eCall Router for Third Party Services
THE INTELLIGENT ECALL UPGRADE
OECON eCall Router – Simply connect your Third Party Service (TPS) to 112 emergency centres all over Europe

OECON’s eCall Router provides all necessary equipment to receive and decode eCalls in European 112 eCall format. It also provides all interfaces for connecting TPS and 112 PSAPs for forwarding data and emergency voice calls.

Features

• Receiving, recording and decoding of MSD (Minimum Set of Data)
• Perfect integration into existing telephony systems (SIP, ISDN)
• XML-based interfaces for simple data integration into existing software solutions
• Forwarding data to 112 PSAPs in several formats
• Web interface for configuration
• Forwarding eCalls to the appropriate PSAP with the RegionBorderTM feature
• Scalable server support
• Up to 100 simultaneous calls per license
• 99.99% reliability in redundant environment

The eCall Router is a certified product and implements all necessary eCall standards according to CEN and ETSI.
Connection: the easy way

The EU standard EN16102 specifies how eCalls can be transmitted to the PSAPs. However, as it is an optional standard, only a few PSAPs in Europe have implemented it. With our eCall Router, you have several technical possibilities to forward your eCall data to the PSAPs.

Five different ways to transfer your eCall data

Introduced in 2015, AML is used to transmit coordinates from mobile phones when calling 112 by using SMS or data transmission. Currently, AML is rolled out across Europe. The eCall transmits the data to the appropriate AML server, where the PSAP can retrieve it like normal AML messages.

If no higher-level transmission procedures are available, the eCall Router can send an e-mail to the appropriate PSAP containing the eCall data and a digital map showing the coordinates of the affected car.

Some countries support the reception of eCall data in its original format using Inband modem. The eCall Router encodes the eCall data and transmits it over the voice channel by using exactly the same method as with the original eCall.

The eCall router can be extended with simple add-on libraries to support proprietary transmission interfaces. This method is a bit more complex than the others, but it allows supporting almost any possible interface.

EN16102 is the preferred transmission method by the European Commission. The eCall Router transfers the eCall data in XML over a password-secured channel from the TPS to the PSAP.
Trust performance over promises with our proven eCall router technology

OECON’s eCall Router is designed as an out-of-the-box product for upgrading PSAPs and TPS to support eCall with minimum effort and investment. Furthermore, using the eCall Router allows you to trust a stable, proven and certified platform already working in PSAPs in half of the EU member states.

Since the introduction of OECON’s eCall product range in 2010, many companies in the automotive industry are testing their devices with our eCall products. In addition, several organisations responsible for conformity assessment certification trust OECON. Many European Member States and several TPS Providers already take advantage of the OECON eCall Router for enabling their services with eCall technology.

Integration – It’s just easy

The OECON eCall Router is designed as an add-on to existing TPS solutions. It uses unified XML interfaces to communicate with existing TPS software, and standard ISDN / SIP features to communicate with the PBX. The OECON eCall Router supports a scalable installation for maximum reliability (99.99% with two servers) and stability. Each server supports up to 100 simultaneous calls.

By supporting different ways of data transmission to the PSAPs, the eCall Router is the most flexible way to connect TPS with PSAPs all over Europe.

Installation Requirements

- Software Package with Installer – runs on Ubuntu 16.04 and higher
- Virtual Machine – completely pre-installed system runs on VMWare or other virtual host systems (not available for ISDN PBX)
- Machine with Intel or AMD processor (Intel i5 or higher, 3rd Gen or higher or AMD Ryzen), 16GB RAM, 500GB HDD/SSD
- ISDN add-on card for support for ISDN networks
- Ethernet connector for SIP (motherboard with two Ethernet connectors recommended)

Benefits

- for all types of PSAP infrastructure
- minimum investment required
- legal certainty – all eCall requirements are fulfilled
- 112 calls with exact location information
- can save lives – reduces arrival time of rescue services

OECON Products & Services GmbH
General information about eCall

eCall is an emergency call system integrated into new vehicles from 2018. The purpose of this system is to drastically reduce the amount of people killed in road accidents. After a road accident the eCall-system automatically establishes an emergency call to the relevant emergency services (normally the nearest 112 Public Safety Answering Point, PSAP), thereby carrying both voice and data. After being triggered the in-vehicle eCall dials 112 (European emergency number) and sends specific details of the accident to the emergency rescue service:

- time of accident
- accurate position
- direction of travel (especially on motorways & in tunnels)
- number of passengers
- type of vehicle

An emergency call can be generated either automatically via activation of in-vehicle sensors after a crash or manually by the vehicle occupants pushing a button.

- How it works
  1. triggered automatically by the car after a crash or manually by the vehicle occupant by pushing a button dialling 112 - emergency call number
  2. a voice connection is established between vehicle occupants and PSAP operator
  3. vehicle related data (MSD) is transmitted
  4. the transfer is completed in approximately 10 seconds

eCall launched in April 2018! (EU Resolution)

PSAPs in 29 European Countries are ready to receive eCalls

First cars with eCall available in 2018
About Us

We are one of the world’s leading providers of cutting-edge testing and location-based smart mobility solutions that support manufacturers and suppliers of the automotive industry and associated industries. Driven by our passion for innovation, we develop solutions enabling the cost and time effective high quality testing processes, and applications of information communication technologies to accelerate the transition to intelligent transport systems.

Our Business

Our broad portfolio of innovative products and services is organized into four main segments. OECON’s market-leading eCall products; smart solutions and test systems for connected and automated driving including innovative applications and "V2X sim4real software"; end-to-end solutions for UAV management as well as smart parking systems. Our products and services support customers’ needs across the entire technology life cycle from proof of concept to the actual implementation.

Our Customers

Numerous customers in EMEA, East Asia and North America take advantage of our cutting-edge testing and smart mobility solutions. Additionally, PSAPs all over Europe trust our eCall Router technology. We thrive on and strive for delivering outstanding customer service, while meeting business objectives of increasing profitability, productivity and growth.

Industry Experts

We are experts in PSAP services, information communication and mobile positioning technologies. With our team of dedicated and specialized professionals who are connected with opinion leaders and important decision makers as well as our experiences gained from various projects for the last 15 years, we are equipped to provide products and services to meet your specific requirements.
Contact

OECON Products & Services GmbH
Hermann-Blenk-Str. 22 a • 38108 Braunschweig
+49.531.35444.10 • www.oecon-line.de • info@oecon-line.de