

**Remarks of
Commissioner Michael O’Rielly, Federal Communications Commission
Before WISPAmerica 2015
February 24, 2015
(as delivered)**

I feel strongly that all of you – the people in this room – embody the true spirit of American entrepreneurship, starting businesses to provide broadband service to your communities and elsewhere, in many instances, when others were unable or unwilling. I thank WISPA and your 800 or so members for providing wireless internet to our country’s rural communities and bringing competition in other areas. Your customers – in many cases your friends and neighbors – use the networks you build and operate to take advantage of all the Internet has to offer. Your businesses facilitate e-commerce, promote job creation in your communities, provide outlets for innovation, and so much more.

Sadly, the importance of the efficient and cost-effective broadband services you provide – oftentimes to the unserved and underserved – may sometimes go unappreciated. In fact, the Commission recently decided that, despite your valiant efforts to bring service to your communities, unless you provide 25/3 speed, your efforts don’t count. This amazes me, especially given the emphasis that this Administration places on broadband deployment, adoption and the closing the so-called digital divide. According to a majority of my colleagues, you must be providing some type of new service I will call “imaginary broadband”.

Despite the Commission’s myopic view on Internet speeds, I continue to believe that the FCC’s role is to create an environment – through its rules and policies – that encourages investment and opportunity and provides the proper incentives to allow all of you to continue to expand and improve your networks and service offerings.

And, while I can say – and as you have probably noticed – that the Commission has been busy on many fronts, I cannot say that the FCC has been completely successful in fulfilling this role. The good news is that the Commission is moving forward . . . albeit slowly . . . to free up and place into your hands the key resource critical to your sector: spectrum. This will benefit not only WISPs, but all mobile broadband providers. The bad news is that the Commission is also pursuing policies that will make it harder for small businesses, like yours, to survive. To end on a happier note, I will start with the less pleasant topic.

Title II and Net Neutrality Harms Small Entrepreneurs

As your companies strived to break into the industry, worked to compete, and rolled out service to your consumers, FCC regulations may not have been at the forefront of your thinking. But, increasingly, companies of all types and sizes have to consider the impact of FCC rules on their business models and bottom lines. The reason is that the Commission is taking a much more hands on approach to regulating. As a result, more companies have to spend time and resources monitoring, or even participating, in FCC proceedings. And to companies not used to dealing with Washington, that can come as a real culture shock!

Despite bipartisan steps in the right direction on some other matters, such as facilitating infrastructure deployment, I am particularly concerned about the Commission’s recent endeavor to reclassify broadband as a telecommunications service and the impact that this will have on small

businesses. As you know, the Commission is scheduled to vote on net neutrality rules later this week. Unfortunately, the draft order is not public, against my wishes, so I can't get into the details, but I do have a few general observations to make.

The net neutrality debate is often framed in terms of pitting large broadband companies against small edge providers. We've all seen the ads and the rhetoric: a big bad cable company intends to nip the next garage-start up in the bud. What gets lost in the debate is that there are numerous small ISPs that will be caught in a Title II trap. Such regulation will create unnecessary burdens and costs for all small providers, including your companies, small cable providers, municipal broadband providers and others.

Given the lack of evidence of net neutrality violations and harms to consumers or edge providers, the Commission has instead taken what the D.C. Circuit has called a "prophylactic" approach. That is, net neutrality rules have been premised on the incentives and ability of ISPs to engage in harmful conduct, not actual harms. Now I don't believe we should be regulating based on hypothetical problems. But even if one accepted that premise, the argument breaks down completely when it comes to small providers.

A wide range of small ISPs have made a pretty compelling case that they lack the incentives and ability to violate any net neutrality principles. Companies trying to grow their businesses and add consumers will be motivated to provide the best possible service, not block or degrade their customers' connections. That's especially true for small providers that face competition from established companies. Moreover, small ISPs simply don't have the ability to demand that edge providers pay them for access or prioritized service. Even if they wanted to engage in this practice, which is not the case, they lack the market power to do so. Would the large Internet application providers even take your phone call?

Unfortunately, this proceeding has shifted far beyond net neutrality rules to Title II itself. The fact that the Commission has to answer questions about the extent to which Title II rate regulations will apply shows how far out of hand this has gotten.

The prospect of Title II is particularly troubling for WISPs and small cable providers. They have little to no experience with common carrier regulation and associated reporting requirements. They also have made investments premised on the Commission's hands off approach to the Internet. In most cases, smaller ISPs employ a handful of people, and those employees are typically focused on deployment and customer service, not regulatory compliance. And they often serve rural areas with smaller populations and higher costs. Imposing new requirements on these providers -- even make-believe "Title II light" -- would be costly and would detract from their efforts to expand broadband coverage, often in rural and other unserved parts of the country. Think of the costs of the Commission's new transparency rules will impose on a small WISP serving a hundred or a couple hundred consumers.

Moreover, some parties, including WISPA, have pointed to potential deficiencies in the Commission's initial Regulatory Flexibility Act analysis. They assert that, the Commission did not adequately analyze the impact of proposed net neutrality rules on small businesses, including the costs of complying with new transparency reporting requirements. I couldn't agree more with this argument. The Commission has repeatedly ignored its obligations or done cursory review for purposes of RFA compliance, and despite my efforts to highlight these concerns, little has been done to improve the situation.

Indeed, as WISPA recently noted, “[w]hile it may be true that 17 broadband access providers accounted for approximately 93 percent of retail subscribers in the U.S. in 2013, neither that nor the statutory requirements of the RFA excuse the Commission from considering the 3,000 small broadband Internet access providers that serve the remaining seven percent”.¹ Notably, the FCC fact sheet regarding the net neutrality plan does not mention any accommodations for small providers.

Even small edge providers stand to lose in the end. Once the Commission decides it can regulate the Internet, I have no confidence it will limit those regulations to service providers. After all, we have seen calls to extend rules to content providers and even applications.

I also want to discuss a recent FCC decision that could impact you and other rural broadband providers: changing the definition of broadband from 4 Mbps downstream and 1 Mbps upstream to 25/3 Mbps. I’m sure it came as a shock to many providers that the high-quality broadband services that their consumers know and love no longer qualify as real broadband service. One small provider I spoke with talked about how frustrating it is to predict just how far the FCC will move its broadband goalpost from year to year. He said that the company tries to plan ahead, of course. It had rolled out 10/1 service well before the FCC adopted that as a standard for universal service in December 2014. And it had just planned for 20 Mbps service thinking that would put it well ahead of the curve of consumer demand and FCC expectations. Well, just one month after changing the standard to 10/1 for USF, the Commission increased it again to 25/3 generally.

Many have suggested that the FCC changed the standard to preserve its authority under section 706(b) to regulate broadband, including by adopting net neutrality rules. Specifically, because the FCC changed the standard to 25/3 and determined that the service was not being deployed to all Americans in a reasonable and timely fashion, it has a duty to take affirmative action to promote broadband deployment, which the FCC has interpreted as a mandate to regulate. That’s undoubtedly true. But the consequences extend beyond legal authority. There are a limited number of technologies, and therefore providers that can meet the new standard. Consequently, the FCC can claim that the broadband market is not competitive. The FCC can use that finding in any proceeding where a lack of competition is grounds for additional FCC intervention. We’ve already seen this in public statements as a justification for preempting state laws restricting municipal broadband.

I also have concerns about what it will mean for future USF decisions. At some point in the future, there will be an auction to determine who will serve rural parts of the country that the current incumbents decline to serve. To be successful, we need to ensure maximum participation in the auction. That means setting a standard high enough to ensure that rural consumers receive reasonably comparable broadband service, but not so high that we exclude providers like yourselves who could be part of the solution.

Spectrum Policy

As for the good news, the Commission is taking the necessary steps to get needed spectrum resources into the marketplace. But we cannot rest on our laurels, more needs to be done to maximize

¹ *Ex parte* letter from Stephen E. Coran, Counsel to the Wireless Internet Service Providers Association, to Tom Wheeler, Chairman, Federal Communications Commission, GN Docket No. 14-28 (Feb. 3, 2015), http://www.cre8group.com/wispa/wispa_Ex_Parte_Presentation_2-3-15.pdf.

the use of these frequencies and, as we look to the future, the Commission needs to pursue efficient spectrum policy.

From WISPs to commercial mobile radio service (CMRS) providers, the message is clear that providers need more spectrum to satisfy the demands of American consumers and maintain the U.S. position as the leader in wireless and Internet technologies. Last year alone, U.S. mobile data traffic grew by 63 percent, 32 million more mobile devices were connected, and a total of 401 million devices accessed the Internet.² These numbers will continue to increase at an astonishing rate. In the next five years, it is expected that mobile data traffic will multiply by a factor of seven and there will be 1,066 million mobile connected devices in this country alone.³

This is not surprising when you consider that mobile use has evolved away from voice-only phones to an array of smartphones, tablets and laptops suitable for data-intensive apps and streaming video. Video consumption alone is expected to increase 8.6 times between now and 2019 and will comprise 75 percent of mobile transmissions.⁴ Wearable devices are expected to increase from 29.3 million today to 170.3 million in 2019 and the traffic from these devices will grow 19 fold.⁵ M2M modules will also proliferate. Currently, they comprise 12.74 percent of device connections, but they are expected to grow to 59.9 percent by 2019 and traffic from M2M will increase 49 fold in this timeframe.⁶

This increase in wireless traffic will require additional spectrum resources, beyond what is in the current pipeline. Locating, repurposing and clearing spectrum takes time, so a long-term strategy is needed. The Commission and our nation cannot wait until the spectrum is needed to start this process. It is just too late at that point. Accordingly, we need a firm plan to reallocate additional spectrum, beyond what has already been identified, mainly from government to commercial purposes. And the plan will need to be based not just on incentives but real consequences for those unwilling to improve spectrum efficiency.

² Cisco, *VNI Mobile Forecast Highlights, 2014-2019, United States – 2014 Year in Review*, http://www.cisco.com/c/dam/assets/sol/sp/vni/forecast_highlights_mobile/index.html#~Country (filter by U.S., 2014 Year in Review) (last visited Feb. 2, 2015); Cisco, *VNI Mobile Forecast Highlights, 2014-2019, United States – Network Connections*, http://www.cisco.com/c/dam/assets/sol/sp/vni/forecast_highlights_mobile/index.html#~Country (filter by U.S., Network Connections) (last visited Feb. 2, 2015) (“Cisco VNI Highlights – U.S. Network Connections”).

³ Cisco, *VNI Mobile Forecast Highlights, 2014-2019, United States – 2019 Forecast Highlights*, http://www.cisco.com/c/dam/assets/sol/sp/vni/forecast_highlights_mobile/index.html#~Country (filter by U.S., 2019 Forecast Highlights) (last visited Feb. 2, 2015); Cisco *VNI Highlights – U.S. Network Connections*.

⁴ Cisco, *VNI Mobile Forecast Highlights, 2014-2019, United States – Mobile Applications*, http://www.cisco.com/c/dam/assets/sol/sp/vni/forecast_highlights_mobile/index.html#~Country (filter by U.S., Mobile Applications) (last visited Feb. 2, 2015) (stating that video comprises approximately 60% of mobile data traffic today).

⁵ Cisco *VNI Highlights – U.S. Network Connections*.

⁶ Cisco, *VNI Mobile Forecast Highlights, 2014-2019, United States – Potential M2M Connections*, http://www.cisco.com/c/dam/assets/sol/sp/vni/forecast_highlights_mobile/index.html#~Country (filter by U.S., Device Growth/Potential M2M Connections) (last visited Feb. 2, 2015).

While the Commission's priority should be to identify spectrum to be auctioned for exclusive use, this in no way undermines the need and importance of unlicensed spectrum. There are underutilized bands where clearing may not be possible or cost prohibitive. These frequencies should be targeted for shared and unlicensed use. For efficient and effective wireless systems, both licensed and unlicensed networks are crucial. Not only is there the niche that is fulfilled by WISPs – serving rural communities where relying solely on fiber and commercial mobile networks may not be viable – but Wi-Fi systems also serve an important role in offloading traffic from overloaded cellular networks. In 2014, 57 percent of mobile traffic was offloaded to Wi-Fi and this number is expected to increase to 66 percent by 2019.⁷ Recent Cisco statistics provide an interesting insight into Internet trends. It is estimated that, in the next five years, Wi-Fi will surpass wired networks in the amount of IP traffic carried. We are truly entering the golden age of Wi-Fi.

To continue this growth, I have a few principles that should be followed as we identify spectrum bands suitable for unlicensed use.

First, where underutilized bandwidth cannot be cleared and unlicensed use is possible, spectrum users must work together to facilitate sharing and accommodate new services. Spectrum resources are too vital for any frequencies to lie fallow for any period of time. That said, the Commission must ensure that incumbents do not receive harmful interference from new services within their band or in adjacent bands. This will require the current spectrum users and the unlicensed community to work together to identify and prevent harmful interference. The Commission must facilitate and ensure that all parties push forward to open these bands for unlicensed use as expeditiously as possible.

The UNII-2B and UNII-4 bands in 5 GHz are prime examples. The Commission must take the necessary steps to facilitate unlicensed use in a band that is already used for Wi-Fi systems. This increased bandwidth will allow the deployment of the latest technologies that will relieve congestion and bring higher speeds. Hopefully, the actions of the Commission, combined with the reintroduction of the Wi-Fi Innovation Act in the House and Senate, will spur the stakeholders – the Wi-Fi community and transportation sector – to come to a quick resolution that will allow unlicensed and DSRC to harmoniously exist in the UNII-4 band.

Second, any protection zones must be as small as possible. The results of interference analyses should ensure that any exclusion, protection or coordination zones exist only where there is concrete evidence of potential harmful interference. For example, we cannot accept the exclusion zones proposed in the 3.5 GHz band that were based on high-power systems as opposed to small cell deployments. These will have to be greatly reduced to provide for a successful service offering. Excluding many of this country's largest cities will not provide a viable business plan for either service providers or equipment manufacturers. The days of overly-cautious, conservative, what-if projections must come to an end.

Finally, and more generally, the Commission must impose stringent buildout requirements that must be enforced. We cannot allow spectrum to remain unused if business plans fail, hypothetical technology is delayed or does not come to fruition, or licensees simply fail to build systems. This spectrum should return to the Commission to be re-auctioned or reallocated for unlicensed use, if

⁷ Cisco, *VNI Mobile Forecast Highlights, 2014-2019, United States – Device Growth/Traffic Profiles*, http://www.cisco.com/c/dam/assets/sol/sp/vni/forecast_highlights_mobile/index.html#~Country (filter by U.S., Device Growth/Traffic Profiles) (last visited Feb. 2, 2015).

appropriate. Similarly, all spectrum users who are not using the entirety of their allocations or who are using it inefficiently should be required to return the spectrum they do not need.

I would like to conclude by thanking you. Not only for having me here today, but also for the important role you play and the services you provide. I applaud your ingenuity, innovative spirit and hard work, and I look forward to your questions.