Touring HGV eCall & e-CMR in Europe

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eCall

- eCall: emergency call triggered manually by vehicle occupants or automatically by in-vehicle sensors when collision is detected.
- When activated, the system dials 112 which sets up a voice connection with a Public Safety Answering Point (PSAP).
- A minimum set of data (MSD) is sent to the PSAP: accident geo-location + vehicle make and model
- This info is forwarded to a traffic information center and to emergency services.
- All new cars and vans sold in the EU will have to have eCall installed from 31st March 2018.
How eCall works

Legend:
- PSAP112: Emergency call centre 112
- MSD: Minimum set of data
  - Data connection
  - Voice connection
- eCall for HGV, buses and coaches
- eCall for cars and light vehicles
- eCall PTW (powered two wheelers)

The satellite indicates the precise location of the vehicle.

eCall immediately after the collision, the vehicle unit transmits the following data to PSAP 112: time and location of the collision, direction and number of passengers. The occupants in a vehicle communicate with the 112 operator.

Mandatory deployment of eCall for Member States PSAP by 1 October 2017 applies to cars and light vehicles.

Additional data (besides the MSD) may be necessary for the emergency services to be effective. For HGV (including dangerous goods), information on the quantity and type of cargo is a key and external source of information, for example electronic documents such as eCRS and eACR, could be vital. For buses and coaches, the number of passengers is key and passengers' list provided electronically could be very useful for rescue services.

eCall for PTW

Due to the absence of a collision-indicating trigger, like the airbag trigger in passenger cars nowadays, a specific triggering method is necessary for PTW. This triggering system, as well as the statistical injury prediction method, will lead to a realistic minimum of false positive and an acceptable level of false negative calls to PSAPs.

Integrated Emergency System
The emergency system sends units to the location of the accident.

RESUCE INTERVENTION

This project is funded by the European Union.
eCall for HGV

- Information on **goods transported**
eCall for HGV

- Information on **goods transported**
- Especially relevant for dangerous goods transport
- Needs to be up-to-date (carrier!)
- Details on consignor/consignee (including phone contact)
- Data can be stored in IVS or retrieved from external database
- Should be accessible only in case of incident (eCall)
- e-CMR can be the common format
- Several custom local dangerous goods database implementations
eCall for buses and coaches

• Number of passengers
eCall for buses and coaches

- **Number of passengers**
- Linked to number of tickets sold
- Ticketing not always digitalized
- Input by the driver
- Implementation of new solutions can be costly
- Personal data / PNR: privacy issues
eCall for HGV, buses & coaches

**Legend:**
- **PSAP**: Emergency call centre (112)
- **MSD**: Minimum set of data
- **Data connection**
- **Voice connection**

**eCall**
Immediately after the collision, the vehicle unit transmits the following data to PSAP: type of vehicle, time, location and direction. The occupants can then communicate with the 112 operator.

**EXTERNAL CARGO INFORMATION DATABASE**

**DG-TRAC**
Tracking & tracing of Dangerous Goods in the medical sector

**e-CMR**

**PSAP**
The operator can see the location of the collision on the map, as well as the data transmitted by the eCall system and can communicate with the passengers. They ensure immediate dispatch of emergency units and forward information about the collision to the traffic information and management center.

**INTEGRATED EMERGENCY SYSTEM**
The emergency system sends units to the location of the accident.

**112**
Traffic Management

**Unified Traffic Information System**

**VMS**
Traffic Info

**INSTRUCTION TO SEND UNITS**

**RESCUE INTERVENTION**
I_HeERO project

• I_HeERO (Infrastructure Harmonised eCall European Pilot) aims at preparing project Member States’ PSAPs for deployment of 112 eCall for two-wheelers, HGVs and long distance buses & coaches.

• Project co-funded by EU: 1st Jan. 2015 - 31st Dec. 2017

• Project Member States: Bulgaria, Cyprus, the Czech Republic, Finland, Germany, Greece, Ireland, Italy, Portugal, Romania and Slovenia.

• 58 commercial partners and 26 associated partners in total.