

January 5, 2018

Evan Viau
Legislative Clerk
Committee on Energy & Commerce
2125 Rayburn House Office Building
Washington, D.C. 20515

USPS and email to: Evan.Viau@mail.house.gov

Re: Communications and Technology Subcommittee hearing

Dear Mr. Viau:

Please see my response provided herein to the requested questions for the record from the November 16, 2017, Communications and Technology Subcommittee hearing entitled, “The Race to 5G and its Potential to Revolutionize American Competitiveness.”

The Honorable Greg Walden

Does blanket extension of FCC auction authority derive the most value from spectrum auctions and incentivize additional auctions that unlock commercial spectrum? Or is it preferable for Congress to authorize specific auctions of specific spectrum bands?

Answer to Mr. Walden

The FCC requires authority to hold spectrum auctions. Historically, the estimated revenues associated with such authorizations have provided an impetus for Congress to direct that specific frequencies are made available for auction. Once blanket authority is authorized, the incentives for Congress to authorize specific reallocations can be blunted. Consequently, more spectrum is ultimately likely to be reallocated, and more value generated, by authorizing specific auctions of specific bands, as opposed to granting blanket auction authority.

The FCC effectively uses its blanket auction authority to assign licenses in many bands, not all of them large high-dollar auctions. It would be overly burdensome for Congress to specifically authorize each of these smaller auctions. Consequently, authorizing blanket authority for auctions expected to raise revenues under some threshold would preserve the FCC’s ability to effectively manage spectrum, but without diminishing the incentives to facilitate larger spectrum reallocations.

The Honorable Gus Bilirakis

As discussed, the FCC has opened an inquiry for the possible use of mid-band spectrum, particularly the 3.7 to 4.2 GHz band. Satellite companies currently make use of these frequencies. Do you have any thoughts on how to quickly and efficiently proceed with 5G in this band in light of these incumbent users?

Answer to Mr. Bilirakis

I have investigated this band on behalf of some of the interested parties and my research found that reallocating some or all of the 3.7 GHz to 4.2 GHz band to support 5G services is expected to create significant value. Incumbent users have made investments and planned business operations based on legitimate rights and expectations about the availability of the 3.7 GHz to 4.2 GHz band. Any transition of the frequencies in this band that does not include the incumbent users as active partners is likely to get bogged down in legal and regulatory proceedings. Consequently, a framework that includes incumbent and new users of the C band as partners is more likely to efficiently and quickly reallocate these frequencies.

The Honorable Billy Long

1. Unlike the U.S., many other countries competing in the race to 5G don't auction their spectrum – it is simply allocated to commercial users by their government. How does the U.S. method of competition affect our ability to lead in 5G?
 - a. What are the long-term gains by auctioning spectrum?
2. As a former analyst at the Congressional Budget Office, how can we maximize the value of limited spectrum for bidders at auction?
3. As we identify more spectrum to develop a solid formation for 5G deployment, how should the FCC think about pending proposals to bring mid-band spectrum to market quickly? Specifically, I'm interested in your view about the potential of L-band spectrum to support an advanced satellite-terrestrial network providing mission-critical connectivity for 5G and IoT applications.

Answer to Mr. Long

Auctions are an effective and efficient way to assign frequencies to specific users because when properly implemented they get frequencies to those who can most productively use them as quickly as possible. To the extent auctions also raise revenue they can be helpful in facilitating allocations to new

Page 3

uses, including making additional frequencies available for 5G. The use of auctions in the U.S. has facilitated our historic leadership in wireless by making frequencies available to entities determined to develop valuable wireless networks. The same benefits should be expected in auctioning frequencies for 5G.

As with any scarce resource, maximizing its value requires putting it to its highest valued uses and with the least delay possible. In the case of spectrum needed for 5G services, private and public interests are largely aligned, suggesting putting the frequencies into private hands quickly through an auction would be expected to maximize value. As with other bands sought after for 5G, this is also true of L-band spectrum. As I noted in my Testimony, the central innovation of 5G is one of architecture, integrating different spectrum bands to meet different needs. In that context, any action to facilitate an advanced satellite-terrestrial network in the mid-band would be expected to add desirable complementary spectrum and services that would make a 5G and IoT network more robust and valuable.

Sincerely,



Coleman Bazelon

CB/cmm