PHOENIX aims to change the role of buildings to active energy consumption, production and storage agents

Smart speakers, virtual assistants or smart TVs are no longer out of the norm. PHOENIX - a project funded by the European Commission, led by the University of Murcia (Spain), and with a budget of over 5 million Euros - will look into the changes that are making buildings smart. The project will investigate different ways to accelerate the transition from non- or semi-smart buildings to smart ones, and to steer it to create healthy and energy efficient indoor environments through building automation and ICT.

The project introduces the novel concept of Adapt&Play. This concept represents the possibility of adapting existing devices in the building to make them capable of communicating through the internet, thus forming an Internet of Things (IoT) ecosystem that communicates to a central platform. This allows sending data about energy consumption or operation regimes and actuating on them remotely (this is the “play).

With each device connected to the internet, the building gains intelligence but this could also increase its exposure to cyber-attacks. Within the project’s research team, international experts on cyber-security will ensure that making buildings more intelligent does not come with increasing privacy risks, which would be the case if the smartisation of the building was done in an un-coordinated effort.

PHOENIX has a comprehensive view about the new paradigm in which smart-homes will be the norm. An intelligent entity (as buildings will be) can establish a dialogue with peers. To this end, part of the project is dedicated on how the smart buildings will communicate with energy providers and with their occupants. The communication will provide recommendations and advices to ensure building occupants get their internal environments to the highest standards, and utilities optimise their infrastructure and contribute to an efficient energy system.

The project has been defined with a highly human-centric approach and it is well aligned with the commission initiative of the Smart Readiness Indicator (SRI), which is a scoring system to indicate how ready buildings are to introduce intelligent services. The project will develop services needed by the people to assess and increase the SRI of their premises. Such services will be extensive evaluated in multiple pilots across five different locations of Europe. All pilots' testing involve buildings occupants and/or facility managers. By doing so, PHOENIX contributes to make buildings better spaces for humans and effective negotiators with the energy system to create an overall healthy, safe and energy efficient community.

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2	Odin Solutions S.L.	Spain
3	My Energia Oner S.L.	Spain
4	Kataskevastiki Makedonias	Greece
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10	Merit Consulting House - Integrated Business Consulting Services Private Company	Greece
11	SKEBIT AB	Sweden
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