



Iskratel Public Safety infocommunications

Iskratel eCall solution for Emergency situations

Key features

- **Shortens** emergency services' response times for more than 50%
- Extremely **cost-effective** solution,
- Scalable, flexible and future-proof platform suitable for **upgrading existing PSAPs** with eCall functionality.
- **Cloud service** models and provision of value added services on top of eCall.

Traffic accidents are one of the major causes of deaths and injuries in Europe. Fast and efficient response of emergency services is crucial to save lives and reduce human injuries.

eCall is a Pan-European service which will be integrated in all vehicles and will automatically or manually report about accidents to right authorities. It is based on system **112**, European emergency call number.

In case of a car accident, an eCall-enabled car automatically calls the nearest emergency centre. Even if no passenger is able to speak a Minimum Set of Data (**MSD**) is sent to the operator, which includes the exact location of the crash site and information about the vehicle.

Moreover, there are many situations where the passengers may not be in a position to call or are unable to provide the precise location. Furthermore, travellers driving abroad may have language problems..

ISKRATEL'S APPROACH

In order to be able to receive eCalls Public Safety Answering Points (**PSAP**) need to adapt their systems. They need to communicate with the in-vehicle equipment and make sure that their applications make the MSD information available for the first responders.

PSAP receiving eCalls will be able to provide the functionalities:

- warn the operator about a new eCall
- display the minimum set of data
- decode vehicle identification number
- warn the operator about the availability of the voice call
- provide a call-back capability
- provide a geographical information:
 - display the location of the vehicle,
 - direction,
 - the last position.

CHALLENGES

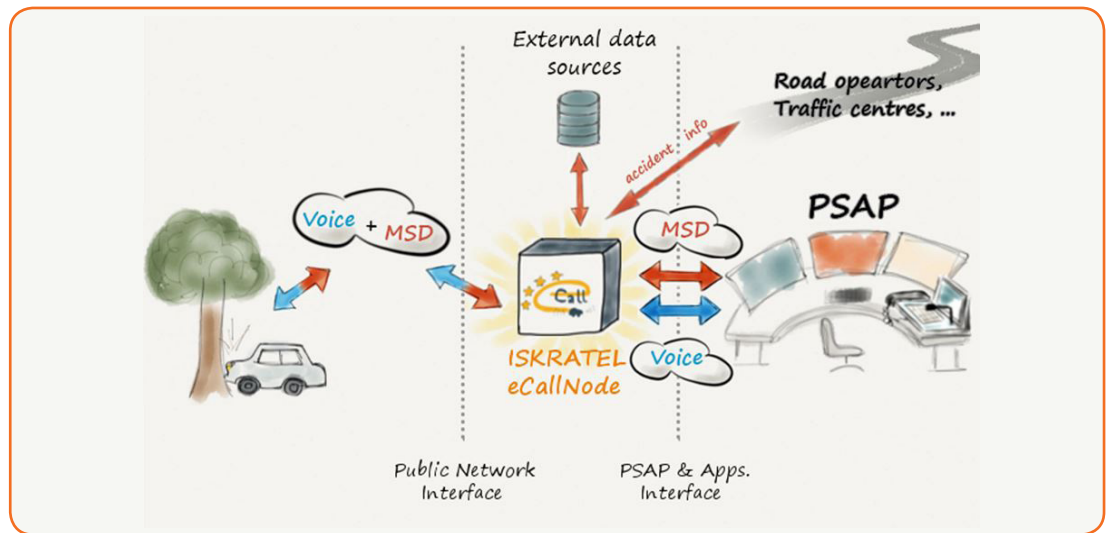
Iskratel eCall Node an extremely cost effective solution, which fits into any environment. Main challenges that the solution meets are:

- Cuts of governments spendings
- How to handle eCalls to avoid overload situations at 112 centres control rooms?
- The mobile network operators are rapidly shifting to all-IP network infrastructure of 4G mobile technology (LTE).

Why

Iskratel eCall?

- **Modularity** – standalone modules
- **Overall IP architecture**
- **Easy integration** with existing systems
- **Open o new IP services**
- **70 years of Iskratel experience integrated**



ISKRATEL ECALL NODE

It supports variety of Network and Data Interfaces:

- TDM interfaces: SS7, ISDN PRA, ISDN BRI
- VoIP interfaces: SIP, SIP-I/T, IMS SIP

Solution offers open data interfaces for integration with national databases and other relevant resources in order to obtain information that is necessary for dealing with an eCall through HTTPS, SOAP, REST, XML, ODBC, etc.

Intelligent routing of voice and data enables routing of calls defined on the basis of different variables:

- **Parameters received by MSD** (GPS, automatically/manually triggered call etc.)
- **Parameters received by telephony signalling** (Called Party Number, Cell Global Identity - CGI, etc.)
- **Multi-level** (multi-stage) **routing**
- **Filtering of routed data** (MSD) dependent on user/destination

High availability is assured by redundant configuration of the solution's vital components with geo-redundancy option.

When eCall Node application is used in the cloud, it can be orchestrated also with commercial applications and integrated with VIN, EUCARIS, and other databases.

The solution is next-generation eCall ready, so it is future-proof.

SOLUTION HIGHLIGHTS

The quicker response will save thousands of lives in the EU every year. The severity of injuries will be considerably reduced in tens of thousands of cases. eCall will also result in faster treatment of injured people, thereby giving accident victims better recovery prospects.

Arriving at the accident scene sooner will also allow faster clearance of crash sites, thus reducing the risk of secondary accidents, decreasing congestion times, cutting fuel waste and lowering CO₂ emissions.

SI3000 eCall Node is a scalable, flexible and future-proof platform suitable for upgrading existing PSAPs with eCall functionality. Providing some advanced features eCallNode is also fit for cloud service models and provision of value added services on top of eCall.

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