

<u>Name</u>	<u>Organisation</u>	<u>Project title</u>	<u>Decision No.</u>	<u>Decision date</u>	<u>Funding period</u>	<u>Funding</u>
Pulli, Petri	OY	Platform for Smart Living Environment for Senior Citizens (P-SESC)	129167	16.07.2008	01.01.2009 - 31.12.2010	160 000

Project description

Finland and Japan are two countries that face an increasingly aging population due to low birth rates and improved life-expectancy. It is predicted that by 2050, percentage of the population of Finland and Japan over the age of 65 will be 27% and 33% respectively. This presents significant challenges to the implementation of public health policies associated with aging, such as reduced physical and mental capabilities (Dementia, Alzheimer's) and psychological problems (loneliness, depression). Currently, the expenditure of both countries on health care system as a percentage of GDP is less than the OECD average, yet both provide results superior to higher spending rivals. This is mainly due to the use of ICT technology, which not only provides high quality and cost effective services to their public, but also provides valuable technological and service export. For the future health care needs, technology must address the full lifecycle of the elderly: diagnosis of potential health problems, in-patient hospital care and post-hospitalization care. In a smart living environment model, a distributed healthcare support information service, based on patient mobility, could keep the elderly continuously connected to health care workers (doctors, home nursing, rehabilitation experts), social services and community support groups. A smart living environment is a physical space rich in devices and services that is capable of interacting with people, the physical environment, and with services originating both inside and outside of the living environment. In this project, a prototype for a mobile based information service platform for the support of elderly people, covering pre-admission, clinical and post discharge care will be developed. The prototype will combine sensor fusion networks developed at Kyoto University, with mobile service knowledge and advanced user interfaces developed at University of Oulu. The prototype will be tailored to meet needs of the elderly according to the results of ongoing Academy of Finland funded SESC project. Through the development and deployment of the prototype at Kyoto University Hospital, empirical data will be collected. Analysis of the data will lead to a better understanding of the usability issues in the smart living environment. The results will allow the provision of continuous clinical support without asking patients to visit clinics and provide a smart living environment that provides better quality of service for the elderly. The cooperation between Kyoto and Oulu will achieve several objectives. Firstly, it will complement Kyoto's knowledge of in-patient care requirements with Oulu's knowledge of out-patient care requirements. Secondly, it will compliment knowledge exchange of Kyoto's expertise in sensor fusion networks, Oulu's knowledge of mobile communication and user interface technology, and best practices. Thirdly, it will provide resources to tailor current systems to the needs of senior citizens.