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A CommScope Company

Supporting Your 6 GHz Network Health

In April 2020, the FCC released the Final Report and Order detailing rules for operation of unlicensed devices in the 5925–7125 MHz band, collectively the "6 GHz band." These unlicensed operations will include a variety of high-power and low-power indoor and high-power outdoor devices including Access Points (AP) and the various client devices that will communicate with them.

These new devices present the possibility for interference with existing incumbent microwave operations. Furthermore, the rollout of some low-power indoor devices could begin as early as the end of 2020.

The Good

The encouraging news is that the high-power operations will have a control mechanism known as an Automatic Frequency Coordination (AFC) system that dynamically manages frequency assignments. The AFC's job will be to minimize the potential for interference with microwave incumbents by analyzing the FCC's Universal Licensing System (ULS) data for licensed and applied microwave links.

The Not So Good

The less encouraging news is that frequency recommendations made by the AFC are only as good as the underlying data within the ULS. Comsearch constantly reviews the ULS data and it is clear there is a significant amount of 6 GHz data that is likely erroneous. In addition, the FCC will likely issue a Public Notice requiring microwave licensees to review and update the data on your licensed systems in the ULS.

What Can Be Done?

Comsearch can help you minimize the risk for system degradation, or even downtime, through a 3-step process of ***Auditing, Corrective Actions*** and ***Mitigation***.

STEP 1: **AUDITING**

Desktop Verifications

Comsearch will analyze current data using all available sources including the ULS, the Comsearch database, and a variety of GIS tools to identify potential data errors. This service will provide a clear list of what data is in error as well as expert advice on prioritization. We will identify the following items:

- Coordinate and AMSL errors using various registered data and graphical imagery
- Missing data to insert
- Legacy data to purge
- Phantom "hanging links" to investigate

Field Verifications

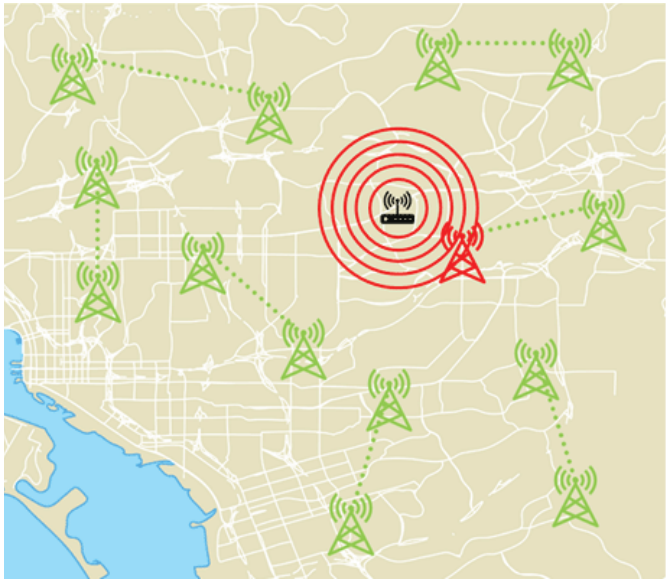
This "deeper dive" service is an actual on-site audit of your microwave network designed to bring your FCC registrations into full compliance. We perform field surveys to ensure accurate coordinates and antenna heights for each licensed system. Data obtained on-site can then be used to correct any errant license details.

STEP 2: **CORRECTIVE ACTIONS**

Coordination & FCC Licensing Updates

Comsearch has a long history preparing FCC applications and working with the ULS. We can help you to prioritize and manage all corrective actions efficiently by performing the following services:

- Prior Coordination Notice (PCN) updates
- FCC licensing corrections, additions and deletions
- FAA Registration (Form 7460-1)
- Antenna Structure Registration (ASR Form 854)
- Local Notices
- Long-term network health with FCC License Management



STEP 3: **MITIGATION**

Interference Resolution

Should interference occur, Comsearch is here to help with identification and mitigation support. Recognizing interference exists is just the first step. Actual identification of the source is often more challenging.

Before deploying a field team, Comsearch will work with AFCs to gather all available data for each interference case. If a quick resolution is not possible, we will mobilize to the site. Armed with the collected AFC data and a wealth of knowledge gathered through many years of tracking interference, our field team will set out to find the origin of each interferer. We employ custom test sets designed specifically for this effort to quickly and efficiently locate RF sources. We also offer mitigation advice and on-going support to assist with resolving interference cases after the fact.

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To learn more about these services, please contact us at 800.318.1234 or customersupport@comsearch.com.

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Visit our website or contact your local Comsearch representative for more information.