

# Unattended Autonomous Surveillance

## The UAS system



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# What is UAS?

## A modern home monitoring system with:

- Large collection of security, care and comfort services.
- Developed with the 'design for all' concept in mind.
- Universal interface between infrastructure and technology for home automation and alarming.
- Suitable for all types of houses (new and existing).
- Based on open international standards (manufacturer independent).

# Why UAS?

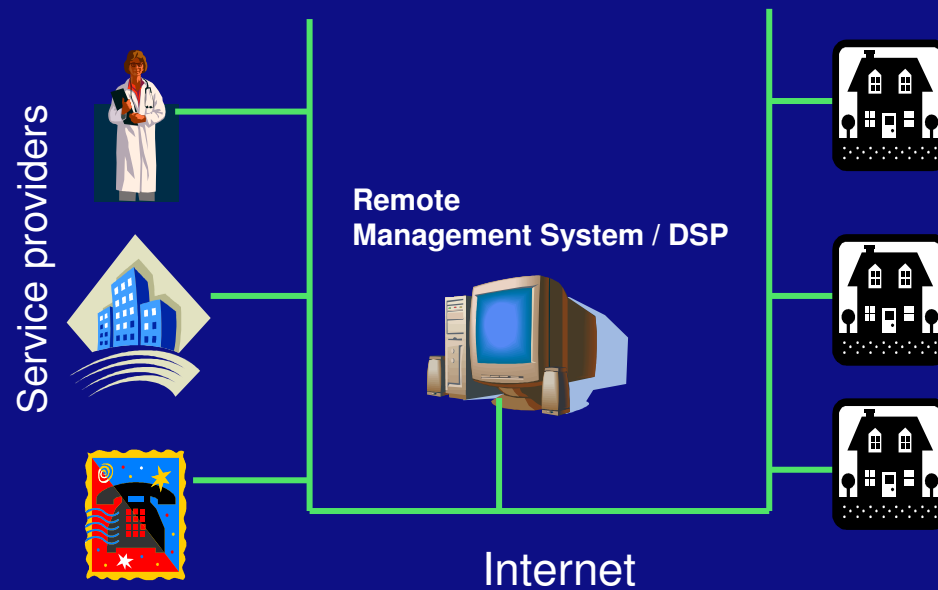
The system combines newest technology with unique functions:

- Automatic detection of emergency situations without an alarm button or any wearable devices.
- Reduction of false alarms by use of voice synthesis and regular phone calls.
- Alarming via SMS/MMS/Email and social alarming protocol(s) .
- Video-observation and video-telephony on a PC or a mobile phone.

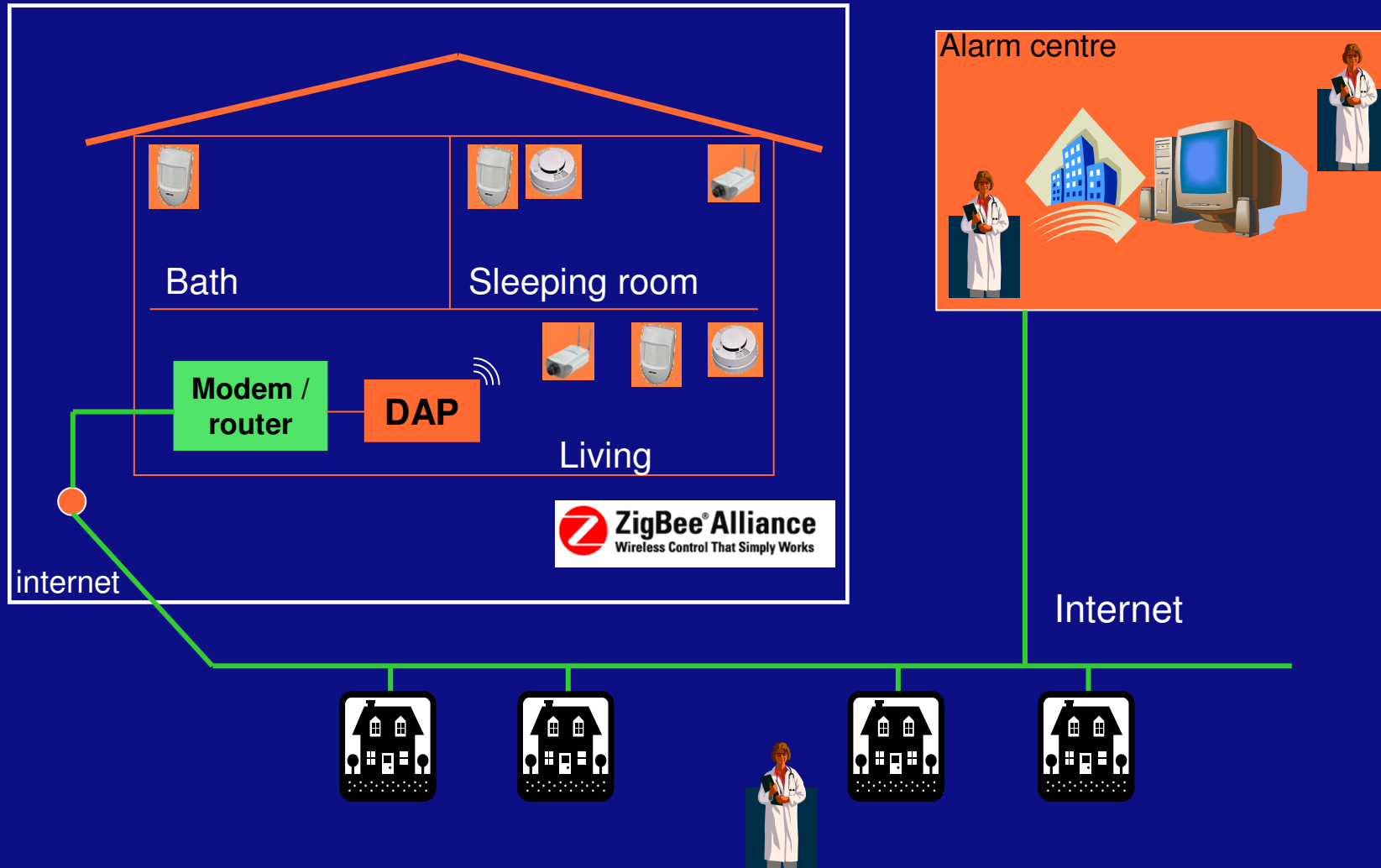
# Trial of the first UAS prototype in 2003



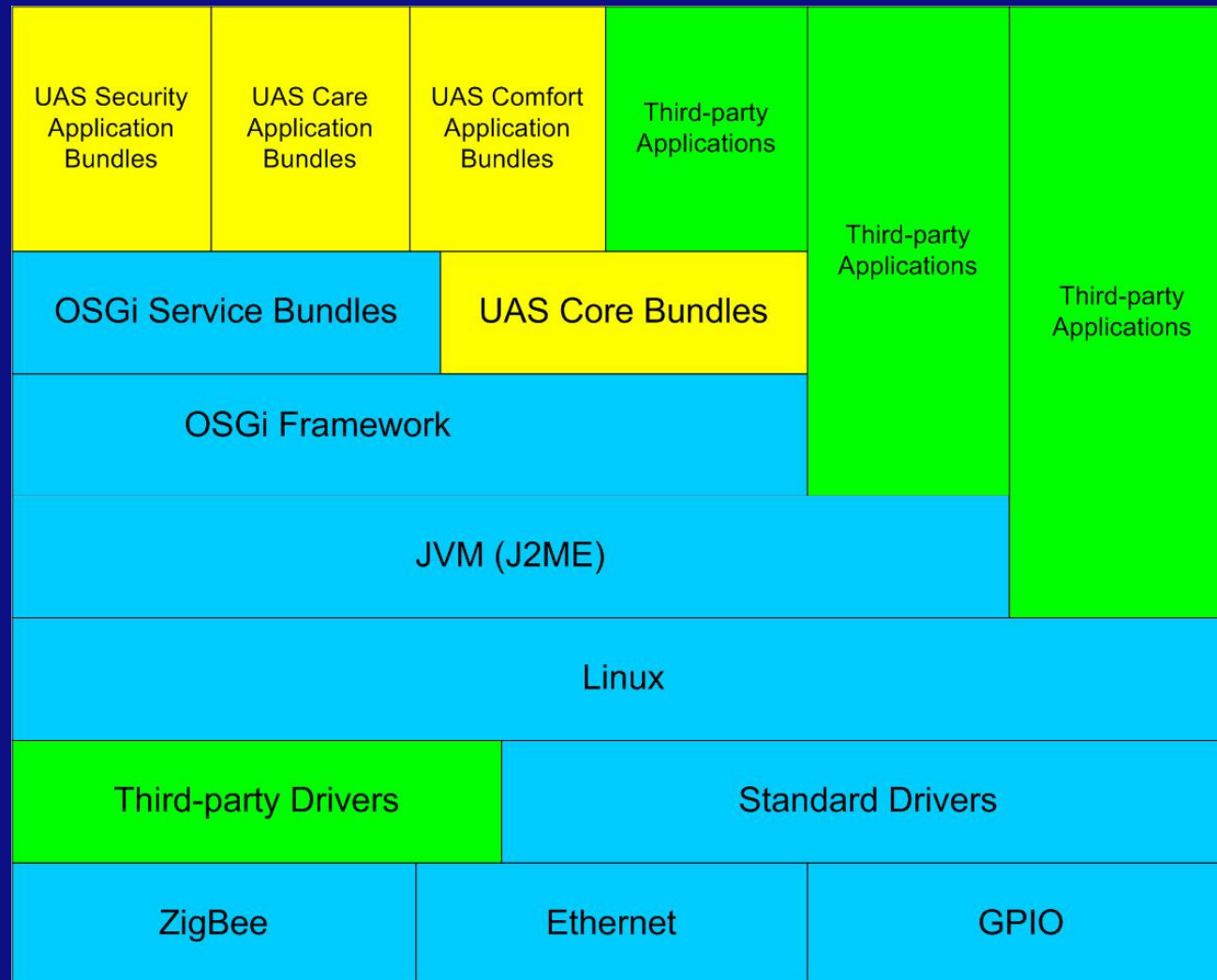
# Unattended Autonomous Surveillance (UAS) Concept (2008)



# UAS system overview



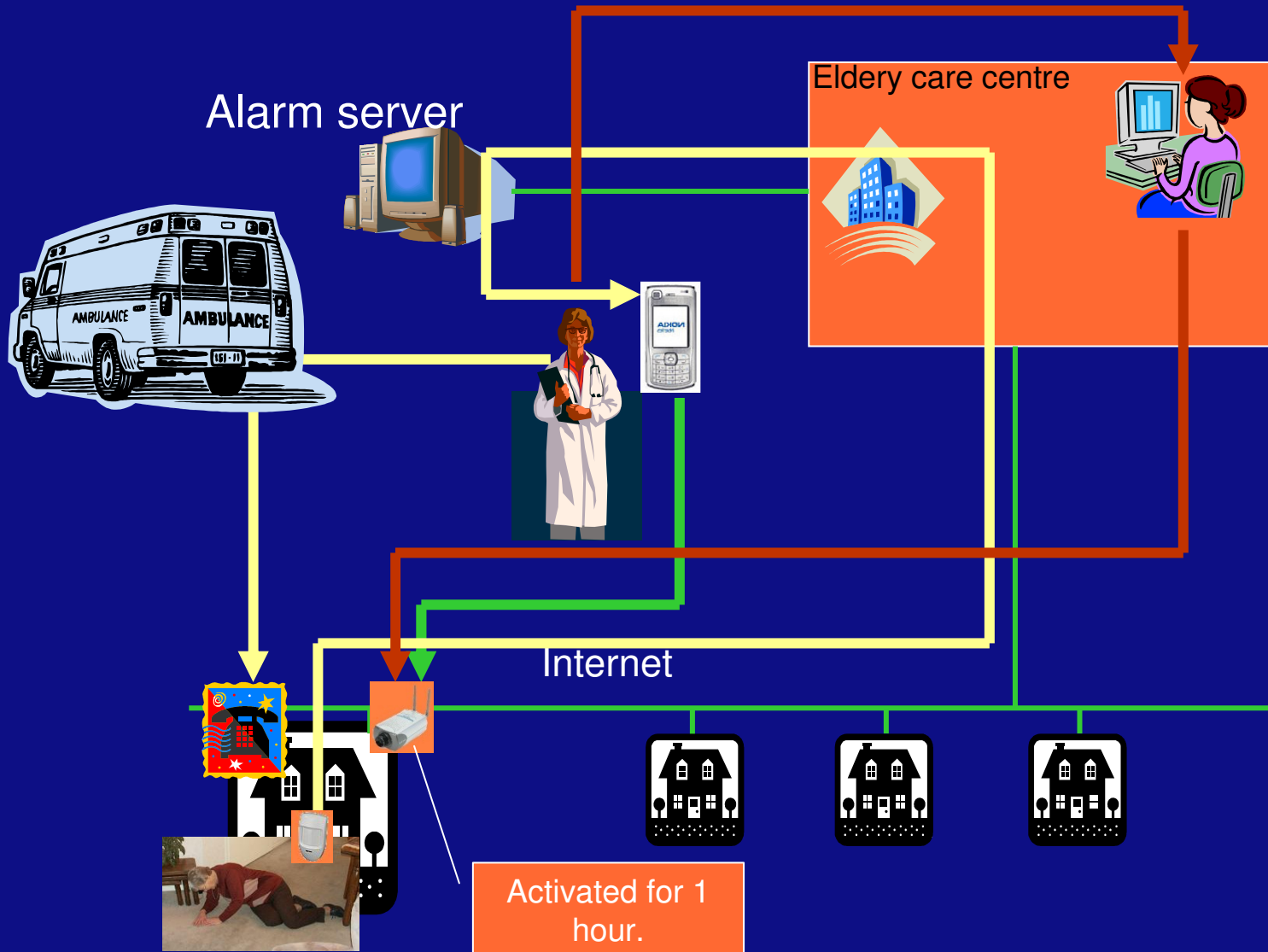
# Open Architecture of the Domotica Access Point (DAP)



# Automatic fall-detection through 'ambient intelligence'



# Example alarm flow



# SMS alarm arrives on the nurse's mobile phone



# Video observation using mobiel phone



# Overview of UAS services

- Social alarming.
- Mobility monitoring (fall detection through ambient intelligence, without wearable devices).
- Burglary detection.
- Fire detection.
- Wandering prevention and detection.
- Video observation using wireless camera's (PC & mobile).
- Videophone using the TV set of the resident.
  
- And many, many more.....

# UAS trial Daelhoven (2006 -2008)

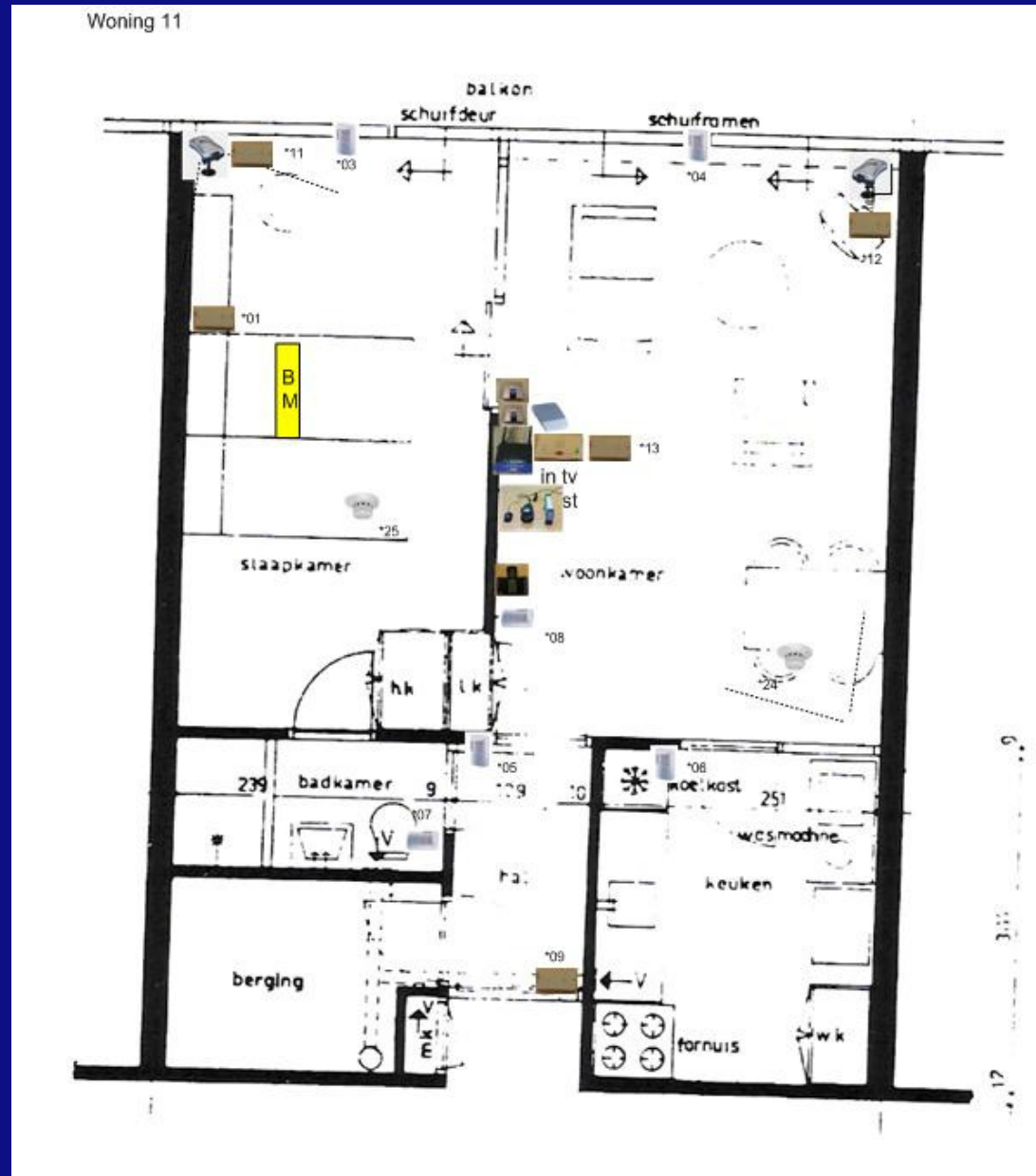


# Trial details

- 20 houses in Soest and Baarn, the Netherlands.
- Trial persons: 60-90 years old. Half disabled, half with dementia.
- Start date: December 2006
- Duration: 2 years.
- In cooperation with:



# Trial houses



# Preliminary conclusions

- Fast and easy installation and removal (6 hours; 2 hours).
- Low false alarm rate (less than 1 false alarm per 2 weeks).
- Real emergency situations correctly detected and alarmed.
- Workload reduction at the involved care organisation due to fast alarm verification possibilities.
- Admission into a nursery home can be postponed / avoided - three trial persons died natural dead at their own houses.



# Questions.

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