

## From Smart Homes to Smart Blocks

*Where the needs of elderly, health care, building professionals, landlords and technologists integrate for a new generation of residences with ICT technology for safe/secure living providing the full of range of services and activities for its citizens.*

**The project:** Our vision is to create a sustainable residential environment where elderly are active members of society and that they have a high quality of life throughout the ageing process. The focus is to examine the challenges and solutions for building the next generation of elderly residences where:

- 1) one can grow old in place without limiting activities to the interior of an apartment
- 2) all relevant services and activities are fully integrated in a sustainable and cost-effective way
- 3) ICT technology such as smart sensor systems are not just in place but coordinated with the full range of services and activities

**Expected impact:** The biggest effect of a smart block is **to demonstrate technology benefit towards societal challenge for not only large cities but also for small towns**. We will establish the idea of a “*smart block*” as a **new urban housing solution integrating intelligent ICT technology on a large scale** that supports coordinated services and facilities and thus promotes active/sustainable living in a safe and secure environment. A multidisciplinary endeavour will be undertaken which starts from the needs and partial solutions from several domains and is able to integrate them together. The identification and integration of needs is the essential first step for realizing a smart block in an urban context.

**About us:** *Alfred Nobel Science Park (ANSP)* and *Örebro University* are based in Region Örebro County, Sweden. ANSP is a central actor in the regional innovation system and Örebro University, represented by the Department of Science and Technology, is leading in the area of autonomous, integrated systems with an outstanding record in smart elderly living environments. ANSP and Örebro University have worked together in numerous projects in the field of smart elderly living funded by the EU, the Swedish Research Council and Vinnova (the Swedish innovation agency). They have also developed a testbed apartment, called Ängen, together with the regional real-estate company Länsgården Fastigheter AB. The apartment serves as a hallmark example of how ICT technology and robotics can be used supporting elderly living. Through our experience, we see an apparent need for a systematic approach in the integration of technology and services in future residences. In fact, it is currently not known how to scale-up many of the solutions for isolated smart home technology, to a full elderly residence, that efficiently serves the needs of several elderly and personnel. This is what we want to tackle in our project.

**Looking for:** Partners with **experience of working with intelligent sensor systems and artificial intelligence** in bigger geographical areas, **enterprises with stable solutions of open systems** as well as **care giving organisations and public sector working with a user-based focus** that involves the users in the development process and that enables the implementation of the project results.

### Interesting calls:

- **DT-TDS-01-2019:** Smart and healthy living at home
- **SC1-DTH-05-2019:** Large scale implementation of digital innovation for health and care in an ageing society
- **SC1-DTH-03-2018:** Adaptive smart working and living environments supporting active and healthy ageing

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