

FCC Proposes 3.5 GHz Auction Procedures

October 2, 2019

The Federal Communications Commission (FCC or Commission) released a Public Notice proposing application and bidding procedures for auctioning Priority Access Licenses (PALs) in the 3550-3650 MHz band (3.5 GHz). The Public Notice represents the next procedural step toward freeing 3.5 GHz spectrum for next-generation wireless services. Designated as Auction 105, the highly-anticipated mid-band spectrum auction is scheduled to begin on June 25, 2020. Comments on the Public Notice are due on October 28, 2019, and Reply Comments are due on November 12, 2019.

Licenses to be Offered

A. Description of Licenses

The Commission will offer seven PALs in each county-based license area, with 22,631 PALs available nationwide. Each PAL consists of a 10-megahertz channel and a 10 year renewable term. Each bidder will be able to bid for up to four generic PALs (blocks) per county. Prospective bidders should be aware that they are not guaranteed a designated frequency. A Spectrum Access System (SAS) will assign channels to licensees. Although a SAS will attempt to assign contiguous channels, it may temporarily assign non-contiguous channels to prevent interference with Incumbent Access users. Each Priority Access Licensee must register its Citizens Broadband Radio Service Devices with a SAS before operating in the band. (¶¶ 2-4).

B. Sharing in 3.5 GHz Band

The 3.5 GHz band includes three tiers of authorization: (1) Incumbent Access (3550-3650 MHz); (2) Priority Access (3550-3650 MHz); and (3) General Authorized Access (GAA) (3550-3700 MHz). Under the regime, incumbent Access users receive protection against harmful

Authors

Ari Meltzer
Partner
202.719.7467
ameltzer@wiley.law
Meredith G. Singer
Partner
202.719.7507
msinger@wiley.law

Practice Areas

Telecom, Media & Technology

frequency interference from Priority Access Licensees and GAA users, while Priority Access Licensees receive protection from GAA users. (¶ 5).

Incumbent Access users, entitled to the highest priority, include federal radiolocation users in the 3550-3650 MHz band and non-Federal Fixed Satellite Service (FSS) earth station users in the 3600-3650 MHz band. Frequencies in the 3550-3650 MHz band are authorized to the Department of Defense (DoD) on a primary basis and Federal non-military Radiolocation secondarily. The National Telecommunications Information Administration may approve new Federal frequency assignments in the band. (¶¶ 8-10).

GAA users may operate in the 3550-3700 MHz band, but are not guaranteed interference protection. The GAA tier is “licensed-by-rule,” such that GAA users may operate freely, on a non-interference basis, in the 3650-3700 MHz portion of the band and on any frequencies not in use by PALs or incumbents in the 3550-3560 MHz portion of the band. (¶¶ 11-12).

Proposed Pre-Bidding Procedures

A. Information Procedures During the Auction Process

The FCC proposes to withhold the following information until the close of bidding: (1) the licenses or areas that an applicant selects in its Form 175; (2) the payment amount made by or on behalf of an applicant; (3) applicant bidding eligibility status; and (4) any other identifiable information.

Under the proposed limited information procedures, the following information would be made public after each round: (1) aggregate demand for licenses; (2) prices at the end of the last completed round; and (3) prices for the following round. Bidders will have access to information including their own bidding eligibility. (¶¶ 13-17).

B. Bidding Credit Caps

The Commission seeks comment on a proposed \$25 million bidding credit cap for small businesses and a \$10 million bidding credit cap for rural service providers. (¶ 20).

Small Business Bidding Credit. Bidders with attributed average gross revenues of less than \$55 million for the preceding three years are eligible for a 15% discount on winning bids. If those revenues are less than \$20 million, the bidder may receive a 25% discount. The total cap for small business bidding credits will not be less than \$25 million. (¶¶ 18-19).

Rural Service Provider Bidding Credit. Entities (1) providing commercial communication services to fewer than 250,000 combined wireless, wireline, broadband, and cable subscribers and (2) serving counties with a population density of 100 or fewer persons per square mile may receive a 15% discount on winning bids. The total bidding credit cap for rural service providers will not be less than \$10 million. (¶¶ 18-19).

Small markets cap. The FCC also seeks comment on a \$10 million small markets cap on the amount that any winning small business may apply to licenses won in counties located within any Partial Economic Area with 500,000 or less people. (¶ 20).

Proposed Bidding Procedures

A. Clock Auction Design

The Commission proposes an ascending clock auction for Auction 105, in which bidders will select generic license blocks in specific counties. Bidding would proceed in a series of rounds, with all blocks in all counties available simultaneously. During each round, the FCC proposes that it will announce a per-block price for each county. Qualified participants would submit bids for the blocks that they wish to purchase at the clock price. The clock price for a generic license will increase each round if the total demand in a county exceeds the number of blocks available. This will continue for all blocks until bidder demand does not exceed supply. Those bidders still indicating a demand for a block at the final price are winning bidders. (¶¶ 23-24).

There is no frequency assignment phase in this auction, because the PALs will not be frequency-specific; rather, Priority Access Licensees will be authorized to use frequencies associated with their PALs as assigned dynamically by SASs. Although PALs will be issued on a county-basis, the FCC invites comment on a proposal to allow bidders to elect to bid at the Cellular Market Area (CMA) level for certain large CMAs rather than bidding for counties within those CMAs separately. The FCC seeks comment on bid incrementing and processing procedures to accommodate such CMA-level bidding. (¶ 25).

B. Generic License Blocks

Limit on blocks per bidder. Under the FCC's proposals, each bidder would have the opportunity to bid on up to four blocks per county. (¶ 28).

County-level or CMA-level bidding. The Commission proposes to allow bidding at a CMA level when such an election is made prior to the start of bidding. Bidders must include all counties in that CMA on their Form 175. CMA-level bidders would forfeit the ability to bid for counties in the CMA. The proposal would only allow CMA-level bidding for the 172 CMAs that qualify as Metropolitan Statistical Areas. Under this proposal, CMA-level pricing would be determined on a county-by-county basis consistent with the aggregate demand for blocks from both CMA-level and county-level bidders. The Commission seeks comment on its proposal to require bidders to make an irrevocable election to bid at either the CMA level or the county level, and how this would affect participation by both small and large entities. (¶¶ 29-33).

C. Bidding Rounds

The initial bidding schedule would be announced in a public notice released at least one week before bidding begins. The Commission proposes to retain discretion to adjust the bidding schedule, including modifying round times and frequency. (¶¶ 34; 36).

D. Stopping Rule

The FCC also seeks comment on a proposed “stopping rule” that would keep all blocks open for bidding until there is no excess demand in any county. (¶ 37).

E. Information Relating to Auction Delay, Suspension, or Cancellation

The Commission proposes to reserve the ability to suspend or cancel bidding for any reason that may affect an efficient and competitive bidding process. (¶ 38).

F. Upfront Payments and Bidding Eligibility

The FCC proposes upfront payments of \$0.01 per MHz-pop and a minimum of \$500 per county. The amount submitted by a bidder will determine initial bidding eligibility. Each block in a given county would be assigned a different number of bidding units, and each bidding unit would cost \$10. Furthermore, upfront payments are not connected to blocks in any geographic area, and a bidder cannot increase its eligibility during the auction. Rather, the initial upfront payment must cover total eligibility. (¶¶ 39-41).

G. Activity Rule, Activity Upper Limit, and Reducing Eligibility

The Commission’s proposal would require bidders to be active on between 90% and 100% of bidding eligibility in all clock rounds. If the bidder fails to meet this threshold, then eligibility is reduced. The FCC also proposes to calculate bidding activity based on those bids accepted by the FCC auction bidding system. (¶ 43).

The Commission proposes to allow bidders to submit bids with more units than those with which they are eligible to bid (the “activity upper limit”). The “activity upper limit” would not allow processed activity to exceed actual eligibility. Under this proposal, the Commission would have discretion to change the activity requirement percentage during the auction. The Commission seeks comment on whether the activity limit percentage should be between 100% and 140% of actual eligibility, and whether 120% is a proper initial activity limit percentage. Bidders are required to indicate their demands in every round, even if those demands are unchanged from a previous round. Missing rounds would be considered requests to reduce demand to zero. Finally, the Commission seeks comment on a proposal to disallow activity rule waivers to preserve eligibility. (¶¶ 44-45; 47-49).

H. Acceptable Bids

Reserve Price: The Commission seeks comment on a minimum opening bid requirement (reserve price) for each county that would be calculated using a formula based on bandwidth and license area population. For CMA-level bids, the minimum opening bid would be the sum of the minimum opening bids of the counties that comprise the CMA. The Commission proposes to base prices on a calculation of \$0.02 per MHz-pop with a minimum of \$1,000. In particular, the Commission is seeking comment on the factors that could affect a bidder’s valuation of the spectrum, such as the service being offered and the population of a proposed facility. (¶¶ 51-53).

Clock Price Increments: The proposed clock auction format would increase prices during each round that the aggregate demand exceeds the supply of blocks available. At the outset of each round, the FCC would announce the start-of-round price (the lowest price) and the clock price (the highest price) at which bidders may select the number of blocks that they demand. This process will continue for all counties until aggregate demand does not exceed supply. The Commission proposes to set the clock price for each round using a county-specific percentage increment to the start-of-round price. The proposed initial increment cap is \$10 million. (¶¶ 55-56).

For counties not subject to CMA-level bidding. The Commission proposes to set a fixed increment (“basic increment percentage”) for counties not subject to CMA-level bidding at the start of each round that would range between 5% and 20% with an initial increment set at 10%. (¶ 58).

For counties subject to CMA-level bidding. The Commission proposes to set varying increment percentages by county within a CMA to equalize aggregate demand and ensure no excess supply for CMA-level bids. Under the FCC’s algorithm, the increment percentage for a county would only deviate from the basic increment percentage specified above when aggregate demand varies widely from county to county within a CMA. The proposed increment percentage maximums would be no greater than 5% to 20%, and the minimums would not be less than 2% to 20%. The Commission seeks comment on setting the initial maximum at 15%, and the initial minimum at 5%. The proposed algorithm for calculating increment percentages can be found in the Auction 105 Technical Guide. (¶¶ 59-62).

Intra-Round Bids: A bidder could place intra-round bids by indicating a point between the round price and the clock price at which its demand for a specific quantity of blocks changes. Under this rule, CMA-level bids to reduce demand may only be made at the start-of-round price to ensure that the price does not increase when there is an excess block supply. (¶¶ 63-64).

I. Bids to Change Demand and Bid Processing

Under the proposed format, a bidder could change the quantity of blocks that it demands at either the clock price or an intra-round price. Bidders wishing to maintain demand would bid for the same quantity at the round clock price. The Commission proposes several bid processing procedures below. (¶¶ 66-67).

No Excess Supply Rule: Under the ascending clock auction, the proposed bidding system would prevent bidders from reducing demand when it would cause aggregate demand to fall below supply for a county (“no excess supply” rule). Requests to reduce demand will only be accepted if the “no excess supply” rule is met. The FCC proposes an exception to allow a CMA-level bidder to bid to reduce demand if there is excess demand in at least one county of the CMA at the time of processing and the bid to reduce demand is made at the start-of-round price. Once the first unit of a bid to reduce demand is processed, the “no excess supply” rule would apply. (¶¶ 68-69).

Partial Application of Bids: Under the proposed bid processing structure, the FCC may permit a partial demand reduction when the excess demand in a round is insufficient to support the bidder’s entire reduction request. Bids to increase demand could also be applied partially when demand exceeds eligibility to bid. (¶

70).

Processed Demands: The Commission proposes to process bids to change demand in order of price point after the end of each round, such that the price would represent the percentage of the bidding interval for the round. Once a round closes, the auction system would change demand based on the bids received, starting with the lowest price point bids. The system would then determine the extent to which the lowest bid can be applied given other bidder demands at the time of processing. The bidding system would advise participants of the status of their bids when round results are disclosed. (¶¶ 71; 73).

Price Determination: If the aggregate demand for blocks in a county or CMA exceeds supply, the price would increase each round. If a reduction in demand causes demand to equal or fall below supply, then the posted price would be the demand reduction price. If aggregate demand is less than supply, then the posted price would be the start-of-round price for the next round. If the stopping rule is not met, then the system would announce clock prices for the subsequent round. (¶¶ 74-75; 77).

J. Winning Bids

Participants still expressing demand for a quantity of blocks in a county when the stopping rule is satisfied (i.e. when bidding has ceased in every county) would be winning bidders of licenses corresponding to the blocks demanded. (¶ 79).

K. Bid Removal and Bid Withdrawal

The FCC proposes allowing bidders to remove any bids placed in a round before the close of the round. (¶ 80).

Unlike auctions using the standard simultaneous multi-round auction system, there are no “provisionally winning” bids in a clock auction. Therefore, bid withdrawals do not apply. However, under the FCC’s proposal, bidders would be able to request to reduce demand for generic blocks subject to the demand continuing to exceed supply. (¶ 81).

Post-Auction Process

A. Deficiency Payments and Additional Default Payment Percentage

Winning bidders that default or are disqualified after the close of the auction are liable for default payments pursuant to 47 C.F.R. § 1.2104(g)(2). Deficiency payments for CMA-level bids will be calculated using the per-block price for each county within the CMA. This includes a proposed additional 25% default payment on any CMA-winning bid. For county-level winning bids, the Commission proposes an additional 20% default payment. (¶¶ 82-85).

B. Tutorial and Additional Information for Applicants

The Commission will release an online tutorial for Auction 105 to help applicants file their short-form applications and better understand the bidding process. (¶ 87).