AALBORG UNIVERSITET

Aalborg, November 2013

To the editor:

Electronic Wall to Improve Quality of Life for the Elderly

An EU research project with 13 international partners and a budget of over 65 million kroner will over the next three years develop an electronic wall that can help those weakened by age enjoy greater independence and increased quality of life at home. The eWALL project will be led by researchers at Aalborg University where international colleagues have been invited to a joint start-up meeting this week.

The ambition of the eWALL project is to develop an interactive, wall-mounted electronic device that helps older users have an active old age with the greatest possible independence. The electronics on the wall in conjunction with the underlying infrastructure will allow ongoing communication with all sectors of the healthcare system so that seniors can feel more comfortable in their own homes, even if they need treatment or rehabilitation following illness.

An important goal is to make the system able to adapt to individual needs. Heart and lung disorders, reduced muscle function and reduced control over movement are some of the physical disabilities that senior citizens endure and that increase risk in the home. In addition, they may experience failing memory, poor sense of orientation and a reduced ability to handle complex situations. Cases of mild dementia can also require continuous support from health professionals.

- Chronic disorders can be amplified and more complex with age and that makes them difficult to handle. They threaten the individual's possibilities for living an independent life, and at the same time, they are a growing challenge for the health sector worldwide because there will be more elderly people. The eWALL project will seek to address the challenges for older people with chronic diseases by developing an affordable and easily-installable prefabricated solution that can be mounted on an existing wall. It must include all the information technology tools necessary for giving the senior citizen access to relevant services, explains Ramjee Prasad, Professor at Aalborg University's Center for TeleInfrastruktur and Coordinator of the large EU project.

He points out that the number of patients with dementia, according to a conservative estimate, will grow by 40 percent over the next 20 years, according to the World Alzheimer Report. Another example is the lung disease COPD, which is currently estimated to be the fourth most common cause of death worldwide and expected to be the third most common in 2020. eWALL will offer assistance to patients with both disorders.

Demonstration on a large scale

The project will conduct interdisciplinary research, and demonstration on a large scale will support the concept with actual experience in technical, user-related and legal matters. The solution's impact on older users' quality of life will be measured, and socioeconomic studies will be done that can form the basis for recommendations to the healthcare sector, which hopefully in time can take advantage of the possibilities in national health systems.

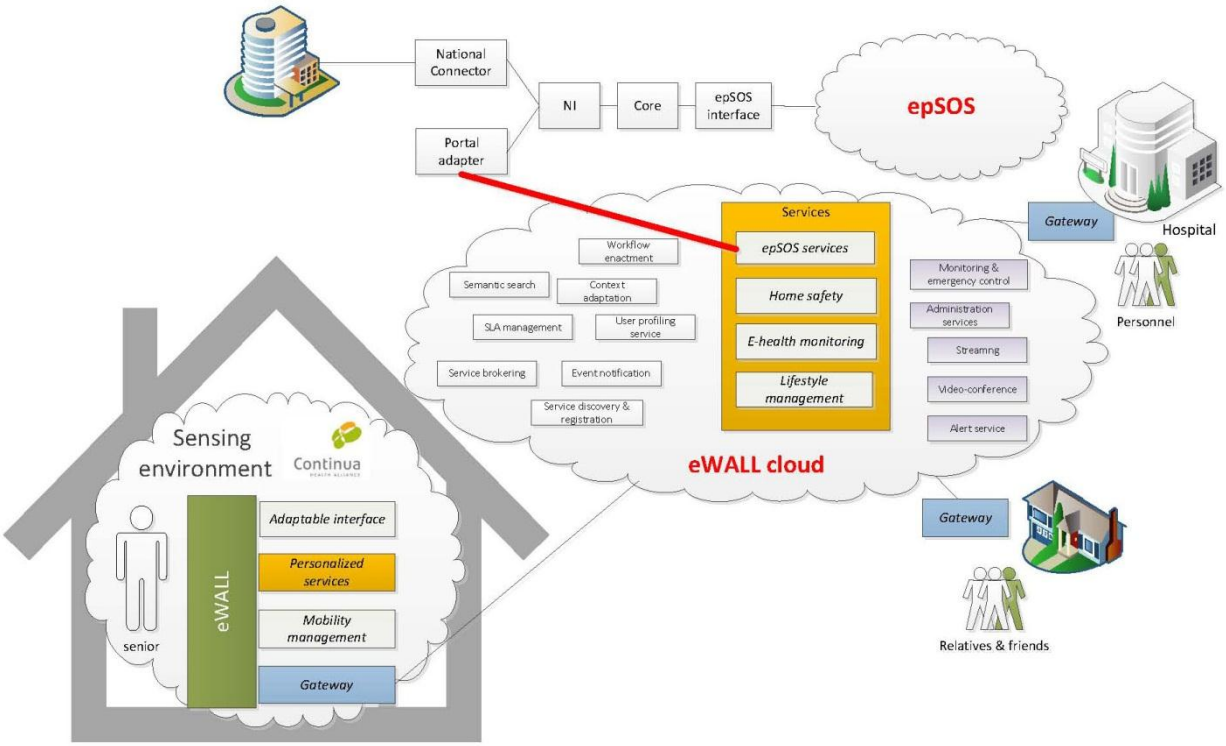
- eWALL is to be a 'lighthouse project' in the European Union, showing how joint research and development can lead to tangible results that provide enhanced quality of life and add value to society, says Coordinator Ramjee Prasad.

Partners

The consortium behind eWALL counts 13 partners from 12 countries: Aalborg University, Hewlett Packard, Ericsson Tesla, Cure, San Raffaele, Roessingh Research and Development, Stelar Security Technology Law Research, Athens Information Technology, University Politehnica of Bucharest, Ss. Cyril and Methodius University, the University of Montenegro, Technical University of Sofia and the University of Zagreb.

eWALL objectives and contribution to European society:

- To enable elderly people with or without cognitive problems to live an independent, normal and social life.
- To enable relatives of the elderly to give them the necessary care in a dignified way without invading their lives.
- To enable professional caregivers and relevant organizations to be more effective in their work and have a closer relationship with more people who need them.

Further information:

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