This year, the time came for the lighting infrastructure at the Bluetooth SIG headquarters to be remodelled. The Bluetooth SIG required the lighting control system to comply with the State of Washington energy code. Additionally, Kirkland regulations require that all private offices are manually turned on and off when they sense no motion for approximately 10 minutes.

The Bluetooth SIG also had one specific requirement they wanted to use wireless controls based on standard Bluetooth technology. Guess this is what you call putting your money where your mouth is.
Designing the right system

LSI Industries delivered luminaires and sensors as part of the Airlink Blue Bluetooth lighting control system based on Silvair technology. Burgess Design Inc, a Pacific Northwest-focused interior architecture firm, designed the whole retrofit.

The project covered 15,700 SqFt, including 96 desks, 14 private offices, conference rooms equipped with articulating walls and can be broken into small spaces or opened to accommodate as many as 150 for a large meeting/event, executive conference room, 2 small conference rooms, collaborative workspaces throughout, a kitchen and breakroom, and a lobby.

It was essential to use a system easily configurable by the employees so they could adjust the settings to their preferences. LSI has provided 170 Bluetooth mesh devices, including Murata daylight harvesting sensors and 113 troffer and other pendant and downlight fixtures. The controllers for the fixtures were supplied by McWong Inc. and Fulham. Additionally, 22 wireless EnOcean switches were used.

Control flexibility

The on-site commissioning process took about three days and was preceded by the commissioning plan created on the web platform.

The project was divided into 44 zones with different scenarios depending on the characteristics of individual rooms. Zones can be configured to match occupants’ needs and are generally structured to make the most of available resources. Some spaces were set up to turn the lights on / off based on the amount of daylight coming through the windows and/or the occupancy indicated by motion sensors.
This kind of configuration gives the Bluetooth SIG the much-desired control flexibility while simultaneously generating massive energy savings through occupancy/vacancy scenarios combined with daylight harvesting. As a result, the building becomes more sustainable and easier to maintain.

The entire project went well for the client and LSI Industries. The employees of the Bluetooth SIG could soon start enjoying a connected lighting system that automatically adjusts to their needs. With this first-hand experience, they can now see all the benefits that Bluetooth networked lighting control system delivers in their office environment.

“It was extremely easy to learn. I did a short virtual session with Silvair showing me how to use the iPad app. Since then I have made multiple adjustments to the lighting schemes. Most of them have only taken a few minutes to set up and push out to all the lights in the office. This allowed us to better accommodate how the space was being used after the office went live. When I received a few complaints that some lights were too bright. I was able to update the offending lights in about 5 minutes.”

Matthew Weirath, Senior Manager, Cloud Operations.

“The installation at Bluetooth SIG headquarters highlights the inherent flexibility and dependability of the LSI AirLink Blue wireless control system built on Bluetooth® mesh. We are able to deliver an end-to-end solution, controlling both LSI fixtures and non-LSI fixtures that meets code and offers the user functional simplicity. We are proud that Bluetooth SIG chose LSI and AirLink Blue as their lighting and lighting controls partner.”

Brian Daley, Director of Product, LSI Controls.