eCall Router
A new way of upgrading PSAPs for eCall

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EC Scenario 1: Upgrade all PSAPs

Expensive: Each PSAP must be equipped with a full eCall processing infrastructure
Analysis required: Upgrade depends mainly on current installation
Good Integration: processed like other emergency calls
EC Scenario 2: Upgrade only Super PSAP (PSAPf)

Relatively cheap: only a few PSAPs to be upgraded
Moderate to poor integration: eCall may be delayed due to direct calls to the relevant PSAP
Time delay due to voice call transmission
German Proposal: PSAP with eCall Router

Separate digital Data (MSD) and centralised processing

Put all expensive components here!
eCall Router Pilot Implementation

112 Call

112 eCall

ISDN Network

Internet

PBX

Operator

PSAP Application

eCall Router

eCall Center

TPS

PSA PEUGEOT CITROEN

ADAC

BMW

Car Info

KBA

eCall Center

Operator

112 eCall

PBX

Operator

PSAP Application

Internet

eCall Router

112 Call

ISDN Network
PSAP eCall Router Advantages

- Minimize upgrade investments
  - No expensive Server and backup infrastructure necessary in PSAPs – important with countries with many PSAPs
  - Also „out-dated“ PSAPs can easily be upgraded
  - Much less upgrade costs compared to an “every-PSAP-itself” upgrade

- Data processing by the eCall Center
  - Automatic Data storage and processing
  - Providing additional data (VIN by KBA and EUCARIS, Assurance data)
  - Highest data integrity and security

- eCall Center provides unified Interface to PSAPs
  - Standard Interface for all connected PSAPs
  - EUCARIS access controlled by eCall Center

- Connection to TPS
  - Friendly Co-Existence of pan-European eCall and TPS
  - Unified interfaces brings the TPS digital data into the PSAP
5 Countries already integrating eCall Router technology

- Netherlands
  - As a PSAP in the HeERO project
  - As a permanent installation (planned)
- Finland
  - As a permanent installation
- Luxemburg
  - As a PSAP in the HeERO II project
- Bulgaria
  - As a PSAP in the HeERO II project
- Germany
  - Currently as the eCall solution for the two PSAPs in Braunschweig and Oldenburg
  - 16 local Governments are responsible for eCall and PSAPs
Third Party Service eCall

• Growing market
  • BMW: > 10 years of experience
  • PSA: 10 years
  • Mercedes Benz: started in March 2012 a new service
  • October 1st: World premiere of a TPS eCall for motor bikes by Schuberth, Telekom and Björn-Steiger-Stiftung
  • Discussions about offering additional services (breakdown, ...) are still going on

• eCall is a very interesting market for OEMs, assurances and automobile associations
Third Party Service eCall benefits and drawbacks

- TPS vs. pan-European eCall
  - SMS and Inband modem delivers comparable results in transmitting data
  - TPS use long numbers – not as prioritised as 112 eCalls
  - Services are comparable or better, but TPS usually is a paid service

- TPS benefits
  - Voice communication in native language
  - Only real emergency calls reach the PSAP (Call Center filters test calls, breakdown calls ...)
  - Psychological care until emergency services arrive at the scene
  - Filtering breakdown calls from real emergency calls (> 60%)
  - Additional data: MSD plus information about risk of severe injuries plus additional sensor data (type of collision, deployed Airbags, ...)

- TPS drawback
  - Currently all digital data cannot be transferred to the PSAP in case of real eCalls
TPS and pan-European eCall
A brilliant coexistence

- Connect the TPS to the eCall Center
  - Same interface as between eCall Router and eCall Center
  - PSAP can access digital Information on TPS eCalls exactly the same way they use for “standard” eCalls
  - No need to implement any additional interface in the PSAP

- Current Status
  - First half of 2013: Connection between eCall Router and BMW TPS
**Complete**: PSAP has full access to eCall functionality

**Economical**: PSAP requires only a minimum of additional infrastructure. Shareable components are combined in one or more eCall centers.

**Good integration**: eCall calls always transferred to the nearest PSAP, all additional data provided by eCall Center (KBA, EUCARIS)

**Cooperative merge** of the EU and private eCall services
Thank you for your attention

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