



Cognitive edge-cloud with serverless computing

HealthCare Assistant Use case

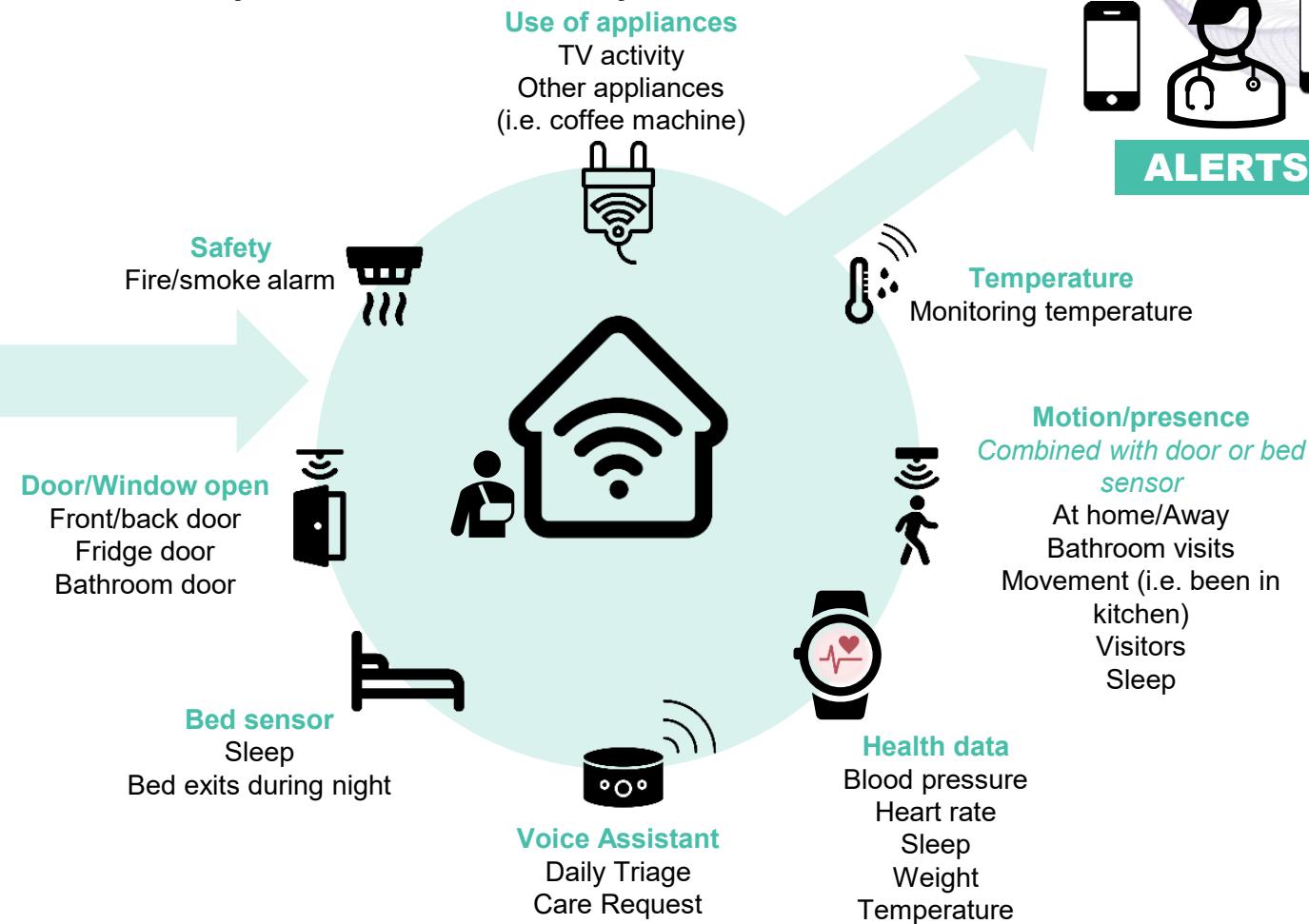
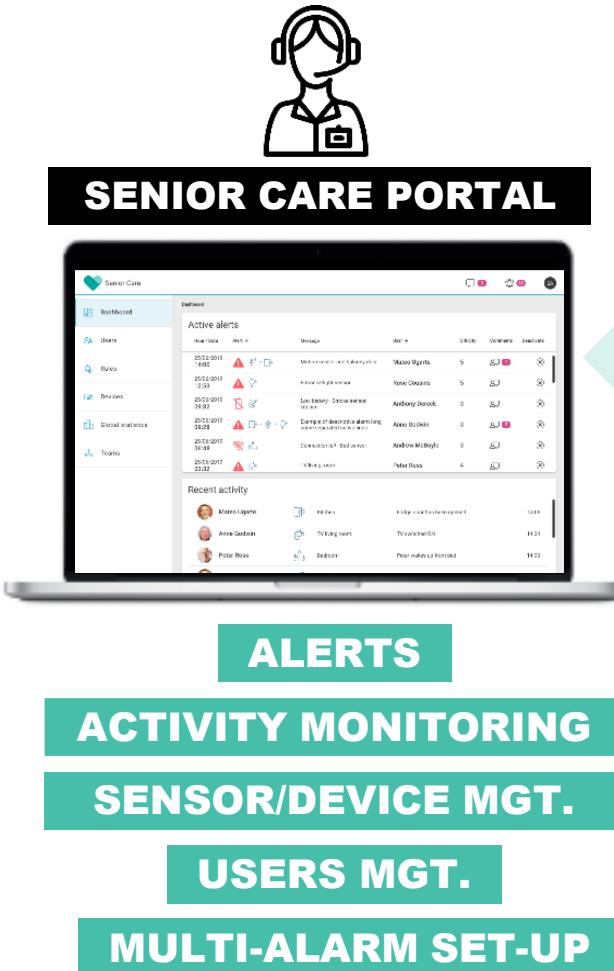
HiPEAC 26 - ML4ECS workshop – Kraków – January 2026



This project has received funding from the European Union's Horizon Europe research and innovation programme under the Grant Agreement No 101092950.

Worldline Senior Care solution

Safety & Autonomy

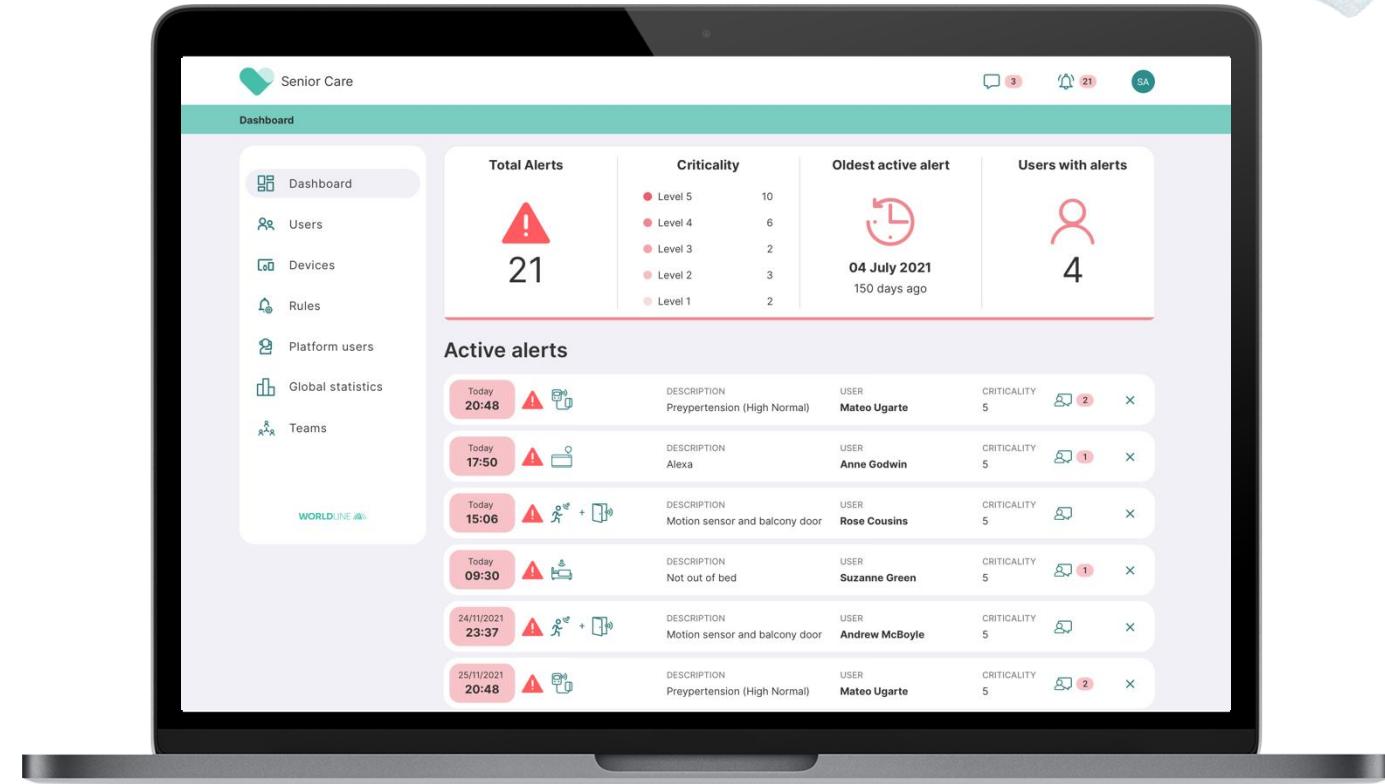


Intuitive Dashboard

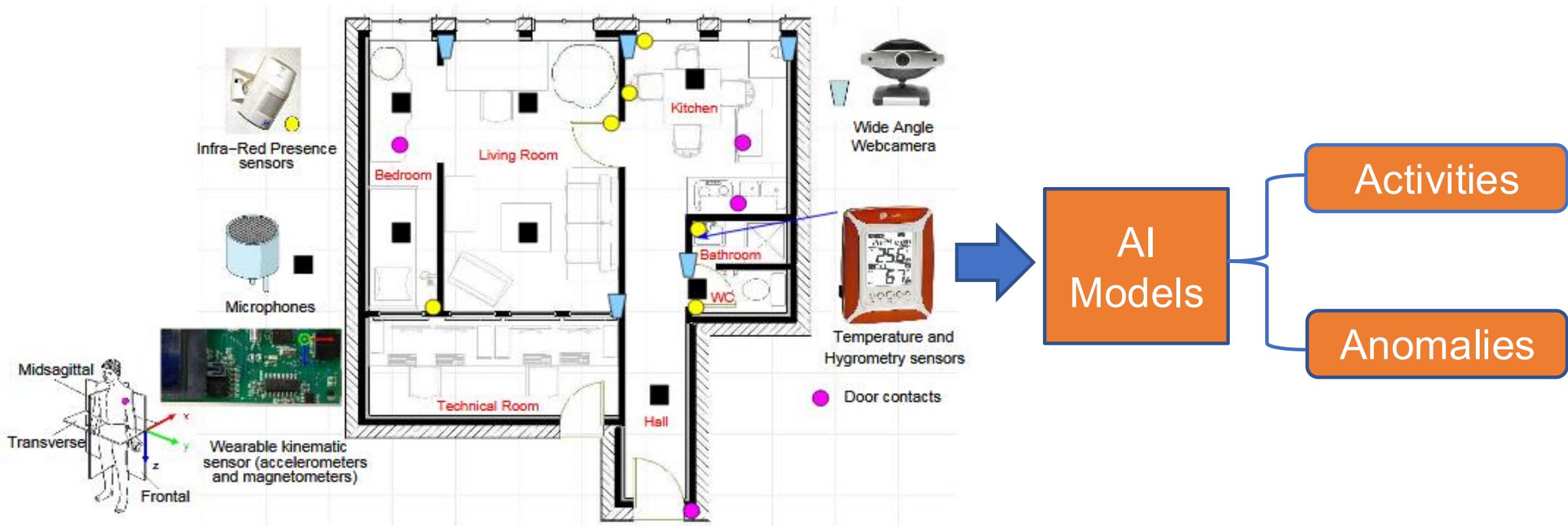
Activity monitoring and alerts

Emergency management for triggered alerts

Follow-up through caregiver comments and notes



AI for Senior Care

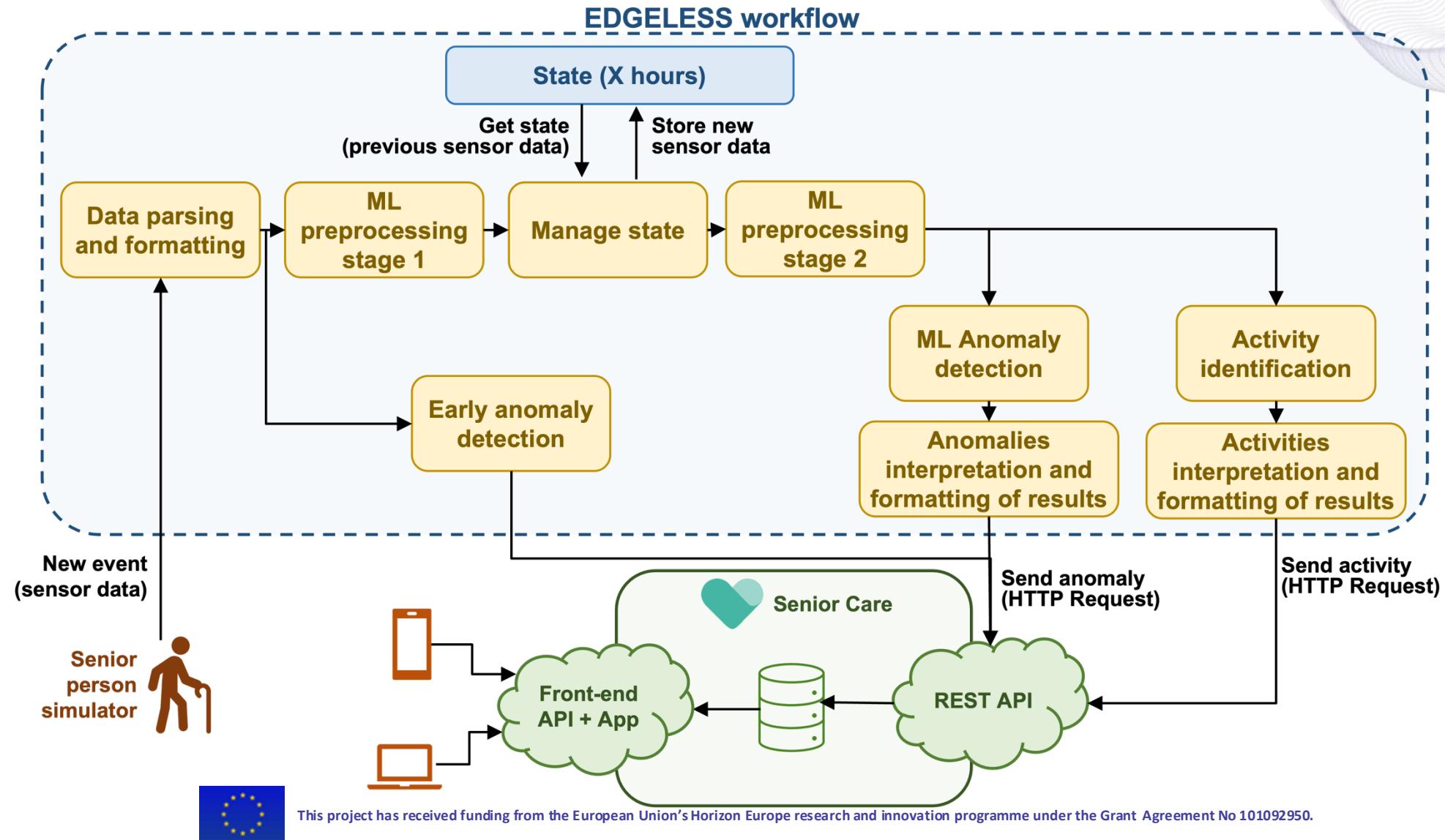


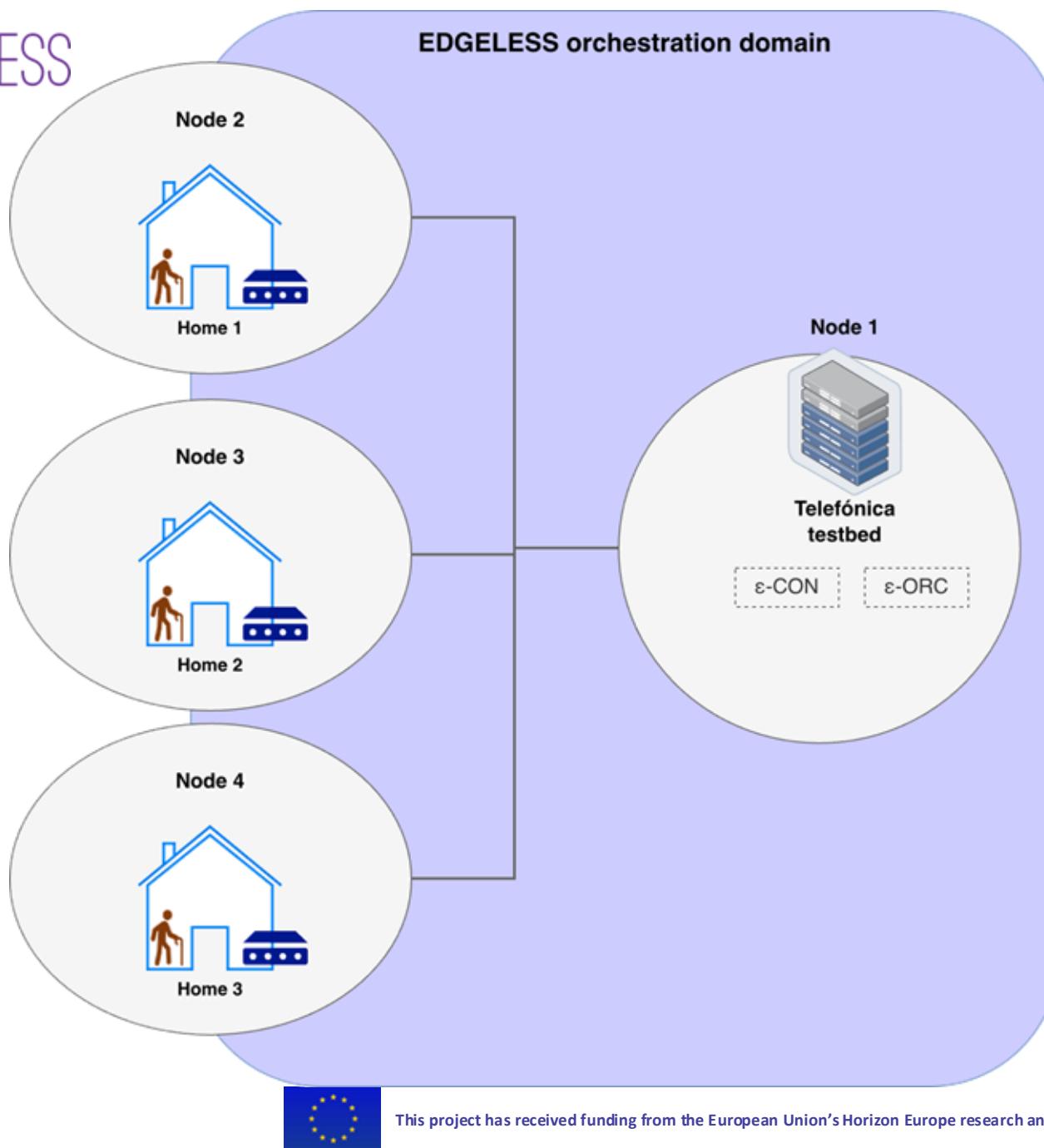
Sensor devices used in the Demo scenario

Device	Details
 Mattress Device	<u>Type</u> : Pressure sensor. <u>Event Trigger</u> : The sensor is activated upon each change of state, detecting when pressure is applied or removed. <u>Item Attachment</u> : Can be attached to beds, couches, chairs, and similar furniture items. This device generates data only when a change of state happens.
 Motion Device	<u>Type</u> : Motion sensor. <u>Event Trigger</u> : Sends an alert with each detection of movement or cessation of movement within a room. <u>Item Attachment</u> : Installed on room walls or ceilings for optimal coverage. This device generates data only when a change of state happens.
 Smart Plug Device	<u>Type</u> : Electric power sensor. <u>Event Trigger</u> : Reports electric consumption data every minute. <u>Item Attachment</u> : Connected to electrical appliances such as TVs, coffee makers, music systems, and lamps. This device generates data every minute.
 Window-Door Device	<u>Type</u> : Contact sensor. <u>Event Trigger</u> : Activates when the contact between two device components is broken or re-established. <u>Item Attachment</u> : Suitable for doors, windows, boxes, and drawers to monitor access and closure. This device generates data only when a change of state happens.
 Smoke Device	<u>Type</u> : Smoke presence sensor. <u>Event Trigger</u> : Triggers only when smoke is detected to alert for potential fire hazards. <u>Item Attachment</u> : Fixed to ceilings, the device ensures timely smoke detection. This device generates data only when a change of state happens.



EDGELESS Workflow





Demo scenario

Identifiable Activities:

- GET_UP
- GO_TO_THE_BATHROOM
- TAKE_MEDICINES
- PREPARE_FOOD
- EAT
- HOUSEHOLD_ACTIVITIES
- WATCH_TV
- ACTIVITIES_OUTSIDE_THE_HOME
- SLEEP



CONSORTIUM



FOLLOW US

-  edgeless-project.eu
-  [@EdgelessP](https://twitter.com/EdgelessP)
-  [company/edgeless-project/](https://www.linkedin.com/company/edgeless-project/)
-  [@edgelessproject](https://www.youtube.com/@edgelessproject)



This project has received funding from the European Union's Horizon Europe research and innovation programme under the Grant Agreement No 101092950.