

OLDES

Older People's e-services at home

The number of elderly people is increasing significantly and rapidly in all EU countries, creating substantial problems in terms of resources needed for assisting them. OLDES aims to plan and develop a technological, cheap and easy to use platform for tele-assistance and tele-company, thanks to the joint work of 11 EU partners.

Objectives of the project

The number of old people in the EU is dramatically increasing and the related burden in term of public expense getting higher and higher – these are the two main reasons motivating the OLDES project. Today more and more old people are living alone, in many cases with no families helping them nor enough money to afford private carers. Getting inspiration from these facts, OLDES will work to plan and implement an innovative technological platform, with low cost and easy use able to provide a wider range of services to an higher number of elderly people, so to face the situations described above. The platform will be tested by 100 elderly people in Italy (10 of them affected by heart disease) and a sample of diabetics in Prague. Mr. Paruolo, Bologna Municipality's Deputy Mayor for Health, firmly wanted this project; he believes that the welfare model has to be changed and renewed quickly, making the most of new technologies and high tech devices to offer a wider number of old people tele-medicine, tele-assistance, tele-entertainment and tele-company services. In this way it will be possible to enlarge the number of people assisted by public services, even if public resources are decreasing whilst the number of old people increases.

OLDES objectives are:

- To develop a cost optimised technical solution;
- To define the profile of "elderly people";
- To define a standardised procedure for tele-care interaction;
- To develop a programme for results evaluation.

Project Description

In order to achieve OLDES' goals, new technological concepts will be integrated and adapted. OLDES will provide: user entertainment services, through easy-to-access thematic channels and special interest forums supported by animators; as well as, health care facilities based on established Internet and tele-care communication standards.

The system will include wireless environment and medical sensors linked via a contact centre to social services and health care providers.

OLDES will also cover the definition, implementation and evaluation of a Knowledge Management (KM) program, an advanced user profiling system that will enhance communication between all the stakeholders of the system. The system will be tested at two different locations: Italy with a group of 100 elderly people (including 10 suffering from heart disease) and in the Czech Republic with a group of 10 diabetic patients.

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OLDES puts older people at the centre and makes their needs the main priority in all developments. This will be achieved through the use of modelling and animation tools to create scenarios designed to elicit responses from older people, their carers and service providers. Animation and simulation will help to ensure that developments are, at all stages, grounded in the realities of social and health care, the cultures and economies of the specific pilot contexts, and as wide a range as possible of other European public service contexts. To maximise the flexibility and exploitability of its products, technical outputs will be packaged appropriately into highly configurable service components.

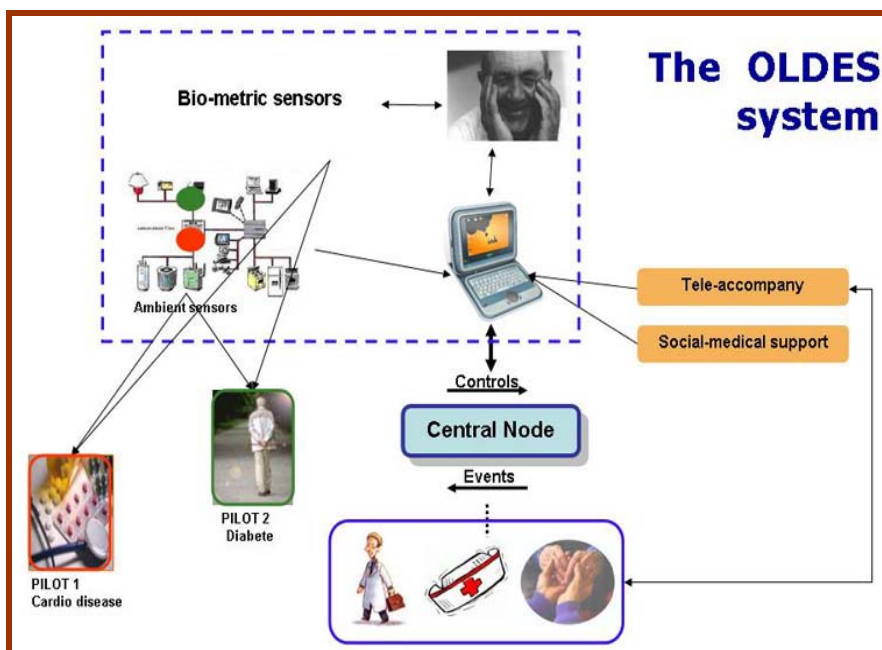
Partners will contribute to the project implementation as summarised below:

- Bologna Municipality will be in charge of the dissemination and communication activities and will also be responsible for the pilot project carried out in Bologna.
- CUP2000 will lead the exploitation and evaluation phase. They will also be involved in the execution of the pilot in Bologna and will manage entertainment tasks, setting up the thematic channels. They will also activate a contact centre for the overall duration of experimentation.

Practical Example / Scenario

Tom is 80, affected by heart disease and alone; his relatives his son lives in an other city and other live far from him. In spite of this, he is still willing to be in contact with friends, be part of a club and be informed on what's going on. His life was not so pleasant before knowing OLDES platform facilities; he felt insecure in his home, he could not be often in contact with friends and club mates and take part to his city's life, without considering all practical problems that he was not able to solve alone. Now he is daily assisted at distance by medical professionals who checks his vital parameters thought telemedicine devices connected to OLDES platform and thanks to OLDES now Tom can also daily chat on several channels with friends on his hobbies and be informed on recent events. His life has changed. He can easily ask for help when he needs, for example, to go shopping or to visit somebody and David, a volunteer working for an association, soon come to give him a lift and brig him where he needs. OLDES, in a word, has made again his life serene, not lonely nor boring and active; today he can also be the "animator" of a channel on football and twice a week he works for it. All those changes where possible thanks to the implementation of an easy to use and low cost local infrastructure offering a wide range of services developed by OLDES.

- Bologna University will be responsible for the design of the GUI interface. UNIBO will develop algorithms for health measurement and will provide the devices and sensors for the equipment and testing of 10 older persons suffering with cardiovascular disease.
- AUSL Bologna will take part in the pilot execution and will lead the Oldes evaluation, validation and testing.
- Newcastle upon Tyne University will assemble a panel of experts from academic institutions and research establishments across Europe who are able to conduct local surveys and undertake research and analysis. This will be supported and directed by a core team from Newcastle who will be responsible for producing the framework deliverable.
- CETIC will lead the software development and will be mainly in charge of the design and the development of the communication system between the sensor modules and INK PC. CETIC will also develop core client-server applications used to offer communication services to the elderly i.e. the provision of (centralised) ASP modality, and embedded communicating and monitoring client application.
- CVUT_ Prague University CVUT will develop the radio user interface.
- Charles University will co-ordinate the pilot on diabetics.
- INK Media (Canada) will mainly develop software for updating the operating system of the INK PC. INK will also provide 120 INK PCs to be used for experimentation during the pilots of Bologna and Prague.
- AGENTSCAPE will develop behavior alarm software for data analysis.



Expected Results & Impacts

This 36 month project will aim to maximise the final result; defining an innovative and alternative welfare system, replacing the existing one, which is no longer sustainable, where technology will be customised according to user needs and used on a large scale. External evaluation will of course be provided by an expert, assessing intermediate and final project results. Anyway, the testing phase will be important for assessing and validating results achieved through the two pilot projects mentioned.

Thanks to the OLDES project, potentially all elderly people in the cities and surrounding areas in the future will be tele-assisted, contributing greatly to the simplification and systemisation of assistance services and providing public cost savings. The technological solutions produced by OLDES will allow older people and their families to live more serene and assisted lives in their own homes, without representing too high a cost burdening the whole society.

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STREP

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