

**Before the
FEDERAL COMMUNICATIONS COMMISSION
Washington, DC 20554**

Competitive Bidding Procedures for)	
)	
)	AU Docket No. 18-85
Auction 101 (28 GHz) and)	
Auction 102 (24 GHz))	
)	

REPLY COMMENTS OF T-MOBILE USA, INC.

T-Mobile welcomes the widespread consensus among commenters encouraging the Commission to modify the *Public Notice* and adjust the timing of the millimeter wave auctions in a manner that better promotes 5G investment and innovation in the United States.¹ The Commission can help maximize auction revenues and bidder participation by: (i) separating Auctions 101 and 102 by a reasonable amount of time; (ii) including the 37-38.6 GHz (“37 GHz”), the 38.6-40 GHz (“39 GHz”), and the 47.2-48.2 GHz (“47 GHz”) bands in Auction 102; and (iii) reducing the upfront payment and reserve price levels to better reflect market realities.

Large and small wireless carriers agree that allowing wireless operators to assess the results of Auction 101 before starting the quiet period for Auction 102 would help companies make more informed decisions about how best to invest in the resources needed to deploy 5G networks.² Offering interested parties a measure of breathing room between the end of the 28

¹ *Auctions of Upper Microwave Flexible Use Licenses for Next-Generation Wireless Services; Comment Sought on Competitive Bidding Procedures for Auctions 101 (28 GHz) and 102 (24 GHz)*, Public Notice, AU Docket No. 18-85 (rel. Apr. 17, 2018) (“*Public Notice*”).

² *See, e.g.*, Comments of AT&T, AU Docket No. 18-85, at 5 (filed May 9, 2018) (“AT&T Comments”); Comments of Blooston Rural Carriers, AU Docket No. 18-85, at 3-4 (filed May 9, 2018) (“Blooston Comments”); Comments of Charter Communications, Inc., AU Docket No. 18-85, at 2-3 (filed May 9, 2018) (“Charter Comments”); Comments of CTIA, AU Docket No.

GHz auction and the start of the 24 GHz auction would also allow the Commission to fulfill its responsibility under section 309(j) of the Communications Act to provide sufficient time for bidders to develop business plans, assess market conditions, and evaluate the availability of equipment for the relevant services prior to the start of an auction.³ As Verizon notes, holding the two auctions contemporaneously promises few, if any, reductions in administrative costs or regulatory burdens: “The auctions are distinct and the FCC has decided that it will use separate application and bidding processes for each auction, so there is no reason to intertwine the prohibited communications periods for both auctions.”⁴ AT&T agrees. According to AT&T, the differences between the 28 GHz and 24 GHz auctions militate in favor of “run[ning] the 28 GHz auction to its conclusion and announc[ing] the winners of Auction 101 before accepting applications for Auction 102.”⁵

Overlapping or back-to-back auctions, by contrast, threaten to frustrate capital formation, auction participation, and bidding. Rural carriers, for example, say that an extended quiet period would “preclude many small and rural carriers that may be inclined to bid on their own for county-based 28 GHz licenses from being able to pursue strategic partnerships and/or consortia that will likely be necessary for capital formation and bidding on the larger 24 GHz PEA

18-85, at 8-10 (filed May 9, 2018) (“CTIA Comments”); Comments of Competitive Carriers Association, AU Docket No. 18-85, at 5-6 (filed May 9, 2018) (“CCA Comments”); Comments of U.S. Cellular, AU Docket No. 18-85, at 2-5 (filed May 9, 2018) (“U.S. Cellular Comments”); Comments of Verizon, AU Docket No. 18-85, at 2-5 (filed May 9, 2018) (“Verizon Comments”).

³ 47 U.S.C. § 309(j)(3)(E)(ii).

⁴ Verizon Comments at 2-3.

⁵ AT&T Comments at 5.

licenses.”⁶ Charter anticipates that larger bidders will suffer similar risks and uncertainties. According to Charter, “[s]imultaneous or overlapping bidding windows for Auction 101 and Auction 102 could force applicants in Auction 101 to needlessly expend resources on applying for Auction 102 before they know whether their spectrum needs have been met in the first auction.”⁷ The lack of an opportunity to analyze auction results and revisit auction strategies in light of those results threatens to reduce revenues to the U.S. Treasury, depress auction participation, and increase the likelihood of “a significant number of licenses (especially licenses for rural areas) going unsold.”⁸

The perceived breadth of the prohibited-communications and joint-bidding rules exacerbates the risk that the Commission’s proposed auction schedule will impair business activity more generally.⁹ As U.S. Cellular notes, there is an “ongoing lack of clarity regarding the intended scope of the prohibited communications rule, which is compounded by the industry’s conflicting interpretations of the rule.”¹⁰ And as CTIA explains, extended application of the prohibited communication rules across two distinct auctions “could have a chilling effect

⁶ Blooston Comments at 1-2; *see also* U.S. Cellular Comments at 5-7 (“[s]maller bidders suffer more harm from restrictions on the amount of information bidders receive”).

⁷ Charter Comments at 2.

⁸ Blooston Comments at 1-2.

⁹ *See, e.g.*, Verizon Comments at 4-5 (“It also would create unnecessary and burdensome compliance issues. The Commission in 2015 clarified that the rule’s prohibition of the communication of ‘bids or bidding strategies (including post-auction market structure)’ covers only communications that ‘relate to the licenses being auctioned.’ Though it was a helpful clarification that discussions about other spectrum bands are not covered by the rule, quiet period compliance in a single auction is difficult enough without extending the period to cover two separate auctions.”).

¹⁰ U.S. Cellular Comments at 7-8.

on the wireless industry’s ability to conduct non-auction related business negotiations.”¹¹ For these reasons, the Blooston Group, like every other commenter addressing the issue, recommends waiting to open “the Auction 102 filing window until after Auction 101 closes would give applicants an opportunity to talk and finalize planning and financing arrangements between the two auctions.”¹²

Commenters also broadly agree that including the remaining millimeter wave spectrum bands—namely, the 37 GHz, the 39 GHz, and the 47 GHz bands—in Auction 102 would accelerate 5G deployments while giving bidders the flexibility to efficiently bid on packages of interchangeable and complementary high-frequency spectrum.¹³ The 24 GHz spectrum represents a possible substitute or complement for the 37 GHz, 39 GHz, and 47 GHz bands, as the Commission has previously recognized.¹⁴ All of these bands have common geographic license sizes and similar prospects for near-term deployment.¹⁵ As AT&T notes, “there is a much greater degree of substitutability between 24 GHz and 37.6-40.0 GHz spectrum, and a

¹¹ CTIA Comments at 9.

¹² Blooston Comments at 3.

¹³ See AT&T Comments at 5; CCA Comments at 3-5; CTIA Comments at 7.

¹⁴ See *Use of Spectrum Bands Above 24 GHz for Mobile Radio Services*, Second Report and Order, Second Further Notice of Proposed Rulemaking, Order on Reconsideration, and Memorandum Opinion and Order, 32 FCC Rcd 10988 ¶ 74 (2017); *Use of Spectrum Bands Above 24 GHz for Mobile Radio Services*, Report and Order and Further Notice of Proposed Rulemaking, 31 FCC Rcd 8014 ¶ 186 (2016).

¹⁵ See T-Mobile Comments at 12 (“No 24 GHz equipment exists yet, and development of such equipment would require diverting resources from development of the 39 GHz band and slow overall 5G deployment. Conversely, auctioning the 24 GHz band with complementary or substitutable millimeter wave bands will allow companies to benefit from and build on current technology development. Accordingly, creating an additional window of time between the end of Auction 101 and the start of Auction 102 would not jeopardize the timely development of 24 GHz equipment and instead may speed it up.”).

simultaneous auction of those bands would permit bidders to express demand for the bands as true alternatives for future deployment.”¹⁶ The same is also true of the 47 GHz band, as other commenters observe.¹⁷

Without the ability to bid on packages of complementary or substitutable spectrum in a single auction, prospective participants would face significant exposure risk.¹⁸ The likelihood of acquiring an incomplete package of licenses might force a participant to stop bidding or, alternatively, forfeit the incomplete package by paying a bid-withdrawal penalty. Either way, the uncertainty and risk of paying too much in the first of a series of auctions could constrain bidding in the 24 GHz auction. A bidder might also forego auction participation entirely due to the risk that it cannot properly determine the value of spectrum in the initial auction when the other auctions have not yet taken place. Bringing forward in time the planned auctions of the 37 GHz, 39 GHz, and 47 GHz bands of spectrum and placing them squarely into Auction 102 with the 24 GHz band would mitigate these risks and allow bidders to make the kinds of informed tradeoffs among spectrum, technology, and capital investments necessary to deploy meaningful 5G networks.

¹⁶ AT&T Comments at 4.

¹⁷ See CCA Comments at 5 (“In the alternative, if the Commission refrains from simultaneously auctioning all remaining and available mmW spectrum after Auction 101, it should at minimum auction the 47 GHz band with the 24 GHz band. The Notice recognizes that 24 GHz licenses are possible substitutes or complements for other licenses, and thus it makes sense for the FCC to auction this band alongside the 47 GHz band.”); CTIA Comments at 7 (urging the Commission to “include the 37/39 GHz and 47 GHz bands along with the 24 GHz band in Auction 102, to the extent that doing so would not cause substantial delay.”).

¹⁸ See T-Mobile Comments at 7-11 (describing the phenomenon of exposure risk in greater detail).

Lowering the upfront payment and reserve price levels would also help maximize bidder participation and economic efficiency. If kept at the present levels, the proposed upfront payment and reserve price values could easily exceed what the market is willing to support, especially in rural areas. The harm of setting prices too high is grave because every unsold license is a lost opportunity for commercial investment and innovation. And the risk of error is especially great here because the Commission's proposed upfront payment and reserve price values already exceed contemporaneous secondary market transactions in millimeter wave band spectrum.¹⁹ Reducing the proposed upfront payment and reserve price levels, which the *Public Notice* proposes to set at \$0.001 per MHz-pop and \$0.002 per MHz-pop, respectively, would encourage auction participation and spur competitive bidding.²⁰

At a minimum, the Commission should adopt a few months separation between the close of Auction 101 and the start of Auction 102, if for no other reason than to assess whether the current upfront payment and reserve price levels are too high for Auction 102 once the results of Auction 101 become known.²¹ Setting excessive upfront payment and reserve price levels carries a serious risk that a substantial number of licenses would remain in government inventory instead of being put to productive use in the commercial market. Reducing the upfront payment and reserve price levels would broaden participation, stimulate bidding, and encourage the type of price discovery that is the foundation of the Commission's competitive bidding process.

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¹⁹ T-Mobile Comments at 14.

²⁰ Once the upfront payment price level is reduced, the opening bid amount should be reduced accordingly, potentially to the level at which the upfront payment is currently set.

²¹ *Id.* at 15-16.

The success of Auctions 101 and 102 will play a large role in determining whether the United States leads or follows in the global race to 5G. Adopting modest changes to the timing and procedures of these auctions—as recommended by nearly all commenters—will best encourage broad participation, maximize revenues to the U.S. Treasury, and enhance 5G competition.

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