

Office retrofit with minimal disruption

# Bluetooth mesh standard enters OSRAM office spaces

In cooperation with Silvair as the company's technology partner, OSRAM has recently launched a new wireless control solution for qualified Bluetooth mesh lighting networks. Cost-effective and simple, HubSense® allows for transforming existing installations into flexible, energy-efficient systems. To demonstrate these capabilities, OSRAM revamped the lighting controls in some of its Munich offices.



The **installation** was carried out by *livebau solutions GmbH*. The retrofit covered 492 m<sup>2</sup> of office space, including 26 workplaces, meeting rooms, think tanks, and the kitchen area. A total of 100 existing T5 luminaires were upgraded to connected LEDs with the HubSense® technology. To enable advanced control strategies, luminaires with embedded occupancy/light sensors were used. Wireless energy harvesting switches were also installed across the office to provide manual control capabilities. The goal was to allow the occupants to manually override the automatic occupancy sensing and daylight harvesting scenarios whenever needed.

**PARTNERS:**

Technology Partner  
**SILVAIR**

**OSRAM**

**SILVAIR**

## DETAILS

Category:	<b>office</b>
Technology:	<b>OSRAM HubSense® lighting control system</b> <b>OSRAM HubSense® luminaires with embedded occupancy / light sensors</b> <b>EnOcean wireless energy harvesting switches</b>
Strategies:	<b>occupancy sensing</b> <b>daylight harvesting</b> <b>manual control</b>
Area:	<b>492 m<sup>2</sup></b>
Location:	<b>OSRAM</b> <b>Parking 33, Garching bei München, Germany</b>
Year:	<b>2019</b>

“From the installer's perspective, wireless technologies make everything much easier. Installation is quicker since I don't have to cut and install any new cables. It's also much cleaner - there is no dirt or dust at the customer's site.

**livebau** installer

QUALIFIED  
BLUETOOTH®  
MESH



[www.silvair.com](http://www.silvair.com)

The **commissioning** process was performed by the OSRAM staff. During the remote planning stage, the entire office space was divided into 21 lighting zones. Using predefined and adjustable lighting control scenarios available in the HubSense® web app, each zone was configured to meet the specific lighting requirements of its occupants. This was followed by the on-site implementation stage. The HubSense® mobile app was used to locate specific luminaires and assign them to relevant lighting zones.



With no need for any lighting control wiring, the entire retrofit was completed in **less than 2 days**. This involved the installation of new luminaires and switches, as well as the commissioning and tuning of the entire system.

*“I could do the pre-commissioning part remotely, so the time spent on site was minimized. I only needed one tool - my mobile phone - to set everything up and launch the entire system. There is no gateway and no need for integration with other networks. All of this makes HubSense® easy to use and very attractive in terms of costs.*”

**Matthias Bolm, OSRAM**  
field application engineer



*“You could hardly notice there was a major retrofit going on. The process was fast and smooth, not causing any serious disruption to the employees.*”

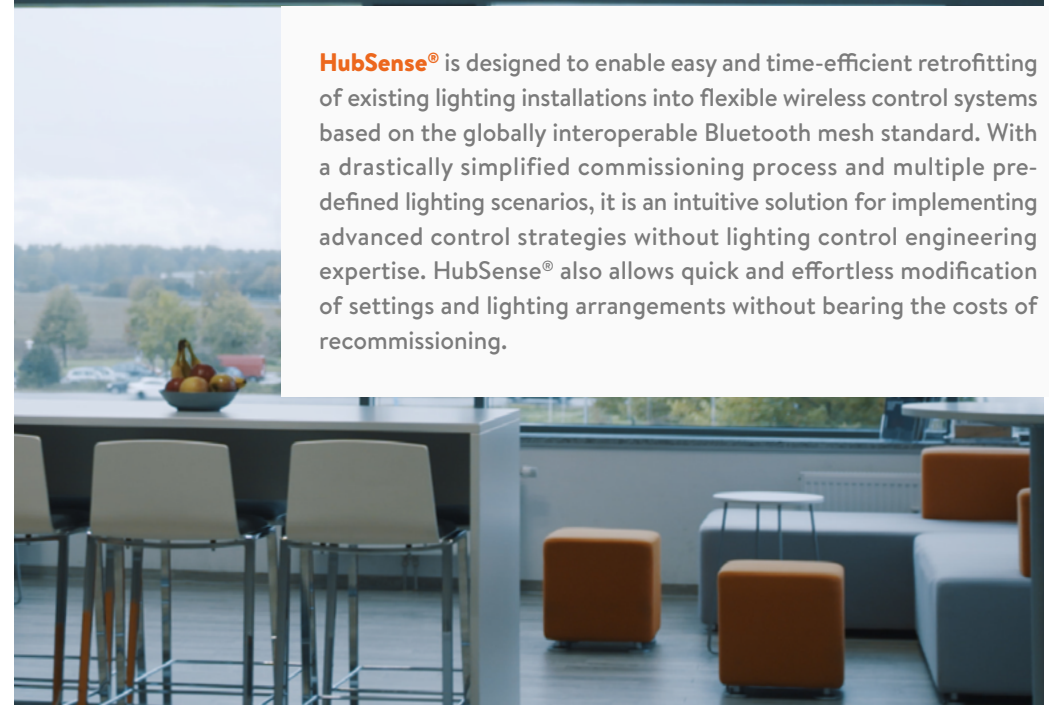
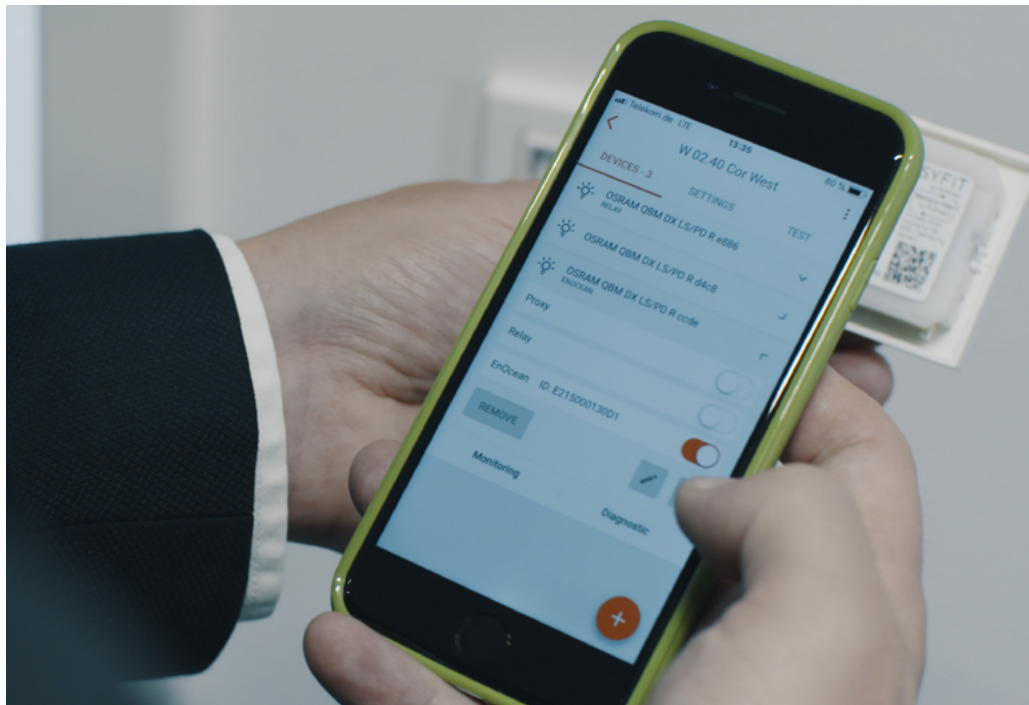
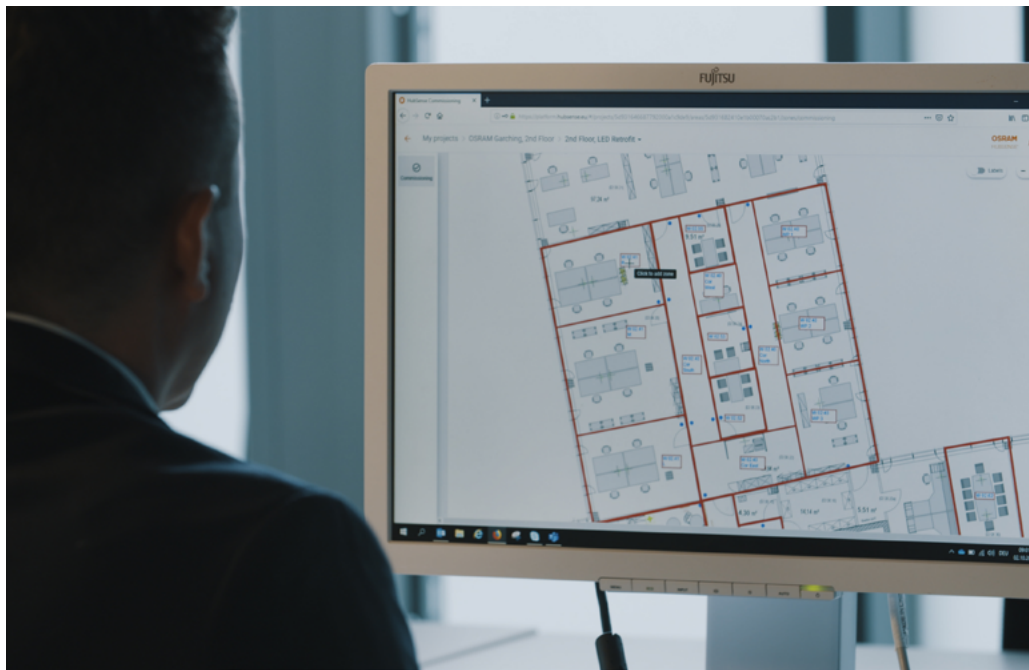
**Felizitas Korbelt, OSRAM**  
office worker

## RESULTS

- flexible control (auto/manual) and reconfiguration
- increased occupant comfort
- lower installation, commissioning, and energy costs
- higher lighting efficiency







**HubSense®** is designed to enable easy and time-efficient retrofitting of existing lighting installations into flexible wireless control systems based on the globally interoperable Bluetooth mesh standard. With a drastically simplified commissioning process and multiple predefined lighting scenarios, it is an intuitive solution for implementing advanced control strategies without lighting control engineering expertise. HubSense® also allows quick and effortless modification of settings and lighting arrangements without bearing the costs of recommissioning.