



Breaking barriers for
a sustainable Active
and Healthy Ageing
through IoT

Current setting

Europe is undergoing major socio-economic changes that make the welfare state's foundations teeter; namely, an **increased life expectancy** and a drop in birth rate. And the numbers seem to have an upward trend. Projections indicate that the **older population (> 65 years) in the European Union will grow from the current 18% up to 28% by 2060**. In addition to the above demographic change, the increasing growth of social and health costs jeopardizes the **sustainability of the current social and health system models**.

In consequence, the number of **persons living to an advanced age and in a situation of dependency is constantly increasing**. That is why analysing the existing **technology solutions** is of great importance, so that these solutions can be linked and used **to CREATE VALUE** for those involved in providing welfare and healthcare to older adults.

The **ACTIVAGE project** takes base on these arguments, with the **primary objective of developing evidence** and bringing to life the **positive impact** of the **technologies and solutions** that are **based on the INTERNET OF THINGS (IoT)** in order **to improve the quality of life, the health and the autonomy of older adults**. And all this, with the aim to ensure the **SUSTAINABILITY** of social and health systems in Europe.



“Soon the world will have a higher number of older adults than children”

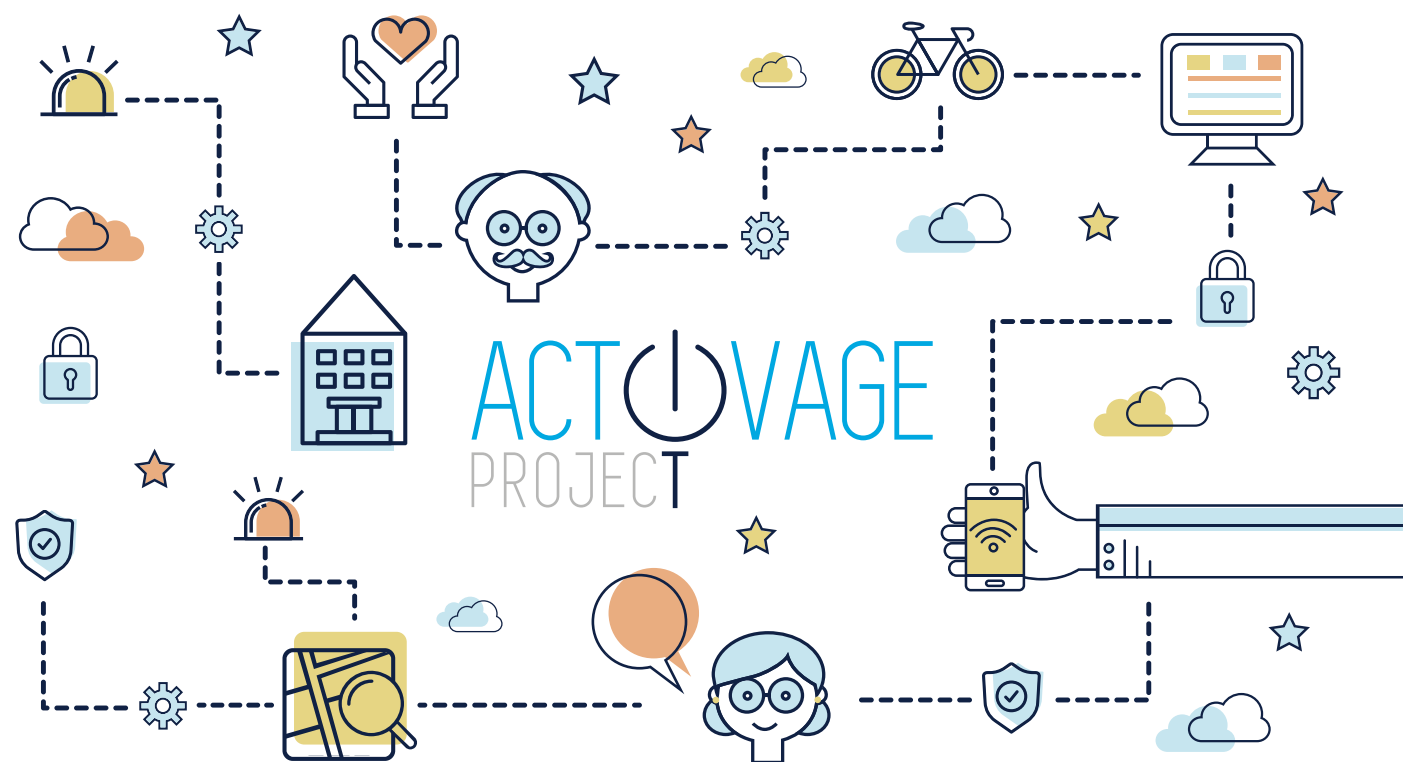


The project aim

In this context, ACTIVAGE is building the first European interoperable and open IoT ecosystem enabling the deployment, at large scale, of a wide range of Active & Healthy Ageing IoT based solutions and services.

To achieve this, ACTIVAGE is integrating **thousands of devices to collect and analyse older adults' environmental and lifestyle information**, identify their needs, and provide **customized solutions**, ensuring users' **data privacy and security**.

The **flexibility and ubiquity of IoT technologies enable the digital transformation of AHA services across the health value chain**, from prevention to rehabilitation, always focused on older adults' wellness and quality of life.



ACTIVAGE deployment sites & AHA services

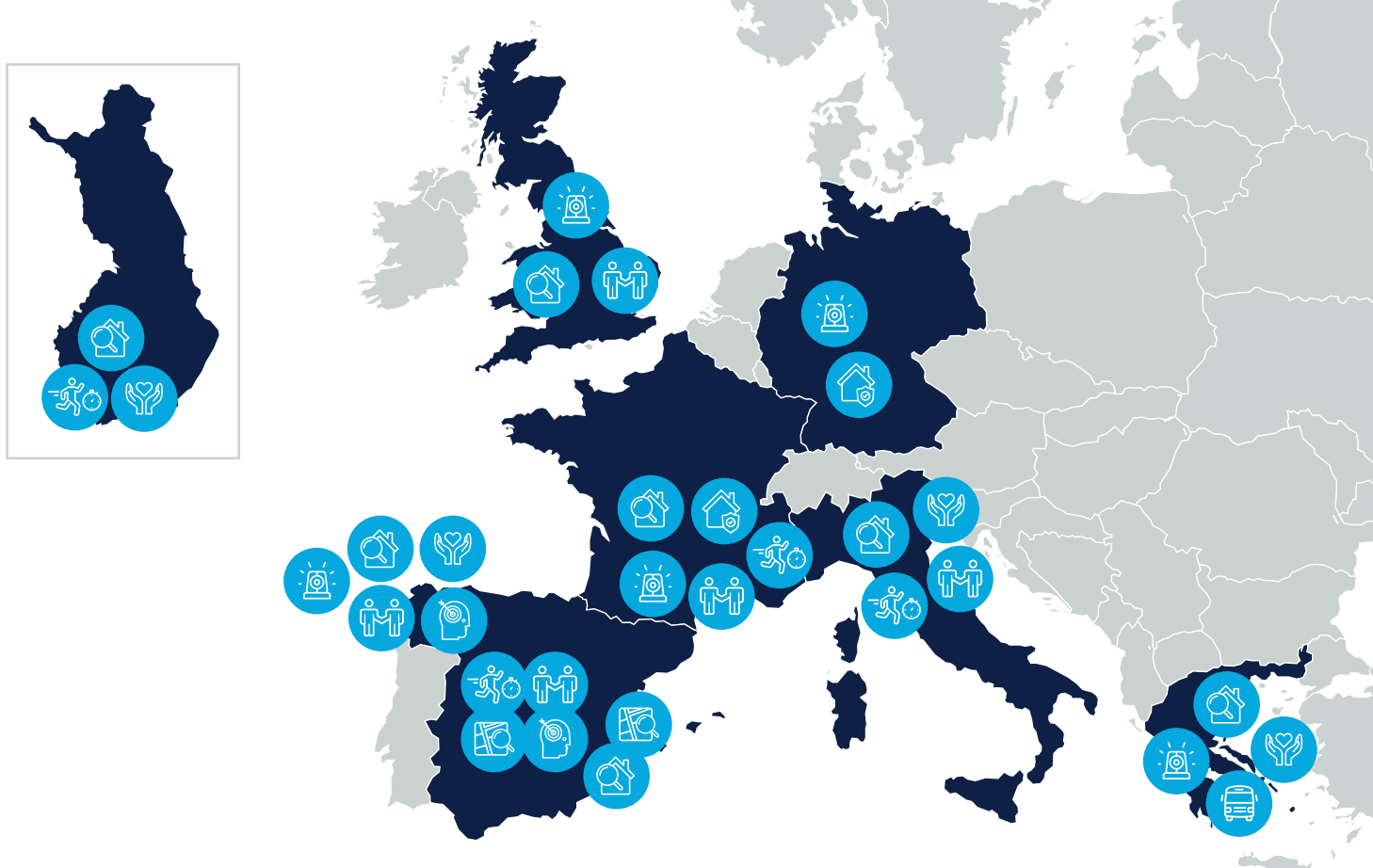
This large-scale pilot will actively involve nearly 10,000 older persons across nine deployment sites in seven different European Union countries. The pilot will be implemented in Madrid, Galicia, Valencia (Spain), Emilia-Romagna (Italy), Greek Cluster: Attica, Central Greece and Macedonia, Grenoble (France), Woquaz (Germany), Region of Hessen in Leeds (United Kingdom) and Finnish Cluster: Cities of Helsinki, Tampere and Turku.










It is important to highlight that ACTIVAGE ambition is that **end users** from the different sites are **involved in the piloting of several use cases**, in such a way that it is **considered a single pilot** and not the sum of different pilots with diverged ambitions. This has been thought intentionally to **simulate real conditions that will emerge in an IoT-enabled European society** sharing an homogenized offering of interoperable services, in order to **maximize the adoption and minimize the effects of market fragmentation**.

ACTIVAGE Deployment Sites' composition represents the European reality: a wide range of social models; different target older populations with the goal of extending independent life; informal and formal carers; different types of potential business models and mixed participation of public and private service providers; different IoT solutions implemented in different ways.

"During the project, successful solutions will be replicated among countries, and eventually pave the way to new business models and the inclusion of third parties through Open Calls"





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|---|---|
|  Daily activity monitoring at home |  Cognitive stimulation |
|  Integrated care for chronic conditions |  Prevention of social isolation |
|  Monitoring outside home |  Safety, comfort and security at home |
|  Emergency trigger |  Support for transportation and mobility |
|  Exercise promotion | |

ACTIVAGE impact

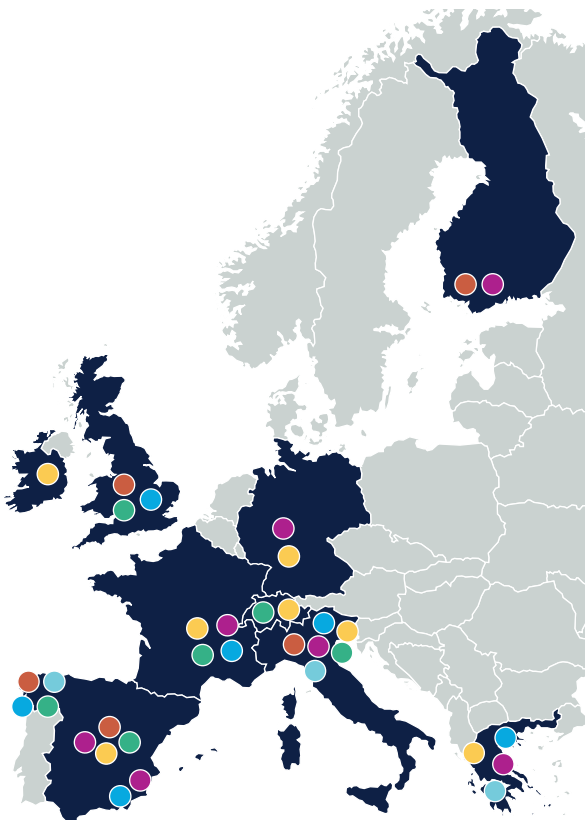
The **main challenge** of the ACTIVAGE project is to **overcome the barriers existing in the IoT-based AHA market**, focusing on the following three main issues:

- Create an **ECOSYSTEM of IoT-AHA solutions** that 1) ensures technology interoperability, 2) proves to enhance the well-being and autonomy of older adults, and 3) serves as a reference for the development of further solutions.
- Enhance **long term sustainability of the current European health and social care systems**.
- Foster and **support** health and social care **policy makers to scale up AHA services** to the whole European population.
- Drive the current market situation and consolidate the **market sustainability by developing business and purchase models that result in the creation of VALUE** for all the agents involved.
- **Attract European Industry and SMEs**, with innovative business and purchasing models, to lead with us the transformation of the AHA market.

The consortium

The ACTIVAGE Project has the support of **49 organisations from 9 European countries**, 10 of which are industrial, 14 leading research institutes or universities, 11 major corporations plus 15 highly innovative small and medium-sized enterprises, and is **coordinated by Medtronic Ibérica** under the auspices of the **H2020 framework of the European Commission**.

ACTIVAGE is also part of the **IoT European Large-Scale Pilots Programme**. An innovative consortium that is collaborating to foster the deployment of IoT solutions in Europe through the integration of advanced IoT technologies across the value chain, demonstrating multiple IoT applications at scale and in a usage context, and as close as possible to operational conditions.



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 ACTIVAGE project



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