

# eCall deployment in Europe



# Agenda

- Two main approaches to provide eCall
- Implement the Pan European eCall at emergency services level

# Approaches to provide eCall

## Pan European eCall

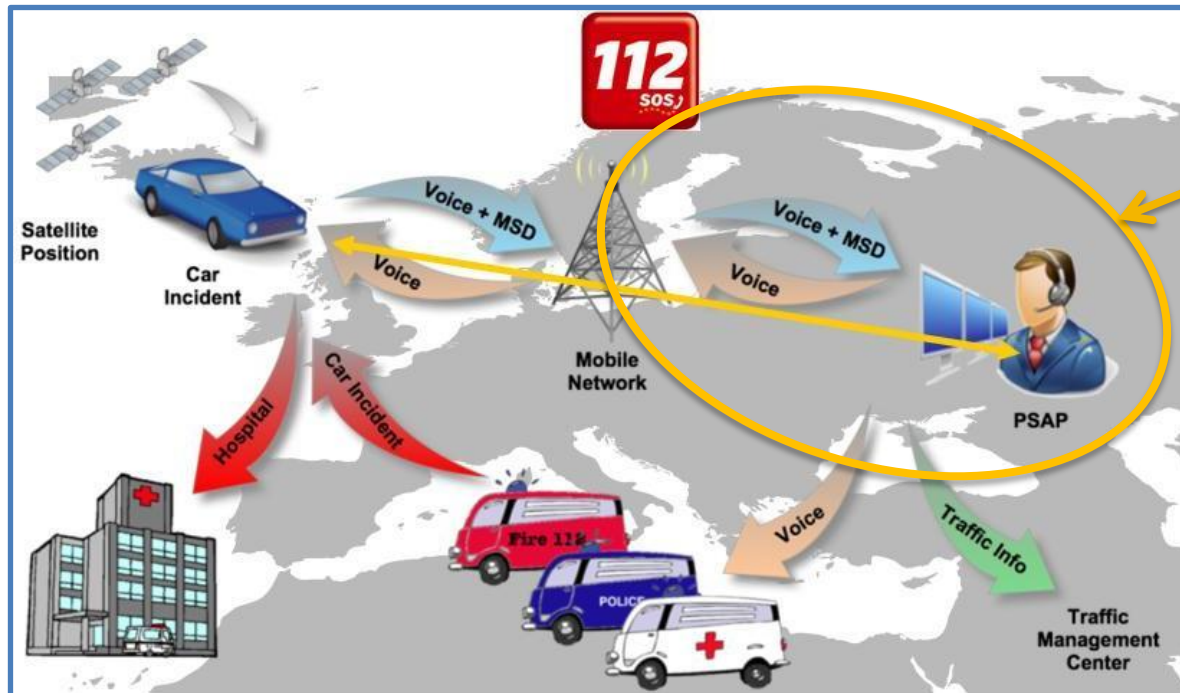


## Third Party Services



NB: Permission should be granted by each Member State for each TPS provider

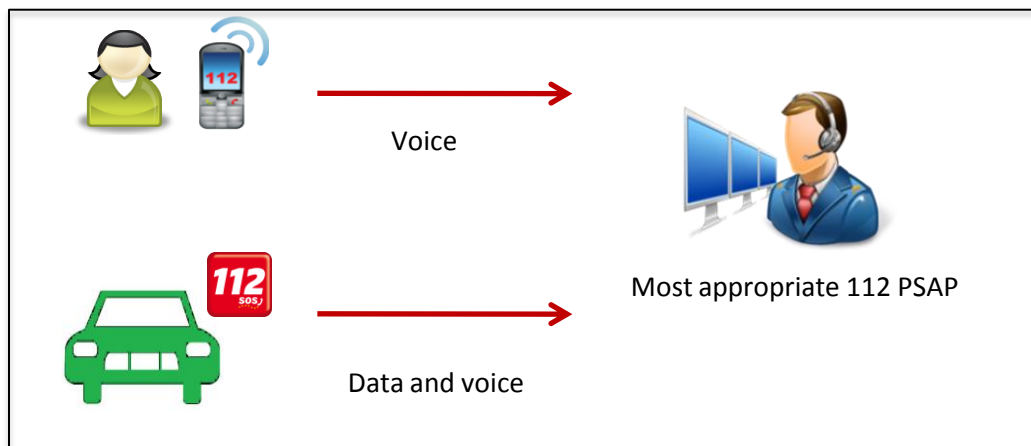
# Pan European eCall architecture



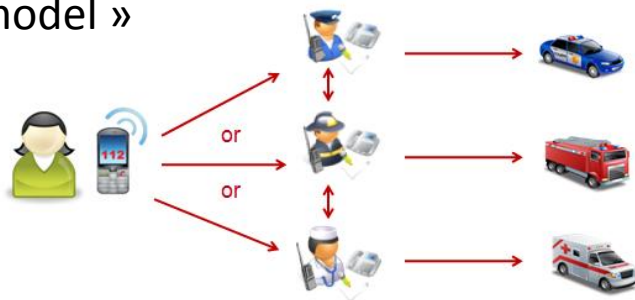
What happens here?

# Receive eCalls (model 1)

**MODEL 1:** eCalls routed as 112 calls. The most appropriate PSAP receives 112 calls and eCalls.



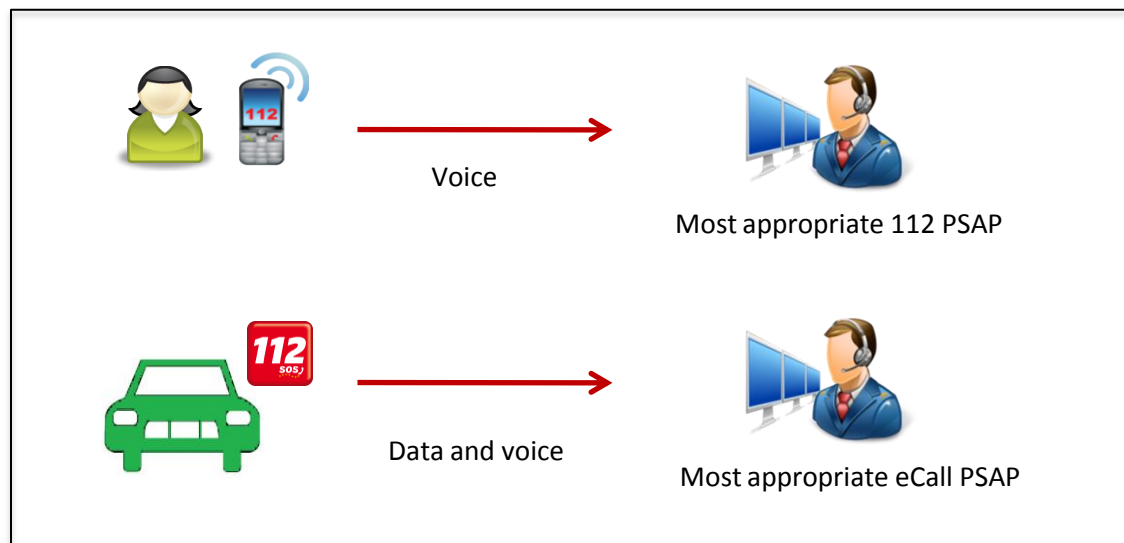
**NB:** Costly to implement in countries where 112 is handled following the « local PSAP model »



e.g. about 100 « 112 PSAPs » in France, hundreds of « 112 PSAPs » in Germany

# Receive eCalls (model 2)

**MODEL 2:** all types of eCalls are routed to a PSAP only dedicated to eCalls. 112 calls continue to be routed to the 112 PSAP.



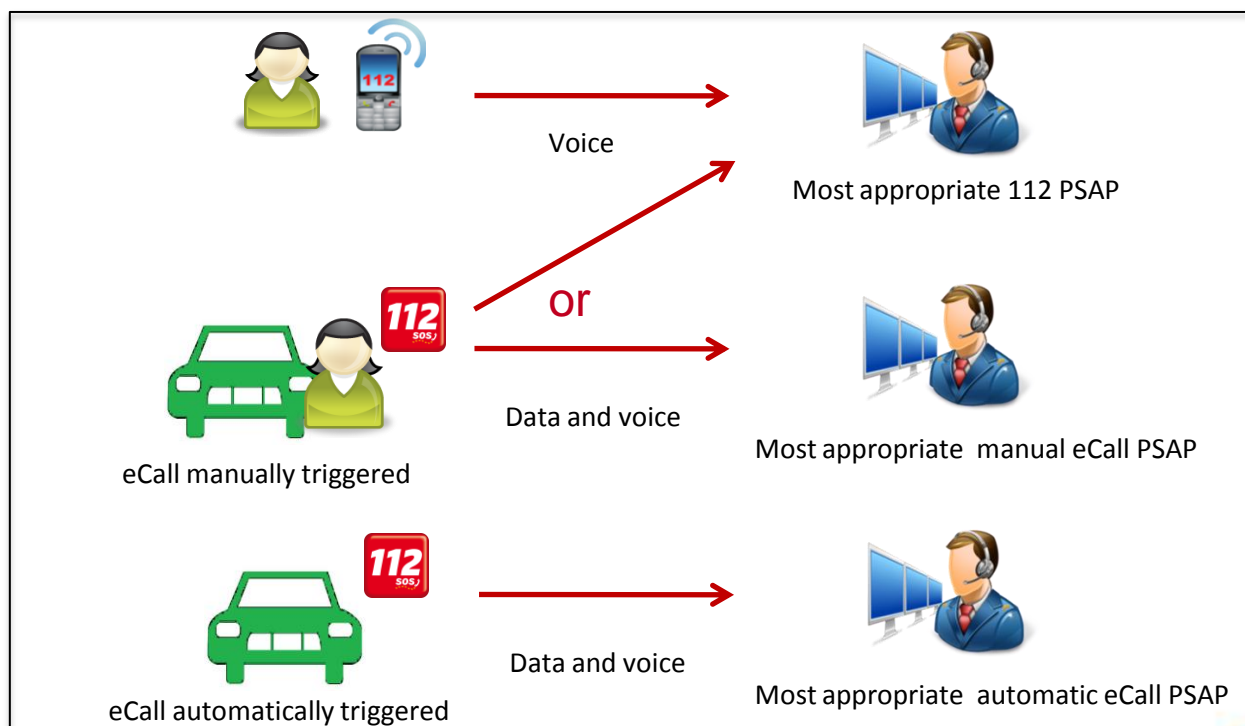
**NB:**

- An eCall is identified in the network thanks to the « eCall flag » so that it can be routed accordingly by mobile network operators
- The eCall PSAP can be a private call centre operating under public mandate



# Receive eCalls (model 3)

**MODEL 3:** manually triggered eCalls and automatically triggered eCalls are routed to different PSAPs (it can be the same PSAP for 112 calls e.g. dedicated manual eCall PSAP can be the same as 112 PSAP)



# Observations

- The descriptions of the eCall models have been voluntarily simplified.
- The slides do not cover the entire eCall handling but rather try to highlight the characteristics of major models
- The eCall models can be mixed



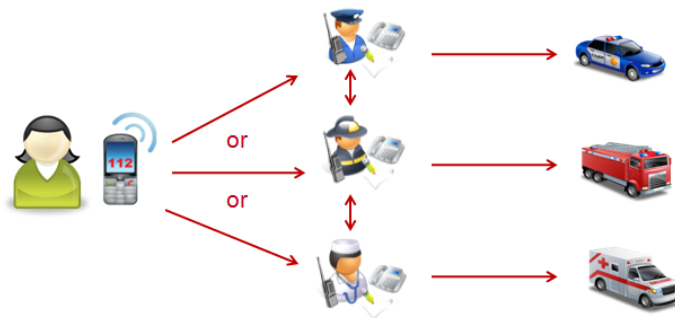
# eCalls models and 112 models

- Each country will implement eCall according to its own national 112 system and the 112 model used.



## The « local PSAPs » Model (1)

**Main characteristic:** calls to 112 routed to a local emergency service. The call-taker belongs to one discipline (fire, police or EMS)

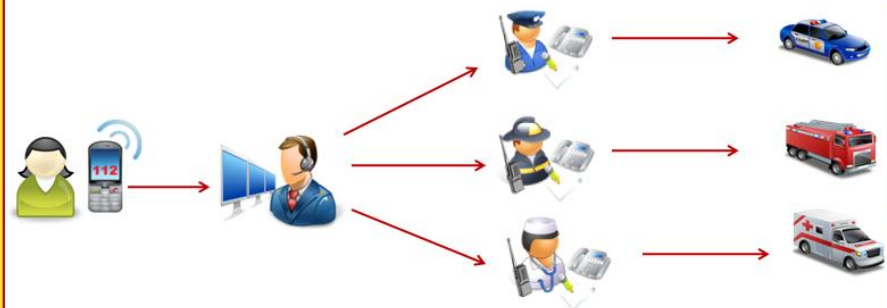


**Example of countries:** Austria, Germany, France, Italy



## « Stage 1 & 2 PSAP(s) » Model (2)

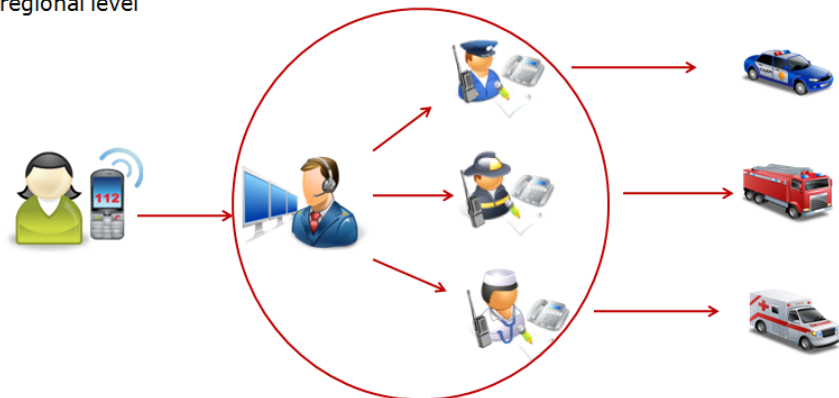
**Main characteristic:** call filtered through PSAP stage 1 and transferred to regional emergency service



**Example of countries:** the United Kingdom, Ireland, the Netherlands

### « Integrated Control Room » Model (3)

**Main characteristic:** gathering of all disciplines in a single location at the regional level



**Example of countries:** Madrid, Ostrava, Belgium provinces (in near future)

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### « Civilian Call-Taking & Dispatching » Model (4)

**Main characteristic:** highly trained civilian call-takers who handle both 112 calls and dispatch

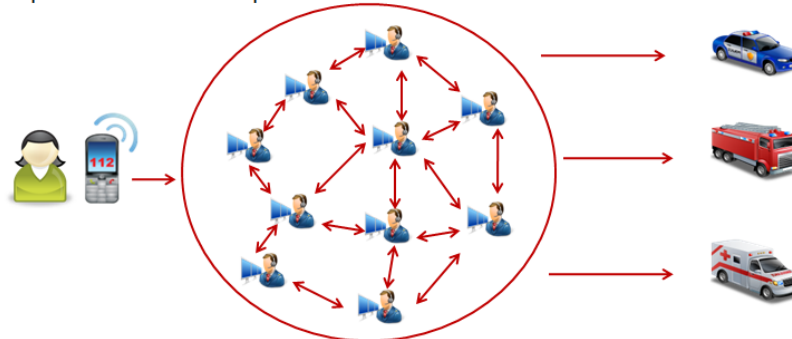


**Example of countries:** Finland, Sweden

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### « Interconnected PSAPs » Model (5)

**Main characteristic:** 112 PSAPs using the same technology interconnected in a single network. Call in province X can be responded and handled in province Y. Works in parallel with other models.



**Example of countries:** Bulgaria, Czech Republic

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# Observations

- Implementation of eCall should vary a lot according to the multiple PSAP architectures across Europe
- Costs (estimates) for upgrading the PSAPs
  - Italy: 100.000 EUR for Varese PSAP
  - Czech Republic: 145.585 EUR
  - Romania: 565.000 EUR
  - UK: between 125.000 and 300.000 EUR for BT stage 1 PSAPs

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# Back up – eCall switch box

