SmartSenior: Intelligent services for senior citizens.

Data exchange via a central gateway.

The aim of the SmartSenior research project is to develop technologically innovative services that enable older people to continue living in their own homes longer, and stay independent longer. The project provides intelligent living environments that help older people protect their quality of life, in terms of health, social interaction and financial position. The project, which is being supported by the Federal Ministry of Education and Research (BMBF), brings together 28 partners, including large corporations, research institutes and small and medium sized enterprises (SMEs).

AAL Home Gateway: core component of a comprehensive service platform
Telekom Innovation Laboratories is developing an innovative home gateway for ambient assisted living (AAL) as the central hub in connected homes.

The AAL Home Gateway provides access to an integrated service platform and its AAL services, unifying previously separate services on a standardized infrastructure and making them easier for older people to use.

Standardized, open application environment
The AAL Home Gateway provides basic functions for all AAL applications and base components for the connection between local and external services and infrastructures. As a result, an AAL service center can obtain the necessary information in specific situations – after a fall-related injury, for example – and initiate the necessary activities (such as notifying outpatient care personnel).

The architecture of the SmartSenior AAL Home Gateway is compliant with international standards (HGI, UPnP, OSGi and others). Open communication protocols and an open and secure application environment guarantee extensibility and integration capability with new services, delivering a wide range of benefits:

- Lower costs through use of existing infrastructure
- Increased acceptance through standardized environment and reduced number of devices
- Increased security (reduced effort for individual service providers to ensure implementation and data security; comprehensive protection for all services through a single maintained, administered, and shared application environment)
- Synergy effects (cheaper development of new sources through shared use of existing devices, services and resources)

The AAL Home Gateway can be maintained remotely by the operator, which can install new services and monitor security.

Other project activities
Telekom Innovation Laboratories is the coordinator of the SmartSenior project. Its other activities include implementing intuitive usage concepts based on a single interaction design for all services and devices; developing a cross-platform architecture, infrastructure and service platform; developing a service platform to aid in everyday tasks and establishing cooperative, integrated business models.