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The AGNES project
User involvement in the innovation process

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Agnes

User-sensitive Home-based
Systems for Successful Ageing
in a Networked Society

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AGNES

User-sensitive Home-based Systems
for Successful Ageing in a Networked Society

- Twelve partners + subcontractors in 6 countries
    - 3 user organisations (in Sweden, Greece, Spain)
    - 3 companies (in Germany, Austria, Italy)
    - 6 universities/research centres (in Sweden, Spain, Greece, Austria)

- 400+ person months over 36 months
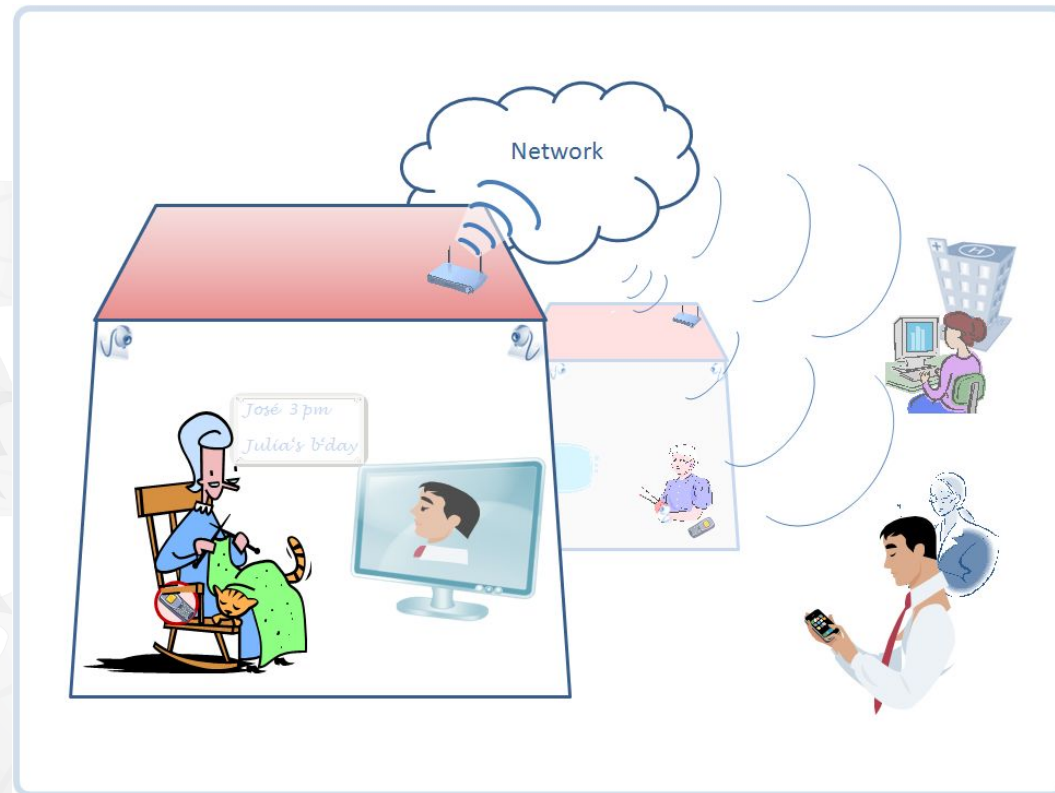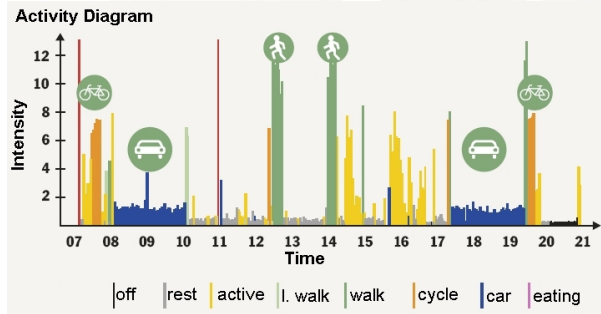   - Sept 2009 to August 2012
    - total cost: €3,6 million
    - funding: €2,4 million
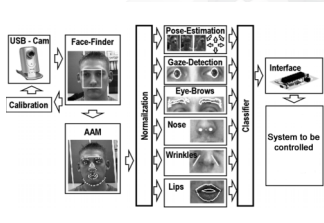
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The elements of AGNES

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The AGNES Vision

- **1.Wellness and active social participation go together**
  - Technology can increase social participation
  - Combating loneliness and mental deterioration
- ➢ A secure social network system for the older person

- **2. Elderly people retain implicit cognitive knowledge**
  - Interaction with technology should capitalise on this
  - Most current systems and devices rely on explicit knowledge for use
- ➢ Tangible/ambient interaction around the retained skills of older users

- **3. Family members need to be informed about elders' states and needs**
  - Can then respond in a timely and sensitive way
  - Contact/visit/involve as needed, not intrude
- ➢ Unobtrusive detection/communication of activities and states

- **All this demands user-led innovation for success**

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AGNES User-led innovation

- **We don't know in advance** what will work for older people & their families

- **An evolutionary approach** to design and implementation

- **Users actively involved** in design and testing from the beginning
  - Requirements, scenarios, suggestions, reactions
  - Iterative design prototypes - system and components
    - Allow older users to communicate requirements, preferences
    - Discussion objects, test use, selection, field trials

- **Creative tension** with technical work
  - Technologists want early specifications
  - User-led innovation means keeping design options open

Waterworth, E. L. & Waterworth J. A. (2009). Designing ICT for the over 80s. In Topo, P. & Östlund, B. (2009), Dementia, Design and Technology: Time to Get Involved. Amsterdam: IOS Press

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User involvement in Innovation
1. End user trials

- Users, using AGNES in own homes, and controls
  - Currently:
    - Sweden, 10 users + 10 controls
    - Greece, 5 users + 5 controls
    - Spain, 7 users + 10 controls

- Standard tests of memory and social life
  - Repeated every 6 months

- Detailed interviews and 6-monthly follow ups
  - Elderly and one relative per household
  - Test and control groups
  - Comparisons over time and across cultures

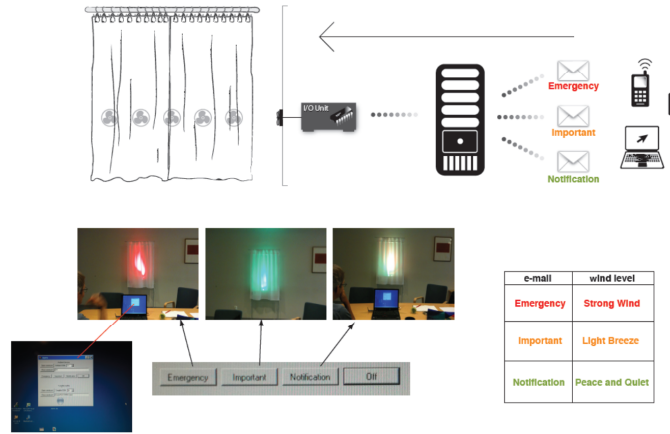- Home log-book for problems, notes, ideas, suggestions

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User involvement in Innovation
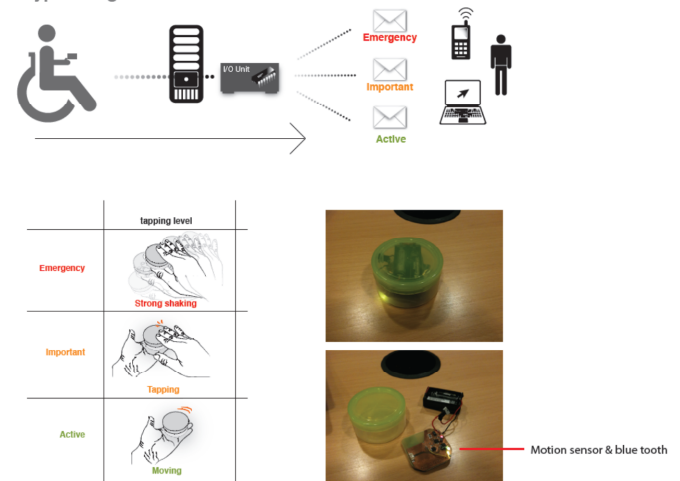## 2. Focus groups

- Two local groups (of 5 and 10 persons) in Sweden
- Meet in a group, gives confidence to express opinions
    - Discuss their lives, needs, preferences, activities
    - Get design ideas, functions and interaction
    - Test early mock-ups and simple prototypes
    - Explore commercialisation routes

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First prototype: Ambient Media (a person-person pair)

e-mail	wind level
Emergency	Strong Wind
Important	Light Breeze
Notification	Peace and Quiet

First prototype: Tangible Media

	tapping level
Emergency	Strong shaking
Important	Tapping
Active	Moving

Motion sensor & blue tooth

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User involvement in Innovation
3. Keeping the users informed and interested

- Local newsletter on AGNES sent out every 3 months
  - What has happened, and what is coming soon
- Weekly messages on the social network
  - Stimulate use
  - Put in contact with other members through the network
- Regular focus group meetings
- Frequent visits to home users and controls
  - **Need to establish relationships and trust**

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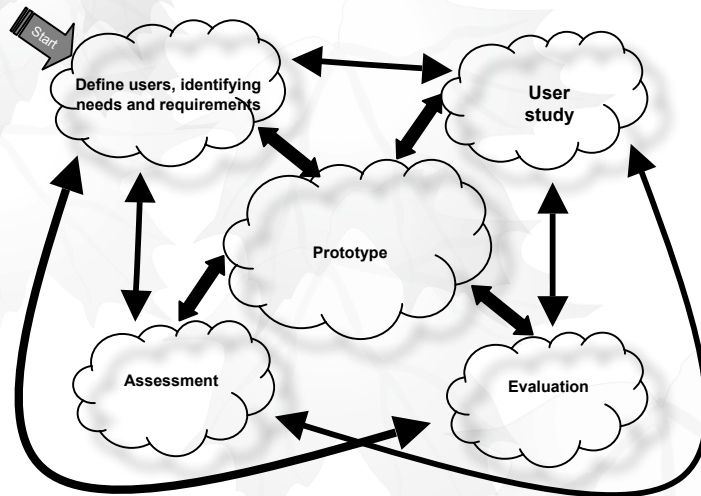Department of Informatics

Conclusions: User-led innovation

- Users should contribute on their terms
    - And be kept fully informed
- We cannot think as the users do
    - We have never been in their situation
    - We do not know their priorities, what they want and need, what they think is fun, etc.
- Users as full members of the project
    - Design and develop with their full involvement
- Innovation only happens when technology is used and accepted

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http://agnes-aal.eu/site/

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