

**Remarks of FCC Commissioner Michael O’Rielly  
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Thank you for that very kind introduction. It is a distinct privilege to participate in the second Mobile World Congress Americas, a partnership between CTIA and GSMA. Today’s remarks replace the traditional gameshow approach of yesteryear with a down-in-the-weeds policy discussion; therefore, I apologize in advance for those attending, as you are stuck listening to me jabber on and on.

As some of you know, I have spent the last two weeks with a new baby daughter and her mildly ill sister. You may not realize how much I appreciate actually being here with you. If you don’t see me out enjoying the city of Los Angeles tonight, do realize that I am planning to take advantage of a very quiet hotel room.

The subject of the ensuing panel is “International Perspectives on Spectrum and 5G.” Make no mistake, there is a global race to be the first nation to initially deploy 5G services. To do so, however, countries are going to need the right policies, and that naturally brings us to spectrum.

*International Spectrum Approaches*

Let me start by discussing how license structure and assignment methods provide the foundation for successful wireless policy and actual network deployment, necessary to make 5G or any new technology a reality. These are complex issues that are frequent topics of conversation with my foreign colleagues. Oftentimes, governments are tempted to design spectrum policy to meet other goals, such as maximizing revenues, increasing competition, achieving ubiquitous service, and promoting technological innovation. In doing so, decision makers can be swayed to make unwise spectrum decisions.

More specifically, my international counterparts sometimes contemplate shorter license terms with re-auction at the term’s end, along with high opening bids, to maximize funds for their treasuries and provide a continuing revenue source. They also look to adjust market sizes and implement technology dictates in an attempt to promote ubiquitous service, innovation, and network upgrades. Further, they consider spectrum set asides and different auction structures to try to engineer competition.

While perhaps well-intentioned, these conflicting goals, however, can have detrimental effects on the networks built and services eventually offered. For example, spectrum set asides and other approaches favoring certain participants, such as basing market sizes solely to help some participants while disadvantaging others, are unlikely to result in spectrum going to its best use and can delay or prohibit the provision of services. Re-auctioning spectrum at the end of a short license term will not lead to widespread deployments, network expansion to the unserved, technology upgrades, or innovation, which require vast expenditures and significant time to recoup costs. Mandating technologies for specific frequencies will keep a band frozen in time, also hindering future technology

upgrades. And, I can go on, but most importantly many entities are unlikely to invest in needed spectrum under the wrong conditions and the consumer ultimately loses out in the end.

I want to be clear that I raise these issues not to belittle or criticize my foreign colleagues, but instead to highlight the complexities of spectrum policy. It is far more complicated than Goldilocks jumping on a few beds and declaring “this one is just right.” The U.S. has established its leadership in wireless technologies, in large part, by setting up simple, well thought-out parameters and allowing the free market to do the rest.

Generally, U.S. success, unlike those prior examples, has been grounded in policies designed to (1) make the spectrum attractive for all industry participants and uses, (2) put it to its highest value use, and (3) ensure that the certainty exists to foster the necessary environment to promote investment and deployment. How do we do this?

We start with our firmly grounded belief in flexible use, allowing those interested to choose the best use for the spectrum and the ability to evolve and upgrade networks and technologies as they see fit. Our license design doubles down on flexibility, by utilizing geographic areas of sufficient size to enable myriad technologies and offerings, including fixed and mobile, private or commercial, foreseen or yet to be developed; with terms long enough – ten years or more – to allow for actual deployments, including wide area networks and those dedicated to discrete area; with renewability to facilitate the requisite network expenditures without fear of investment being stranded; with performance requirements as safeguards to ensure that licenses are put into use.

The Commission then uses the ultimate free market mechanism to assign these licenses: simultaneous, multi-round auctions. Ultimately, auction participants set spectrum values based on their business models, spectrum needs, and deployment plans. Further, price discovery permits entities to modify their strategies and refocus on some markets, if others get too expensive. This ensures that spectrum will always go to its highest value use; providers will have the incentive to deploy the best and latest technology in order to compete in the marketplace and recoup their investments; and successful entities will be able to grow and use profits to expand and upgrade their services to meet the needs of Americans. And dare I say, it is a model worth replicating in other nations as well.

### *International Organizations & Standard Setting Bodies*

Nations not only have different approaches to licensing and auction mechanisms, but these differences also extend to macro issues, such as global harmonization and standards setting for various spectrum bands. So, what does this mean for the organizations that serve to bring nations together to discuss diverging views, develop rational global spectrum policy, and prevent harmful outcomes? Here I speak not only of the International Telecommunication Union – the ITU for aficionados – but also of the many standard setting bodies, such as 3GPP, IEEE, WinForum, the TIA standard setting panels, and others, as well as the more informal negotiations that occur almost every day among nations.

To evaluate the functionality of these organizations, we should first stipulate to the premise that international spectrum harmonization is incredibly valuable. It just so happens that radio waves do not adhere to artificial boundaries determined by past military conflicts or geographical markers, but instead are governed by science, and more specifically, physics. There is actually no way to stop, on a grand scale, wireless signals from reaching their desired and natural end points. Moreover, we shouldn't wish to do so, as there are enormous benefits and efficiencies to be had if the entire ecosystem of equipment manufacturers, service providers, application developers and others can operate under common understandings for one or more spectrum bands. Quite frankly, harmonization lowers the cost of production, deployment, and service offerings, meaning enormous advantages for consumers and nations.

For years, we have relied on our international spectrum organizations to bring coherence, agreement, and forward-looking thinking to the many diverging spectrum approaches and views for the goal of producing global spectrum harmonization. But this structure - at both the formal and informal levels - is fraying, sufficiently becoming a major impediment for those nations, like the United States, that need significant spectrum allocation changes to reflect the dynamic wireless marketplace for commercial services.

In the case of the ITU, it faces a bevy of real issues, which I have talked about a couple times and expanded upon in a recent op-ed. From mission creep and bureaucratic overreach to basic ineffectiveness and blatant cronyism, many of the charges are fairly well known and yet little is being done to correct them. My fundamental concern with the ITU, however, is that its leadership has not been prepared or willing to take the necessary steps to focus directly on spectrum issues and, when necessary, challenge those member states trying to stop progress on spectrum policy. Nations that are leading the world in technological advances should demand more in terms of spectrum reallocations to prepare for future wireless services in the one-, five-, ten- and twenty-year timeframes. It is unacceptable to allow specific nations or regions to block spectrum progress when its done not to preserve national security or prevent harmful interference, but to further the parochial goals of the objectors, like protecting the financial balance sheets of domestic incumbents or enabling a nation's companies to compete — or even dominate — internationally.

For the private sector standard-setting bodies, we have seen attempts by nation states to try to influence and skew the elected leadership to favor the business interests of a specific domestic company or for purposes of causing harm to those headquartered in other countries, particularly the United States. This shameful practice undermines the legitimacy of new standards and, if successful, could deter companies from participating and cooperating in the process. In the end, if the decisions of standard-setting bodies face questions of legitimacy and undue influence, then companies will simply walk away, which will further fracture the quest for greater spectrum harmonization.

This reminds me of a pertinent quote by former Senator and Department of Defense Secretary Chuck Hagel, in which he said in relation to foreign policy,

“Alliances and international organizations should be understood as opportunities for leadership and a means to expand our influence, not as constraints on our power.” Senator Hagel was rightly pointing out that the U.S. and others join international organizations for purposes of leading and influencing like-minded countries, but it should never be seen as an attempt to diminish our sovereignty, and it doesn’t limit our ability to take any actions we may need to advance our own goals.

Similarly, it should be accepted that the United States and its private-sector companies expect that global spectrum policy forums will be used to reach proper and mutually beneficial outcomes. Any effort to use these processes as a direct assault on our nation or our companies will not be allowed to stand. We have options. There are a handful of nations that are quite clearly leading global wireless advancements and real capabilities are available to work outside the ITU or the existing standard setting bodies to further spectrum policy. It should never come to this, but preventing such a reality will require a direct improvement in the structural performance of international spectrum organizations and a check on bad practices.

### *Agendas of Some Foreign Governments*

While I have this captive audience, I think it’s worth raising whether the apparatuses setting spectrum policy can or should be used for ulterior motives. In other words, what happens when other governments, especially those built on far different models than the U.S., use spectrum policy bodies to advance their individual or collective geo-political interests, sometimes at the expense of spectrum policy? What happens if such participation and coordination is not done to drive sound spectrum policy but to facilitate state-sponsored industrial policy in other fields? What happens if elected leadership positions are used as pedestals to stymie the political and economic interests of the U.S.?

It should come as no surprise that I am a firm believer and defender of the structure of the U.S. government, which consists of a representative democracy with foundations and reliance on individual liberty and a free, capitalist marketplace. Sadly, my views are not universally held, as several nations actively engaged in spectrum policy have government systems based on the derivatives of the intellectually-broken and historically-failed communist state.

I plan to have more to say on this in the coming months, but I think answers to these questions matter for the future of spectrum policy.

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With that, I think it is best to depart and let our panel of experts debate these and many other issues pertaining to the views on spectrum policy from an international perspective. I thank you so very much for your attention and wish you a successful Mobile World Congress Americas.