



Robots in Assisted Living Environments

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RADIO Objectives

- Societal problem statement:
 - Ageing population strains the resources of healthcare institutions
 - People are more comfortable at home, but also need to be and feel safe
- Project objective: develop an automated system that
 - Provides home assistance, making it easier to stay longer at own home
 - Usable and accepted by the primary users
 - Detects early symptoms of cognitive impairment, making it safer to stay longer at own home
 - Is fit for its medical purpose and accepted by healthcare professionals
 - Has low acquisition, installation, and maintenance costs
 - Integrates off-the-self hardware
 - Can be installed by a technician with minimal training

RADIO Action

Research and Innovation Action

Funded under European Union's Horizon 2020 programme

*Advancing active and healthy ageing with ICT: service robotics
within assisted living environments*

April 2015 – March 2018

<http://radio-project.eu>



RADIO Consortium



Academic:

NCSR "Demokritos", Greece, *Action Coordinator*



TEI Western Greece, *Technical Manager*



RUB

Ruhruniversitaet Bochum, Germany



Healthcare:

Fondazione Santa Lucia, Italy, *Clinical Manager*

Hospital Asil de Granollers, Spain

Frontida Zois, Greece



Industrial:

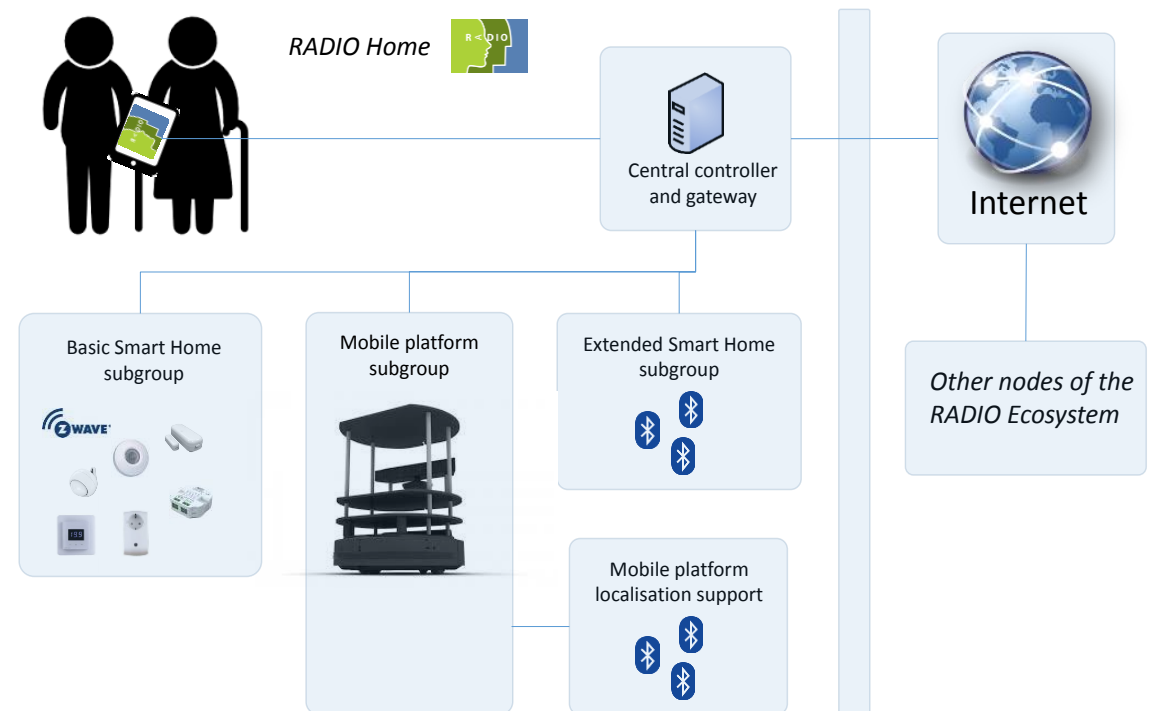
Robotnik, Spain

Sensing&Control, Spain

AVN, Cyprus

The RADIO Home Concept

- A RADIO Home integrates
 - Commercial smart home devices
 - A TurtleBot2 mobile platform
 - Bluetooth devices
- Robot:
 - Can search for misplaced things
 - Monitors ADLs
 - Recharges self
- Smart home devices:
 - Provide home automation
 - Record usage logs
 - Wake up robot (motion detectors)



Thank you for your attention !



<http://radio-project.eu/>