



CASE STUDY

# DAS/RAN INTEGRATION

for a Tier 1 Carrier



## SERVICES PROVIDED

Remote and Onsite Technical Services

DAS/RAN Integration

Interoperability Upgrades



# DAS/RAN INTEGRATION

## for a Tier 1 Carrier

### ABOUT THE TIER 1 CARRIER

The Tier 1 carrier manages complex networks that include various technologies that include 4G and 5G. They also deploy a range of infrastructure components such as cell towers, small cells, distributed antenna systems (DAS) and RAN.

### CUSTOMERS OBJECTIVE

Integrate new 4G and 5G networks into legacy DAS/RAN network equipment

### CHALLENGES

**Information Gap:** Due to the age of the current DAS/RAN system and natural shifts in staff over time, there was an information gap of the site

**Technological Complexity:** Comprehending key technical elements such as installed OEM technology, design specs, power levels, DAS/RAN input capabilities, specific DAS/RAN features, and areas for network upgrade to enhance interoperability

### SOLUTIONS

**Consultive Approach:** Instead of jumping right into the project, the Tempest team first consulted with the client to understand their exact needs and define the scope of work that aligned with the budget

**Cross-Functional Team:** Provided remote technical and repair services expertise across multi-vendor equipment and technologies

#### Summary of Deliverables Included:

- Performed a baseline assessment of the network equipment
- Attention was paid to the details of the power levels coming in to ensure they were within spec for the existing DAS, and verified the OEM configurations
- Commissioned the integration for the 4G network solution while having the unique ability to also install and repair DAS/RAN
- Guided network traffic
- Prepared site for 5G integrations

### RESULTS

- The integration allowed the carrier to avoid failed calls, slow data speeds, and potential compatibility problems with 4G and 5G frequency bandwidth and bands
- Conducting the baseline assessment allowed Tempest to address potential issues at the outset, and the Tier 1 Carrier had a smooth transition to deliver substantial improvements to both network performance and user experience
- The carrier was able to overcome challenges related to legacy DAS/RAN systems and the intricate interoperability issues between DAS and 4G and 5G networks