



PUBLIC NOTICE

Federal Communications Commission
445 12th St., S.W.
Washington, D.C. 20554

News Media Information 202 / 418-0500
Internet: <http://www.fcc.gov>
TTY: 1-888-835-5322

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AUCTION OF 1.4 GHz BANDS LICENSES SCHEDULED FOR FEBRUARY 7, 2007 COMMENT SOUGHT ON COMPETITIVE BIDDING PROCEDURES FOR AUCTION No. 69

AU Docket No. 06-104

Comments Due: September 11, 2006

Reply Comments Due: September 18, 2006

Report No. AUC-06-69-A (Auction No. 69)

By this Public Notice, the Wireless Telecommunications Bureau (“Bureau”) announces an auction of 64 licenses in the paired 1392-1395 MHz and 1432-1435 MHz bands, and in the unpaired 1390-1392 MHz band (collectively the 1.4 GHz bands).¹ This auction, which is designated Auction No. 69, is scheduled to commence on February 7, 2007.²

I. LICENSES TO BE OFFERED IN AUCTION NO. 69

In Auction No. 69, two 3-megahertz blocks, each consisting of a pair of 1.5 megahertz segments in the 1392-1395 MHz and 1432-1435 MHz bands, will be offered in each of six regions known as Economic Area Groupings (EAGs). Additionally, one 2-megahertz block of unpaired spectrum in the 1390-1392 MHz band will be offered in each of 52 geographic areas known as Major Economic Areas (MEAs).

License Descriptions. The following table describes the licenses that will be offered in Auction No. 69:

Block	Frequencies	Bandwidth	Pairing	Geographic Area Type	No. of Licenses
A	1392-1393.5 and 1432-1433.5 MHz	3 MHz	2 x 1.5 MHz	EAG	6
B	1393.5-1395 and 1433.5-1435 MHz	3 MHz	2 x 1.5 MHz	EAG	6
	1390-1392 MHz	2 MHz	unpaired	MEA	52

¹ This spectrum has been reallocated for non-Government use to provide fixed and mobile services, with the exception of aeronautical mobile services. *See* 47 C.F.R. § 27.802.

² The Bureau initially announced that licenses in these bands would be included in the inventory of Auction No. 46. 1392-1395 and 1432-1435 MHz, 1390-1392 MHz, 1670-1675 MHz, and 2385-2390 MHz Bands Auction Scheduled for September 18, 2002; Comment Sought on Reserve Prices or Minimum Opening Bids and Other Auction Procedural Issues, *Public Notice*, 17 FCC Rcd. 9600 (2002). The Bureau subsequently revised the Auction No. 46 inventory and offered only the 1670 -1675 MHz band license in Auction No. 46. Auction No. 46 Revised License Inventory and Auction Start Date; Comment Sought on Revisions to Auction Procedures, *Public Notice*, 17 FCC Rcd. 13421 (2002) (“*Auction No. 46 Revised Comment Public Notice*”).

The licenses available in Auction No. 69 are also listed in Attachment A of this public notice.

Permissible Services. When adopting its service rules for these bands, the Commission established a flexible regulatory and licensing framework in order to promote the provision of new and technologically innovative services.³ Licensees may provide both fixed and mobile services including wireless internet, high speed data as well as advanced two-way mobile and paging services.⁴

International Coordination. Currently, the U.S. does not have international agreements with Canada and Mexico governing operations in the 1392-1395 MHz, 1432-1435 MHz or the 1390-1392 MHz bands. Licensees in these bands operating near the borders must protect stations in Canada and Mexico from harmful interference. We also note that operation in these bands may be subject to future agreements with Canada and Mexico and therefore may be subject to further modification.⁵

Incumbency Issues. Potential applicants are advised that there are several government operations that will continue to operate in these bands:

1390-1392 MHz

- Radio astronomy observations may be assigned in the 1350-1400 MHz band on an unprotected basis at the 16 radio astronomy observatories identified in the table of Footnote US311.⁶
- Government operations authorized as of March 22, 1995, at the 17 sites identified in the table of Footnote US351 will continue to operate on a fully protected basis until January 1, 2009.⁷ All other government operations, except for medical telemetry (1395-1400 MHz), will operate on a non-interference basis to authorized non-Government operations and shall not hinder implementation of any non-Government operations.⁸

1392-1395 MHz and 1432-1435 MHz

- Radio astronomy observations may be assigned in the 1350-1400 MHz band on an unprotected basis at the 16 radio astronomy observatories identified in the table of Footnote US311.
- Government operations authorized as of March 22, 1995, at the 17 sites identified in the table of Footnote US351 will continue to operate on a fully protected basis until January 1, 2009.⁹ All other government operations, except for medical telemetry (1395-1400 MHz), will operate on a non-interference basis to authorized non-Government operations and shall not hinder implementation of any non-Government operations.¹⁰
- Government stations in the fixed and mobile services may operate indefinitely on a primary basis at the 23 sites listed in the table of Footnote US361.¹¹ All other Government stations in the fixed

³ See Amendments to Parts 1, 2, 27 and 90 of the Commission's Rules to License Services in the 216-220 MHz, 1390-1395 MHz, 1427-1429 MHz, 1429-1432 MHz, 1432-1435 MHz, 1670-1675 MHz, and 2385-2390 MHz Government Transfer Band, *Report and Order*, 17 FCC Rcd 9980 (2002)(*Report and Order*).

⁴ See *id.*, 17 FCC Rcd at 9997-9 ¶¶ 37-39; 47 C.F.R. § 27.802.

⁵ See *Report and Order*, 17 FCC Rcd at 10048 ¶¶ 178-79; 47 C.F.R. § 27.803.

⁶ 47 C.F.R. § 2.106 n. US311.

⁷ 47 C.F.R. § 2.106 n. US351.

⁸ See *id.*

⁹ See *id.*

¹⁰ See *id.*

¹¹ 47 C.F.R. § 2.106 n. US361.

and mobile services shall operate on a primary basis until re-accommodated in accordance with the National Defense Authorization Act of 1999.¹²

Spectrum Relocation Fund. The upper half of paired frequencies for 1.4 GHz bands licenses, i.e., 1432-1435 MHz, is spectrum covered by a Congressional mandate that requires that auction proceeds fund the estimated relocation costs of incumbent federal entities.¹³ Specifically, the Commercial Spectrum Enhancement Act (“CSEA”) established a Spectrum Relocation Fund (“SRF”), to which the cash proceeds attributable to “eligible frequencies” in an auction of licenses involving such frequencies would be deposited.¹⁴ In addition to requiring that specified auction proceeds be deposited in the SRF, CSEA prohibits the Commission from concluding any auction of eligible frequencies if the total cash proceeds attributable to such spectrum are less than 110 percent of the estimated relocation costs provided to the Commission by the National Telecommunications and Information Administration (“NTIA”).¹⁵

On December 27, 2005, pursuant to CSEA, NTIA notified the Commission that there are no costs associated with relocating federal operations from the 1432-1435 MHz band.¹⁶

II. BUREAU SEEKS COMMENT ON AUCTION PROCEDURES

Section 309(j)(3) of the Communications Act of 1934, as amended, requires the Commission to “ensure that, in the scheduling of any competitive bidding under this subsection, an adequate period is allowed . . . before issuance of bidding rules, to permit notice and comment on proposed auction procedures”¹⁷ Consistent with the provisions of Section 309(j)(3) and to ensure that potential bidders have adequate time to familiarize themselves with the specific rules that will govern the day-to-day conduct of an auction, the Commission directed the Bureau, under its existing delegated authority, to seek comment on a variety of auction-specific procedures prior to the start of each auction.¹⁸ We therefore seek comment on the following issues relating to Auction No. 69.

¹² *See id.*

¹³ *See* Commercial Spectrum Enhancement Act, Pub. L. No. 108-494, 118 Stat. 3986, Title II (2004) (codified in various sections of Title 47 of the United States Code) (“CSEA”), § 202 (codified at 47 U.S.C. § 923(g)(2)).

¹⁴ *Id.*, §§ 201-209. Eligible frequencies comprise four bands specified in CSEA (the 216-220 MHz, 1432-1435 MHz, 1710-1755 MHz and 2385-2390 MHz bands), as well as any other band of frequencies reallocated from federal use to non-federal use after January 1, 2003, and assigned by the Commission through competitive bidding. *Id.*, § 202. Bands of frequencies previously identified by the National Telecommunications and Information Administration in the Spectrum Reallocation Final Report, NTIA Special Publication 95-32 (1995), are excluded. *Id.*

¹⁵ *Id.*, § 203(b). CSEA also requires that, at the same time, NTIA submit for approval its estimate of relocation costs and the timelines for relocation to the Senate Committees on Appropriations, and Commerce, Science, and Transportation, the House of Representatives Committees on Appropriations and Energy and Commerce, and the Comptroller General. Unless disapproved by the Committees within 30 days, the estimate “shall be approved.” *Id.*, § 202.

¹⁶ *See* letter from Michael D. Gallagher, Assistant Secretary for Communications and Information, National Telecommunications and Information Administration, US Department of Commerce, to Kevin J. Martin, Chairman, Federal Communications Commission (Dec. 27, 2005).

¹⁷ 47 U.S.C. § 309(j)(3)(E)(i).

¹⁸ *See* Amendment of Part 1 of the Commission’s Rules — Competitive Bidding Procedures, Allocation of Spectrum Below 5 GHz Transferred from Federal Government Use, 4660-4685 MHz, *Third Report and Order and Second Further Notice of Proposed Rule Making*, 13 FCC Rcd 374, 448 ¶¶ 124-25 (1997) (“*Part 1 Third Report and Order*”) (directing the Bureau to seek comment on specific mechanisms related to day-to-day auction conduct including, for example, the structure of bidding rounds and stages, establishment of minimum opening bids or

A. AUCTION STRUCTURE

1. Simultaneous Multiple-Round Auction Design

We propose to auction all licenses included in Auction No. 69 using the Commission's standard simultaneous multiple-round auction format. As described further below, this type of auction offers every license for bid at the same time and consists of successive bidding rounds in which eligible bidders may place bids on individual licenses. Typically, bidding remains open on all licenses until bidding stops on every license. We seek comment on this proposal.

Information Available to Bidders Before and During an Auction. The Bureau also seeks comment on whether to implement procedures that would limit the disclosure of information on bidder interests and identities relative to the information procedures that have typically been used for Commission auctions. Commenters should indicate what factors support the position they take on this issue. In particular, commenters should specifically address whether technological considerations or the likely level of competition in this auction weighs in favor of or against limiting the disclosure of information on bidder interests and identities relative to most past Commission spectrum auctions, or whether the Commission should condition the implementation of such limits on a measure of the competitiveness of the auction, such as the eligibility ratio or a modified version of the eligibility ratio.

Package Bidding. The Bureau has considered the possibility of using a simultaneous multiple-round with package bidding ("SMR-PB") format for this auction, but is not inclined to believe that SMR-PB would be appropriate for the auction of these licenses. Under the Commission's package bidding rules, bidders can place bids on any groups of licenses they wish to win together, with the result that they win either all the licenses in a group or none of them. In the SMR-PB auction format, each bidder can have at most a single winning bid. Consequently, because bidders cannot win a group of licenses unless they have explicitly placed a bid on that exact combination, package bidding may be more complex for bidders if they wish to aggregate any or all of a number of licenses.¹⁹ However, we seek comment on this issue. If commenters believe that an SMR-PB design should be implemented for this auction, they should indicate what specific factors lead them to that conclusion.

2. Round Structure

The Commission will conduct Auction No. 69 over the Internet. Alternatively, telephonic bidding will also be available via the Auction Bidder Line. The toll-free telephone number for telephonic bidding will be provided to qualified bidders.

The auction will consist of sequential bidding rounds. The initial bidding schedule will be announced in a public notice to be released at least one week before the start of the auction.

Footnote Continued _____

reserve prices, minimum acceptable bids, initial maximum eligibility for each bidder, activity requirements for each stage of the auction, activity rule waivers, criteria for determining reductions in eligibility, information regarding bid withdrawal and bid removal, stopping rules, and information relating to auction delay, suspension or cancellation). See also 47 C.F.R. § 0.131; Amendment of Part 1 of the Commission's Rules — Competitive Bidding Proceeding, Order, Memorandum Opinion and Order, and Notice of Proposed Rule Making, 12 FCC Rcd 5686, 5697-98 ¶ 16 (1997) ("Part 1 Order").

¹⁹ The number of possible combinations (C) increases exponentially with the number of licenses (N) at the rate $C = 2^N - 1$. This number can become very large quickly; for example, 20 licenses would result in over one million possible combinations. Depending upon the number of licenses included in an SMR-PB auction, the Bureau may decide, for computability, to limit the number of bids a bidder may place in a round, the number of different packages a bidder may define, and the number of different packages on which a bidder may place bids.

The Bureau proposes to retain the discretion to change the bidding schedule in order to foster an auction pace that reasonably balances speed with the bidders' need to study round results and adjust their bidding strategies. Under this proposal, the Bureau may increase or decrease the amount of time for the bidding rounds and review periods, or the number of rounds per day, depending upon bidding activity levels and other factors. We seek comment on this proposal.

3. Stopping Rule

The Bureau has discretion “to establish stopping rules before or during multiple round auctions in order to terminate the auction within a reasonable time.”²⁰ For Auction No. 69, the Bureau proposes to employ a simultaneous stopping rule approach. A simultaneous stopping rule means that all licenses remain available for bidding until bidding closes simultaneously on all licenses. More specifically, bidding will close simultaneously on all licenses after the first round in which no bidder submits any new bids, applies a proactive waiver, or submits a withdrawal.²¹ Thus, unless circumstances dictate otherwise, bidding will remain open on all licenses until bidding stops on every license.

Further, the Bureau proposes to retain the discretion to exercise any of the following options during Auction No. 69:

1. Use a modified version of the simultaneous stopping rule. The modified stopping rule would close the auction for all licenses after the first round in which no bidder applies a waiver, places a withdrawal, or submits any new bids on any license for which it is not the provisionally winning bidder. Thus, absent any other bidding activity, a bidder placing a new bid on a license for which it is the provisionally winning bidder would not keep the auction open under this modified stopping rule.
2. Keep the auction open even if no bidder submits any new bids, applies a waiver, or submits a withdrawal. In this event, the effect will be the same as if a bidder had applied a waiver. The activity rule, therefore, will apply as usual and a bidder with insufficient activity will either lose bidding eligibility or use a remaining waiver.
3. Declare that the auction will end after a specified number of additional rounds (“special stopping rule”). If the Bureau invokes this special stopping rule, it will accept bids in the specified final round(s) after which the auction will close.

The Bureau proposes to exercise these options only in certain circumstances, for example, where the auction is proceeding very slowly, there is minimal overall bidding activity, or it appears likely that the auction will not close within a reasonable period of time. Before exercising these options, the Bureau is likely to attempt to increase the pace of the auction by, for example, increasing the number of bidding rounds per day and/or changing the minimum acceptable bid percentage. We seek comment on these proposals.

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

For Auction No. 69, we propose that, by public notice or by announcement during the auction, the Bureau may delay, suspend, or cancel the auction in the event of natural disaster, technical obstacle, evidence of an auction security breach, unlawful bidding activity, administrative or weather necessity, or for any other

²⁰ 47 C.F.R. § 1.2104(e).

²¹ Proactive waivers are described in Section II.B.3. “Activity Rule Waivers and Reducing Eligibility,” below.

reason that affects the fair and efficient conduct of competitive bidding.²² In such cases, the Bureau, in its sole discretion, may elect to resume the auction starting from the beginning of the current round, resume the auction starting from some previous round, or cancel the auction in its entirety. Network interruption may cause the Bureau to delay or suspend the auction. We emphasize that exercise of this authority is solely within the discretion of the Bureau, and its use is not intended to be a substitute for situations in which bidders may wish to apply their activity rule waivers. We seek comment on this proposal.

B. AUCTION PROCEDURES

1. Upfront Payments and Bidding Eligibility

The Bureau has delegated authority and discretion to determine an appropriate upfront payment for each license being auctioned.²³ As described further below, the upfront payment is a refundable deposit made by each bidder to establish eligibility to bid on licenses. Upfront payments related to the licenses for specific spectrum subject to auction protect against frivolous or insincere bidding and provide the Commission with a source of funds from which to collect payments owed at the close of the auction.²⁴ With these factors in mind, we propose to calculate upfront payments on a license-by-license basis using a formula based on bandwidth and license area population:²⁵

$\$0.005 * \text{MHz} * \text{License Area Population}$ with a minimum of \$1,000 per license.

We further propose that the amount of the upfront payment submitted by a bidder will determine the bidder's initial bidding eligibility in bidding units. We propose that each license be assigned a specific number of bidding units equal to the upfront payment listed in Attachment A, on a bidding unit per dollar basis. The number of bidding units for a given license is fixed and does not change during the auction as prices rise. A bidder's upfront payment is not attributed to specific licenses. Rather, a bidder may place bids on any combination of licenses it selected on its FCC Form 175 as long as the total number of bidding units associated with those licenses does not exceed its current eligibility. Eligibility cannot be increased during the auction; it can only remain the same or decrease. Thus, in calculating its upfront payment amount and hence its initial bidding eligibility, an applicant must determine the **maximum** number of bidding units it may wish to bid on (or hold provisionally winning bids on) in any single round, and submit an upfront payment amount covering that total number of bidding units. Provisionally winning bids are bids that would become final winning bids if the auction were to close in that given round.²⁶

The proposed number of bidding units for each license and associated upfront payment amounts are listed in Attachment A.²⁷ We seek comment on these proposals.

²² 47 C.F.R. § 1.2104(i).

²³ See *Part 1 Order*, 12 FCC Rcd at 5697-98 ¶ 16. See also *Part 1 Third Report and Order*, 13 FCC Rcd at 425 ¶ 86; Implementation of Section 309(j) of the Communications Act—Competitive Bidding, *Second Report and Order*, 9 FCC Rcd 2348, 2378-79 ¶¶ 171-75 (1994) (“*Competitive Bidding Second Report and Order*”).

²⁴ See *Competitive Bidding Second Report and Order*, 9 FCC Rcd at 2378-79 ¶¶ 171-76.

²⁵ All population figures are from the 2000 U.S. Census, U.S. Department of Commerce, Bureau of the Census. See Census 2000 Summary File 1 (SF1) and July 3, 2001, News Releases covering the U.S. Virgin Islands, Guam, the Northern Mariana Islands, and American Samoa.

²⁶ See Section II.B. 6. “Provisionally Winning Bids,” below.

²⁷ Results are rounded using our standard rounding procedure: results above \$10,000 are rounded to the nearest \$1,000; results below \$10,000 but above \$1,000 are rounded to the nearest \$100; and results below \$1,000 are rounded to the nearest \$10.

2. Activity Rule

In order to ensure that the auction closes within a reasonable period of time, an activity rule requires bidders to bid actively throughout the auction, rather than wait until late in the auction before participating. A bidder's activity in a round will be the sum of the bidding units associated with any licenses upon which it places bids during the current round and the bidding units associated with any licenses for which it holds provisionally winning bids. Bidders are required to be active on a specific percentage of their current bidding eligibility during each round of the auction. Failure to maintain the requisite activity level will result in the use of an activity rule waiver, if any remain, or a reduction in the bidder's eligibility, possibly curtailing or eliminating the bidder's ability to place bids in the auction.²⁸

We propose to divide the auction into two stages, each characterized by a different activity requirement. The auction will start in Stage One. We propose that the auction generally will advance from Stage One to Stage Two when the auction activity level, as measured by the percentage of bidding units receiving new provisionally winning bids, is approximately twenty percent or below for three consecutive rounds of bidding. However, we further propose that the Bureau retains the discretion to change stages unilaterally by announcement during the auction. In exercising this discretion, the Bureau will consider a variety of measures of bidder activity, including, but not limited to, the auction activity level, the percentage of licenses (as measured in bidding units) on which there are new bids,²⁹ the number of new bids, and the percentage of increase in revenue. We seek comment on these proposals.

For Auction No. 69, we propose the following activity requirements:

Stage One: In each round of the first stage of the auction, a bidder desiring to maintain its current bidding eligibility is required to be active on licenses representing at least 80 percent of its current bidding eligibility. Failure to maintain the required activity level will result in a reduction in the bidder's bidding eligibility in the next round of bidding (unless an activity rule waiver is used). During Stage One, a bidder's reduced eligibility for the next round will be calculated by multiplying the bidder's current round activity by five-fourths (5/4).

Stage Two: In each round of the second stage, a bidder desiring to maintain its current bidding eligibility is required to be active on 95 percent of its current bidding eligibility. Failure to maintain the required activity level will result in a reduction in the bidder's bidding eligibility in the next round of bidding (unless an activity rule waiver is used). During Stage Two, a bidder's reduced eligibility for the next round will be calculated by multiplying the bidder's current round activity by twenty-nineteenths (20/19).

We seek comment on this proposal. Commenters that believe this activity rule should be modified should explain their reasoning and comment on the desirability of an alternative approach. Commenters are advised to support their claims with analyses and suggested alternative activity rules.

3. Activity Rule Waivers and Reducing Eligibility

Use of an activity rule waiver preserves the bidder's eligibility despite the bidder's activity in the current round being below the required minimum level. An activity rule waiver applies to an entire round of bidding, not to particular licenses. Activity rule waivers can be either proactive or automatic and are

²⁸ See Section II B.3. "Activity Rule Waivers and Reducing Eligibility," below.

²⁹ For example, when monitoring activity for determining when to change stages, we may consider the percentage of bidding units of the licenses receiving new provisionally winning bids, excluding any FCC-held licenses.

principally a mechanism for auction participants to avoid the loss of bidding eligibility in the event that exigent circumstances prevent them from placing a bid in a particular round.

The FCC Auction System assumes that a bidder that does not meet the activity requirement would prefer to apply an activity rule waiver (if available) rather than lose bidding eligibility. Therefore, the system will automatically apply a waiver at the end of any bidding round in which a bidder's activity level is below the minimum required unless: (1) the bidder has no activity rule waivers remaining; or (2) the bidder overrides the automatic application of a waiver by reducing eligibility, thereby meeting the minimum requirement. If a bidder has no waivers remaining and does not satisfy the required activity level, its eligibility will be permanently reduced, possibly curtailing or eliminating the bidder's ability to place additional bids in the auction.

A bidder with insufficient activity may wish to reduce its bidding eligibility rather than use an activity rule waiver. If so, the bidder must affirmatively override the automatic waiver mechanism during the bidding round by using the "reduce eligibility" function in the FCC Auction System. In this case, the bidder's eligibility is permanently reduced to bring the bidder into compliance with the activity rule as described above. Reducing eligibility is an irreversible action. Once eligibility has been reduced, a bidder will not be permitted to regain its lost bidding eligibility, even if the round has not yet closed.

A bidder may apply an activity rule waiver proactively as a means to keep the auction open without placing a bid. If a bidder proactively applies an activity rule waiver (using the "apply waiver" function in the FCC Auction System) during a bidding round in which no bids or withdrawals are submitted, the auction will remain open and the bidder's eligibility will be preserved. An automatic waiver applied by the FCC Auction System in a round in which there are no new bids, withdrawals, or proactive waivers will not keep the auction open. A bidder cannot submit a proactive waiver after submitting a bid in a round, and submitting a proactive waiver will preclude a bidder from placing any bids in that round. Applying a waiver is irreversible; once a proactive waiver is submitted, that waiver cannot be unsubmitted, even if the round has not yet closed.

We propose that each bidder in Auction No. 69 be provided with three activity rule waivers that may be used at the bidder's discretion during the course of the auction as set forth above. We seek comment on this proposal.

4. Reserve Price or Minimum Opening Bids

Section 309(j) calls upon the Commission to prescribe methods for establishing a reasonable reserve price or a minimum opening bid amount when FCC licenses are subject to auction, unless the Commission determines that a reserve price or minimum opening bid amount is not in the public interest.³⁰ Consistent with this mandate, the Commission has directed the Bureau to seek comment on the use of a minimum opening bid amount and/or reserve price prior to the start of each auction.³¹

a. Reserve Price

In CSEA, Congress requires the Commission to prescribe methods by which the total cash proceeds from any auction of licenses authorizing use of eligible frequencies, such as 1432-1435 MHz, shall equal at least 110 percent of the total estimated relocation costs provided to the Commission pursuant to CSEA.³²

³⁰ 47 U.S.C. § 309(j)(4)(F). The Commission's rules regarding reserve prices and minimum opening bids are set forth at 47 C.F.R. § 1.2104(c) and (d).

³¹ *Part 1 Third Report and Order*, 13 FCC Rcd at 454-55 ¶ 141. See 47 C.F.R. § 1.2104(c).

³² See CSEA, § 203(b); see also 47 C.F.R. § 1.2104(c).

CSEA also requires that the total cash proceeds “attributable to” eligible spectrum must be at least 110 percent of the total estimated relocation costs before the Commission may conclude the auction.³³ If this condition is not met, CSEA requires that the Commission shall cancel the auction.³⁴ On December 27, 2005, pursuant to CSEA, NTIA notified the Commission that there are no costs associated with relocating federal operations from the 1432-1435 MHz band.³⁵ Accordingly, the Bureau does not propose a reserve price to cover relocation costs under CSEA.

b. Minimum Opening Bids

In contrast to a reserve price, a minimum opening bid amount is the minimum bid price set at the beginning of the auction below which no bids are accepted. It is generally used to accelerate the competitive bidding process. The auctioneer, however, often has the discretion to lower the minimum opening bid amount during the course of the auction. It is also possible for the minimum opening bid amount and the reserve price to be the same amount.

In light of Section 309(j)’s requirements, the Bureau proposes to establish minimum opening bid amounts for Auction No. 69. The Bureau believes a minimum opening bid amount, which has been used in other auctions, is an effective bidding tool for accelerating the competitive bidding process.³⁶ The Bureau does not propose a separate reserve price for the licenses to be offered in Auction No. 69.

Specifically, for Auction No. 69, the Bureau proposes to calculate minimum opening bid amounts on a license-by-license basis using a formula based on bandwidth and license area population.³⁷

\$0.005 * MHz * License Area Population with a minimum of \$1,000 per license.

This proposed minimum opening bid amount for each license available in Auction No. 69 is set forth in Attachment A of this public notice.³⁸ We seek comment on this proposal.

If commenters believe that this minimum opening bid amount will result in unsold licenses, or is not a reasonable amount, or should instead operate as a reserve price, they should explain why this is so, and comment on the desirability of an alternative approach. Commenters are advised to support their claims with valuation analyses and suggested reserve prices or minimum opening bid amount levels or formulas. In establishing minimum opening bid amounts, we particularly seek comment on such factors as the amount of spectrum being auctioned, levels of incumbency, the availability of technology to provide service, the size of the service areas, issues of interference with other spectrum bands and any other relevant factors that could reasonably have an impact on valuation of the licenses being auctioned. We

³³ See CSEA, § 203(b).

³⁴ *Id.*

³⁵ See letter from Michael D. Gallagher, Assistant Secretary for Communications and Information, National Telecommunications and Information Administration, US Department of Commerce, to Kevin J. Martin, Chairman, Federal Communications Commission (Dec. 27, 2005).

³⁶ See, e.g., Auction of 800 MHz SMR Upper 10 MHz Band, Minimum Opening Bids or Reserve Prices, *Order*, 12 FCC Rcd 16354 (1997); Auction of the Phase II 220 MHz Service Licenses, Auction Notice and Filing Requirements for 908 Licenses Consisting of Economic Area (EA), Economic Area Grouping (EAG), and Nationwide Licenses, Scheduled for September 15, 1998, Minimum Opening Bids and Other Procedural Issues, *Public Notice*, 13 FCC Rcd 16445 (1998).

³⁷ See note 25 (concerning Census figures), above.

³⁸ See note 27 (concerning rounding), above.

also seek comment on whether, consistent with Section 309(j), the public interest would be served by having no minimum opening bid amount or reserve price.

5. Bid Amounts

We propose that, in each round, eligible bidders be able to place a bid on a given license in any of nine different amounts.³⁹ Under this proposal, the FCC Auction System interface will list the nine acceptable bid amounts for each license.⁴⁰

The first of the nine acceptable bid amounts is called the minimum acceptable bid amount. The minimum acceptable bid amount for a license will be equal to its minimum opening bid amount until there is a provisionally winning bid for the license. After there is a provisionally winning bid for a license, the minimum acceptable bid amount for that license will be equal to the amount of the provisionally winning bid plus a percentage of that bid amount calculated using the formula described below. In general, the percentage will be higher for a license receiving many bids than for a license receiving few bids. In the case of a license for which the provisionally winning bid has been withdrawn, the minimum acceptable bid amount will equal the second highest bid received for the license.⁴¹

The percentage of the provisionally winning bid used to establish the minimum acceptable bid amount (the “additional percentage”) is calculated at the end of each round, based on an activity index which is a weighted average of the number of bids in that round and the activity index from the prior round. Specifically, the activity index is equal to a weighting factor times the number of bids on the license in the most recent bidding round plus one minus the weighting factor times the activity index from the prior round.⁴² The additional percentage is determined as one plus the activity index times a minimum percentage amount, with the result not to exceed a given maximum. The additional percentage is then multiplied by the provisionally winning bid amount to obtain the minimum acceptable bid for the next round. The Commission will initially set the weighting factor at 0.5, the minimum percentage at 0.1 (10%), and the maximum percentage at 0.2 (20%). Hence, at these initial settings, the minimum acceptable bid for a license will be between 10% and 20% higher than the provisionally winning bid, depending upon the bidding activity for the license. Equations and examples are shown in Attachment B.

The eight additional bid amounts are calculated using the minimum acceptable bid amount and a bid increment percentage. The first additional acceptable bid amount equals the minimum acceptable bid amount times one plus the bid increment percentage, rounded. If, for example, the bid increment percentage is 5 percent, the calculation is (minimum acceptable bid amount) * (1 + 0.05), rounded, or (minimum acceptable bid amount) * 1.05, rounded; the second additional acceptable bid amount equals the minimum acceptable bid amount times one plus two times the bid increment percentage, rounded, or (minimum acceptable bid amount) * 1.1, rounded; the third additional acceptable bid amount equals the minimum acceptable bid amount times one plus three times the bid increment percentage, rounded, or (minimum acceptable bid amount) * 1.15, rounded; etc. We will round the results of these calculations, as well as the calculations to determine the minimum acceptable bid amounts, using our standard

³⁹ Bidders must have sufficient eligibility to place a bid on the particular license. See Section II.B.1. “Upfront Payments and Bidding Eligibility,” above.

⁴⁰ In the event of duplicate bid amounts due to rounding, the FCC Auction System will omit the duplicates and will list fewer than nine acceptable bid amounts for the license.

⁴¹ See Section II.B.7. “Bid Removal and Bid Withdrawal,” below.

⁴² For Round 1 calculations, because there is no prior round (*i.e.*, no round 0), the activity index from the prior round is set at 0.

rounding procedures.⁴³ For Auction No. 69, the Bureau proposes to use a bid increment percentage of 5 percent to calculate the eight additional acceptable bid amounts.

The Bureau retains the discretion to change the minimum acceptable bid amounts, the parameters of the formula to determine the percentage of the provisionally winning bid used to determine the minimum acceptable bid, and the bid increment percentage if it determines that circumstances so dictate. The Bureau will do so by announcement in the FCC Auction System during the auction. We seek comment on these proposals.

6. Provisionally Winning Bids

Provisionally winning bids are bids that would become final winning bids if the auction were to close in that given round. At the end of a bidding round, a provisionally winning bid for each license will be determined based on the highest bid amount received for the license. In the event of identical high bid amounts being submitted on a license in a given round (*i.e.*, tied bids), we will use a random number generator to select a single provisionally winning bid from among the tied bids. (Each bid is assigned a random number, and the tied bid with the highest random number wins the tiebreaker.) The remaining bidders, as well as the provisionally winning bidder, can submit higher bids in subsequent rounds. However, if the auction were to end with no other bids being placed, the winning bidder would be the one that placed the provisionally winning bid. If any bids are received on the license in a subsequent round, the provisionally winning bid again will be determined by the highest bid amount received for the license.

A provisionally winning bid will remain the provisionally winning bid until there is a higher bid on the license at the close of a subsequent round, unless the provisionally winning bid is withdrawn. Bidders are reminded that provisionally winning bids count toward activity for purposes of the activity rule.⁴⁴

7. Bid Removal and Bid Withdrawal

For Auction No. 69, we propose the following bid removal procedures. Before the close of a bidding round, a bidder has the option of removing any bid placed in that round. By removing selected bids in the FCC Auction System, a bidder may effectively “unsubmit” any bid placed within that round. In contrast to the bid withdrawal provisions described below, a bidder removing a bid placed in the same round is not subject to a withdrawal payment. Once a round closes, a bidder may no longer remove a bid.

A bidder may withdraw its provisionally winning bids using the “withdraw bids” function in the FCC Auction System. A bidder that withdraws its provisionally winning bid(s) is subject to the bid withdrawal payment provisions of the Commission rules.⁴⁵ We seek comment on these bid removal and bid withdrawal procedures.

In the *Part 1 Third Report and Order*, the Commission explained that allowing bid withdrawals facilitates efficient aggregation of licenses and the pursuit of backup strategies as information becomes available during the course of an auction.⁴⁶ The Commission noted, however, that in some instances bidders may seek to withdraw bids for improper reasons. The Bureau, therefore, has discretion in managing the

⁴³ Results are rounded using our standard rounding procedure: results above \$10,000 are rounded to the nearest \$1,000; results below \$10,000 but above \$1,000 are rounded to the nearest \$100; and results below \$1,000 are rounded to the nearest \$10.

⁴⁴ See Section II.B.2. “Activity Rule,” above.

⁴⁵ 47 C.F.R. §§ 1.2104(g) and 1.2109.

⁴⁶ *Part 1 Third Report and Order*, 13 FCC Rcd at 459-60 ¶ 150.

auction to limit the number of withdrawals to prevent any bidding abuses. The Commission stated that the Bureau should assertively exercise its discretion, consider limiting the number of rounds in which bidders may withdraw bids, and prevent bidders from bidding on a particular market if the Bureau finds that a bidder is abusing the Commission's bid withdrawal procedures.⁴⁷

Applying this reasoning, we propose to limit each bidder to withdrawing provisionally winning bids in no more than two rounds during the course of the auction. To permit a bidder to withdraw bids in more than two rounds may encourage insincere bidding or the use of withdrawals for anti-competitive purposes. The two rounds in which withdrawals may be used will be at the bidder's discretion; withdrawals otherwise must be in accordance with the Commission's rules.⁴⁸ There is no limit on the number of provisionally winning bids that may be withdrawn in either of the rounds in which withdrawals are used. Withdrawals will remain subject to the bid withdrawal payment provisions specified in the Commission's rules.

C. POST-AUCTION PROCEDURES

1. Establishing the Interim Withdrawal Payment Percentage

We seek comment on the appropriate percentage of a withdrawn bid that should be assessed as an interim withdrawal payment, in the event that a final withdrawal payment cannot be determined at the close of the auction. In general, the Commission's rules provide that a bidder that withdraws a bid during an auction is subject to a withdrawal payment equal to the difference between the amount of the withdrawn bid and the amount of the winning bid in the same or subsequent auction(s).⁴⁹ However, if a license for which there has been a withdrawn bid is neither subject to a subsequent higher bid nor won in the same auction, the final withdrawal payment cannot be calculated until a corresponding license is subject to a higher bid or won in a subsequent auction. When that final payment cannot yet be calculated, the bidder responsible for the withdrawn bid is assessed an interim bid withdrawal payment, which will be applied toward any final bid withdrawal payment that is ultimately assessed.⁵⁰ The Commission recently amended its rules to provide that in advance of the auction, the Commission shall establish the percentage of the withdrawn bid to be assessed as an interim bid withdrawal payment between three percent (3%) and twenty percent (20%).⁵¹

When it adopted the new rule, the Commission indicated that the level of the interim withdrawal payment in a particular auction will be based on the nature of the service and the inventory of the licenses being offered.⁵² The Commission noted that it may impose a higher interim withdrawal payment percentage to deter the anti-competitive use of withdrawals when, for example, bidders likely will not need to aggregate

⁴⁷ *Id.*

⁴⁸ *See* 47 C.F.R. § 1.2104(g).

⁴⁹ 47 C.F.R. § 1.2104(g)(1). The withdrawal payment amount is deducted from any upfront payments or down payments that the withdrawing bidder has deposited with the Commission. No withdrawal payment is assessed for a withdrawn bid if either the subsequent winning bid or any of the intervening subsequent withdrawn bids equals or exceeds that withdrawn bid. *Id.*

⁵⁰ *Id.*

⁵¹ *See* 47 C.F.R. § 1.2104(g)(2), as amended by Implementation of the Commercial Spectrum Enhancement Act and Modernization of the Commission's Competitive Bidding Rules and Procedures, WT Docket No. 05-211, *Report and Order*, 21 FCC Rcd 891, 903 ¶ 30 (2006) ("CSEA/Part 1 Report and Order").

⁵² *See* 47 C.F.R. § 1.2104(g)(2).

licenses offered, such as when few licenses are offered that are not on adjacent frequencies or in adjacent areas, or there are few synergies to be captured by combining licenses.⁵³

With respect to the licenses being offered in Auction No. 69, the service rules permit a variety of fixed and mobile services, some of which may best be offered by combining licenses on adjacent frequencies or in adjacent areas. Balancing the potential need for bidders to use withdrawals to avoid incomplete combinations of licenses with our interest in deterring strategic withdrawals, we propose a percentage below the maximum 20 percent (20%) permitted under the current rules but above the 3 percent (3%) previously provided by the Commission's rules. Specifically, we propose to establish the percentage of the withdrawn bid to be assessed as an interim bid withdrawal payment at ten percent (10%) for this auction. We seek comment on this proposal.

2. Establishing the Additional Default Payment Percentage

Any winning bidder that defaults or is disqualified after the close of an auction (i.e., fails to remit the required down payment within the prescribed period of time, fails to submit a timely long-form application, fails to make full payment, or is otherwise disqualified) is liable for a default payment under 47 C.F.R. § 1.2104(g)(2). This payment consists of a deficiency payment, equal to the difference between the amount of the bidder's bid and the amount of the winning bid the next time a license covering the same spectrum is won in an auction, plus an additional payment equal to a percentage of the defaulter's bid or of the subsequent winning bid, whichever is less. Until recently this additional payment for non-combinatorial auctions has been set at 3 percent of the defaulter's bid or of the subsequent winning bid, whichever is less.

The *CSEA/Part 1 Report and Order* modified Section 1.2104(g)(2) by, *inter alia*, increasing the 3 percent limit on the additional default payment for non-combinatorial auctions to 20 percent.⁵⁴ Under the modified rule, the Commission will, in advance of each non-combinatorial auction, establish an additional default payment for that auction of 3 percent up to a maximum of 20 percent.⁵⁵ As the Commission has indicated, the level of this payment in each case will be based on the nature of the service and the inventory of the licenses being offered.⁵⁶

For Auction No. 69, the Bureau proposes to establish an additional default payment of 10 percent. As noted in the *CSEA/Part 1 Report and Order*, defaults weaken the integrity of the auctions process and impede the deployment of service to the public, and an additional default payment of more than the previous 3 percent will be more effective in deterring defaults. At the same time, we do not believe the detrimental effects of any defaults in Auction No. 69 are likely to be unusually great. Balancing these considerations, we propose an additional default payment of 10 percent of the relevant bid. We seek comment on this proposal.

III. CONCLUSION

Comments are due on or before September 11, 2006, and reply comments are due on or before September 18, 2006. All filings related to the auction of 1.4 GHz Bands licenses should refer to AU Docket No. 06-104. Comments may be submitted using the Commission's Electronic Comment Filing System ("ECFS")

⁵³ See 47 C.F.R. § 1.2104(g)(2).

⁵⁴ See *CSEA/Part 1 Report and Order*, 21 FCC Rcd at 903 ¶ 30.

⁵⁵ See 47 C.F.R. § 1.2104(g)(2).

⁵⁶ See *CSEA/Part 1 Report and Order*, 21 FCC Rcd at 903 ¶ 30.

or by filing paper copies.⁵⁷ The Bureau strongly encourages interested parties to file comments electronically, and requests submission of a copy via the Auction No. 69 e-mail box (auction69@fcc.gov).

Electronic Filers: Comments may be filed electronically using the Internet by accessing the ECFS at <http://www.fcc.gov/cgb/ecfs/>. Filers should follow the instructions provided on the website for submitting comments. In completing the transmittal screen, filers should include their full name, U.S. Postal Service mailing address, and the applicable docket or rulemaking number. Parties may also submit an electronic comment by Internet e-mail. To get filing instructions, filers should send an e-mail to ecfs@fcc.gov, and include the following words in the body of the message, “get form.” A sample form and directions will be sent in response.

Paper Filers: Parties who choose to file by paper must file an original and four copies of each filing. Filings can be sent by hand or messenger delivery, by commercial overnight courier, or by first-class or overnight U.S. Postal Service mail (although we continue to experience delays in receiving U.S. Postal Service mail). All filings must be addressed to the Commission’s Secretary Attn: WTB/ASAD, Office of the Secretary, Federal Communications Commission.

- The Commission’s contractor will receive hand-delivered or messenger-delivered paper filings for the Commission’s Secretary at 236 Massachusetts Avenue, NE, Suite 110, Washington, DC 20002. The filing hours at this location are 8:00 a.m. to 7:00 p.m. Eastern Time (ET). All hand deliveries must be held together with rubber bands or fasteners. Any envelopes must be disposed of before entering the building.
- Commercial overnight mail (other than U.S. Postal Service Express Mail and Priority Mail) must be sent to 9300 East Hampton Drive, Capitol Heights, MD 20743.
- U.S. Postal Service first-class, Express, and Priority mail should be addressed to 445 12th Street, SW, Washington DC 20554.

Auction No. 69 E-mail Box: The Bureau also requests that a copy of all comments and reply comments be submitted electronically to the following address: auction69@fcc.gov.

Copies of comments and reply comments will be available for public inspection between 8:00 a.m. and 4:30 p.m. ET Monday through Thursday or 8:00 a.m. to 11:30 a.m. ET on Fridays in the FCC Reference Information Center, Room CY-A257, 445 12th Street, SW, Washington, DC 20554, and will also be accessible through the search function on the ECFS web page at <http://www.fcc.gov/cgb/ecfs/>.

This proceeding has been designated as a “permit-but-disclose” proceeding in accordance with the Commission’s *ex parte* rules.⁵⁸ Persons making oral *ex parte* presentations are reminded that memoranda summarizing the presentations must contain summaries of the substance of the presentations and not merely a listing of the subjects discussed. More than a one or two sentence description of the views and arguments presented is generally required. Other rules pertaining to oral and written *ex parte* presentations in permit-but-disclose proceedings are set forth in Section 1.1206(b) of the Commission’s rules.

For further information concerning this proceeding, contact the Wireless Telecommunications Bureau, as listed below:

⁵⁷ See Electronic Filing of Documents in Rulemaking Proceedings, GC Docket No. 97-113, *Report and Order*, 13 FCC Red 11322 (1998).

⁵⁸ 47 C.F.R. §§ 1.1200(a), 1.1206.

Mobility Division, Wireless Telecommunications Bureau

For service rules questions: Erin McGrath or Michael Connelly (legal) or Keith Harper (technical), at
(202) 418-0620

Auctions and Spectrum Access Division, Wireless Telecommunications Bureau

For general auction questions: Roy Knowles or Barbara Sibert at (717) 338-2868
For auctions legal questions: Howard Davenport at (202) 418-0660

- FCC -

Auction No. 69 – 1.4 GHz Bands
DA 06-1016
Attachment A

Market Number	Description	License Number	Frequencies (MHz)	Channel Block	Population	Bandwidth (MHz)	Bidding Units	Upfront Payment	Minimum Opening Bid
MEA Licenses (1390-1392 MHz)									
MEA001	Boston	BA-MEA001	1390-1392		9,229,477	2	92,000	\$92,000	\$92,000
MEA002	New York City	BA-MEA002	1390-1392		30,885,797	2	309,000	\$309,000	\$309,000
MEA003	Buffalo	BA-MEA003	1390-1392		1,507,759	2	15,000	\$15,000	\$15,000
MEA004	Philadelphia	BA-MEA004	1390-1392		8,435,057	2	84,000	\$84,000	\$84,000
MEA005	Washington	BA-MEA005	1390-1392		8,767,100	2	88,000	\$88,000	\$88,000
MEA006	Richmond	BA-MEA006	1390-1392		4,329,258	2	43,000	\$43,000	\$43,000
MEA007	Charlotte-Greensboro-Raleigh	BA-MEA007	1390-1392		11,679,928	2	117,000	\$117,000	\$117,000
MEA008	Atlanta	BA-MEA008	1390-1392		9,198,217	2	92,000	\$92,000	\$92,000
MEA009	Jacksonville	BA-MEA009	1390-1392		2,605,624	2	26,000	\$26,000	\$26,000
MEA010	Tampa-St. Petersburg-Orlando	BA-MEA010	1390-1392		6,802,332	2	68,000	\$68,000	\$68,000
MEA011	Miami	BA-MEA011	1390-1392		6,294,487	2	63,000	\$63,000	\$63,000
MEA012	Pittsburgh	BA-MEA012	1390-1392		4,109,453	2	41,000	\$41,000	\$41,000
MEA013	Cincinnati-Dayton	BA-MEA013	1390-1392		4,517,237	2	45,000	\$45,000	\$45,000
MEA014	Columbus	BA-MEA014	1390-1392		2,349,060	2	23,000	\$23,000	\$23,000
MEA015	Cleveland	BA-MEA015	1390-1392		5,211,808	2	52,000	\$52,000	\$52,000
MEA016	Detroit	BA-MEA016	1390-1392		10,696,754	2	107,000	\$107,000	\$107,000
MEA017	Milwaukee	BA-MEA017	1390-1392		5,023,107	2	50,000	\$50,000	\$50,000
MEA018	Chicago	BA-MEA018	1390-1392		13,667,977	2	137,000	\$137,000	\$137,000
MEA019	Indianapolis	BA-MEA019	1390-1392		3,066,469	2	31,000	\$31,000	\$31,000
MEA020	Minneapolis-St. Paul	BA-MEA020	1390-1392		6,657,036	2	67,000	\$67,000	\$67,000
MEA021	Des Moines-Quad Cities	BA-MEA021	1390-1392		2,879,403	2	29,000	\$29,000	\$29,000
MEA022	Knoxville	BA-MEA022	1390-1392		1,559,410	2	16,000	\$16,000	\$16,000
MEA023	Louisville-Lexington	BA-MEA023	1390-1392		4,349,581	2	43,000	\$43,000	\$43,000
MEA024	Birmingham	BA-MEA024	1390-1392		3,390,273	2	34,000	\$34,000	\$34,000
MEA025	Nashville	BA-MEA025	1390-1392		2,444,643	2	24,000	\$24,000	\$24,000
MEA026	Memphis-Jackson	BA-MEA026	1390-1392		4,192,132	2	42,000	\$42,000	\$42,000
MEA027	New Orleans-Baton Rouge	BA-MEA027	1390-1392		4,762,929	2	48,000	\$48,000	\$48,000
MEA028	Little Rock	BA-MEA028	1390-1392		2,652,998	2	27,000	\$27,000	\$27,000
MEA029	Kansas City	BA-MEA029	1390-1392		3,187,783	2	32,000	\$32,000	\$32,000

Market Number	Description	License Number	Frequencies (MHz)	Channel Block	Population	Bandwidth (MHz)	Bidding Units	Upfront Payment	Minimum Opening Bid
MEA030	St. Louis	BA-MEA030	1390-1392		4,787,224	2	48,000	\$48,000	\$48,000
MEA031	Houston	BA-MEA031	1390-1392		6,626,248	2	66,000	\$66,000	\$66,000
MEA032	Dallas-Fort Worth	BA-MEA032	1390-1392		11,571,024	2	116,000	\$116,000	\$116,000
MEA033	Denver	BA-MEA033	1390-1392		4,978,469	2	50,000	\$50,000	\$50,000
MEA034	Omaha	BA-MEA034	1390-1392		1,773,282	2	18,000	\$18,000	\$18,000
MEA035	Wichita	BA-MEA035	1390-1392		1,175,577	2	12,000	\$12,000	\$12,000
MEA036	Tulsa	BA-MEA036	1390-1392		1,384,426	2	14,000	\$14,000	\$14,000
MEA037	Oklahoma City	BA-MEA037	1390-1392		1,837,958	2	18,000	\$18,000	\$18,000
MEA038	San Antonio	BA-MEA038	1390-1392		3,668,441	2	37,000	\$37,000	\$37,000
MEA039	El Paso-Albuquerque	BA-MEA039	1390-1392		2,519,690	2	25,000	\$25,000	\$25,000
MEA040	Phoenix	BA-MEA040	1390-1392		4,808,845	2	48,000	\$48,000	\$48,000
MEA041	Spokane-Billings	BA-MEA041	1390-1392		2,001,065	2	20,000	\$20,000	\$20,000
MEA042	Salt Lake City	BA-MEA042	1390-1392		3,132,367	2	31,000	\$31,000	\$31,000
MEA043	San Francisco-Oakland-San Jose	BA-MEA043	1390-1392		13,850,204	2	139,000	\$139,000	\$139,000
MEA044	Los Angeles-San Diego	BA-MEA044	1390-1392		22,527,050	2	225,000	\$225,000	\$225,000
MEA045	Portland	BA-MEA045	1390-1392		3,675,513	2	37,000	\$37,000	\$37,000
MEA046	Seattle	BA-MEA046	1390-1392		4,812,965	2	48,000	\$48,000	\$48,000
MEA047	Alaska	BA-MEA047	1390-1392		626,932	2	6,300	\$6,300	\$6,300
MEA048	Hawaii	BA-MEA048	1390-1392		1,211,537	2	12,000	\$12,000	\$12,000
MEA049	Guam-Northern Mariana Islands	BA-MEA049	1390-1392		224,026	2	2,200	\$2,200	\$2,200
MEA050	Puerto Rico-US Virgin Islands	BA-MEA050	1390-1392		3,917,222	2	39,000	\$39,000	\$39,000
MEA051	American Samoa	BA-MEA051	1390-1392		57,291	2	1,000	\$1,000	\$1,000
MEA052	Gulf of Mexico	BA-MEA052	1390-1392		0	2	1,000	\$1,000	\$1,000

Total MEA Licenses

52

2,858,500

\$2,858,500

\$2,858,500

Market Number	Description	License Number	Frequencies (MHz)	Channel Block	Population	Bandwidth (MHz)	Bidding Units	Upfront Payment	Minimum Opening Bid
EAG Licenses (1392-1395 MHz and 1432-1435 MHz, Paired)									
EAG001	Northeast	BB-EAG001-A	1392.0-1393.5 / 1432.0-1433.5	A	44,077,625	3	661,000	\$661,000	\$661,000
EAG001	Northeast	BB-EAG001-B	1393.5-1395.0 / 1433.5-1435.0	B	44,077,625	3	661,000	\$661,000	\$661,000
EAG002	Mid-Atlantic	BB-EAG002-A	1392.0-1393.5 / 1432.0-1433.5	A	47,079,540	3	706,000	\$706,000	\$706,000
EAG002	Mid-Atlantic	BB-EAG002-B	1393.5-1395.0 / 1433.5-1435.0	B	47,079,540	3	706,000	\$706,000	\$706,000
EAG003	Southeast	BB-EAG003-A	1392.0-1393.5 / 1432.0-1433.5	A	51,610,405	3	774,000	\$774,000	\$774,000
EAG003	Southeast	BB-EAG003-B	1393.5-1395.0 / 1433.5-1435.0	B	51,610,405	3	774,000	\$774,000	\$774,000
EAG004	Great Lakes	BB-EAG004-A	1392.0-1393.5 / 1432.0-1433.5	A	44,940,233	3	674,000	\$674,000	\$674,000
EAG004	Great Lakes	BB-EAG004-B	1393.5-1395.0 / 1433.5-1435.0	B	44,940,233	3	674,000	\$674,000	\$674,000
EAG005	Central/Mountain	BB-EAG005-A	1392.0-1393.5 / 1432.0-1433.5	A	49,321,832	3	740,000	\$740,000	\$740,000
EAG005	Central/Mountain	BB-EAG005-B	1393.5-1395.0 / 1433.5-1435.0	B	49,321,832	3	740,000	\$740,000	\$740,000
EAG006	Pacific	BB-EAG006-A	1392.0-1393.5 / 1432.0-1433.5	A	48,590,810	3	729,000	\$729,000	\$729,000
EAG006	Pacific	BB-EAG006-B	1393.5-1395.0 / 1433.5-1435.0	B	48,590,810	3	729,000	\$729,000	\$729,000

Total EAG Licenses

12

8,568,000

\$8,568,000

\$8,568,000

Total Licenses in Auction No. 69

64

11,426,500

\$11,426,500

\$11,426,500

**Auction No. 69 – 1.4 GHz Bands
DA 06-1016
Attachment B**

Formulas to Determine Minimum Acceptable Bids

$$A_i = (C * B_i) + ((1-C) * A_{i-1})$$

$$I_{i+1} = \text{smaller of } ((1 + A_i) * N) \text{ and } M$$

$$X_{i+1} = I_{i+1} * Y_i$$

where,

A_i = activity index for the current round (round i)

C = activity weight factor

B_i = number of bidders submitting bids on the licenses in the current round (round i)

A_{i-1} = activity index from previous round (round i-1), A_0 is 0

I_{i+1} = additional percentage for the next round (round i+1)

N = minimum additional percentage or floor

M = maximum additional percentage or ceiling

X_{i+1} = additional dollar amount

Y_i = provisionally winning bid amount from the current round

Examples

License 1

$$C=0.5, N = 0.1, M = 0.2$$

Round 1 (2 bidders submitting bids, provisionally winning bid = \$1,000,000)

1. Calculation of additional percentage for round 2:

$$A_1 = (0.5 * 2) + (0.5 * 0) = 1$$

$$I_2 = \text{The smaller of } ((1 + 1) * 0.1) = 0.2 \text{ or } 0.2 \text{ (the maximum additional percentage)}$$

2. Calculation of dollar amount associated with the additional percentage for round 2 (using I_2 from above):

$$X_2 = 0.2 * \$1,000,000 = \$200,000$$

3. Minimum acceptable bid amount for round 2 = \$1,200,000

Round 2 (3 bidders submitting bids, provisionally winning bid = \$2,000,000)

1. Calculation of additional percentage for round 3:

$$A_2 = (0.5 * 3) + (0.5 * 1) = 2$$

$$I_3 = \text{The smaller of } ((1 + 2) * 0.1) = 0.3 \text{ or } 0.2 \text{ (the maximum additional percentage)}$$

2. Calculation of dollar amount associated with the additional percentage for round 3 (using I_3 from above):

$$X_3 = 0.2 * \$2,000,000 = \$400,000$$

3. Minimum acceptable bid amount for round 3 = \$2,400,000

Round 3 (1 bidder submitting bids, provisionally winning bid = \$2,400,000)

1. Calculation of additional percentage for round 4:

$$A_3 = (0.5 * 1) + (0.5 * 2) = 1.5$$

$$I_4 = \text{The smaller of } ((1 + 1.5) * 0.1) = 0.25 \text{ or } 0.2 \text{ (the maximum additional percentage)}$$

2. Calculation of dollar amount associated with the additional percentage for round 4 (using I_4 from above):

$$X_4 = 0.2 * \$2,400,000 = \$480,000$$

3. Minimum acceptable bid amount for round 4 = \$2,880,000