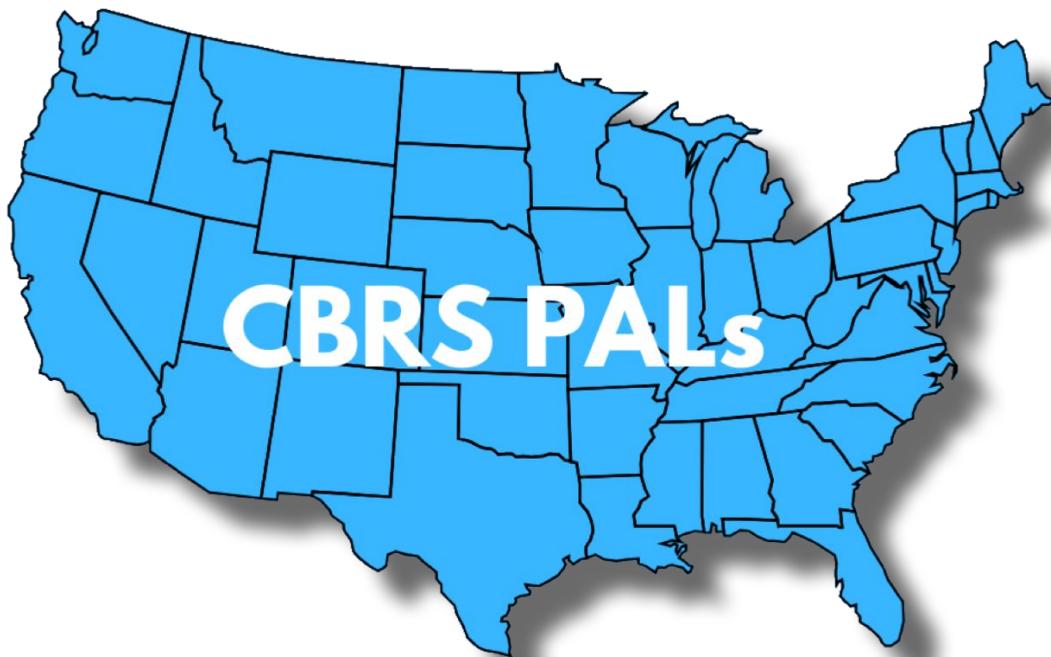




## **Priority Access Licenses (PALs) in the CBRS Band (3550-3700 MHz) Ideal for Fixed Wireless, Private Networks, IoT and Smart City Applications**

The Citizens Broadband Radio Service (CBRS) introduces dynamic spectrum sharing and ranges from 3550-3700 MHz. CBRS is governed by a three-tiered spectrum authorization framework: Incumbents (Federal Radar Location Systems, VIP users), Priority Access Licenses (PALs) and General Authorized Access (GAA). Access and operations to CBRS are managed by a dynamic spectrum access system (SAS).



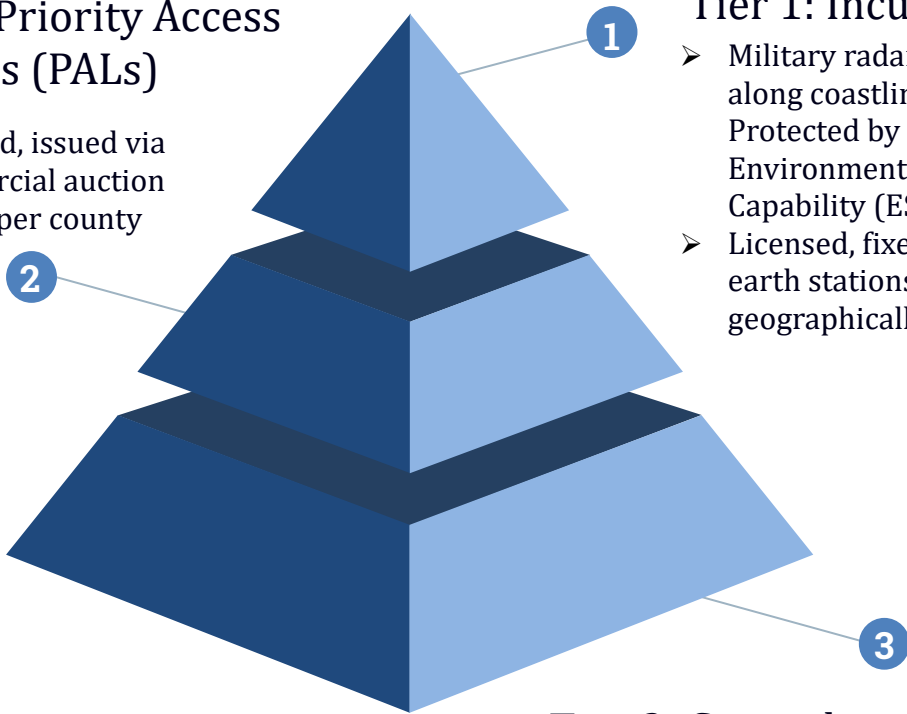
CBRS PALs are exclusive dedicated use channels in the CBRS band ideal for a wide range of users, such as Wireless Internet Service Providers (WISPs), oil/gas companies, electric utilities, nationwide and regional mobile carriers, cable companies, Smart City initiatives, and others that may take advantage of broadband connectivity.

CBRS offers LTE/5G spectrum opportunities (3GPP b48/n48) supporting key applications, including Fixed Wireless Access (FWA), cellular mobility, broadband connectivity, support of internal communications over Private LTE networks for Critical Infrastructure Industries, Internet of Things (IoT), Video Surveillance, UAVs, Asset Monitoring/Tracking, and more.

**Contact: Andreas Bitzarakis, [andreas@selectspectrum.com](mailto:andreas@selectspectrum.com), (571) 287- 8723**  
Visit our website at <http://selectspectrum.com> to learn more

## Tier 2: Priority Access Licenses (PALs)

- Licensed, issued via commercial auction
- 7 PALs per county



## Tier 1: Incumbents

- Military radar systems along coastlines. Protected by Environmental Sensing Capability (ESC)
- Licensed, fixed satellite earth stations protected geographically

## Tier 3: General Authorized Access (GAA)

- Not unlicensed but shared
- Spectrum Access System (SAS) to facilitate coordination among users as well as protect incumbents and PAL holders

|               | 3.55 GHz                 | 3.60 GHz | 3.65 GHz | 3.70 GHz |
|---------------|--------------------------|----------|----------|----------|
| <b>Tier 1</b> | Federal RLS and ARNS use |          |          |          |
| <b>Tier 2</b> | Floating 70 MHz (PALs)   |          |          |          |
| <b>Tier 3</b> | 80 - 150 MHz (GAA)       |          |          |          |

A Citizens Broadband Radio Service Device (CBSD) must be Part 96 compliant in order to operate in the CBRS band and to communicate with the SAS. Power limits in the CBRS band are as follows:

| Device          | Max EIRP (dBm/10 MHz) | Max PSD (dBm/MHz) |
|-----------------|-----------------------|-------------------|
| End User        | 23                    | N/A               |
| Category A CBSD | 30                    | 20                |
| Category B CBSD | 47                    | 37                |