
112 eCall performance criteria

Work in progress status

Olten/Switzerland

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Contributors



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Status of work



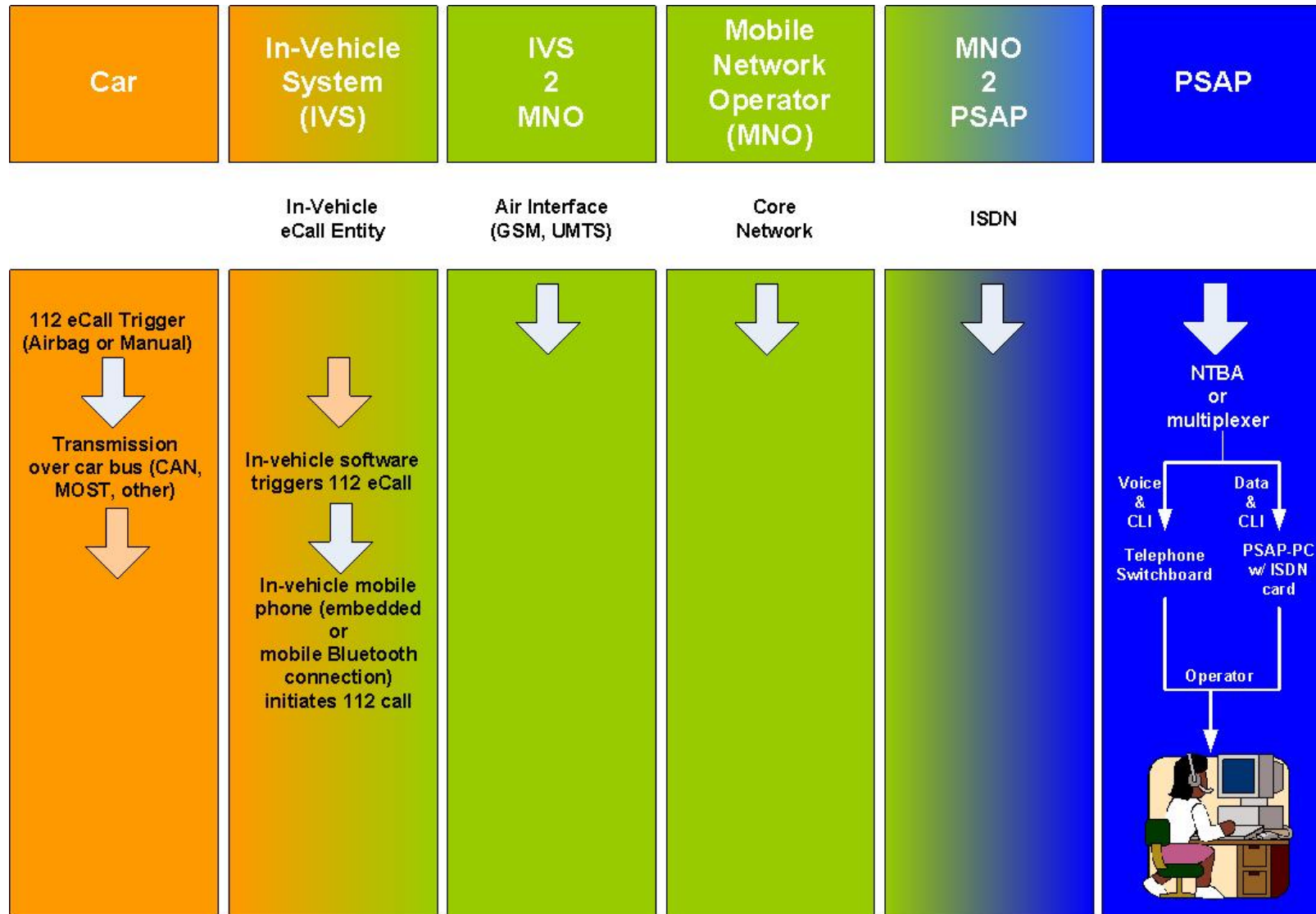
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Open issues



The objectives of this group are to define the minimum performance criteria of the automotive 112 eCall in such a way that the goal of the European Commission of saving up to 2500 lives from traffic accidents and reduce average wound severity by 15% per year could be accomplished, while keeping the costs for the different stakeholders across the 112 eCall service chain (as depicted on the next slide) to a minimum.

112 eCall service chain



Key criteria



- Location data
 - Availability
 - Accuracy
 - Timing
 - Acknowledgement
 - Call-back possibility
 - HMI
 - Language
 - Back-up
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Location data - availability



- ❑ Localization data must be available when a crash occurs, i.e. it must not happen that the unit has to run through a warm or even a cold start procedure – this is because
 - a pearl chain has to be stored in the eCall system to calculate the travel direction (the heading information from the satellites is not adequate)
 - acquiring the fix after the crash typically takes too much time
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Location data - accuracy

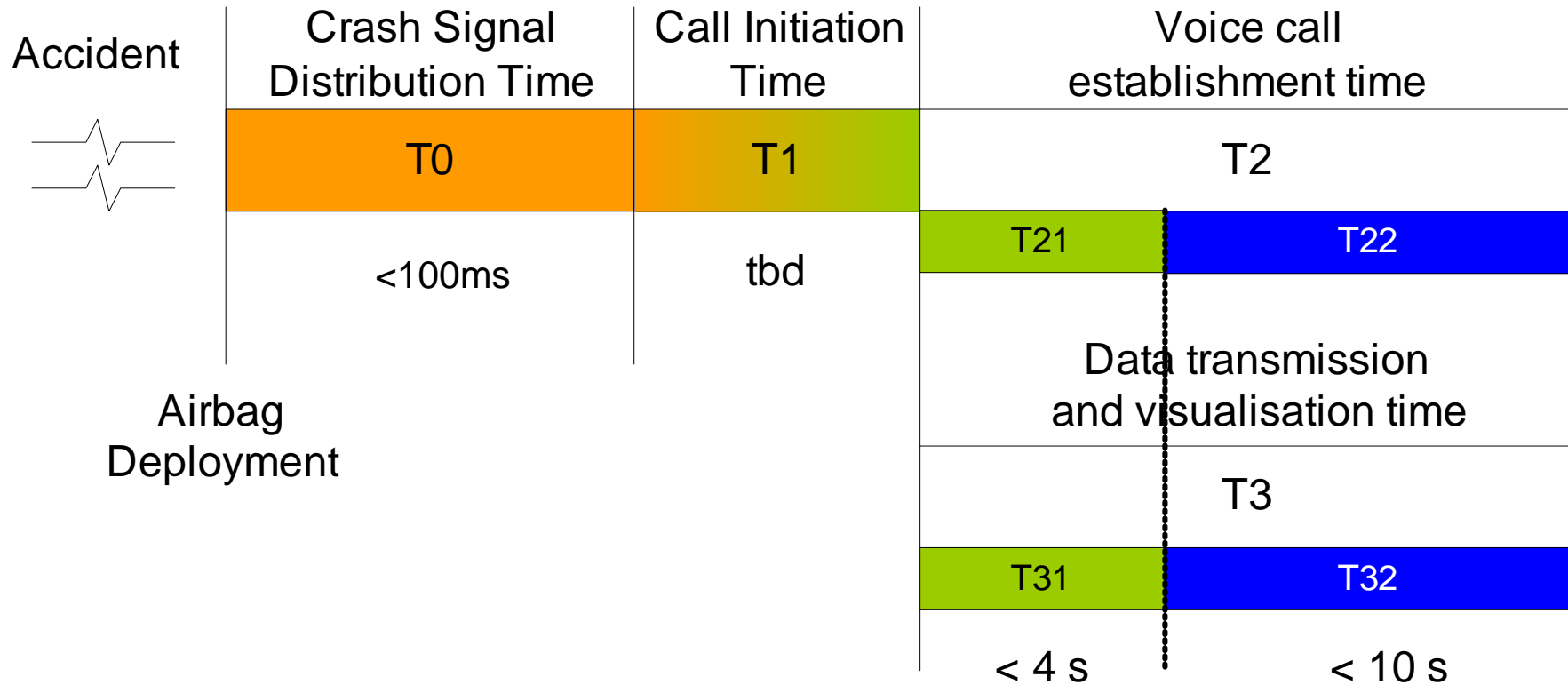


□ PSAP requirement

- 50 m – urban
- 100 m – rural

Urban and rural will still need to be defined.

Timing



Acknowledgement



- ❑ There must be an acknowledgement, so that the IVS knows that the data has not been received yet, and has the possibility to resend
 - ❑ Time for acknowledgement: still to be defined
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Call-back possibility



- ❑ Call back option is needed if the connection is lost or broken. This may be necessary for several reasons:
 - The PSAP or emergency service needs additional information of any kind.
 - Sometimes needed to get confirmation in case a 112 call is doubtful or vague; this is then to check it out.
 - It is a very useful option to reassure people that suffered a serious accident or other very unpleasant event (robbery, mugging, witnessing a crime or serious accident). If people are wounded this call back option is also useful to help people to stay awake and to divert their attention, preventing they get unconscious or go into shock.
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HMI



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- ❑ The user must be informed via the HMI about the call status (call establishment in process or something similar); otherwise he could call 112 twice because he does not know the real status
 - ❑ The customer must be able to cancel the call (for the manual call of course, e.g. if the call has been triggered accidentally, but also for the automated call, for privacy reasons: “I have just bumped into another car whilst leaving the pub car park and I don't want to talk to the police!” – source of this argument: will not be disclosed ;-)
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Language



For the basic 112 eCall service it is decided that no translation service is offered between the involved vehicle and the PSAP.

Back-up



The E112 service (i.e. voice call + transmission of the best available location information that the MNO has access to) shall act as a back-up scenario in case the 112 eCall does not manage to deliver the MSD.

Open issues



- SIM/ NO-SIM decision required
 - Operator roaming needs to be clarified, in case of SIM card
 - MSD final agreement needed
 - Urban & rural domains need to be defined
 - Call initiation time
 - Acknowledgement time to be defined
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Next steps



- Clarification of all open issues
 - Agreement of all stakeholders with regards to defined performance criteria
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