

# A NETWORKED multisensor system for elderly people: healthCARE, safety and security in home environment



Netcarity is a European project researching and testing technologies which will help elderly people to improve their wellbeing, independence, safety and health at home.

Participants include academics, technology firms, psychologists, sociologists, carers, designers and regional authorities.

## Netcarity will:

- Develop and test a new technology infrastructure for homes, with systems and services that improve the quality of life for elderly people
- Turn elderly people's homes into supportive environments which include them in society
- Provide new tools which help caregivers, family and friends better support the elderly
- Advance understanding of technologies which support ambient assisted living
- Facilitate the creation of new markets and companies responding to the demographic change

**Funding:** €13 million

**Duration:** February 2007 – January 2011

## Netcarity benefits:

Users	Technology	Economic and political
<b>Inclusion</b> – Enable elderly people to play a full role in society	Development of new interface modalities suitable for the elderly	Create wealth and new markets by driving the development of new services and products
<b>Assistance</b> – User-friendly access to everyday services including personal care, shopping, transport, cooking or housekeeping	Development of smart sensor technologies for fall and fire detection	Support the development of an affordable approach to Europe's demographic challenge
<b>Protection</b> – Making the elderly feel safe at home	Improve knowledge and understanding of ambient intelligence technologies for assisted living environments	Support policy development by providing experience from diverse European communities
<b>Health</b> – Provision of long term, proactive medical support that looks after people's physical, emotional and social wellbeing	Integrate traditionally fragmented technologies into a single system	
	Promote open standards and provide opportunities for innovation	
	Generate an understanding of how the elderly adapt and use technology	

Netcarity is an Integrated Project supported by the European Community under the Sixth Framework Programme (IST-2006-045508).

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## Work schedule:

Year one:	Year two:	Year three:	Year four:
<p>Delivery of initial user-centred design – consultations with individuals and care groups</p> <p>Initial specification for the Netcarity system including overall design guidelines and a roadmap to implementation</p> <p>Initial prototypes available for testing</p>	<p>Installation of Netcarity system in 20 homes in Eindhoven and Trento</p>	<p>New user interfaces deployed at test sites</p> <p>Inclusion services such as personal training, enhanced communications and entertainment services deployed and under evaluation</p> <p>Prototypes of new devices such as smart fire detection now available for testing in home environments</p> <p>Further roll out of systems to an additional 40 homes</p>	<p><b>100 homes equipped with the Netcarity system</b></p>

## List of participants

Organisation	Country	Description
Provincia Autonoma di Trento	Italy	Regional government in the province of Trento
Stichting Verpleging en Verzorging Eindhoven e.o. De Archipel	The Netherlands	A provider of housing and care services to the elderly. They will be building more than 1000 new homes for the elderly in Eindhoven over the next five years
Stichting Smart Homes	The Netherlands	Experts in assistive technologies in the home
Bruno Kessler Foundation	Italy	Experts in new, intuitive user interfaces and user-centered design
Consiglio Nazionale delle Ricerche	Italy	Specialists in computer vision technology for protection
Eberhard Karls Universitaet Tübingen	Germany	Sensor and data fusion expertise
A&O Systems & Services GmbH	Germany	Expert in IT services
Ceske vyoske uceni technicke v Praze	Czech Republic	Expertise in data warehousing, data mining and business intelligence
IBM Ceska Republika SPOL. S.R.O.	Czech Republic	Situation modelling and acoustic scene analysis
AO Action	Germany	Specialist sensing network
Siemens Aktiengesellschaft	Germany	Siemens corporate research centre, experts in fire and gas sensing
Ikerlan S. Coop	Spain	Spanish research centre. Specialists in knowledge discovery
Kuijpers Beveiligingssystemen BV	The Netherlands	Developers and installers of smart home technologies
Universita degli Studi di Pavia	Italy	Experts in sensor electronics and sensor networks
MR&D Institute srl	Italy	Italian design house, looking at design of in-home gateway and in-home network design

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