

FACT SHEET OF COMMISSIONER MICHAEL O'RIELLY
CBRS Report and Order: Fixing the Rules to Enable Mid-Band 5G

The Commission will consider an item at its next Open Meeting to revise its existing rules governing the Citizens Band Radio Services (CBRS), which will utilize spectrum between 3.55 to 3.70 GHz. In doing so, the focus will be on correcting policy mistakes made pertaining to the Priority Access Licenses (PALs) back when rules were adopted in April 2015 & May 2016.

While thoughtfully considering all proposals to improve the PALs has taken quite a bit of time, this process has not delayed the initiation of CBRS, as both PALs and General Authorized Access (GAA) are dependent on fully operational SAS systems (and ESC systems where needed), which are still being considered under the Commission's approval process. With this decision, it is expected that the PALs auction can occur next year, if consistent with other auctions to be scheduled.

Geographic License Sizes

To ensure that all interested parties are treated fairly in the band, the draft item proposes to auction licenses by counties instead of by census tracts, with an option to bid for all counties in the largest markets as a package. This fixes a number of fundamentally flawed issues with the current rules:

- Lacking Auction Capability – The Commission does not, and will not for the foreseeable future, have the capability to hold a forward auction for the number of market areas created by census tract licensing (i.e., 74,000). The current rules would have generated a fake auction based on one-time sealed bids, which would have undervalued the licenses and tainted the outcomes to the detriment of the American people. In fact, the Commission's auction software will have to be modified just to handle the more than 3,000 counties this proposal adopts.
- Interference – Due to the number of borders created and the small size of census tracts, harmful interference will be difficult to manage at license edges. Further, uplink and downlink may be provided in the same spectrum bands, increasing the odds of interference with neighboring PALs, unless all surrounding licensees can agree to synchronize operations.
- Return to Successful Licensing Structure – These licenses will have performance requirements, will be offered with standard bidding credits, and can be partitioned and disaggregated like standard licenses.

In coming to this conclusion other compromises were considered and disregarded, including:

- Infeasibility of Hybrid Approach – While some advocated to offer different license sizes within a geographic area (i.e., some by census tract licenses, some county-based licenses, and some by larger areas) in the same band, there are significant interference issues with doing so.
- Rejected Census Tracts in GAA – In an attempt to try to permit some census tract-sized licenses, a proposal was made to convert 20 MHz of GAA spectrum for this purpose. It was soundly rejected by the chief proponents of census tracts licenses.

Arriving at a county-based auction was not easy, as many interested parties wanted much larger license sizes and negotiated down from their preferred position twice. The loudest opponents remain a segment of the wireless ISPs and providers of Industrial Internet of Things (IIoT) services, who were unwilling to compromise. In the end, the county approach is supported by the representatives of the entire mobile wireless industry, the cable industry, the rural telecommunications industry, and many wireless ISPs.

License Terms & Renewability

Current rules implement short license terms with no license renewability expectation, which sharply curtails overall CBRS interest because it raises providers' cost for capital, limits the opportunity to generate a return on investment, and curbs the ability and willingness of investors to fund longer-term projects. It's also directly opposite of the U.S. position advocated overseas. The previous Commission acknowledged as much when it switched the CBRS license terms to three years with a one-time extension. Moreover, the Commission maintains ten-year license terms (or longer) with renewability for almost every other similar wireless service. Thus, the modified rules reaffirm the Commission's long-standing practice to provide longer license terms with an expectation of renewal for providers in compliance with its rules.

PAL Availability

The Commission's existing rules preclude PAL assignment if only one participant seeks to obtain them within a market and, if demand for PALs is less than eight in a geographic area, the Commission will auction the number of PALs sought minus one. This was highly unpopular with all commenters, so we are returning to our normal auction rules where all seven PALs will be available in all counties.

Power Limits

The CBRS technical rules effectively necessitate a reduction in power when aggregating channels to accommodate wider bandwidths. In working with interested parties, the proposed change modifies the rules to accommodate wider bandwidths for 5G technologies, while maintaining the existing interference protections for other services operating outside the CBRS band.

Database Information

Currently, SAS Administrators are required to make publicly available detailed information about the location and characteristics of facilities, but legitimate concerns were raised regarding competitively sensitive information and overall security. Instead, the item proposes that SAS Administrators make aggregated spectrum usage data available, which will enable potential CBRS providers to make investment and deployment decisions.