



# AdOff

## A worker-centric approach to adaptive office technologies

By developing adaptive office technologies that combine automated and voluntary data, the ITEA project AdOff (Adaptive Office) will offer evidence-based tools to identify and address negative office situations according to worker's personal preferences.

### Addressing the challenge

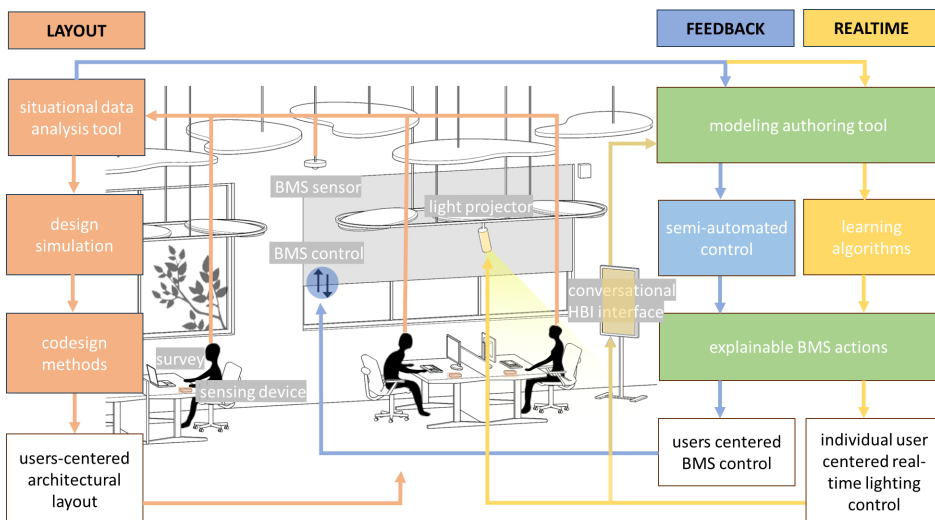
Many workers are dissatisfied with their shared office design due to risks to their health, wellbeing, productivity or social relations. Adaptive workplace technologies try to manage this by automating services that optimise the visual, acoustic, respiratory and thermal comfort of occupants. However, these rely on generalised metrics, tending to operate independently from one another while neglecting user-specific needs. Concrete evidence of their combined impact is also lacking, providing no rationale for employers to invest in such technologies.

### Proposed solutions

Given that no workplace design always suits everyone, AdOff proposes the integration of automated and voluntary data to identify risks, consider individual preferences, and measure impact objectively. First, the project will create a shared architecture and platform blueprint that ensures interoperability across diverse technologies and vendors, thereby integrating automated sensor data, voluntary user input, and intelligent modules to support scalable deployment across varied environments. Second, tools and guidelines will be developed to assess the impact of environments and interventions on health and wellbeing. These will combine real-time environmental data with contextual and self-reported feedback for evidence-based insights that inform both design and operational decisions. Finally, AdOff will introduce a tool suite for interacting with building management systems

and smart office infrastructure, allowing interventions like adaptive control of lighting and space utilisation based on individual and collective input. Using the same interfaces with the BMS, a different toolset can be used to optimise energy consumption of the building. With these

and operating office environments that promote health, wellbeing, and sustainability. This will allow the consortium to grow within a smart office market worth USD 39.55 billion in 2022 and expected to reach USD 94.22 billion by 2029. For workers, meanwhile, better comfort levels translate into greater productivity, which AdOff aims to increase by 15% according to a pre-post intervention study. This is especially crucial as a lack of comfort can also undermine the performance of the

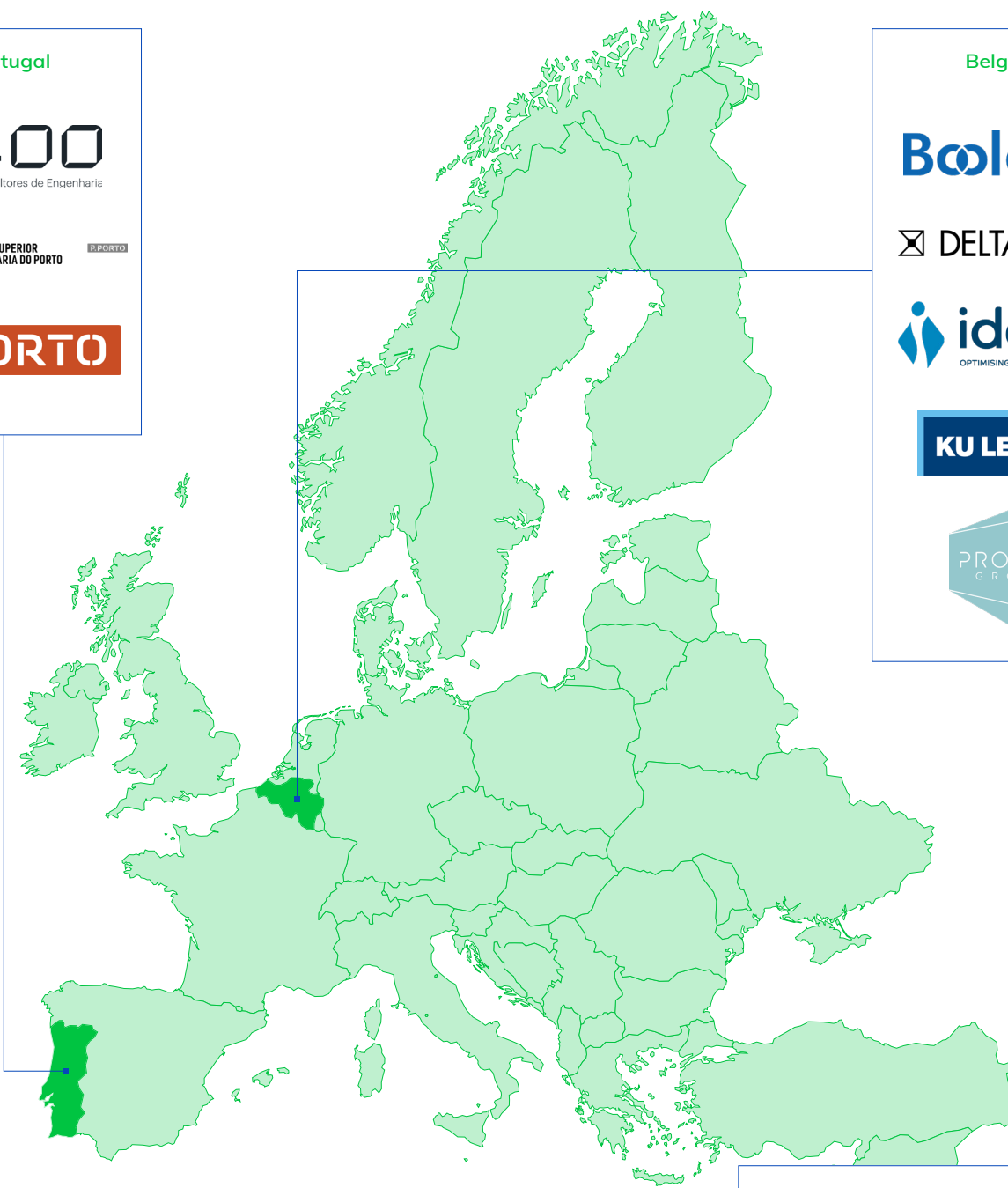


innovations, the user will be placed at the centre of office management decision-making.

### Projected results and impact

By developing solutions within a common framework, AdOff guarantees that individual partners' innovations – ranging from sensing technologies and data analytics to adaptive control systems – can be offered as a comprehensive solution including technical tools, guidelines, insights, and best practices for anybody involved in creating

entire organisation through increased absenteeism or turnover, with the EU spending EUR 476 billion annually on work-related health and wellbeing issues. For organisations as a whole, further advantages will include effective monitoring of indoor conditions, through which the project expects to reduce energy costs by 10%, for example. By these factors combined, AdOff envisions a holistic view on the smart office concept in which the dynamic, unpredictable requirements of a workplace can finally be captured over time and space.



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