

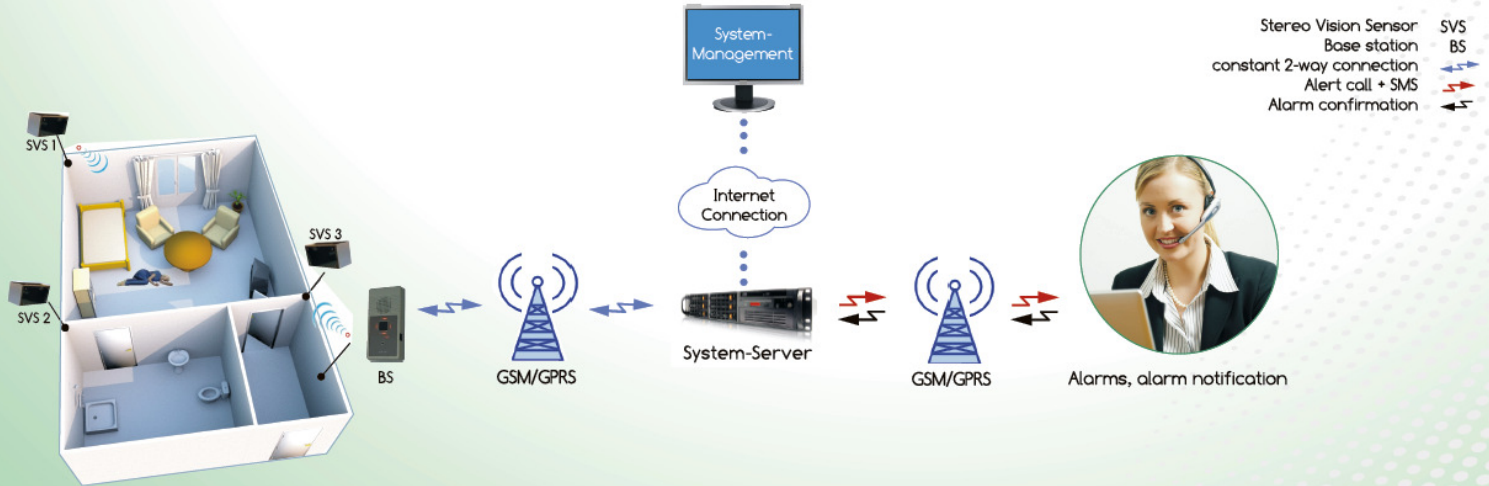


CARE - Safe Private Homes for Elderly Persons

Funded by the Ambient Assisted Living Joint Programme the project develops an intelligent optical monitoring and alarm system to detect critical situations and unusual behaviour.

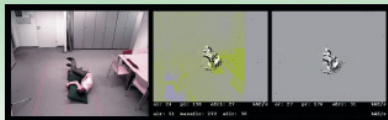
Starting Point:

- The majority of elderly seniors live alone in their own apartments.
- In cases of serious falls or similar critical situations in the home environment a person living alone has little chance to alert someone.
- Also portable emergency devices are sometimes - just in an emergency - for the user "out of reach".
- The fear, of not being able to help themselves in an emergency, increases with older age more and more.



Technology:

- An intelligent optical stereo vision sensor autonomously analyses critical events such as falls or immobility of persons.
- The sensor processes and analyses the transaction data in real time by itself, no separate computer is needed.
- The data itself is not sent, only the information that a critical situation exists.
- Even within the sensor unit the image information is reduced to a minimum so that the privacy of the residents is protected.
- Based on an intelligent motion monitoring (sleep and walk function) a low energy consumption is achieved.



Actual image (left) and its corresponding data representation from a pair of neuromorphic dynamic vision sensors

Benefit:

- The detection of an emergency situation and the possibility of intercom permit the rapid alert of the nursing service or of the relatives.
- People living alone can live independently and fearlessly longer in their known home environment.
- In cases of emergency care, the costs of illness due to complications can be avoided by a rapid medical help.
- The high level of robustness and security of the alarm and monitoring system enable it to be used 365 days a year.
- The system is easy to install.

www.care-aal.eu

CARE Consortium and Project data:

Partners: AIT Austrian Institute of Technology (AT), Budapest University of Technology and Economics (HU), Oy Everon Ab (FI), Senioren Wohnpark Weser GmbH (DE), SensoCube GmbH (DE), Yrjö ja Hanna Kredit (FI)
Starting Date: July 2009, Duration: 30 months

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