STATEMENT OF
COMMISSIONER MICHAEL O'RIELLY
APPROVING IN PART, 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.

After much hard work, the item before us is in fairly good shape.

While we are at the early stages of development, most industry participants believe that next generation, or 5G, networks will incorporate millimeter wave spectrum to achieve the capacity, speed and latency needs of Americans' wireless usage. Not only will these frequencies likely be used to provide data-intensive applications, such as advanced video downloads and gaming capabilities, but will also be used with our current 4G deployments to incorporate the vast and expanding Internet of Things and allow Americans to conduct business, communicate with loved ones, access the Internet and utilize apps wherever they may be.

Today, the U.S. becomes the first country to allocate spectrum for next generation wireless networks. I have stated repeatedly – and my colleagues agree – that we must maintain our position as the world leader in wireless innovation. Other nations, such as South Korea, China and Japan, seek to challenge our status, but we are ideally situated to usher in the next wave of wireless technologies based on our preeminence and experience gained in deploying 4G technologies. We are solidifying this leadership role by opening up the 28, 37, 39 and 64-71 GHz for mobile use.

I appreciate that the item, as promised to me, seeks comment, in the further notice, on seven new bands to open up for additional wireless uses. However, I am sure that no one is surprised that I will continue to push for even more bandwidth. I want to make it clear that I understand that we may not find all spectrum suitable, but this is a necessary exercise to ensure that our spectrum resources are being used efficiently and put to their best use.

This is why I sought to include more bands in the further notice, especially those that are being studied in preparation for the next World Radio Conference (WRC). While I have been critical of the events that I witnessed at WRC-15 and its decision to not study certain frequencies, such as 28 GHz, this does not mean that we should ignore the spectrum they did identify. While we do not include some of these bands today, we should move forward to consider such frequencies as 42.5-43.5 and 45.5-47 GHz to see if mobile services can be offered and global harmonization achieved. We also should have inquired about the 40-42 GHz bands and the LMDS frequencies (29.1-29.25 and 31-31.3 GHz) outside of the 28 GHz band, so that these licensees are not following two separate sets of rules.

A main role of the Commission is to provide the necessary spectrum resources and then let the private sector release technology into the marketplace to meet consumer demand. In the same vein, we

must provide a regulatory environment that offers licensees with the necessary flexibility and certainty to allow investment, innovation and deployment of next generation systems. While I am supportive of the action we take today, there are several licensing issues that, in my opinion, would have benefitted from further consideration and that I suspect we will be revisiting in the future.

For example, licensing 28 GHz by counties as opposed to larger market areas, such a PEAs, has been rejected by almost everyone in the record. There is also opposition to the shared use of the lower 600 MHz of the 37 GHz band between the federal government and multiple commercial users and concerns that the operability requirement for the 37-40 GHz band may slow down deployment. Issues have also been raised about how Fixed-Satellite Service (FSS) earth stations should be protected and how they should be sited going forward.

I also have serious concerns about the potential direction of some of the sharing proposals raised in the further notice. Going forward, I am unlikely to support any sharing mechanism that resembles the unproven 3.5 GHz experiment or the indoor "hybrid" approach that was proposed and rejected for the 37 GHz band. I also do not agree that any sharing paradigm with the federal government should be extended to the upper portion of the 37 GHz band, nor should the federal government obtain an allocation in the 42-42.5 GHz band. In fact, the further notice states that the government has access to the 47.2-50.2 and 50.4-52.6 GHz bands, but is not using the spectrum. The federal government needs to decrease – not increase – its footprint. This is why I have been outspoken about the need for spectrum fees for federal users as one solution.

I must dissent, however, to the spectrum aggregation limits imposed in this order and the mobile spectrum holdings discussion in the further notice. Generally, I oppose spectrum caps in favor of the free market but, in this case, it makes absolutely no sense to impose any limits. We do not have a consensus definition of 5G, finalized standards, a full understanding of what services will be offered, or any idea of how much spectrum is needed to achieve the capacity, speed and latency goals for particular spectrum bands, but we adopt foolish policy anyway. Moreover, this makes the proposal, in the further notice, of a potential holding period precluding certain secondary market transactions utterly preposterous. Transferability restrictions are used when small businesses or other favored entities have access to spectrum set asides, not when licensees pay full price for spectrum at auction.

Although improvements have been made since the item was originally circulated, I also cannot support the security section of this order requiring a high-level statement of every licensee's security plans. While I fully support secure networks, wireless providers have every incentive to ensure the soundness of their networks. A lack of security measures, or even worse a security breach, results in a loss of subscribers, which is not a successful business plan. Therefore, I don't think that this reporting requirement is necessary or all that helpful. Once again, this is the Commission gathering data for the purposes of monitoring, but it is really a means for the Commission to interfere in the design and operations of networks and the starting point for future regulation. I also cannot support the delegation of authority to the Public Safety Bureau to release an NOI seeking comment on the "security implications and solutions in future 5G networks."

Now that the Commission has identified spectrum for next generation networks, we must finish up the proceeding to further reduce regulatory burdens on small cell deployments. I understand that we are getting close, and I commend the Bureau for its work. Once this is done, we must refocus our energy on ensuring that localities cannot put unnecessary roadblocks in front of small cell siting.

I thank the Chairman for incorporating some of my edits and suggestions. And, a special thanks to the multi-bureau and office team who worked tirelessly to get this item to us so quickly. Although I

may have made some different choices along the way, I recognize the amount of effort that went into this work product.