The Commonwealth Scientific and Industrial Research Organisation (CSIRO) is the federal government agency for scientific research in Australia. Its mandate is to carry out scientific research to assist Australian industry and the interests of the Australian community. CSIRO relocated to a four-storey, 14,000 square meters (150,000 square feet) bespoke facility in Black Mountain, Canberra ACT. The new building now houses the science research facility and associated staff in a fit-for-purpose area that better supports discoveries of the future.

BUSINESS NEED

CSIRO is considered a world-leading organization in science and technology research and dissemination of information. Some of the outcomes from the organization's work include:

- · Wireless LAN technology, otherwise known as Wi-Fi
- · The Hendra vaccine
- · Polymer banknotes with three levels of security
- · The permanent pleat for fabrics
- · Extended wear contact lenses

THE CHALLENGE: Government

Gain cellular coverage in well-insulated areas of the new building

SOLUTION

Implement Cel-Fi GO Smart Signal Booster alongside seven Blackhawk Omni High Gain Antennas, and six Pulse Larsen DAS Ultrathin Clear Antennas and Reflectors.

The results of installation achieved high-quality cellular reception in designated areas, maintained external building façade by using small form antennas, and insured consistent mobile communication capabilities to support ground-breaking research.



FINDING THE RIGHT SOLUTION

CSIRO Procurement reached out to communications expert Greg Baker, Principal from Transfibre, a Powertec reseller, to find out how to improve mobile coverage within the building. He recommended 10 Cel-Fi GO Smart Signal Boosters alongside seven Blackhawk Omni High Gain Antennas, and six Pulse Larsen DAS Ultrathin Clear Antennas and Reflectors.

CSIRO selected Cel-Fi after an extensive review of the product, as well as other solutions on the market. The Transfibre team then worked alongside CSIRO's electrical engineer to plan the two-stage installation. First, they tested all the antennas to determine the optimal position to gain the best outcome in boosting capacity. Then, during the first phase of the installation, the team of two installers focused on providing coverage in the office areas of the building. In one week, the building had coverage.

CSIRO

- 5,000+ employees.
- Pioneering work in radio astronomy led to the invention of Wi-Fi.
- Other notable accomplishments include the Hendra vaccine, plastic bank notes with optically variable devices, and extended wear contact lenses.
- Partnered to carry out world-first surgery to implant a titanium-printed heel bone into a human.



SUPPORTING WORLD-LEADING RESEARCH

CEL-FI QUATRA DELIVERS CELLULAR COVERAGE, WHERE LEED BUILDINGS BLOCK IT

Once the CSIRO team moves in, the team will initiate the second stage of the installation, which will involve extending coverage to areas that are deemed to have limited or poor-quality reception.

Not only does CSIRO have a state-of-the-art facility to conduct its research, the organization can now also communicate via mobile with colleagues within the building, as well as external research teams. This collaboration will help to accelerate further ground-breaking discoveries that will benefit Australians and the global community at large.



BEYOND BETTER COVERAGE

- · Deployed within hours
- Penetrated steel, concrete, and glass panes
- Achieved strong indoor 4G signal