Attachment—Additional Questions for the Record

Subcommittee on Communications and Technology Hearing on "Repurposing the C-Band to Benefit all Americans" October 29, 2019

Mr. Jeff Campbell, Vice President, Government Affairs and Technology Policy, Cisco Systems, Inc.

The Honorable Adam Kinzinger (R-IL)

- 1. Mr. Campbell, for those of us who want to ensure rural providers have an opportunity growing out of C-Band, I'd like to hear your assessment of our options. Some of the plans propose to build fiber in rural areas.
 - a. If the FCC chooses something other than a traditional public auction, what can we do to make sure that big and small carriers both have opportunities to acquire this spectrum and use it?

Response: The FCC has various tools at its disposal that it can use or has used to ensure that a variety of participants could participate whether an auction is conducted by existing licensees or by the FCC itself. While the C-Band Private Auction proposal is now hypothetical in light of Chairman Pai's announced choice for a public auction, the FCC could essentially use many of the same tools. First among them is the geographic size of the license areas. Private auction proponents set forth in the FCC record an extensive auction plan that would auction spectrum in 406 separate "Partial Economic Areas" – a definition used in many other spectrum auctions such as the Broadcast Television Spectrum Incentive Auction. Another possible choice, although not proposed by the C-Band private auction proponents, would have been Cellular Market Areas (Metropolitan Statistical & Rural Service Areas) of which (when last used) result in 734 licenses auctioned. These choices are neither the largest geography ever auctioned (e.g., the FCC auctioned a nationwide 700 MHz license) nor the smallest (e.g., the upcoming Priority Access Licenses for CBRS for each of 3000+ counties). The size of the license to be auctioned has a direct bearing on the affordability and desirability of the license for small carriers. In addition to size of the footprint to be auctioned, other tools used to enhance small carrier participation are how reserve prices are set for the licenses and bidding credits to small entities. Finally, the Commission could impose facilities build out requirements that would encourage larger carriers to sell rural holdings that would not be built out quickly.

Had a private auction been selected, the FCC could have engaged C-Band Alliance to determine if C-Band Alliance could adjust its auction proposal, and in any event, could have conditioned necessary FCC action (reallocation of the band, acceptance of the auction winners, etc.) on following the agency's preferred approach.

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It's also worth noting that while allowing all willing bidders to participate is good, an auction design that is optimized to bring in revenue is important also, particularly if the revenue can be directed toward rural build out. For example, auction revenues could be redirected into universal service to support 3.55-3.7 GHz CBRS build out from qualified entities or as an add-on to the newly announced 5G fund. Particularly in rural areas, there is expected to be less pressure on the use of 3.55-3.7 GHz adjacent than in urban locations. Fueling development of that band directly addresses the need for mid-band spectrum for rural carriers.

b. Can the FCC ensure that satellite operators pay a fair share to the Federal Treasury?

Response: Yes. Had the private auction proposal been allowed to run its course, in our opinion, the likely outcome is that, prior to an FCC decision, the satellite proponents would have filed a summary statement of the commitments that they had collectively made in the docket. This would have supplemented the proponents' ongoing commitment to transparency, but also would have been a vehicle for the FCC to use as a basis for its decision. As the Treasury contribution was receiving significant attention, the FCC could have indicated its desire for a Treasury commitment, likely stated as a formula to reflect the still-unknown auction revenue. We would have expected the FCC to be quite clear that failure to honor commitments would result in the FCC not honoring the auction results. While such a rule would have triggered bidders to insist on certain legal protections for their winning bids until revised FCC licenses were finalized, this is not an insurmountable challenge.

The Honorable Bill Flores (R-TX)

1. The next generation of satellite providers such as Starlink or ABS-3A will bring a whole new set of innovative services to the telecommunication industry. It will also, however, bring along a whole new set of challenges in the use of our spectrum. As these technologies begin to enter the marketplace, the FCC will need a flexible regulatory regime that facilitates innovation and the continued creation of new services.

a. How important will it be for the FCC to find ways to cut down on the time required to auction spectrum?

Response: Your question goes to the heart of difficulties that we face as we think about how to wring the most out of our public airwaves going forward. There are four big challenges. First, as you point out, technology is changing more quickly than regulators can predict. Who knew a few short years ago that we would see huge constellations of small, non-geostationary satellites being launched to utilize the Ku-band and the C-band? For terrestrial technology, how could we have predicted even a few short years ago the large bandwidths needed to support 5G and Wi Fi 6 next generation technologies? The second challenge - how do you manage a Table of Frequency Allocations so that regulators can flexibly provide for innovative new technologies, while providing as much predictability and certainty for existing users as they can? Third, how do you manage a Table of Allocations that in part is regulated by the FCC and in part controlled

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by the federal government? And finally, how do assure that spectrum is assigned (by auction or otherwise) as quickly as possible and yet still consistent with Administrative Procedure Act principles and requirements? The Administration has before it a National Spectrum Strategy, which – when finalized – may begin to answer some of these questions. Hopefully, that document will enable us to start to work toward spectrum planning so that each issue that arises does not feel like a new mountain to climb.