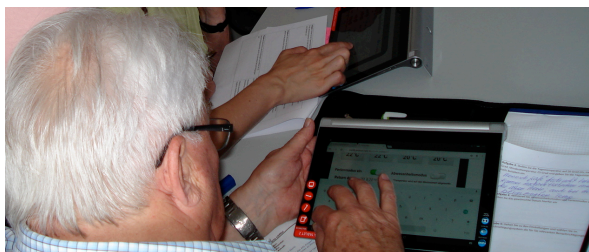


We design, build, and manage an innovative heating control system for elderly people offering simplicity and cost reduction.



END USER ORIENTED

SmartHeat is absolutely based on the end users interaction. Older adults, informal and formal carers are involved in pilots and user satisfaction workshops and questionnaires.

ENERGY BILL SAVING

A reduction of a 30% in average on the gas bill during the two validation iterations of the project has been set.

QUALITY GUARANTEES

SmartHeat aims to the minimization of the number of system failures up to a 99,9% success probability.

Consortium



Contact:

Michel Deriaz, PhD
R&D Project Manager
E: michel.deriaz@unige.ch
University of Geneva – CUI
7 rte de Drize, CH-1227 Carouge
Switzerland

Website: www.smartheat-aal.eu
Twitter: [@smartheat_aal](https://twitter.com/smartheat_aal)



Smart, secure and user friendly heating monitoring and control for elderly people



The project SmartHeat is co-funded by the AAL Joint Programme and the related National Authorities in Switzerland, Austria, Romania, Italy and Spain.

www.smartheat-aal.eu



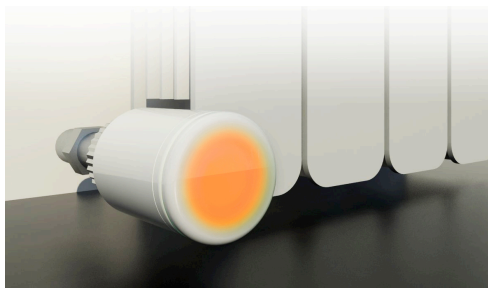
Industrial Design

The **SmartHeat project** is strongly focused on the end users and their satisfaction. The consortium aims to produce, at the end of the project, a prototype that is very close to exploitation on the market. The end users are involved in the project since the beginning in order to maximize the chances of user satisfaction and lower the adoption barriers.



Innovative Solutions

The **SmartHeat** project aims to **leverage on modern IoT technologies** in order to radically change the home heating experience for **health, comfort and wellbeing of elderly people**. The goal will be achieved via the development of a smart, secure and elderly friendly Information and communications technology (ICT) system for heating monitoring and control.



Optimal integration of information, design, and technology.

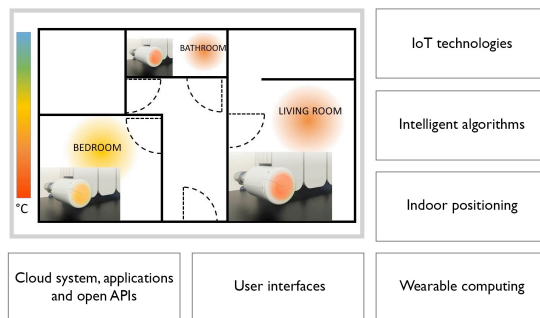
INTELLIGENT ALGORITHMS

The SmartHeat system can be controlled manually by the user but it can also be controlled in an automatic way. **Intelligent algorithms** allow the system to learn the user's habits and taking into account the environmental conditions (room temperature and humidity, presence, light, proximity, etc.) controls the heating system accordingly.

USER INTERFACES

The SmartHeat system will be provided with older adult **friendly user** interfaces, which can be adapted based on the skills of the user. The interaction between the system and the users is done via different user interfaces, such as **PCs, smartphone or tablet**, which also enable the access from outside the home.

SMARTHEAT'S ARCHITECTURE



SENIOR LIVING ON YOUR TERMS

COMFORT AND CONVENIENCE

INDEPENDENT LIVING



"The technology developed in the SmartHeat-project focuses on central needs elderly people have in their own homes: well-being, independence and a positive feeling of security"

INTERNET OF THINGS

A key building block of the platform is what we call the **smartTRV**, a **Thermostatic Radiator Valve** equipped with IoT technologies for monitoring and control of the radiators via the Internet. The smartTRV can also control a radiator in an autonomous way depending on the environmental conditions of the room, such as temperature, presence, humidity, etc.

CLOUD, APPS AND OPEN APIs

A cloud-based system will provide storage and application development functionalities. **Informal or formal carers** who are not at home can receive **alerts**. If the user sets a temperature but the system knows that the temperature in a certain room is not safe for the user, the carer can be informed and adjust accordingly.