

# The Finnish Pilot site

## Challenges with eCall IVS prototypes and lessons learnt in HeERO eCall tests

HeERO International Conference  
21 November 2013  
Bucharest, Romania



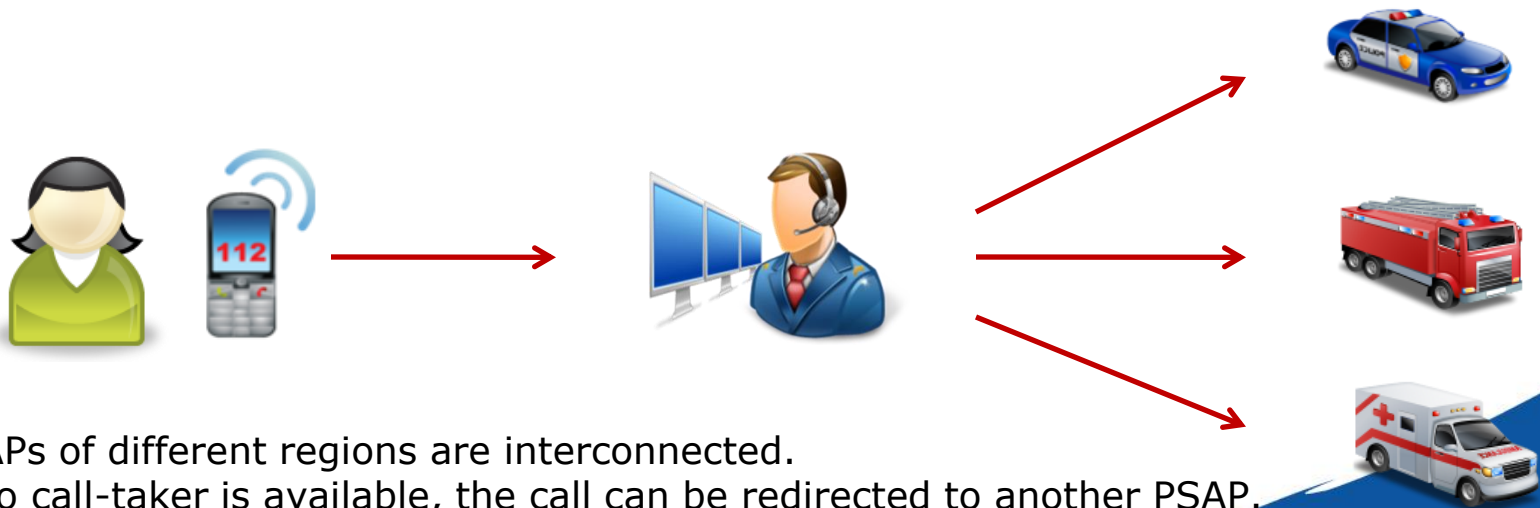
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- Project Consortium and other stakeholders
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# 112 model used in Finland

## « ERO independent PSAP » Model (5) **FINLAND**

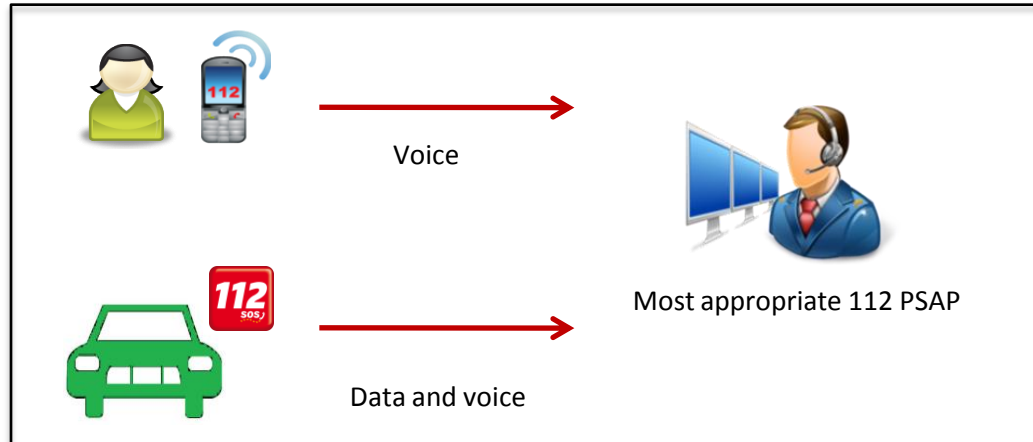
- Civilian call-takers handle both call-taking and intervention resources' dispatch. In some cases, EROs' specialists are available to support.
- The same PSAP is in charge of classification of calls, data collection and dispatching the intervention resources to the incident.



# eCall model to be used In Finland: model 1

**MODEL 1: eCalls routed as 112 calls.**

**The most appropriate PSAP receives 112 calls and eCalls.**



The number of PSAPs will be reduced to 6 when the operation of eCall service will start in 2015.

More details can be found in the “eCall Implementation roadmap for Finland” published by the Ministry of Transport and Communications

# Project Consortium in Finland

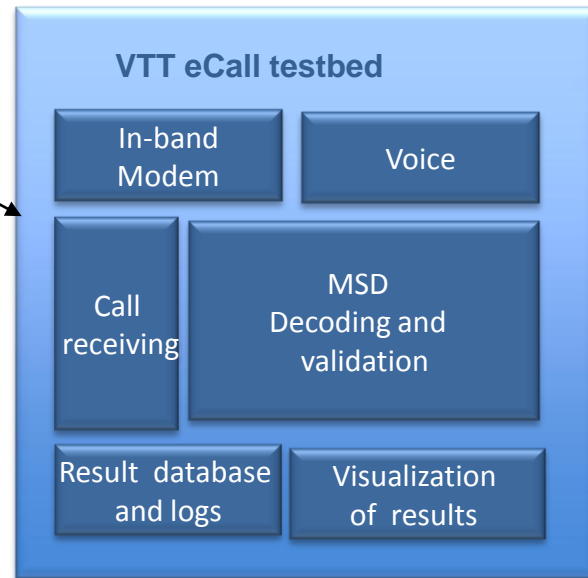
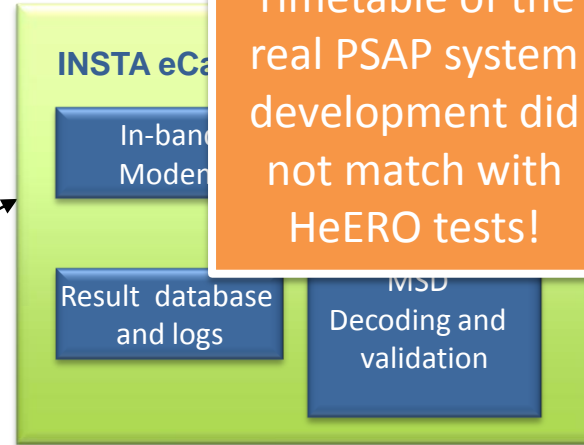
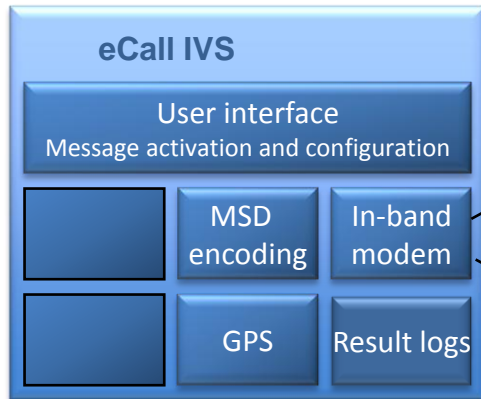
- Stakeholders / consortium;

Name	Role	HeERO Consortium
Ministry of Transport and Communications	MS leader	Yes
Ministry of the Interior	Ministry responsible of Emergency Rescue Centre Administration	Yes
Emergency Rescue Centre Administration	Responsible of PSAP system development, PSAP training, running of PSAPs in Finland	Yes
VTT	Responsible for operating the Finnish National Pilot, test bed functions, tests and analysis, WP6 leader	Yes
Ramboll	WP4: eCall tests with motorcycle, WP6	Yes
Finnish Communications Regulatory Authority (FICORA)	Telecommunications regulator. Actively involved in the project – provides common guidelines for all MNOs.	No (National associated partner)
Finnish Traffic Safety Agency (TraFi)	Vehicle register and traffic safety aspects	No (National associated partner)

- Cooperation between the stakeholders;
  - INSTA (developer of the new PSAP central system)
  - All MNOs
  - eCall IVS developers in Finland

# FI Piloting Architecture

## Plan for 2nd phase (Jan 2013)



UPDATE Apr 2013:  
Timetable of the real PSAP system development did not match with HeERO tests!

End-to-end automatic tests

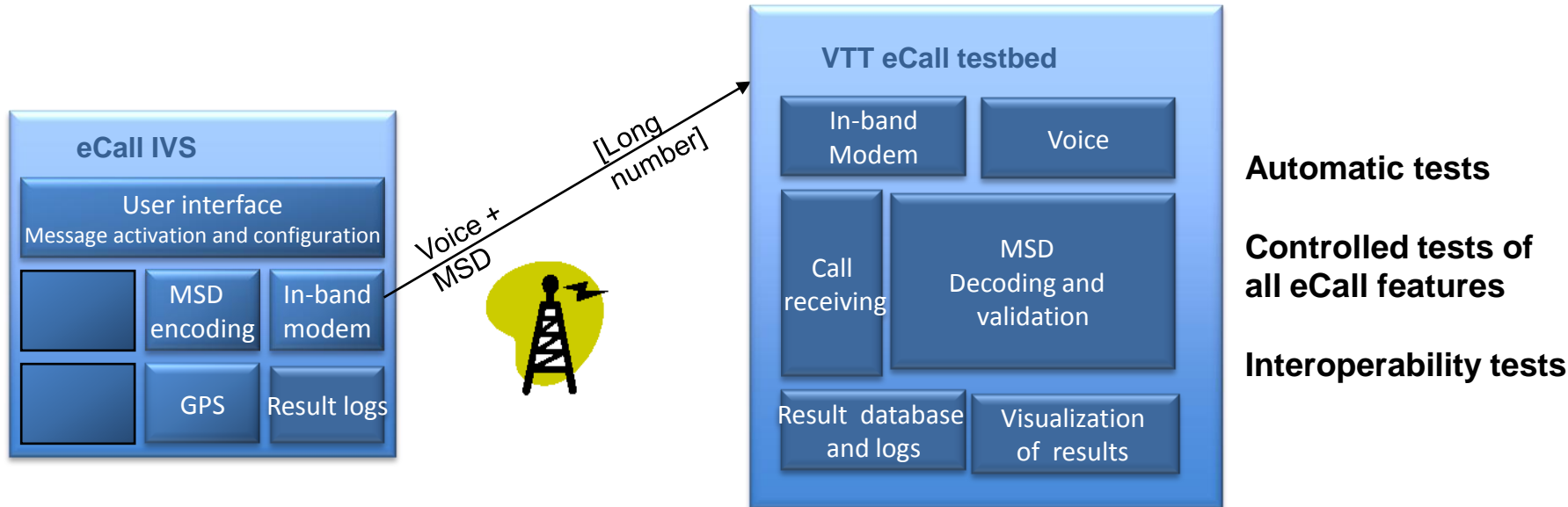
Both systems provide similar logs for analysis

Controlled tests of all eCall features



# FI Piloting Architecture

## final implementation 2nd phase



# Main challenge: IVS selection and issues

- One target for 2<sup>nd</sup> phase tests in Finland was to do measurements with 2 fully functional eCall IVSes from different vendors

eCall IVS X

- Negotiations with IVS vendor X stopped in April 2013, because the software needed to access the data logging features of the IVS needed a NDA which restricted the publicity of the study results. Legal departments could not solve the issue in given timeframe.

- IVS A was not available until April 2013
- Changes in IVS data logging and other issues took a lot of time with the IVS provider
- During the actual HeERO tests, non-standard behaviour of the IVS was detected. The IVS manufacturer tried to find a solution to the issues with the modem provider, but could not provide a solution.

eCall IVS A





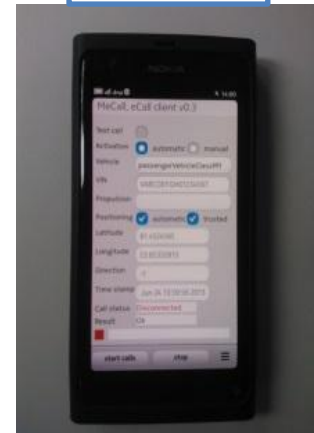
# Main issues and impact on eCall tests and later to the deployment

- Preparation of the 2nd phase test were on critical timeline in June 2013
- Examples of challenges encountered in analysis of the test results:
  - issues in IVSes
  - lack of MNOs with eCall flag implementation
  - the prototype PSAP (VTT eCall testbed, no real PSAP available)
- Therefore, the results obtained in HeERO do not fully reflect the performance which is possible to achieve in Finland  
=> tests needed also after the HeERO project

# The countermeasures

- Tests were started with eCall IVS A regardless on some issues
- VTT mobile eCall IVS B prototype was taken into the tests in May 2013, although it was not fully tested

eCall IVS B



- Analysis and conclusions were carefully done by taking into account these limitations => Clear improvement points for IVSes were found when analysing the Finnish test results
  - Negotiations with the IVS manufacturer and modem supplier continues to fix the problems.
- Participation to the eCall testfest in Sept where standardised functionality and interoperability VTT mobile eCall IVS B and testbed (PSAP) was successfully verified.

# Recommendations to other countries willing to test/implement eCall

- Preparation of the tests takes a lot of time with prototype providers, close cooperation and communication with proto providers essential
- Main conclusion: different stakeholders may understand the basic standards of eCall in a different way, the eCall testfest may help in this issue
- Recommendation: Testing of the interoperability between IVS, mobile networks and PSAPs should continue at national level after the European HeERO project has ended. The performance of the whole service chain should be tested when:
  - problems in eCall IVS prototypes have been fixed or real products are available
  - the eCall flag has been implemented by all MNOs
  - new information system of Finnish PSAPs is ready for testing

# Thank you for your attention!

## Questions?

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