ITS: eCall – Door Opener for General Telematics in Passenger Cars

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5th CLEPA Automotive Aftermarket Conference

Agenda

1 eCall Facts & Figures

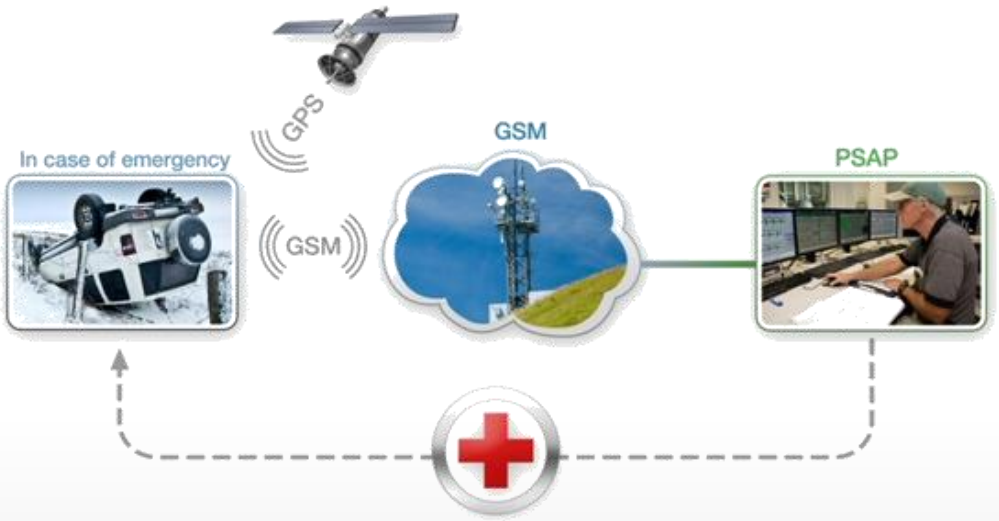
2 eCall within the Big Picture of "ITS"

3 ITS and the Aftermarket

4 Challenges and Opportunities for the Aftermarket

eCall Facts & Figures

eCall: Functionalities and Legislation

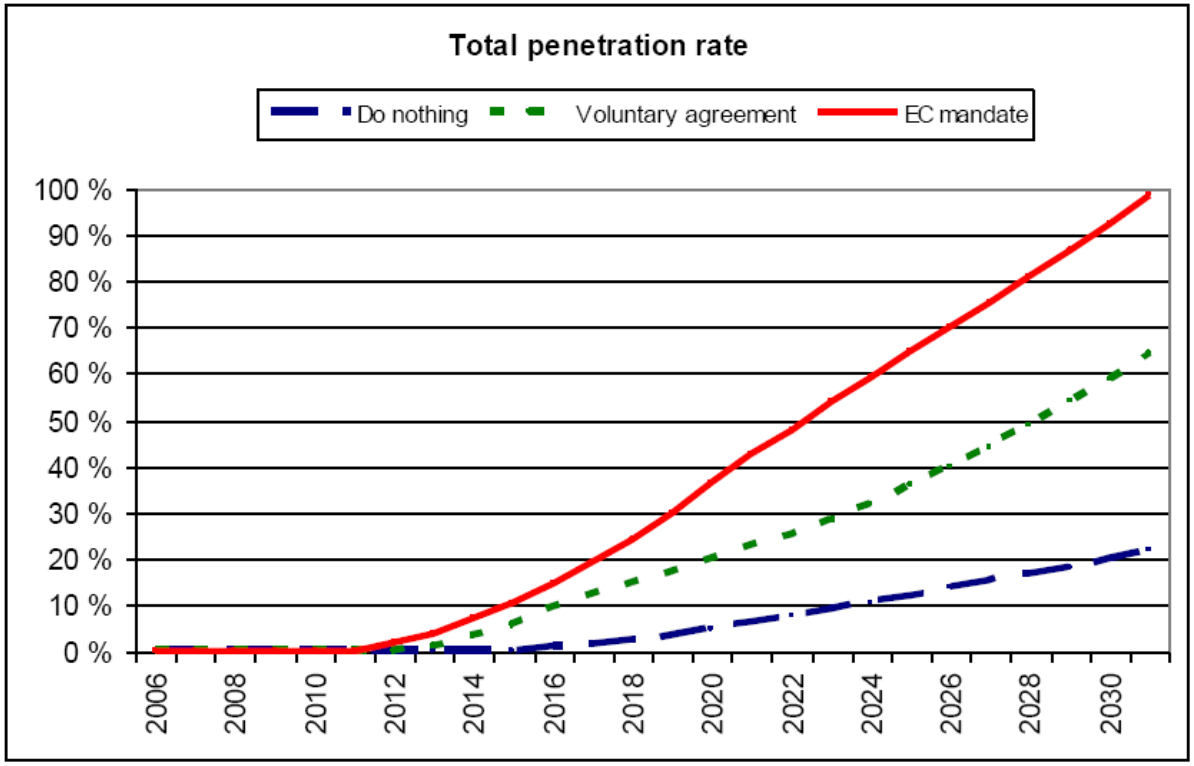


eCall Legislation Proposal for Type approval by the EU Commission

- Legislation proposal submitted in June 2013
- Fully functional eCall service rollout throughout EU by 2015 (Oct.)
- eCall mandatory for new PV and LCV models in 2015 (Oct.)
- Additional emergency and/or added value services possible
- Still subject to approval by Council and Parliament

eCall Facts & Figures

eCall to Boost Number of Cars With Telematic Units



EU Comission projection show: eCall legislation will be a gamechanger

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Global Challenges
Traffic Collapse is One of the Global Challenges

Water Crisis

Over the last **50 years the human population has nearly tripled**!

Peak Oil

2020, the peak of production of copper, gold and oil

Medical Supply

In Germany alone, there are **12,000 vacancies for physicians**

Species Extinction

Certain species that human beings **depend upon for food supply** are going to extinct

Climate Change

People from different cultures will either have to **work together or face mutual destruction**

Traffic Collapse

Average one-way commuting time in mega-cities **70-84 minutes**

ITS Definition

ITS is Required to Solve the Traffic Collapse

Intelligent Transportation System (ITS) Definition*

ITS is the creation of a **data network** between **transport infrastructure, vehicles and users** by using information and communication technology.

It is more than in-vehicle products. The intelligent transportation system is only possible if a **representative quantity of data is collected, linked and processed.** Hence a high quality information is provided as a service in real-time.

ITS Targets

- **Save Costs**
- **Save Time**
- **Protect Life**
- **Protect Environment**

*Source: European Telecommunications Standards Institute (ETSI)

ITS Value Chain (Architecture)

Data is the Basis of the ITS Value Chain

V2V Communications

Means of Transportation & Movables

1. Frontend: Hardware / Software

to collect data

Connectivity
to ensure data flow

V2I Comm

Infrastructure

1. Frontend: Hardware / Software

to collect data

Wide Area Wireless (Mobile)

4. Services

release processed data in real-time to

Fixed Point to Fixed Point Comm.

2. Physical Backend

to archive data

3. Data Processing

to structure data

Data Demand

- Private (PV, 2W)
- Non-Private (CV, Taxi, Trailers)
- OEM
- Insurance companies
- Workshops (OES, IAM)
- Government

Customer

ITS Business Sectors

Continental Currently Active in 5 Business Sectors

Business Sectors as derived from ITS America*

Archived Data Management

Improvement of transportation through **archiving & sharing** of data

Commercial Fleet Operations & Logistics

Implementation of **products & services** facilitating **transportation policies**

Emergency Management

Realization of **reactive assistance** for **emergency situations**

Maintenance Management

Application of **vehicle parameters** followed by **reactive services**

Advanced Public Transportation Systems

Development of efficient **public transport** services

Advanced Traffic Management System

Employment of technologies enhancing **traffic flow** and **congestion problems**

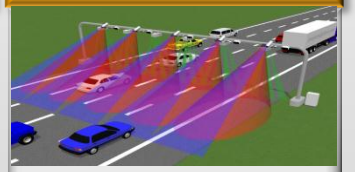
Advanced Traveller Information System

Utilization of essential **traffic information**

Safety & Security

Appliance of **safety & security** in-vehicle technologies

Traffic Payment



Deployment of **toll** or other **payment options**

*2011, SIZING THE U.S. AND NORTH AMERICAN INTELLIGENT TRANSPORTATION SYSTEM MARKET

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ITS Business Sectors

5 ITS Business Sectors Relevant to Aftermarket

Business Sectors as derived from ITS America*

Archived Data Management

Commercial Fleet Operations & Logistics

Example:

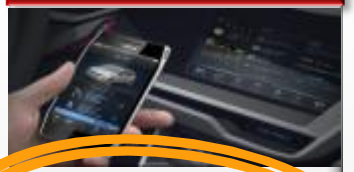
- Aftermarket Fleet Management Solutions

Emergency Management

Example

- Retrofitted eCall

Maintenance Management



Example:

- Predictive maintenance
- Remote Vehicle Diagnostics

Advanced Public Transportation Systems

Advanced Traffic Management System

Advanced Traveller Information System

Example:

- PND devices

Safety & Security

Traffic Payment

Example:

- Usage based insurance Aftermarket solution

*2011, SIZING THE U.S. AND NORTH AMERICAN INTELLIGENT TRANSPORTATION SYSTEM MARKET

Business Sectors with Aftermarket Share

EXAMPLE

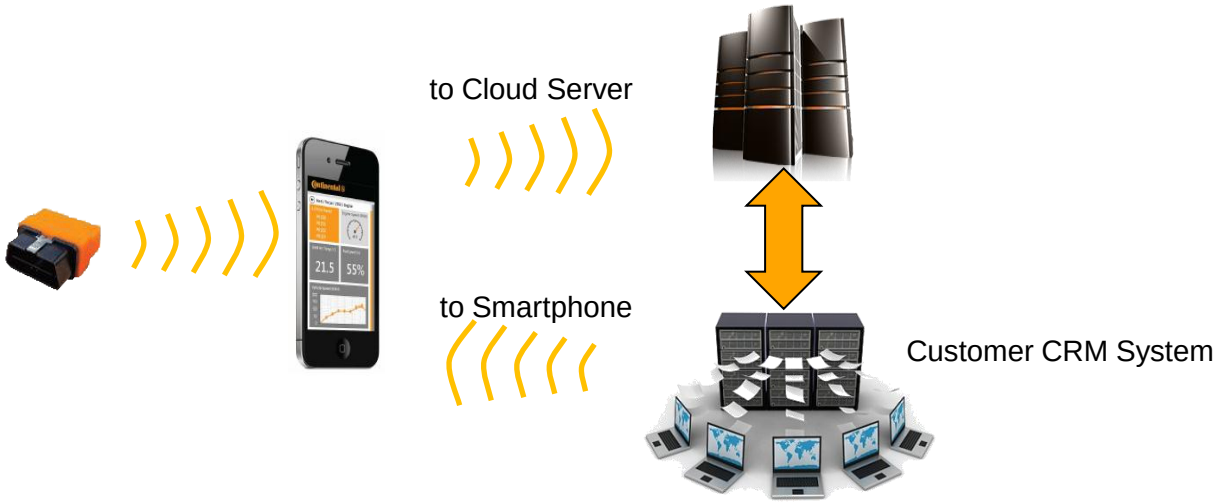
ITS Maintenance Management

Bluetooth Dongle: System Overview

EXAMPLE

ITS Maintenance Management

Bluetooth Dongle: Services and USPs



B2C

- B-Call
- Information about
  - Service interval (Maintenance / Oil)
  - Error codes / activity recommendation
- Eco-Driving
- Guidance to workshop
- Customized offers

B2B

- Generate new customers
- Improved customer relationship management
- Improved efficiency in workshop
- Gathering vehicle data / analysis

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A 40 € bn market

IAM Facing Challenge of Strong OEM Positioning

Status Quo

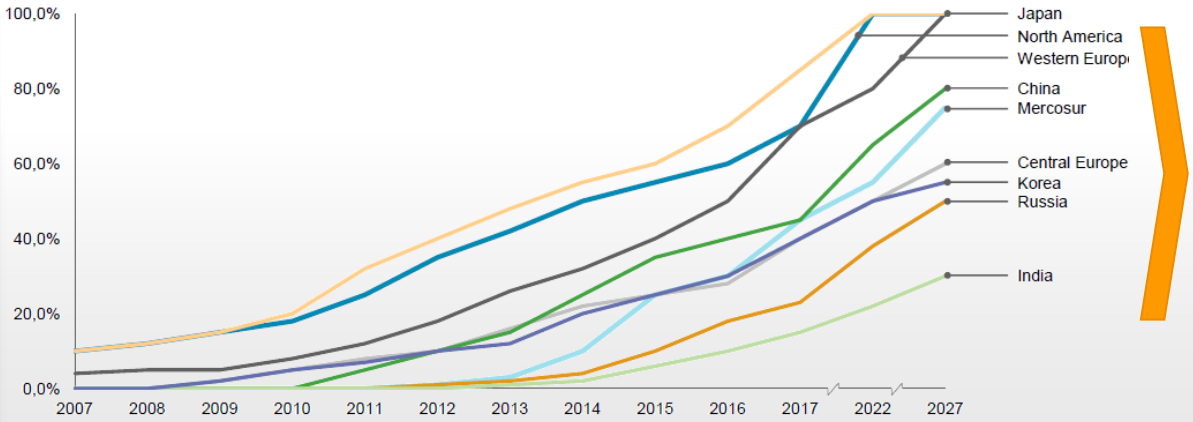
› OEM embedded telematics are essentially **closed systems with unique software**

› Thus, the **OEMs have complete control over in-vehicle data** as of right now.*

Future Prospects

› OEMs increasingly integrating embedded telematics **(every new car connected in 2025):**

Market fitment/penetration rates of smartphone and embedded connectivity units fitted to newly-assembled passenger cars and light vehicles, 2007-2027, (%)



If this forecast is accurate, IAM solutions will not be relevant to new vehicle owners by 2025 in NA and Europe

› Legislations for **eCall could strengthen OEMs positioning even further** if open access not granted

* © Oliver Wyman | Connected Cars Battle Fields

Risks & Opportunities for Aftermarket

Business Opportunities for Both the OE and IAM

Risks & Challenges	Opportunities
› OEMs gatekeeper to customer data	› As long as OE fitment rate is still low and demand for connected services high → business opportunities for Aftermarket
› OE fitted telematics dominate the market	
› eCall legislation not protecting 3rd party interests	› Increased installation rate of telematic units as a potential for added Value services
› Aftermarket only short to medium-term solution until “every new car connected” in 2025	› ITS can secure an open door towards the aftersales customers (parts & services)

Required Actions

Open Choice & Fair Competition has to be ensured

1. **Ensure that the eCall telematic unit is indeed an interoperable and open-access platform**

   Necessity to address critical passages in current EU proposal such as: *"The eCall in-vehicle system shall be accessible to all independent operators free of charge and without discrimination at least for repair and maintenance purposes."*

2. **Set technical standards for telematic units in order to enable 3rd party applications**

3. **Ensure restriction free access to in-vehicle information data by 3rd parties**

   Car Diagnostics data….

>>> The future of the connected car business starts now, be a part of it, or see others passing you

Thank you
for your attention!