

**STATEMENT OF
COMMISSIONER MICHAEL O'RIELLY
APPROVING IN PART AND DISSENTING IN PART**

Re: *Use of Spectrum Bands Above 24 GHz for Mobile Radio Services, GN Docket No. 14- 177; Establishing a More Flexible Framework to Facilitate Satellite Operations in the 27.5-28.35 GHz and 37.5-40 GHz Bands, IB Docket No. 15-256; Petition for Rulemaking of the Fixed Wireless Communications Coalition to Create Service Rules for the 42-43.5 GHz Band, RM-11664; Amendment of Parts 1, 22, 24, 27, 74, 80, 90, 95, and 101 to Establish Uniform License Renewal, Discontinuance of Operation, and Geographic Partitioning and Spectrum Disaggregation Rules and Policies for Certain Wireless Radio Services, WT Docket No. 10-112; Allocation and Designation of Spectrum for Fixed-Satellite Services in the 37.5-38.5 GHz, 40.5-41.5 GHz and 48.2-50.2 GHz Frequency Bands; Allocation of Spectrum to Upgrade Fixed and Mobile Allocations in the 40.5-42.5 GHz Frequency Band; Allocation of Spectrum in the 46.9-47.0 GHz Frequency Band for Wireless Services; and Allocation of Spectrum in the 37.0-38.0 GHz and 40.0-40.5 GHz for Government Operations, IB Docket No. 97-95*

It is envisioned that the spectrum bands we consider today eventually will be part of the next generation of wireless services, allowing everything from lightning fast downloads of high-definition video to accommodating the future abundance of the Internet of Things. There are great expectations of what may be possible from these airwaves – increased data speeds reaching 10 gigabytes/second, latency of one-thousandth of a second, increased spectral and energy efficiency, among others. If successful, it could lead to a technological revolution I like to refer to as wireless fiber.

Although, there are no standards or consensus definition yet for “5G” services, most believe that, to obtain these benefits, it will involve multiple components, including fiber, enhancements to current networks, additional infrastructure, and, of course, spectrum. To reach this potential, the Commission must ensure that sufficient spectral resources are available.

For this reason, I am supportive of taking this next step to open up these millimeter wave frequencies to mobile use by seeking further in-depth comment on the 28, 37, 39, and 64 to 71 GHz bands. These particular bands are being pursued because they already have mobile allocations and, accordingly, it is expected to be easier to introduce mobile use in them. But let’s face it, even these bands are not exactly problem free, and we have some real work to do to make them operational. Moreover, these frequencies are likely just the tip of the iceberg of what is needed to make next generation services a reality.

Like Commissioner Pai, I requested that the Commission seek inclusion of additional bands explored in the Notice of Inquiry (NOI). Even if we are not ready to determine every exact component, including detailed licensing specifics (and I am skeptical that we should be doing so for the other bands), complacency must not carry the day. Instead, we must aggressively push forward. It’s the only way we will create the necessary spectrum pipeline for both future licensed and unlicensed use.

On that point, I would have preferred moving forward on allowing mobile services in additional airwaves outlined in the NOI, with the understanding that some bands may take longer to resolve. But in the nature of compromise, I will accept this portion of the item because considerable effort was made to improve the section, ask additional questions that should spur the process of opening additional bands for mobile use, and a promise was made by the Chairman to reexamine the issue soon after the World Radiocommunication Conference, which I plan on attending. Beyond these bands, the Commission needs to look even further and target additional bandwidth between 6 and 24 GHz and even in lower bands. The Commission must do so in the near term as well.

Additionally, and I may sound like a broken record, it is imperative that the Commission continues its work on removing barriers to wireless infrastructure deployment. This is obviously not an issue center to today's task, but millimeter wave frequencies, which travel less than a kilometer and can be easily obstructed by buildings, will take that many more sites. As such, this will be paramount for purposes of densification and providing the corresponding back haul that will be needed for these systems.

Although I support the bulk of the item, there are certain proposals and ideas contained in this notice with which I disagree. Instead of simplicity and utilizing what has worked for the Commission in the past, we opt for vast experimentation and licensing frameworks that are unproven and highly dubious. Why do we seem intent on tossing aside our tried-and-true spectrum auction, "bidding process options" and licensing procedures on a whim?

For instance, the item contains a hybrid licensing structure for the 37 GHz Band that is objectionable and eerily reminiscent of the contained access facility that was raised – and luckily discarded – in the 3.5 GHz proceeding. If this idea is implemented, licenses would be auctioned for the outdoor areas, but indoor and possibly other discrete areas would be reserved for property owners. I am at a loss as to why we would risk the attractiveness, "auctionability" and potential development of this band for a proposal that on its face looks like giveaway for land developers and owners.

Furthermore, the discussion regarding the future of satellite services, especially the framework that is proposed for 28 GHz and allowing satellite gateways to get co-primary status, seems to reach a conclusion before actually determining if wireless and satellite services can coexist. Additionally, the structure proposed would allow certain gateway stations to obtain co-primary status for free. Talk about a giveaway.

In another area, the discussion on bidding process options would undo almost two decades of generally successful Commission precedent on auction process and renewal format. What is the justification for contemplating a vastly different scheme? This is especially troubling given our last deviation, the 3.5 GHz "experiment," has generated extensive questions regarding the viability of the priority access licenses.

Separately, the notice also contains questions regarding network and equipment security that is unlike any security section I have seen before, and the Commission's intrusion seems harmful. Beyond major authority problems, the simple fact is that licensees have the incentive to secure their networks in order to attract and maintain customers. This section of heavy-handed security procedures should have been stricken and I don't support it.

Finally, the item seeks to impose spectrum aggregation caps. The only good news is that there is a proposal that these frequencies will not be added to the spectrum screen set forth in the Mobile Spectrum Holdings Order. While I don't support any spectrum caps, it seems particularly premature given that we do not know what these services will look like and how much spectrum will be needed.

Despite not being able to support this order in full, I would like to thank the Chairman, his team and Commission staff for their time and efforts in working with me and my office to try to get the item into a better place. Thank you.