

**Before the
Federal Communications Commission
Washington, DC 20554**

In the Matter of)	
)	
Incentive Auction of Upper Microwave)	AU Docket No. 19-59
Flexible Use Service Licenses in the)	
Upper 37 GHz, 39 GHz, and 47 GHz Bands)	
For Next-Generation Wireless Services)	

To: The Commission

**COMMENTS OF
THE WIRELESS INTERNET SERVICE PROVIDERS ASSOCIATION**

The Wireless Internet Service Providers Association (“WISPA”) responds to the Commission’s Public Notice requesting comment on the proposed procedures to be used for Auction 103, the incentive auction of Upper Microwave Flexible Use Service (“UMFUS”) licenses in the Upper 37 GHz (37.6-38.6 GHz), 39 GHz (38.6-40 GHz), and 47 GHz (47.2-48.2 GHz) bands.¹ WISPA agrees with many of the Commission’s proposals, and suggests refinements intended to increase auction participation by smaller and rural providers.

Background

WISPA represents the interests of wireless Internet service providers (“WISPs”) that provide high-speed fixed wireless broadband services to consumers, businesses, and anchor institutions across the country. WISPA’s members include more than 800 WISPs, equipment manufacturers, distributors, and other entities committed to providing affordable and competitive fixed broadband services. WISPA estimates that WISPs serve more than 4,000,000 people, many

¹ *Incentive Auction of Upper Microwave Flexible Use Service Licenses in the Upper 37 GHz, 39 GHz, and 47 GHz Bands for Next-Generation Wireless Services; Comment Sought on Competitive Bidding Procedures for Auction 103*, Public Notice, AU Docket No. 19-59, FCC 19-35 (rel. April 15, 2019) (“Public Notice”).

of whom reside in rural areas where wired technologies may not be available or are not cost-effective to deploy.

To meet subscribers' needs, WISPs rely on a combination of licensed, lightly licensed (shared access), and unlicensed bands. Increasingly, in large part as a result of lower-cost and better-performing equipment, WISPs are expanding their networks from rural communities into suburban and urban areas to compete with wired broadband technologies, even at higher speeds. To further enable competitive choice, WISPs will, over time, require more short-range, high-capacity spectrum, including millimeter wave spectrum, which offers significant capacity advantages over lower spectrum bands. Millimeter wave spectrum is particularly useful in densely populated areas, especially where other spectral resources may be congested. Some WISPA members are currently using millimeter wave technology, and the ecosystem will continue to develop to make millimeter wave technology ever more advanced and affordable. However, WISPs will miss the opportunity to access the benefits of millimeter wave technology if they are unable to access the spectrum. WISPA believes that if the rules and procedures to be used for Auction 103 are crafted in a way that recognizes the needs and constraints of small and rural service providers, the large supply of UMFUS licenses being made available through this auction could facilitate greater participation by those providers across the country.

WISPA notes, however, that the Partial Economic Areas ("PEAs") designated for the licenses to be made available through this auction are very large, especially considering the relatively short range of the upper microwave bands. WISPA is concerned that the Commission's decision to license the spectrum being made available through Auction 103 on a PEA basis could mean that, even with bidding credits, small providers may not be able to compete for licenses even in relatively rural markets, and that many areas may not receive any

bids at all.² Either of these outcomes will leave rural areas unserved with the technologies and services enabled by these bands. As discussed below, one measure that could help address this problem would be for the Commission to auction the “white space” where an incumbent in the 39 GHz band decides to retain its partial PEA holding.³

Discussion

I. THE COMMISSION SHOULD MAKE “WHITE SPACE” IN THE 39 GHz BAND AVAILABLE IN THE AUCTION

In situations where an incumbent licensee in the 39 GHz band decides to retain its partial PEA holding, the remaining portion of the spectrum block in that PEA will have unassigned spectrum usage rights.⁴ In the Public Notice, the Commission proposes to exclude this resulting “white space” from Auction 103.⁵ WISPA urges the Commission to revisit this determination and to make this 39 GHz white space available to auction participants. Rather than leave this spectrum fallow, making available spectrum blocks that cover part of a PEA will create smaller license areas that will promote greater participation in the auction by smaller providers who may otherwise be unable to compete for licenses that cover an entire PEA. Including licenses that cover part of a PEA will also promote more intensive use of the bands and make more of this spectrum usable for the deployment of new technologies and services across the nation, including in relatively rural markets. Conversely, the Commission’s proposal to exclude these

² Rural licenses may not receive bids – even though the minimum opening bids are relatively low – because (a) larger providers will generally not demand licenses in rural areas, and (b) PEAs are so large that a smaller provider would have to acquire significantly more geographic area than it desires to cover or would be required to cover under the buildout rules.

³ WISPA also notes that the Commission has initiated a proceeding to increase availability of advanced telecommunications capability in rural areas through modifications to its partitioning, disaggregation and leasing rules. *See Partitioning, Disaggregation, and Leasing of Spectrum*, Notice of Proposed Rulemaking, FCC 19-22, WT Docket No. 19-38 (rel. March 15, 2019). WISPA plans to file Comments in that proceeding.

⁴ *See, e.g.*, Public Notice at ¶ 5.

⁵ *Id.*

partial PEAs from the auction risks leaving valuable segments of spectrum fallow and, more importantly, leaving rural areas unserved. The costs of auctioning such white space spectrum would seem minimal when compared to the benefits of making UMFUS licenses available to more areas of the country. The benefits of including the 39 GHz white space in the auction thus far outweigh any potential costs.

Moreover, auctioning the “white space” will not add any undue complexity to the auction.⁶ As an example, in Auction 102 the Commission proceeded with auctioning licenses for spectrum in the 24 GHz band, even though not all channel blocks were available in a subset of PEAs, and in one PEA only a portion of one spectrum block (75 MHz instead of the full 100 MHz) was available due to encumbrance by an existing licensee.⁷ The Commission was able to address this variation by establishing an additional category of license in those PEAs with an encumbered block, which was made available in the clock round simultaneously with every other license.⁸ Although the total amount of encumbered 24 GHz spectrum was extremely low relative to the total 24 GHz band, the results of Auction 102 strongly indicate that this did not increase the complexity of the auction for the Commission or for auction participants.

II. THE COMMISSION SHOULD ADD A 35% BIDDING CREDIT

The Commission plans to provide small business bidding credits in Auction 103 based on the same eligibility criteria that it has applied in previous UMFUS auctions.⁹ Specifically, an entity with average annual gross revenues for the preceding three years not exceeding \$55

⁶ *Id.*

⁷ See *Auctions of Upper Microwave Flexible Use Licenses for Next-Generation Wireless Services: Notice and Filing Requirements, Minimum Opening Bids, Upfront Payments, and Other Procedures for Auctions 101 (28 GHz) and 102 (24 GHz)*, Public Notice, AU Docket No. 18-85, FCC 18-109 (rel. Aug. 3, 2018) at ¶ 11 and Attachment A Files (updated Aug. 10, 2018) (<https://www.fcc.gov/auction/102>).

⁸ *Id.*

⁹ See Public Notice at ¶ 12.

million would be eligible for a 15% bidding credit, and an entity with average annual gross revenues for the preceding three years not exceeding \$20 million would be eligible for a 25% bidding credit.¹⁰ In addition, the Commission will provide a 15% rural service provider bidding credit for eligible entities.¹¹ WISPA supports the availability of these small business and rural service provider bidding credits in Auction 103. However, WISPA believes that the Commission can do more to promote the participation of small businesses and rural service providers in this auction.

In particular, WISPA urges the Commission to exercise its discretion under Section 1.2110(f) of its rules to add to this auction a 35% bidding credit for entities with average annual gross revenues for the preceding three years not exceeding \$4 million, as provided for in Section 1.2110(f)(2)(i)(A) of the Commission's rules.¹² The addition of this bidding credit would further promote small business and rural service provider participation in this auction and in the provision of spectrum-based services, consistent with Section 309(j) of the Communications Act.¹³

III. THE COMMISSION SHOULD ESTABLISH SEPARATE CATEGORIES FOR THE GENERIC BLOCKS IN THE UPPER 37 GHz AND 39 GHz BANDS

The Commission proposes to establish two categories of generic blocks in each PEA, with the first category consisting of the available blocks between 37.6-40 GHz ("Category M/N") and the second category consisting of the blocks between 47.2-48.2 GHz ("Category P").¹⁴ The Commission's proposed categories are based on what it describes as the close

¹⁰ *Id.*

¹¹ *Id.*

¹² See 47 C.F.R. § 1.2110(f)(1); 47 C.F.R. § 1.2110(f)(2)(i)(A).

¹³ See Public Notice at ¶ 11; 47 U.S.C. § 309(j).

¹⁴ See Public Notice at ¶¶ 33 – 37.

similarity of the blocks within each category.¹⁵ WISPA disagrees about the level of interchangeability between the blocks in proposed Category M/N and urges the Commission to establish separate categories for the blocks in the Upper 37 GHz and the 39 GHz bands.

The blocks of spectrum in the Upper 37 GHz and 39 GHz bands are far from perfect substitutes for each other from a network deployment perspective. Although these bands are subject to the same service rules as well as an interoperability requirement, each band has unique encumbrance and incumbency issues that may lead bidders to value these bands very differently. Specifically, the 39 GHz band has a significant level of incumbency, and the ultimate availability of blocks within this band will be subject to the outcome of the incentive auction that is taking place within Auction 103. Meanwhile, the Upper 37 GHz band is encumbered by coordination zones around at least 15 military installations, with the possibility that the Department of Defense may seek to coordinate use for additional sites in the future.¹⁶

Incumbent 39 GHz licensees who participate in the auction are also likely to place far greater value on obtaining contiguous blocks in the 39 GHz band to extend their holdings than on non-contiguous blocks in the Upper 37 GHz band. By expressing this demand across the full range of licenses in Categories M and N, incumbents will necessarily inflate the total value of both groups of blocks. This would also have the effect of inflating prices during the assignment phase, because larger incumbents will have a significant preference for acquiring blocks that would extend their existing holdings in the 39 GHz band. Establishing separate categories for

¹⁵ *Id.* at ¶ 37.

¹⁶ *See Use of Spectrum Bands Above 24 GHz for Mobile Radio Services*, Fifth Report and Order, GN Docket No. 14-177, FCC 19-30 (rel. April 15, 2019) at ¶¶ 13 – 17. The Commission has always explicitly recognized that these are two different bands and has consistently referred to the 37 GHz and 39 GHz bands separately since initiating the Spectrum Frontiers proceeding. *See, e.g. Use of Spectrum Bands Above 24 GHz For Mobile Radio Services, et al.*, Report and Order and Further Notice of Proposed Rulemaking, 31 FCC Rcd 8014, 8043-62 and 8066-71 (2016).

the Upper 37 GHz band and the 39 GHz band would therefore enable all auction participants to more effectively focus their bidding on those blocks of spectrum that are of the greatest value to them, thus improving bidder manageability and increasing the efficiency of both the auction process and the results.

WISPA therefore recommends that the Commission establish three categories of generic blocks for Auction 103 consisting of (1) the available blocks between 37.6-38.6 GHz (“Category M”); (2) the available blocks between 38.6-40 GHz (“Category N”); and (3) the available blocks between 47.2-48.2 GHz (“Category P”).

IV. THE COMMISSION SHOULD BE TRANSPARENT ABOUT WHEN IT WILL INCREASE THE CLOCK PRICE INCREMENT

WISPA generally agrees with the Commission’s overall approach and proposed bidding procedures for Auction 103. In particular, WISPA agrees with the Commission’s proposal to use a tiered approach based on market population for determining minimum opening bid amounts.¹⁷ However, WISPA suggests that the Commission manage the pace of the auction through changes to the bidding schedule (*e.g.*, increasing the number of rounds per day) rather than larger bidding increments.¹⁸

With respect to clock price increments, the Commission should set the increment between 5% and 10% and should establish a threshold at which point it believes the increment should be greater than 10%, much like the Commission does in simultaneous multiple round auctions.¹⁹ WISPA assumes that the Commission intends to use higher price increments to accelerate the conclusion of the auction when the bidding activity slows significantly over the

¹⁷ See Public Notice at ¶ 66.

¹⁸ See *id.* at ¶ 68.

¹⁹ See *id.* at ¶ 70. For example, the Commission could establish a threshold based on a percent of products for which the demand is equal to supply over “n” number of rounds.

course of multiple rounds. If so, the Commission should make that decision explicit, and should be transparent before the auction with respect to what the trigger will be that will result in the use of bidding increments above 10%. Inversely, if the Commission intends to use higher bid increments in any round without notice, it needs to tell bidders so in advance of the auction. Smaller auction participants are resource-constrained and their demand may be extremely elastic. Relying on intra-round bids to allow smaller bidders to express demand at a lower price adds complexity to their bidding strategies. WISPA's suggestion would provide a necessary level of predictability for bidders as to when they should expect to see larger price increases during the course of the auction, without limiting the Commission's flexibility to manage the pace of the auction.

Finally, while intra-round bids should be permitted,²⁰ relying on intra-round bids to express demand at a certain price will increase the complexity of the auction for bidders, may disincentivize smaller bidders from participating, or may cause them to reduce demand prematurely. This is particularly true for smaller bidders that may not have sophisticated auction teams or access to auction economists. WISPA also notes that intra-round bidding will not help control the pace of the auction, especially for rural areas that reach equilibrium well before urban areas.²¹

²⁰ *See id.*

²¹ *See id.* at ¶ 71.

Conclusion

WISPA commends the Commission for its efforts to make the Upper 37 GHz, 39 GHz, and 47 GHz bands available for licensing and looks forward to working with the Commission and other stakeholders to establish an effective framework and effective procedures for Auction 103.

Respectfully submitted,

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