



Supporting the Transfer of Knowledge for a Participative Design of the Care Work Sector through Microelectronics

Developments in labor markets and demand for elderly care open an opportunity for innovations in the use of service robots in health services. Microelectronic innovations often proceed however, without consideration of the needs of either care workers or elderly persons.



Figure 1: Care-O-bot® 3 – Mobile Robot Assistant, Fraunhofer IPA, Stuttgart

The project network "WiMi Care" is coordinated by the Universität Duisburg-Essen and involves a close partnership with the Fraunhofer Institute for Manufacturing Engineering and Automation (IPA) in Stuttgart, the developer of the Care-O-bot. The Care-O-bot is aimed at care services, and Duisburg sociologists will assess how best to use the robot in actual care service settings.

The research begins with an assessment of an elderly care facility, where the Care-O-bot will eventually be tested, and follows the impact of this assessment on development and commercialization processes. The concerns of the Duisburg research go well beyond the issue of "usability" to understand how knowledge is generated at the front-line of service work

and transferred back to engineers and commercial firms designing and marketing robots for service functions.



Figure 2: CASERO – Automated Guided Vehicle System, MLR System GmbH, Ludwigsburg

The project aligns closely with a recent EU communication on technology and demographic change, and has taken on the role of an important pilot project for future technology policy in the German Education and Research Ministry program on "Technology/Services/ Demography".

Diego Compagna, Stefan Derpmann and Kathrin Mauz Institute of Sociology, University of Duisburg-Essen

Project Network Coordinator: *Karen Shire* – Institute of Sociology, University of Duisburg-Essen

Project Network Partners:

- Fraunhofer-Institut für Produktionstechnik und Automatisierung Birgit Graf, Theo Jacobs, Christopher Parlitz
- User Interface Design GmbH Franz Koller, Peter Klein, Christiane Hartmann
- MLR System GmbH für Materialfluss- und Logistiksysteme Kurt Krause, Jochen Luz, Matthias Hilmer

The project is funded by the Federal Ministry of Education and Research (BMBF)

karen.shire@uni-due.de www.wimi-care.de