation Platform (EeIP), the eCall PSAPs Expert Group and the eCall Driving Group within the eSafety/i-Mobility Forum, and a public consultation on the implementation of eCall from 19 July to 19 September 2010.

The proposal also takes into account the discussions in the meetings held with experts from Member States, EEA countries and Switzerland on 13 October 2011, 29 May, 19 June and 03

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<sup>8</sup> 2011/750/EU

July 2012 to prepare the specifications for the PSAPs. These meetings were also attended by representatives from the European Parliament and the European Data Protection Supervisor<sup>9</sup>.

Finally, this proposal also takes into consideration the opinion of the European ITS Advisory Group, composed of 25 high level representatives from ITS service providers, associations of users, transport and facilities operators, manufacturing industry, social partners, professional associations, local authorities and other relevant fora<sup>10</sup>.

## **2.2. Impact assessment and cost-benefit analysis**

An extensive cost-benefit analysis was conducted as part of the eCall Impact Assessment for the three proposed options, including the preferred option on regulatory measures.

As far as the cost-benefit analysis of the chosen option (option 3) is concerned, each of the three planned eCall regulatory measures (in-vehicle, telecommunication, PSAP) is inseparable from the other two. While costs for the PSAPs can be estimated separately from the in-vehicle and telecommunication parts of eCall, the benefits can be estimated only for the whole eCall initiative.

### *2.2.1. Analysis of main costs for PSAPs*

The marginal costs of handling the 112 eCalls for each PSAP equipped to handle 112 calls enhanced with location capabilities — E112 calls (obligation under the Universal Service Directive<sup>11</sup>) — cover the following:

- In-band modem server (from €3 000 to €20 000, depending on the number of eCalls)
- Software to decode the MSD (minimum set of data) and integration with the PSAP software
- Training

Annual operational costs should be added to these costs. Where the eCalls will be received in a PSAP that also receives other emergency calls, the majority of these costs will be subsumed within the normal operational costs. Otherwise they will depend on the number of operators needed to handle the estimated number of eCalls<sup>12</sup>.

The estimated costs of upgrading PSAPs average around EUR 1.1 million per Member State<sup>13</sup>. This estimate derives from a cluster analysis based on the density of population of the country, accident typologies, road and emergency response infrastructures, and other general statistics. The cost in each country varies considerably depending on the number of PSAPs, but also on the technical solution chosen for upgrading the PSAPs.

Additional information on costs was provided by the HeERO pre-deployment pilot<sup>14</sup> (Jan. 2011 to Jan. 2013) which involved the authorities of nine Member States and associated countries, as well as forty partners. The objective of the project was to prepare for the deployment of the necessary infrastructure, including the start-up of an interoperable, harmonised 112-based in-vehicle emergency call system. The project will be followed up by the HeERO2 pilot launched in early 2013 and that will run for 24 months, involving an additional nine Member States and associated countries.

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<sup>9</sup> See agenda and summary record

<sup>10</sup> <http://ec.europa.eu/transparency/regexpert/index.cfm?do=groupDetail.groupDetail&groupID=1941>

<sup>11</sup> <http://ec.europa.eu/transparency/regexpert/index.cfm?do=groupDetail.groupDetail&groupID=2736>

<sup>12</sup> Directive 2002/22/EC, Art. 26

<sup>13</sup> SEC(2011) 1019 final, Annex III

<sup>14</sup> SEC(2011) 1019 final, Annex XIV

<sup>15</sup> [http://ec.europa.eu/information\\_society/apps/projects/factsheet/index.cfm?project\\_ref=270906](http://ec.europa.eu/information_society/apps/projects/factsheet/index.cfm?project_ref=270906)

The HeERO pilot has helped to demonstrate that innovative solutions can reduce costs in comparison to the rather conservative approach followed in the eCall impact assessment, especially for those Member States where there are a large number of PSAPs. It also confirmed that the estimated and real costs of implementation were within the expected ranges.

#### 2.2.2. *Analysis of main benefits*

The benefits identified in the impact assessment and several studies, including national ones, include:

- Reduction in fatalities (with all vehicles eCall-equipped, between 1% and 10% depending on country population density and road and emergency response infrastructure)<sup>15</sup>.
- Reduction in the seriousness of the injuries (between 2% and 15%)<sup>16</sup>.
- Reduction in congestion costs caused by traffic accidents. This is due to improved accident management, as the accident is immediately notified to the PSAPs and can therefore be transferred to the appropriate Traffic Management Control, which can immediately inform other road users, and help reduce secondary accidents.
- Facilitation of rescue services and increased security of rescue team (e.g. fire-fighters) when extracting trapped occupants, as the MSD will, among other things, provide information on the fuel type.
- Reduced SOS roadside infrastructure, as each road user would be able to trigger an emergency call from their vehicle.

#### 2.2.3. *Cost-benefit ratio*

Benefits have also been monetised<sup>17</sup> and a cost-benefit analysis drawn up for the different options and for types of affected categories. The estimations are calculated up to year 2033 as this is the expected year of full penetration of the eCall service under the preferred policy option.

	Policy option 1 No EU action	Policy Option 2 Voluntary approach	Policy Option 3 Regulatory measures
Benefit-Cost Ratio	0.29	0.68	1.74

### 3. **LEGAL ELEMENTS OF THE PROPOSAL**

#### 3.1. **Legal basis**

Article 6(2) of Directive 2010/40/EU requires the Commission to present at the latest 12 months after the adoption of the necessary specifications for a priority action, where appropriate and after conducting an impact assessment including a cost-benefit analysis, a proposal to the European Parliament and the Council in accordance with Article 294 TFEU on the deployment of these specifications.

<sup>15</sup> SEiSS, E-MERGE, eIMPACT, AINO studies. For a more detailed analysis on the calculation, please see Annex IV of the eCall Impact Assessment.

<sup>16</sup> SEiSS, E-MERGE, eIMPACT, AINO studies. For a more detailed analysis on the calculation, please see Annex IV of the eCall Impact Assessment.

<sup>17</sup> SEC(2011) 1019 final, Annexes IV and XIV

### **3.2. Subsidiarity and proportionality**

According to the principle of subsidiarity (Article 5(3) of the Treaty on European Union), action at EU level should be taken only when the aims envisaged cannot be achieved sufficiently by Member States alone and can therefore, by reason of the scale or effects of the proposed action, be better achieved by the EU.

Road safety is an issue of major concern across the entire European Union and for all of its inhabitants: 500 million citizens in the 27 Member States use more than 230 million vehicles on over 5 million km of roads. The purpose of the interoperable EU-wide eCall initiative is ultimately to introduce in all vehicles in Europe the minimum functionalities needed to ensure adequate handling of emergency calls by the emergency response services. Currently, there are more than 100 million road journeys every year across the various Member States and the number is increasing due to further consolidation of the European Union (through the free movement of goods, people and services). Action is needed at EU level in order to guarantee interoperability and continuity of the service throughout Europe, which cannot be satisfactorily achieved by individual Member States alone. Moreover, taking action at EU level using common European eCall standards approved by the European Standardisation Organisations (CEN and ETSI) will ensure efficient provision of the emergency response service across Europe, for example in the case of vehicles travelling abroad, and also help to avoid market fragmentation (which may occur as a result of the proliferation of national and/or proprietary private solutions implemented in differing ways).

The EU-wide eCall, in line with 112 and E112 deployment, has been designed in such a way as to minimise the impact on all stakeholders in the value chain (automotive industry, mobile network operators, Member States, PSAPs), and to distribute this impact fairly.

The current proposal calls on Member States to deploy the necessary eCall PSAP infrastructure required for the proper receipt and handling of all eCalls on their territory, in accordance with the specifications laid down by Commission Delegated Regulation (EU) No 305/2013 of 26 November 2012 supplementing Directive 2010/40/EU of the European Parliament and of the Council with regard to harmonised provision for an interoperable EU-wide eCall, in order to ensure the compatibility, interoperability and continuity of the EU-wide eCall service. The plan is to keep the financial and administrative costs for national/regional authorities to a minimum, commensurate with the objectives to be achieved. A substantial part of implementation (organisation of the PSAPs) is left to national decision-making bodies. The PSAPs infrastructure will be upgraded by the Member States in a manner best suited to their national/local architecture, thereby respecting the specific issues and circumstances that apply in each Member State. Each Member State will be able to organise its emergency services in the way most cost effective and appropriate to its needs, including the possibility to filter calls that are not emergency calls and may not be handled by eCall PSAPs, in particular in the case of manually triggered eCalls.

### **3.3. Detailed explanation of the proposal**

Article 1 requires the Member States to deploy the necessary eCall PSAP infrastructure required for the proper receipt and handling of all eCalls on their territory no later than 1 October 2015.

Article 2 requires the Member States to report to the Commission on the state of implementation of this Decision 18 months at the latest after the entry into force of this Decision.

Article 3 provides for the Decision to enter into force on the twentieth day following that of its publication in the Official Journal of the European Union.

#### **4. BUDGETARY IMPLICATIONS**

There are no budgetary implications for the EU budget.

#### **5. OPTIONAL ELEMENTS**

- European Economic Area

The proposed act concerns an EEA matter and should therefore extend to the European Economic Area.



Proposal for a

**DECISION OF THE EUROPEAN PARLIAMENT AND OF THE COUNCIL**

**on the deployment of the interoperable EU-wide eCall**

(Text with EEA relevance)

THE EUROPEAN PARLIAMENT AND THE COUNCIL OF THE EUROPEAN UNION,

Having regard to the Treaty on the Functioning of the European Union, and in particular Article 91 thereof,

Having regard to the proposal from the European Commission,

After transmission of the draft legislative act to the national Parliaments,

Having regard to the opinion of the European Economic and Social Committee<sup>18</sup>,

Having regard to the opinion of the Committee of the Regions<sup>19</sup>,

Acting in accordance with the ordinary legislative procedure,

Whereas:

- (1) Under Article 3(d) of Directive 2010/40/EU of the European Parliament and of the Council of 7 July 2010 on the framework for the deployment of Intelligent Transport Systems in the field of road transport and for interfaces with other modes of transport<sup>20</sup>, the harmonised provision for an interoperable EU-wide eCall service constitutes a priority action for the development and use of specifications and standards.
- (2) Article 6 of Directive 2010/40/EU requires the Commission to adopt delegated acts as regards specifications necessary to ensure compatibility, interoperability and continuity for the deployment and operational use of intelligent transport systems (ITS) for the priority actions.
- (3) Commission Delegated Regulation (EU) No 305/2013 of 26 November 2012 supplementing Directive 2010/40/EU of the European Parliament and of the Council with regard to the harmonised provision for an interoperable EU-wide eCall<sup>21</sup> establishes the specifications for upgrading the Public Safety Answering Point (PSAP) infrastructure required for the proper receipt and handling of eCalls, in order to ensure the compatibility, interoperability and continuity of the harmonised EU-wide eCall service.
- (4) Article 6(2) of Directive 2010/40/EU requires the Commission to present at the latest 12 months after the adoption of the above-mentioned Delegated Regulation, where appropriate and after conducting an impact assessment including a cost-benefit

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<sup>18</sup> OJ C , , p. .

<sup>19</sup> OJ C , , p. .

<sup>20</sup> OJ L 207, 6.8.2010, p. 1.

<sup>21</sup> OJ L 91, 3.4.2013, p. 1.

analysis, a proposal to the European Parliament and the Council in accordance with Article 294 of the Treaty on the Functioning of the European Union on the deployment of these specifications.

- (5) It is expected that, by reducing the response time of the emergency services, the interoperable EU-wide eCall service will reduce the number of fatalities in the Union as well as the severity of injuries caused by road accidents. The interoperable EU-wide eCall service is also expected to bring savings to society by improving incident management and by reducing road congestion and secondary accidents.
- (6) In order to ensure the interoperability and continuity of the service throughout the Union, and reduce the costs of implementation for the Union as a whole, it is necessary that all Member States deploy the eCall priority action in accordance with the common specifications established in Delegated Regulation (EU) No 305/2013. This should be without prejudice to the right of each Member State to deploy additional technical means to handle other emergency calls.
- (7) As experienced with other emergency calls systems, manually triggered eCalls may include a share of assistance calls. If necessary, Member States may implement all appropriate technical and organisational means in order to filter these assistance calls to ensure that only real emergency calls are handled by eCall PSAPs.
- (8) Since the objective of this Decision, namely to ensure the coordinated and coherent deployment of the interoperable EU-wide eCall service and to guarantee interoperability and continuity of the service throughout Europe, cannot be sufficiently achieved by the Member States and/or the private sector and can therefore, by reason of its scale and effects, be better achieved at Union level, the Union may adopt measures, in accordance with the principle of subsidiarity as set out in Article 5 of the Treaty on European Union. In accordance with the principle of proportionality as set out in that Article, this Decision does not go beyond what is necessary in order to achieve that objective,

HAVE ADOPTED THIS DECISION:

#### *Article 1*

Member States shall deploy no later than 1 October 2015 the necessary eCall PSAP infrastructure required for the proper receipt and handling of all eCalls, if necessary purged of non-emergency calls, on their territory, in accordance with the specifications laid down by Delegated Regulation (EU) No 305/2013, in order to ensure the compatibility, interoperability and continuity of the interoperable EU-wide eCall service. This is without prejudice to the right of each Member State to organise its emergency services in the way most cost effective and appropriate to its needs, including the possibility to filter calls that are not emergency calls and may not be handled by eCall PSAPs, in particular in the case of manually triggered eCalls.

#### *Article 2*

At the latest 18 months after the entry into force of this Decision, Member States shall report to the Commission on the state of implementation of this Decision. This report shall include at least the list of competent authorities for assessing the conformity of the operations of the eCall PSAPs with the requirements listed in Article 3 of Delegated Regulation (EU) No 305/2013, the list and geographical coverage of the eCall PSAPs, the description of the conformance tests and the description of the privacy and data protection protocols.

*Article 3*

This Decision shall enter into force on the twentieth day following that of its publication in the *Official Journal of the European Union*.

*Article 4*

This Decision is addressed to the Member States.

Done at Brussels,

*For the European Parliament  
The President*

*For the Council  
The President*