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[www.iseb.ruhr-uni-bochum.de](http://www.iseb.ruhr-uni-bochum.de)



Rhein-Ruhr-Institut für Sozialforschung u. Politikberatung (RISP) an der Universität Duisburg-Essen  
Dipl. Soz. Wiss. Kay Loss  
[www.risp-duisburg.de](http://www.risp-duisburg.de)



T-Systems Business Services GmbH  
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[www.t-systems.com](http://www.t-systems.com)



# RESEARCH DESIGN IMPLEMENTATION



[www.e-health-at-home.de](http://www.e-health-at-home.de)

## COORDINATION OF THE JOINT PROJECT AND CONTACT

Joachim Liesenfeld  
Rhein-Ruhr-Institut für Sozialforschung und Politikberatung (RISP) e.V.  
an der Universität Duisburg-Essen  
Heinrich-Lersch-Str. 15  
47057 Duisburg  
Tel.: +49 (0)203/280 99-14  
Fax: +49 (0)203/280 99-22  
✉ joachim.liesenfeld@uni-duisburg-essen.de



Development of business models for a self-determined life in an ageing society

## BASIC INFORMATION

- Funded by the Bundesministerium für Bildung und Forschung (BMBF)
- Funding focal point: Technology and services in demographic change („Technologie und Dienstleistungen im demografischen Wandel“)
- Project execution: Arbeitsgestaltung und Dienstleistungen im DLR
- Duration: Sept. 2008 bis Aug. 2011



## TASKS OF E-HEALTH@HOME

Based on innovative business models the project E-Health@Home identifies, evaluates, designs, and implements telemedicine services for the elderly. The project contributes to the solution to problems resulting from an aging society. The objective is the development of alternatives for those who have been living in residential nursing homes due to health impairment.

The project creates conditions under which these people can live independently in their own homes longer than was previously the case. Starting points for E-Health@Home are current and future applications in telemedicine and ambient assisted living (AAL).

The success of E-Health@Home depends on a balanced consideration from medical, technological, economical and social factors. The team of the project is thus structured highly interdisciplinary manner.

In the context of E-Health@Home, the social and economical protagonists of this evolving (third) health care market will be completely and innovatively linked.

### OBJECTIVE: A NEW MODEL FOR SUPPLY

- The elderly look for new models for living in their third phase of life. In addition, an aging society needs new supply models.
- The private Home needs to be upgraded as a health site. An increasing interlocking of outpatient and nursing home care is emerging.
- Services in telemedicine and AAL will allow the home-centred treatment of a multitude of illnesses and complaints.
- Further critical success factors are the encouragement of independent and responsible behavior by the elderly, involvement of relatives and new forms of social initiatives such as the Mehrgenerationenhaus. (Multi-Generation-Home)
- This life and supply model requires a flexible network of business and intermediate organizations, which offer medical, nursing, practical household and cultural services.

Developing the home as a health site improves the life quality of the patient. At the same time, nursing and health-care costs can be reduced.

### RESEARCH OBJECTS AND PRIORITIES

Integration of existing and development of new services

- An architectural framework which supports the interoperability of devices and the integration of services in telemedicine and AAL will be developed
- Telemedicine and AAL applications will be registered, reviewed, and classified, in order to optimise the methods in service engineering for future applications.

#### Business models and methods of business management

- A central task of the project is the analysis of innovative business models as well as business systems, which enable the facilitation of the home as a health site based on sustainable and value-added architecture.
- Possible advantages in efficiency and effectiveness are analysed from an economic and operational point of view.
- The project develops solutions for safety and security of data due to special challenges in terms of data protection requirements.

#### Modelling of the social environment

- Telemedicine and AAL have to be easily accessible for the elderly so they can regard these services as socially beneficial.
- The perspective of telemedicine will be connected with innovation in nursing care, supply and social environment.



### PROJECT TIMETABLE

The project sees itself as a research and development project running over a term of three years, divided in three phases of 12 months each.

- Sept. 2008 - Aug. 2009  
Exploration and conceptual design
- Sept. 2009 – Aug. 2010  
Modelling and implementation of prototypical applications
- Sept. 2010- Aug. 2011  
Testing, evaluation and transfer