

**Remarks of FCC Commissioner Michael O’Rielly
Before the New Jersey & New York Wireless Associations’
2020 Update Webinar
July 9, 2020**

Hello, everyone! I’m Mike O’Rielly of the Federal Communications Commission and it is my absolute pleasure to join you this lovely summer day. Let me start by thanking the New Jersey and New York Wireless Associations for inviting me to address all of you, albeit from the confines of a personal home. I pray that everyone watching is healthy and coping well with the challenging times in which we live. Soon, a day will come when we can return to the traditional in-person warm water and rubber chicken conference luncheons. In the meantime, we are forging a tiny semblance of normalcy thanks to video technology.

One issue before I jump into specific communications policy matters: I absolutely must applaud the amazing performance, over the past four months or so, of the U.S. wireless industry. We all owe you a debt of gratitude for having the foresight to invest, build powerful networks, and implement the requisite flexibility to manage vast traffic shifts that have withstood recent surges in use. American wireless providers and those serving the industry should hold their heads high knowing their efforts helped keep a nation connected throughout one of its most difficult moments. You all played a part — with a continuing role ahead — to bring comfort, information, and well-being to the people of the Mid-Atlantic states.

With all that said, let’s delve into some policy issues at the FCC that I hope may be of interest to this distinguished group.

Fifth Generation Wireless Service

These days, any substantive conversation about wireless technology in America has to start with 5G. That is not just because everyone has hyped it to the nth degree, for which I, too, plead guilty. Instead, 5G is the proper starting point because it is at the forefront of our attention, grabbing the bulk of energy and funding from related industry sectors, in turn forcing decisions by applicable regulatory bodies, and capturing the imagination and interests of consumers.

What is truly exciting about 5G is that people can see in it the future come to life. It represents the culmination of what was once only imagined in old Hollywood movies — a universe where wireless technology is embedded and ingrained in nearly everything. A 5G wireless world will no longer be about one, siloed device carried in a pocket or purse. If the Internet served to connect people and places through specialized devices, 5G will take it a step further to serve as the first real wireless standard to seamlessly connect everything else. The applications are nearly endless: industrial; manufacturing; enterprise; home; transportation; recreation. And, it effectively enables technologies that have been sitting on the verge of success for a quite a while, including augmented and virtual reality, holograms, e-sports, and autonomous cars, to name a few. I’ll give you a timely analogy: local officials recently reopened our neighborhood parks, and my two-year old was mesmerized when we first ventured through the gates — the wonderment and unlimited possibilities that lay before her led to wide eyes and an open mouth. That’s how we should all feel about 5G.

As you know all too well, the definition of 5G is constantly evolving as the standard-setting process progresses with each new release. At the most basic level, with 5G, we should expect to experience

massive increases in speed and capacity and far lower latency. All will greatly enhance the consumer experience. But, when we examine those changes in the works, Releases 16 and 17 New Radio, or NR, it is clear that the benefits extend far beyond individual consumer phone speeds to the entire commercial sector as well. More specifically, these releases are designed to establish the technical parameters for more complex use cases. Release 16, for example, sets standards for many key aspects, such as integrated wireless access and backhaul, NR in unlicensed spectrum, industrial Internet of Things and ultra-reliable low latency communication, along with intelligent transportation systems and vehicle-to-everything communications. In other words, backhaul, unlicensed, IoT, and cars are four areas expected to see heavy enterprise 5G consumption.

Citizens Band Radio Service

While many of you are starting to plan and build 5G networks to meet the insatiable consumer demand for all things wireless, the Commission continues to focus on one of its primary obligations to the American people: managing the nation's spectrum resources. This daunting task is becoming only more difficult as we seek the necessary bandwidth to deploy next-generation services in an environment where the optimal frequencies have been allocated to others. This is even more true when it comes to identifying much sought-after mid-band spectrum.

Having led the Commission's review and reform of our previously flawed 3.5 GHz priority access license rules, I am almost giddy that these PALs will be auctioned starting on July 23rd, a short two weeks from now. The PALs will be the first new mid-band licenses for 5G and other innovative uses. And, there is reason for excitement: an impressive 271 applicants have qualified to bid in the auction. The potential bidders include mobile and fixed wireless providers of all sizes, cable operators, electric companies, manufacturers, universities, investment groups, individuals, and others. My ultimate vision was to ensure that PALs were attractive to a diverse group of potential users. It appears that introducing the tried and true concepts of longer license terms, renewability, common sense-based license areas, and normal auction procedures where all licenses would be available, among others, accomplished this goal.

Nonetheless, it is premature to speculate on who will place bids, which markets will have the greatest demand, who will ultimately win licenses, and for how much. While we leave that to auction magic to decide, we do know that seven, 10 megahertz PALs will be available in New Jersey's 21 counties, New York's 62 counties, and the other 3,150 counties throughout the U.S. All interested bidders will be eligible to acquire up to 40 of the 70 megahertz available in any particular county. Of course, due to the band's three-tier innovative and experimental structure, PAL holders will still have to protect incumbent uses, such as U.S. Navy radar, so potential bidders must perform their due diligence. But, thanks to the spectrum access system, or SAS, if an incumbent does turn on operations, it will receive protection from harmful interference and the PAL will automatically be reassigned a new channel in the lower 100 megahertz of the band, if available.

For those of you who do not envision needing priority access or do not want to expend the resources to participate in the auction, spectrum is still available to you under general authorized access, or GAA. This 80 megahertz of unlicensed-like spectrum is already available through one of the five SAS providers, with more moving through the approval process. So far, this spectrum is being used to provide both innovative commercial services and private enterprise solutions for the education, healthcare, and manufacturing sectors.

C-Band

The Commission will follow up the release of the CBRS spectrum with an auction for the majority of the existing C-band, or 3.7 to 4.2 gigahertz. This is another longstanding project of mine, having started working on it four years ago and led the charge since then to make this premier band available for advanced wireless services, such as 5G. It's been an extremely difficult issue from that first conceptual conversation years ago, so to have reached the point where we stand now, through all of the twists and turns, is very exciting and gratifying.

To give you a bit more detail about where we are in the process, just last February the Commission finally voted to reallocate and auction the 280 megahertz of spectrum for terrestrial broadband, while preserving the upper 200 megahertz for the satellite incumbents and their contractees. At the same time, we sought comment on the auction procedures for these fourteen, 20 megahertz licenses in each of the 406 partial economic areas, or PEAs. Luckily for the wireless industry, the heavy lifting on transition plans and relocation expenses lies squarely with the satellite companies and those that use their services.

While petitions for reconsideration have been filed and some small satellite companies unsuccessfully pursued a stay in the D.C. Circuit, we are on track for a December auction. Under the Commission plan, 100 megahertz in 46 of the 50 largest markets must be completely cleared by December 5, 2021, and all 280 megahertz in all markets by the same date in 2023. While this may not have been my preferred path, it is consistent with my main principles in executing the C-Band transition: Chairman Pai has committed to an auction this year, the incumbents are protected in the reconfigured band, the auction will release a huge portion of spectrum for innovative new purposes, and the satellite companies are participating voluntarily.

Future Wireless Bands

What I've just discussed, however, represents the past: those spectrum bands already in the works or close to being allocated for next-generation purposes. Not to shortchange those efforts in any way, but the question you should be asking yourselves is, What is the next act? Almost everyone acknowledges that what's been done to date is not enough for the future. And, they are correct. We cannot afford to rest on our laurels or stop working hard to bring other bands into the spectrum pipeline. Almost all experts agree that the Commission must find upwards of 500 to 800 megahertz of additional spectrum for licensed commercial purposes in the next three to five years. I'll throw out a couple to consider.

Top of the list of next bands is 3.1 to 3.55 GHz. It currently houses a number of Department of Defense radar systems and has been identified by Congress for possible commercial purposes. I have made the argument that, of this 450 megahertz block, upwards of 200 must be cleared and go towards meeting our insatiable demand for licensed spectrum. I know the upper 100 can be repurposed without much heartburn, and we can work through the second 100 the same way. As for the remaining 250 megahertz in the lower portion of the band, the bulk of it, at a minimum, must be shared, as in the 3.5 GHz tiered structure of priorities. This would protect the DoD purposes while opening these portions to 5G services as well.

After this band, the identification of potential options becomes more complicated. I have initiated the necessary conversations with industry experts, including manufacturers, providers, academia, and others to help determine which frequencies are most ideal for future purposes. For example, I think it is not unreasonable to have further dialogue with applicable and interested parties on the much debated

12 GHz band. It would certainly seem appropriate to explore the relevant issues here. Similarly, 7 GHz could provide an opportunity for possible licensed operations. There are also a couple other bands being privately discussed but are not necessarily ready for public exposure just yet and maybe never will be. Accordingly, if anyone out there has any ideas or is aware of any magical bands previously not discussed, I would love to hear your thoughts.

9-1-1 Fee Diversion

Turning to my last policy issue, I think it's especially appropriate, given this crowd, to provide an update on efforts to stop the diversion of consumer-paid 9-1-1 fees by state and local governments. It's a tale of good news, bad news. The good news is that, save for any backsliding, the pool of diverting states is now down to just four. It's been a long time coming, requiring a lot of conversations and letters, and even the threat of losing critical federal funding. Just months ago, West Virginia officials, led by Governor Justice, changed their state statute to finally end the state's diversionary practices. Puerto Rico did the same, by codifying the dedicated allocation of its collected fees and restricting expenditures to proper purposes under the law.

The bad news — and I expect no shock in this audience — is that both New York and New Jersey continue to cement their positions, remaining squarely on the committed diverter list. While the other two states, Nevada and Rhode Island, are either relatively new to the practice or have flirted with doing the right thing, New York and New Jersey have said they have absolutely no interest in making changes, or, at other times, have made up hairsplitting justifications for practices that Commission experts have repeatedly rejected. To put it in context, New Jersey and New York account for \$175.5 million of the total \$187 million diverted in 2018, or a whopping 93.9 percent, according to the Commission's last report. Your leaders are unwavering in their commitment to steal these vital fees. They can't be swayed by underfunded call centers or outdated technology. They don't seem to care they are no longer eligible for certain federal monies.

Well, if I have learned anything about my time serving on the Commission, and specifically in this fight, it's that no real, substantive changes come easy. Let it be known, I will use every tool at my disposal to force needed change in these states' practices and will not stop until the Commission is able to submit a clean report to Congress stating that there are no diverting states. I thank each and every one of you who are willing to join me in this fight.

* * *

So, that's probably a lot more ground covered than you were expecting from me. And, there are so many other issues I could have discussed — like macro towers. I'll save that for the Q&A or the next time when hopefully we will be able to meet in person. Until then, all my best to you and your families.