

Invisible Assistant to Prolong Active Ageing at Home

Development of virtual assistant for seniors has been launched

„Virtual assistant prevented fire“, „Invisible assistant saved an old woman from heart attack“, „Internet platform called an ambulance for an old man with commotion“, „IT application alarmed for depression“.

Titles like these will be often met in media in 2021. Because at that time the future integrated high-tech modular system will start operating at full capacity to help lonely seniors live actively and independently at home despite the burden of years and diseases.

This was stated today by Jordan Dimitrov from the Balkan Institute for Labour and Social Policy (BILSP). He announced to journalists the start of an innovative project for the development of a virtual assistant to support active ageing (SAAM - Supporting Active Ageing through Multimodal Coaching). It is financed with almost 4 million euro by the EU Framework programme for research and innovation Horizon 2020. Its end goal is to extend as much as possible the active and independent living of people aged 60 and over in their own homes while preserving their physical, emotional and mental condition as well as their social contacts as long as possible. The future online platform will also support the work of those taking care of them - relatives, friends, health and social workers.

The project started on 1 October 2017 and will go on for three years. The representatives of the international consortium that will be working on its implementation met yesterday for the first time and today continue their discussions in Sofia. The partners are 10 coming from five European countries. Among the partners, there are leading universities like the University of Edinburgh (United Kingdom) and the Paris Lodron University of Salzburg (Austria), two Slovenian research organisations, namely the University Rehabilitation Institute and the technological Jožef Stefan Institute, established technological companies like the Bulgarian ScaleFocus and the German Interactive Wear AG. The Consortium includes also renowned non-governmental organisations with vast experience in working with seniors - the Bulgarian Red Cross, Caritas Bulgaria and the Austrian platform of the European Federation of Older Persons - EURAG Austria

The project co-ordinator is the Balkan Institute for Labour and Social Policy, based in Sofia that since 2001 manages and implements multiple social projects under programmes, funded by the EU and other international donors

The future virtual assistant will help seniors feel better in their usual environment while collecting data on their health and emotional condition through sensors, intelligent measuring devices, video and audio receivers. The system is going to observe the life functions and taking medicines, to detect and alarm for negative changes of mood and behavior of its users. It will prevent risky situations (fire



for example), and under certain conditions automatically turn off the potential risk agents, or signal for accidents. After analyzing health indicators and habits of older people, the invisible assistant will give recommendations for a healthy diet, propose social and cultural activities as well as group activities for leisure time.

The integrated system will improve the social contacts of its users and prevent isolation and depression while encouraging regular communication with relatives, friends and neighbors, supporting relations with relatives, friends, neighbors and personal GPs of seniors in order to ensure timely help when needed. The virtual assistant will ensure the opportunity for a direct contact with medical specialists, social services providers, volunteers, employers who are involved in the broad social circle of the system's users.

The future autonomous modular system will be a completely new innovative product for Bulgaria as well as for Europe. It will collect information through unobtrusive sensors suitable for permanent wearing or installation at home. A discreet observation of living environment and personal activity will be implemented whereas inviolability of personal life is secured – this is what Bernard Ženko, technical manager of the project, has explained. For the direct communication with the end users clear consumer interfaces will be developed – visual and sound, adapted to the needs and habits of older people.

The system will analyze collected personal information and take independent decisions to remind or encourage its users for certain actions towards their physical and mental health (for example, take medicines, cook food, call a friend or go out for a walk). Special strategies and technologies for influence through persuasion will be developed to this end.

An assessment of seniors needs will be performed at the initial stage of SAAM project, ethical and technological standards will be established for the development of the system. The pilot testing of the future technology, modules and sensors has been envisaged for the autumn of 2020. The international consortium is planning to develop a platform which is to be further developed after the end of the project.

