



# CEA TECH SERVICES FOR THE SILVER ECONOMY

Technology for tomorrow's silver-economy challenges



**Comfort, wellness, and leisure**  
Personalized physical activity, design and ergonomics, travel, social networks, cultural activities, food, cognitive stimulation



**New urban services**  
Public and shared transportation, signage, ground surface indicators, information displays, accessibility



**Independent living**  
Compensation systems for the disabled, in-home diagnostics, personalized medicine, treatment, e-healthcare



**In-home safety**  
Home automation, detection systems for personal monitoring and falls, geolocation, safety systems, connectivity, indoor environmental quality



**E-services and data security**  
E-healthcare, secure remote data transfer, big data, service traceability, digitalization of content, administrative tasks



**Assisted living**  
Remote monitoring, logistics, connected objects, in-home assistance, remote medicine, communicating task alert systems, robotics



## CEA Tech can help the following businesses:

- Manufacturers targeting the silver economy
- Systems manufacturers and the integrative industries
- Manufacturers of in-home and independent/assisted living equipment
- Transportation equipment manufacturers
- IT services companies

Here are some of the ways CEA Tech can support your development:



**Sensor systems  
and the associated services**

Integration of physicochemical sensors into textiles and other materials for the development of services like geolocation, alerts, and fall detection

**Communicating systems**

Remote patient-to-caregiver communication, medical data transfer, e-healthcare

**Data security**

Encryption for data transmission, smart-card security and certification

**Interactive simulation**

Simulation to optimize infrastructures and transportation, to identify disabilities or altered performance, to design equipment for caregivers

**HMI (virtual  
and augmented reality)**

Simplification and centralization of in-home user interfaces and cultural interfaces

**Vision systems**

Fall detection, video protection, search for missing persons, in-home surveillance and security

**Lighting**

Integration of LEDs into homes and infrastructures for low-power illuminated surface and walkway indicators

**Construction**

Appropriate building design for the elderly, improved occupant comfort, control of home automation systems like lighting and security

**Materials**

Surface treatments for the elderly (non-slip, for example); materials for depollution; prosthetics

**Big data and data analysis  
for e-services**

Medical records, personalized services via social networks, early alerts triggered by events (weather, epidemics), preventive medicine

**Labs-on-chip**

Portable physiological fluid analysis

**Robotics and cobotics**

Rehabilitation, assistance for patients with impaired motor skills, assistance with everyday tasks, assistance for caregivers

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