

**Remarks of FCC Commissioner Michael O’Rielly  
before the 7<sup>th</sup> Annual Americas Spectrum Management Conference  
Washington, D.C.  
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Thank you, Alexis, for that kind introduction, and for Forum Global for the opportunity to join you this afternoon. I have been asked to discuss the Citizens Band Radio Service – or CBRS for those of us intimately involved in the proceeding – as a precursor to the upcoming panel on the same topic. The timing of this event is indeed fortuitous, because the draft order on this exact issue will be considered at this month’s meeting and its text is being posted sometime today, if it’s not already up.

I am fortunate that FCC Chairman Pai entrusted me with such a challenging and important project. Over the last many months, I employed sound regulatory principles to guide my review of the band. To put it mildly, there is a lot of interest in this spectrum, and there are many divergent and passionate opinions. I have heard them all, sometimes at very high decibels.

As you may know, this is spectrum that everyone gave little thought to three short years ago, when the Commission initiated the original proceeding. To enable the resulting “experiment,” the Commission created a three-tier structure to utilize the 150 megahertz between 3550 to 3700 MHz that would protect incumbents while providing for licensed and unlicensed use, through seven priority access licenses (PALs), along with 80 MHz of spectrum for unlicensed-like use, known as general authorized access (GAA). Additionally, if a PAL is not assigned or not in use in a market, then that spectrum will be shared among GAA users.

To coordinate all of these various uses and to protect the U.S. Navy’s radar systems, the frequencies will be managed by a spectrum access system, or SAS, which will manage spectrum access by all users, and the Environmental Sensing Capability, or ESC, system, which will detect when federal users are transmitting on the spectrum.

So far, the Commission has six conditionally approved SAS operators whose prototypes are currently being lab tested. In preparation for the end of the lab tests, the Commission released a public notice just over two months ago, announcing the procedures for these operators to submit proposals for initial commercial deployments. All six SAS operators filed proposals by the September deadline. These are now in the process of being reviewed and, if approved, will permit operators to start initial commercial deployments, which will serve as field tests, hopefully by the end of this year. As the testing continues, it is imperative for there to be continuous dialogue between government representatives and the SAS operators, so that any issues can be worked out quickly and completely. Once a SAS is in place, GAA will be able to be deployed using the dynamic protection areas, announced last May, which are designed to protect the federal incumbents prior to ESC deployment.

*Concluding Reconsideration of PALs*

The final piece to this puzzle is fixing the structure of the Priority Access Licenses. Almost a year ago, the Commission started a proceeding to take a fresh look at the seriously flawed licensing model previously adopted. The 3.5 GHz flaws are even more apparent now because the wireless market has changed so significantly since initial adoption. With the continued growth of mobile and the emergence of 5G, a renewed debate about how to put this spectrum to its highest value use was necessary. Simply put, the Commission needs to evolve with the ever changing marketplace.

On that note, it's clear that U.S. wireless providers and the international community have targeted the mid bands for 5G, with the CBRS band right in the bullseye. The United States must be at the forefront to determine and harmonize bands and establish standards so that our industries benefit. This is particularly true for the 3.5 GHz band, which is seen as the "key global roaming band for 5G."

Moreover, the record in our current proceeding, along with the meetings I have had over the last year, confirmed that many providers seek to deploy large-area networks – larger than a building or campus – that require greater certainty that the investment of time and money necessary for R&D, equipment, and deployment will not be stranded. Short license terms, a lack of renewability, and an inexplicable rule that would artificially reduce the number of licenses offered at auction do not provide the reliability needed for large, expensive systems. Small license areas also dissuade large scale networks and investment, because they make it difficult to impossible to manage interference complications for entities trying to build over a larger area. In other words, potential harmful interference at license boundaries.

For these and many other reasons the Commission will consider its new Report and Order (R&O) to address these deficiencies. Among other things, the R&O will:

- Increase the license terms to ten years with an expectation of renewal if licensees meet performance requirements;
- Auction all PALs regardless of applications with standard bidding credits to be available;
- Facilitate the partitioning and disaggregation of licenses; and
- Increase the geographic license size from census tracts to counties nationwide, with the possibility of package bidding for defined metropolitan service areas with one bid.

Together, it's a stronger structure for all parties interested in using the band to offer service.

### *Responding to Criticism*

For anyone following this proceeding, the true point of contention has been the geographic license size. Many accusations have been perpetuated about my motives and the effect of moving away from census tracts. It only seems appropriate to address the main ones here and now.

First, some allege that the sole purpose of this review was to turn 3.5 GHz into a 5G band for large wireless providers, at the expense of small businesses and rural deployment. Nonsense. What this is really about is making this valuable resource available at auction and allowing the free market to decide the best use for this spectrum. These rules will permit mobile and fixed use to be offered by large and small, urban and rural, and incumbent and new providers. Nothing prevents small or rural entities from competing and winning at auction. Anyone assuming that nationwide providers will automatically win all of the licenses given their potential deep pockets didn't follow the 600 MHz broadcast incentive auction, where small and new entrants won licenses while three of the four large providers mostly sat it out.

It is also unfortunate that some may have been given the impression that CBRS was to be "their" spectrum, that it would be available to them on the cheap, or at least offered in a way that would dissuade possible auction participants. The Commission should never use its rules to pick winners and losers, and it will not happen under my watch.

Second, some entities argue that they "deserve" the licenses because larger providers are currently ignoring rural America or supposedly warehousing spectrum. This is a falsehood, but, to the extent that

there are issues, they should be solved through build-out requirements, which are part of this order, and our Universal Service Fund programs. These are the better ways to deal with those parts of the country where the business case is hard to make for expensive infrastructure builds.

Third, some claim that their investments will be stranded due to these changes. I recognize the efforts of all sorts of entities seeking to make this band operational, but this argument is disingenuous. Let's be clear: any investments already made were done with no assurances that these entities would win a PAL at auction. Instead, I invite them to fully participate in the auction. And, if they don't prevail, besides 80 megahertz of GAA, there is the secondary market and all of the other spectrum bands that the Commission is opening up for additional uses.

Fourth, some have suggested that these changes embody the archaic and stale policies of the past. Those "stale" ideas are what have produced the highly successful and envy-of-the-world spectrum auctions, provided state of the art wireless networks, and made the U.S. the leader in wireless technologies. What it doesn't do is retain artificial restrictions – both implicit and explicit – through license and auction structure.

Fifth, some allege that a census-tract auction is not administratively burdensome. After multiple meetings with our auction team, it became readily apparent that we could not conduct an auction that covered 74,000 market areas and over half a million licenses. Maybe with endless time and money our software could get there, but, as many have pointed out, we don't have endless time and I am pretty sure we don't have endless money. A census tract auction would have been a single-round sealed-bid auction. Yet, our highly successful spectrum auctions have been simultaneous multi-round auctions, allowing price discovery, flexibility to change auction strategies, and ensuring licenses go to their best use. Additionally, our auctions are carefully monitored to ensure there is no inappropriate behavior. There is no out-sourcing to eBay. Also, this has nothing to do with the capabilities of the SAS operators to track a large number of licenses, as some have argued.

Sixth, some argue that there were better compromises on the table than the one I recommended. But any of those "offers" did not resolve the issues I have discussed. Consider that I did offer a compromise that would have converted two GAA channels to census tract PALs on a one-time basis. These licenses would have been separated from the other PALs to eliminate interference concerns. Given everyone was interested in licenses, I thought I had come upon the Holy Grail, but it was instantaneously rejected.

I do want to thank those who actually were willing to compromise. The wireless industry abandoned large market areas, others reluctantly accepted package bidding, some were willing to go from counties to larger market sizes or census tracts to counties. Unfortunately, a few came to the table with a census tract or bust attitude. What is in the draft item, which I invite you to review, reflects a fair and reasonable compromise based on all of the various interests.

That's probably more than you wanted to know, and all of this may seem like a very defensive response to criticism but after a year of debate it feels liberating to discuss what I believe to be a fair and balanced compromise. I have the obligation — as many of you do — to ensure sound spectrum policy works for all parties. At the same time, as we have moved along the CBRS path, I have tried to retain or reinstall spectrum principles that have worked so well for so long. They are the same elements that I've taken internationally when speaking to other countries about spectrum auctioning and licensing.

## *C-Band*

Since it is part of the panel to be held after your afternoon break, it seems only appropriate to comment on the C-band proceeding. The next prime spectrum for reallocation is the band directly next to CBRS. I have championed and led the effort to reallocate the 3.7 to 4.2 GHz band in the U.S. for flexible wireless services, including 5G. Almost everyone seems to recognize the importance of this band, as the United States is at a disadvantage to other countries when it comes to licensed spectrum below 5 GHz.

Moreover, this is one of those rare opportunities where the current licensees are willing to part with spectrum that is effectively underutilized. It is also unique, because various stakeholders are working together to develop the best way forward to transition this spectrum to its highest and best use. Comments we received in response to our Notice of Inquiry led to our July Notice of Proposed Rulemaking that highlighted a market-based approach to reassign some or all of this spectrum from satellite to wireless use. For the astute spectrum follower, you probably saw some announcements yesterday on this exact point. In particular, I am pleased to see that my friend, Preston Padden, will be leading the C-Band Alliance of satellite companies working towards this approach.

While the Commission will certainly consider all approaches contemplated in our July NPRM, the ultimate mechanism selected must ensure that the reallocation is completed quickly, not five or ten years down the road. In other words, speed must be of major importance. Additionally, a sufficient amount of spectrum must be made available, at least 200 to 300 megahertz. Further, broadcasters and cable operators who currently contract with the satellite companies must be protected and have a means to deliver their programming, whether on the remaining C-band spectrum or via other means. And, the proposal must include permitting unlicensed spectrum use in the C-band uplink, better known as 6 GHz, which I am pleased to say is the subject of a separate NPRM this month. A market-based approach is incredibly attractive as it can satisfy these requirements. You can trust that I will do everything possible to conclude this issue as expeditiously as possible.

## *Spectrum Below 3.5 GHz*

Lastly, let me take a moment to make clear that there are opportunities to reallocate identified spectrum below the 3.5 GHz band in the United States. Specifically, the Commission needs to explore those frequencies between 3100 to 3550 MHz – and even more precisely the 3450 to 3550 band – to see if it could be made available for additional wireless uses. This spectrum is particularly attractive because it is directly adjacent to CBRS. As is typical now, this spectrum is already in use by incumbents, in this case, the U.S. military. While all signals indicated that NTIA and the Department of Defense were ready to clear 3450 to 3550, the decision was made to conduct a feasibility study instead.

In the end, it may just seem like we are clearing a 100 MHz here and there, but if spectrum in these bands is aggregated with potential licenses in 3.5 GHz and a good portion of 3.7 to 4.2 GHz, we will create a solid U.S. spectrum footprint in the mid-band for 5G service.

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With that, I should relinquish the stage and allow the panel of experts to refute, debate, ignore, or add more color to my comments on spectrum policy. I thank you so much for your attention and wish you well for the rest of the conference.