

## CBRS Environmental Sensing Capability System Maintenance

### Location:

United States

### Business Needs:

Maintenance and support for the ESC network throughout the coastal United States.

### Commdex Solution:

Commdex will provide 24x7 maintenance services to provide operational integrity and continuity of the nationwide network of sensors ensuring operation of the CBRS band.

### Customer Profile

Comsearch, a CommScope Company, in cooperation with Google, developed and operates an Environmental Sensing Capability (ESC) network which consists of a geographically diverse set of sensors deployed at tower sites along the coast nationwide that detect the presence of signals from federal systems in the 3.5 GHz Citizens Broadband Radio Service (CBRS) band. This information is communicated to the Spectrum Access System (SAS) to facilitate the protection of federal operations in the band, as well as to identify channels that can be cleared for lower priority use.

### Customer Challenge

Comsearch's ESC network is geographically spread along the coastal areas of the entire United States. Once deployed, Comsearch needed to ensure that the system would operate continuously through a structured process of system monitoring, preventative maintenance, rapid deployment for troubleshooting and repair, and warehousing and logistics of equipment and parts.

# COMMSCOPE/Comsearch ESC

## Commdex Solution

Commdex provides 24x7 maintenance services for Comsearch's nationwide network deployed along the United States coastline. This includes tower mounted antennas, sensor equipment, ground-based networking electronics and backup power systems. Commdex also performs installation related services for site additions, which include antenna, and sensor installation, power configuration, and testing at each of the sites.

### 24x7 Call Center:

Commdex provides a Network Operations Center (NOC) that receives the customer maintenance requests and mobilizes technicians for onsite maintenance. Commdex technicians are dispatched to respond to maintenance requests or "trouble tickets" created by the customers. Technicians are available 24 hours per day, seven days per week, 365 days per year. Commdex is responsible for monitoring the issue to resolution. After a maintenance request is completed, a report is provided detailing the steps taken to resolve the issue, any equipment replaced, and the final status of the site.

### Troubleshooting and Repairs:

Commdex is responsible for mobilizing to the site and restoring site operations or reporting any pending issues (i.e., awaiting spare parts, awaiting backhaul vendor resolution, etc.) to Comsearch Support within the Resolution Timeframe. Commdex Technicians troubleshoot and repair/replace any damaged

equipment or inoperable units in accordance with provided maintenance instructions. If an item requires depot-level repairs, technicians package items, and return to customer designed location. We also schedule, coordinate with escort service providers for UPS/rectifier, battery, router equipment as necessary. When repairs are completed, a report is provided detailing the steps taken to resolve the issue, any equipment replaced, and the final status of the site.

### Preventative Maintenance:

Commdex also performs annual site visits for the purpose of Preventative Maintenance that is done on a rotating basis without repeating sites. Preventive Maintenance include routine maintenance tasks such as visual inspection of site and equipment, ground testing, photo documentation, routine equipment testing, etc. to ensure that the site is in good condition and the equipment is working properly.

### Warehousing and Logistics:

Commdex maintains an inventory of spares in its warehouse locations across the US so that technicians have ready access to the spares within driving distance of the sites. Technicians pick up these spares when required by the trouble ticket. When the spare is used and the existing equipment is sent for a warranty replacement or orders are placed to refresh the inventory.

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### ABOUT COMMDEx

Commdex is a leading systems integrator, providing a broad range of mission critical solutions and services for telecom networks, communications systems and information technology. We have global experience and specialized expertise across breadth of technologies and full life cycle of communications systems. For more information about Commdex's products and services, call Commdex Sales at (770) 349-0400 or via email at [sales@commdex.com](mailto:sales@commdex.com)