

Summary - LISA



Chair of Building Realisation and Robotics

General Information

• Project Title: Living Independently in Südtirol/Alto Adige

Project Acronym: LISA

• **Sponsor/Client:** Italian government and the city of Bolzano, Italian consortium of companies; funding code: decree of the provincial government No. 22/I-II from 06/01/2010

Budget: ca. 1,2 million €
Duration: 2010 - 2012

Abstract

In LISA, the implementation of a novel robotic service wall supporting those ADLs was the main objective. The proposed system followed a modular approach, whereas all system elements provide "plug and play" characteristics. Such an approach enables an efficient system, which can be arranged and re-arranged into various configurations, and can be easily installed in any residence without requiring specific space dimensions. Through LISA's mechatronic service wall, an ambient intelligence environment (Ami) can be created within a house or flat. A variety of services can be addressed by the proposed system, contributing to a higher level of quality in ADLs. That means also a higher degree of safety as the system can contact emergency services. After an early design phase two 1:1 prototypes were evaluated using an Age Simulation Suite. Finally, the mechatronic service wall was installed for three months in a real house and evaluated by potential users.

Key Facts

Modular Mechatronic Walls to assist elderly in care homes



Figure 1: The entrance module of the first LISA project with novel assistive functions



Figure 2: Modular, platform-based approach for an efficient mass customization service

















