

HeERO 112 SOS

Harmonised eCall European Pilot



Pan-European eCall - The Italian project HeERO best practice in Europe

Save up to 2,500 lives each year on Europe's roads and save more than 20 billion euro of social spending, reducing up to 50% the response times of emergency services following an accident: these are the targets of the eCall system, which will be mandatory on all new cars by the end of 2015.

But how does eCall work? In the event of a serious accident, the eCall device in the vehicle automatically generates a call to the 112 which, we remind, is the European Unique Number (NUE) of the public service for emergency calls; when the rescue centre closest to the crashed vehicle responds, the device immediately sends a set of data, including the exact GPS position of the vehicle, and then establishes a voice connection with the operator of the rescue centre. Once acquired additional information about the emergency in progress, the centre coordinates the emergency services to be sent to the accident site.

The call can also be activated manually, with the same effects, via a dedicated eCall button.

To promote the eCall system and calibrate its set-up, nine European countries (Italy, Croatia, Czech Republic, Finland, Germany, Greece, Netherlands, Romania and Sweden) with 40 public and private partners including automakers, automotive operators and mobile network operators have given rise to the European project HeERO (Harmonised eCall European Pilot), co-funded by the European Commission.

Italy is present in the project HeERO with the Presidency of the Council of Ministers, which is coordinating the project, Magneti Marelli, Centro Ricerche Fiat CRF, Telecom Italy, AREU (Regional Emergency Urgency - Lombardy) and the Automobile Club of Italy.

The Italian pilot, unique in the European context, is characterized by the fact that it has implemented the eCall system on a end-to-end, real chain and not into a simulated environment. For example as centre to manage the eCalls it has chosen an operative centre of the real 112, which is the operational centre of the NUE 112 of Varese, which represents, in Italy the first example of a 1st level PSAP completely adequate to the standards required by the European Unique Number 112.

This PSAP has been upgraded by AREU (Regional Emergency Urgency - Lombardy), both hardware and software, in order to receive the emergency eCalls, while Telecom Italy has modified the telecommunication networks operating in Varese, both fixed and mobile, to route the eCalls towards the 112 NUE centre.

The on board devices have been developed by Magneti Marelli. These devices, in order to assess the coexistence of public service with a private service, in addition to managing the Pan-European eCall allow you to make an emergency call for mechanical problems, the so-called bCall or breakdown Call.

These devices have been installed into vehicles of volunteer users selected among the ACI members of Varese; in this way, they have participated in the tests with their cars and have provided valuable feedback on the system and its use.

The presence of CRF / FGA among the project partners has allowed to address all the issues related to the integration of the eCall device in the vehicle and to analyze the performance data of the system.

ACI has provided its call center dedicated to roadside assistance to test the bCall and its Traffic Info Centre "Luce Verde" Milano to verify the benefits of eCall also in terms of efficiency of information services to citizens potentially interested in accidents and similar events. In addition, it recruited among its members of Varese those who participated in the road test and took care of all aspects of dissemination and information.

The Presidency of the Council of Ministers assured both the coordination of partners' activities with those of the European consortium, and the coordination with the national administrations involved in the Pan-European eCall system (Ministry of the Interior, Ministry of Infrastructure and Transport, Ministry of Economic Development).

The results of the Italian test site have been presented at the first edition of Smart Mobility World, an international congress dedicated to the topics of Smart City and Green Mobility, held in Turin on 26 and 27 September.