



# PUBLIC NOTICE

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## 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

#### Report No. AUC-02-46-A (Auction No. 46)

By this Public Notice, the Wireless Telecommunications Bureau ("Bureau") announces the auction of licenses in the paired 1392-1395 and 1432-1435 MHz bands and in the unpaired 1390-1392 MHz, 1670-1675 MHz, and the 2385-2390 MHz bands ("Auction No. 46") scheduled to commence on September 18, 2002.<sup>1</sup> Auction No. 46 will include 66 licenses. In Auction No. 46, 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). Additionally, 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). Finally, two 5-megahertz blocks of contiguous unpaired spectrum, one in the 1670-1675 MHz band, and one in the 2385-2390 MHz band, will be offered on a nationwide basis.<sup>2</sup> A complete list of licenses available for Auction No. 46 is included as Attachment A.

<sup>1</sup> 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 Bands, GN Docket 02-8, *Report and Order*, FCC 02-152 (rel. May 24, 2002) ("*Service Rules Report and Order*").

<sup>2</sup> Licensees will be required to file an application through ULS to request FAS coordination of any fixed station located within the protection radii of a co-primary Government incumbent or any mobile unit which would operate within the protection radii of the co-primary Government incumbent. *Service Rules Report and Order*, FCC 02-152 at ¶ 163. FAS coordination will be required prior to activation of any fixed or mobile station within the co-primary Government incumbent's protection radii. *Id.*

The licensee in the 2385-2390 MHz band will be required to coordinate fixed and mobile operations within the protection radii of non-Government aeronautical flight test sites with the Aerospace and Flight Test Radio Coordinating Council (AFTRCC) prior to filing an application for an individual station license with the Commission. *Service Rules Report and Order*, FCC 02-152 at ¶¶ 174-175. An individual station license will be issued for each coordinated operation. *Id.*

The following table describes the licenses that will be auctioned:

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
	1670-1675 MHz	5 MHz	unpaired	Nationwide	1
	2385-2390 MHz	5 MHz	unpaired	Nationwide	1

The Commission recently adopted service rules for the paired 1392-1395 and 1432-1435 MHz bands and the unpaired 1390-1392 MHz, 1670-1675 MHz, and 2385-2390 MHz bands.<sup>3</sup> Of the five frequency bands included in Auction No. 46, only the 1432-1435 MHz and 2385-2390 MHz bands are subject to the reimbursement provisions of the National Telecommunications and Information Administration Organization Act (NTIA Organization Act), as added by the Strom Thurmond National Defense Authorization Act for Fiscal Year 1999 (NDAA-99).<sup>4</sup> Section 113(g) of the NTIA Organization Act requires certain non-Government licensees to reimburse incumbent Federal entities for the relocation costs such Federal entities incur.<sup>5</sup> It also requires the Federal entity to notify the National Telecommunications and Information Administration (NTIA) prior to auction of the “marginal costs anticipated to be associated with such relocation or with modifications necessary to accommodate prospective licensees,” and requires NTIA to provide the Commission with that information prior to auction.<sup>6</sup> The NDAA-99 also directs the NTIA and the Commission to develop reimbursement procedures.<sup>7</sup> The Commission’s implementation of NDAA-99 is heavily dependent on reimbursement procedures being promulgated by the NTIA, which have not yet been released.<sup>8</sup> Following the release of such reimbursement procedures, in a separate proceeding the Commission will adopt any additional rules or procedures necessary to supplement NTIA’s reimbursement procedures.

The Balanced Budget Act of 1997 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

<sup>3</sup> See *supra* note 1.

<sup>4</sup> Pub. L. 105-261, 112 Stat. 1920 (1999). See *Service Rules Report and Order*, FCC 02-152 at ¶ 2; Reallocation of the 216-220 MHz, 1390-1392 MHz, 1427-1429 MHz, 1429-1432 MHz, 1432-1435 MHz, 1670-1675 MHz, and 2385-2390 MHz Government Transfer Bands, ET Docket No. 00-221, *Report and Order and Memorandum Opinion and Order*, 17 FCC Rcd 368, 372, ¶ 7 (2002).

<sup>5</sup> 47 U.S.C. § 923(g)(1).

<sup>6</sup> *Id.* In a recent letter from NTIA to the Commission, NTIA reports that there are “no longer any marginal costs subject to mandatory federal reimbursement” for the 1432-1435 MHz band. NTIA noted, however, that the projected costs for the 2385-2390 MHz band “have been more difficult to finalize.” See Letter to Bruce Franca, Acting Chief, Office of Engineering and Technology, Federal Communications Commission, from William T. Hatch, Associate Administrator, Office of Spectrum Management, National Telecommunications and Information Administration, dated December 19, 2001.

<sup>7</sup> 47 U.S.C. § 923(g)(1)(E).

<sup>8</sup> See Mandatory Reimbursement Rules for Frequency Band or Geographic Relocation of Federal Spectrum-Dependent Systems, National Telecommunications and Information, Docket No. 001206341-0341-01, *Notice of Proposed Rule Making*, 66 Fed. Reg. 4771 (Jan. 18, 2001). We previously sought comment on proposed general rules and guidelines to implement NDAA-99. Reallocation of 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 Bands, *Notice of Proposed Rulemaking*, ET Docket No. 00-221, 15 FCC Rcd 22657, 22677-22682, ¶¶ 54-66 (2000) (*Reallocation Notice*).

rules, to permit notice and comment on proposed auction procedures . . . .”<sup>9</sup> Consistent with the provisions of the Balanced Budget Act 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,<sup>10</sup> to seek comment on a variety of auction-specific procedures prior to the start of each auction.<sup>11</sup> We therefore seek comment on the following issues relating to Auction No. 46.

## **I. Auction Structure**

### **A. Simultaneous Multiple Round (SMR) Auction Design**

We propose to award all licenses included in Auction No. 46 in a single, simultaneous multiple-round auction. As described further below, this methodology offers every license for bid at the same time with successive bidding rounds in which bidders may place bids. We seek comment on this proposal.

### **B. Upfront Payments and Initial Maximum Eligibility**

The Bureau has delegated authority and discretion to determine an appropriate upfront payment for each license being auctioned, taking into account such factors as the population in each geographic license area, and the value of similar spectrum.<sup>12</sup> 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 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.<sup>13</sup>

With these guidelines in mind for Auction No. 46, we propose that different formulae be utilized in setting upfront payments for the Nationwide licenses than those used for the MEA and EAG licenses. We anticipate that values between nationwide and regional licenses will vary, and, accordingly propose the following license-by-license formulae<sup>14</sup> for calculating upfront payments:

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<sup>9</sup> See 47 U.S.C. § 309(j) (as amended by Section 3002(a)(E)(i), Balanced Budget Act of 1997, Pub. L. 105-33, 111 Stat. 251 (1997) (“Balanced Budget Act”).

<sup>10</sup> See Amendment of Part 1 of the Commission’s Rules — Competitive Bidding Proceeding, WT Docket No. 97-82, *Order, Memorandum Opinion and Order, and Notice of Proposed Rule Making*, 12 FCC Rcd 5686, 5697, ¶ 16 (1997) (“*Part 1 Order*”) (“We also clarify that pursuant to Section 0.131 of our rules, the Chief, Wireless Telecommunications Bureau, has delegated authority to implement all of the Commission’s rules pertaining to auctions procedures.”).

<sup>11</sup> 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, WT Docket No. 97-82, ET Docket No. 94-32, *Third Report and Order and Second Further Notice of Proposed Rule Making*, 13 FCC Rcd 374, 448, ¶ 124 (1998) (“*Part 1 Third Report and Order*”). The Commission directed 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 reserve prices, minimum accepted 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. *Id.* at ¶ 125.

<sup>12</sup> 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.

<sup>13</sup> See Implementation of Section 309(j) of the Communications Act - Competitive Bidding, PP Docket No. 93-253, *Second Report and Order*, 9 FCC Rcd 2348, 2378-79, ¶¶ 171-176 (1994).

<sup>14</sup> All population figures are from the 4/1/90 U.S. Census, U.S. Department of Commerce, Bureau of the Census. Results below \$10,000 are rounded to the nearest hundred; results above \$10,000 are rounded to the nearest thousand.

For MEA and EAG Licenses:

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

For Nationwide Licenses:

\$0.01 \* MHz \* License Area Population with a minimum of \$1,000 per license.

Accordingly, we list all licenses, including the related license area population and proposed upfront payment for each, in Attachment A. We seek comment on this proposal.

We further propose that the amount of the upfront payment submitted by a bidder will determine the number of bidding units on which a bidder may place bids. This limit is a bidder's "maximum initial eligibility." Each license is assigned a specific number of bidding units equal to the upfront payment listed in Attachment A, on a bidding unit per dollar basis. This number does not change as prices rise during the auction. A bidder's upfront payment is not attributed to specific licenses. Rather, a bidder may place bids on any combination of licenses as long as the total number of bidding units associated with those licenses does not exceed its maximum initial eligibility. Eligibility cannot be increased during the auction. Thus, in calculating its upfront payment amount, an applicant must determine the **maximum** number of bidding units it may wish to bid on (or hold high bids on) in any single round, and submit an upfront payment covering that number of bidding units. We seek comment on this proposal.

**C. Activity Rules**

In order to ensure that the auction closes within a reasonable period of time, an activity rule requires bidders to bid actively on a percentage of their maximum bidding eligibility during each round of the auction rather than wait until the end to participate. A bidder that does not satisfy the activity rule will either lose bidding eligibility in the next round or must use an activity rule waiver (if any remain).

We propose to divide the auction into three stages, each characterized by an increased activity requirement. The auction will start in Stage One. We propose that the auction generally will advance to the next stage (i.e., from Stage One to Stage Two, and from Stage Two to Stage Three) when the auction activity level, as measured by the percentage of bidding units receiving new high bids, is approximately twenty percent or below for three consecutive rounds of bidding. However, we further propose that the Bureau retain 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, the number of new bids, and the percentage increase in revenue.<sup>15</sup> We seek comment on these proposals.

For Auction No. 46, 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 eligibility is required to be active on licenses representing at least 80 percent of its current bidding eligibility. Failure to maintain the requisite 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, reduced eligibility for the next round will be calculated by multiplying the current round activity by five-fourths (5/4).

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<sup>15</sup> In the event that total upfront payments for the auction do not purchase at least as many bidding units of eligibility as there are bidding units available in the auction, we may consider the percentage of bidding units of the total eligibility receiving new high bids, not the percentage of bidding units available in the auction receiving new high bids, when monitoring activity for determining when to change stages.

**Stage Two:** In each round of the second stage, a bidder desiring to maintain its current eligibility is required to be active on 90 percent of its current bidding eligibility. During Stage Two, reduced eligibility for the next round will be calculated by multiplying the current round activity by ten-ninths (10/9).

**Stage Three:** In each round of the third stage, a bidder desiring to maintain its current eligibility is required to be active on 98 percent of its current bidding eligibility. In this final stage, reduced eligibility for the next round will be calculated by multiplying the current round activity by fifty/forty-ninths (50/49).

We seek comment on these proposals. If commenters believe that these activity rules should be changed, they 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.

#### **D. Activity Rule Waivers and Reducing Eligibility**

Use of an activity rule waiver preserves the bidder's current bidding 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 and not to a particular license. Activity waivers are principally a mechanism for auction participants to avoid the loss of auction eligibility in the event that exigent circumstances prevent them from placing a bid in a particular round.

The FCC Automated Auction System assumes that bidders with insufficient activity would prefer to use an activity rule waiver (if available) rather than lose bidding eligibility. Therefore, the system will automatically apply a waiver (known as an "automatic waiver") at the end of any bidding period where a bidder's activity level is below the minimum required unless: (1) there are no activity rule waivers available; or (2) the bidder overrides the automatic application of a waiver by reducing eligibility, thereby meeting the minimum requirements.

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 period by using the reduce eligibility function in the bidding system. In this case, the bidder's eligibility is permanently reduced to bring the bidder into compliance with the activity rules as described above. Once eligibility has been reduced, a bidder will not be permitted to regain its lost bidding eligibility.

A bidder may proactively use an activity rule waiver as a means to keep the auction open without placing a bid. If a bidder submits a proactive waiver (using the proactive waiver function in the bidding system) during a bidding period in which no bids or withdrawals are submitted, the auction will remain open and the bidder's eligibility will be preserved. An automatic waiver invoked in a round in which there are no new valid bids or withdrawals will not keep the auction open.

We propose that each bidder be provided with five 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.

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

For Auction No. 46, 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 reason that affects the fair and efficient conduct of competitive bidding.<sup>16</sup> In such cases, the Bureau, in its sole discretion, may elect to resume the auction starting from the beginning of the current round, resume

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<sup>16</sup> See 47 C.F.R. § 1.2104(i).

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.

## **II. Bidding Procedures**

### **A. Round Structure**

The Commission will conduct Auction No. 46 over the Internet. Telephonic Bidding will also be available. As a contingency, the FCC Wide Area Network, which requires access to a 900 number telephone service, will be available as well. Full information regarding how to establish such a connection, and related charges, will be provided in the public notice announcing details of auction procedures.

The initial bidding schedule will be announced in a public notice to be released at least one week before the start of the auction, and will be included in the registration mailings. The simultaneous multiple round format will consist of sequential bidding rounds, each followed by the release of round results. Details regarding the location and format of round results will be included in the same public notice.

The Bureau has 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. 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 the bidding activity level and other factors. We seek comment on this proposal.

### **B. Reserve Price or Minimum Opening Bid**

The Balanced Budget Act calls upon the Commission to prescribe methods for establishing a reasonable reserve price or a minimum opening bid when FCC licenses are subject to auction unless the Commission determines that a reserve price or minimum opening bid is not in the public interest.<sup>17</sup> Consistent with this mandate, the Commission has directed the Bureau to seek comment on the use of a minimum opening bid and/or reserve price prior to the start of each auction.<sup>18</sup>

Normally, a reserve price is an absolute minimum price below which an item will not be sold in a given auction. Reserve prices can be either published or unpublished. A minimum opening bid, on the other hand, 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. Also, the auctioneer often has the discretion to lower the minimum opening bid amount later in the auction. It is also possible for the minimum opening bid and the reserve price to be the same amount.

In light of the Balanced Budget Act's requirements, the Bureau proposes to establish minimum opening bids for Auction No. 46. The Bureau believes a minimum opening bid, which has been utilized in other auctions, is an effective bidding tool.<sup>19</sup>

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<sup>17</sup> See 47 U.S.C. § 309(j) (as amended by Balanced Budget Act, Section 3002(a)). The Commission's authority to establish a reserve price or minimum opening bid is set forth in 47 C.F.R. § 1.2104(c) and (d).

<sup>18</sup> See *Part 1 Third Report and Order*, 13 FCC Rcd at 454-455, ¶ 141.

<sup>19</sup> 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).

For Auction No. 46, the Commission proposes that different formulae be utilized in setting minimum opening bids for Nationwide licenses that those used for MEA and EAG licenses. Specifically, the following license-by-license formulae<sup>20</sup> for calculating minimum opening bids are as follows:

For MEA and EAG Licenses:

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

For Nationwide Licenses:

$\$0.01 * \text{MHz} * \text{License Area Population}$  with a minimum of \$1,000 per license.

The specific minimum opening bid for each license available in Auction No. 46 is set forth in Attachment A herein. Comment is sought on this proposal.

If commenters believe that these minimum opening bids will result in substantial numbers of unsold licenses, or are not reasonable amounts, or should instead operate as reserve prices, 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 levels or formulas. In establishing the minimum opening bids, 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 geographic service areas, issues of interference with other spectrum bands and any other relevant factors that could reasonably have an impact on valuation of the spectrum in the 1392-1395 and 1432-1435 MHz, 1390-1392 MHz, 1670-1675 MHz, and 2385-2390 MHz bands. Alternatively, comment is sought on whether, consistent with the Balanced Budget Act, the public interest would be served by having no minimum opening bid or reserve price.

### **C. Minimum Acceptable Bids and Bid Increments**

In each round, eligible bidders will be able to place bids on a given license in any of nine different amounts.<sup>21</sup> The Automated Auction System interface will list the nine acceptable bid amounts for each license.

Once there is a standing high bid on a license, the Automated Auction System will calculate a minimum acceptable bid for that license for the following round, as described below. The difference between the minimum acceptable bid and the standing high bid for each license will define the **bid increment**. The nine acceptable bid amounts for each license consist of the minimum acceptable bid (the standing high bid plus one bid increment) and additional amounts calculated using multiple bid increments (i.e., the second bid amount equals the standing high bid plus two times the bid increment, the third bid amount equals the standing high bid plus three times the bid increment, etc.).

Until a bid has been placed on a license, the minimum acceptable bid for that license will be equal to its minimum opening bid. The additional bid amounts for licenses that have not yet received a bid will be calculated differently, as explained below.

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<sup>20</sup> All population figures are from the 4/1/90 U.S. Census, U.S. Department of Commerce, Bureau of the Census. Results below \$10,000 are rounded to the nearest hundred; results above \$10,000 are rounded to the nearest thousand.

<sup>21</sup> Bidders must have sufficient eligibility to place a bid on the particular license. See Section I(B) (“Upfront Payments and Initial Maximum Eligibility”), *supra*.

For Auction No. 46, we propose to calculate minimum acceptable bids by using a smoothing methodology, as we have done in several other auctions. The smoothing formula calculates minimum acceptable bids by first calculating a **percentage increment**, not to be confused with the **bid increment**. The percentage increment for each license is based on bidding activity on that license in all prior rounds; therefore, a license which has received many bids throughout the auction will have a higher percentage increment than a license which has received few bids.

The calculation of the percentage increment used to determine the minimum acceptable bids for each license for the next round is made at the end of each round. The computation is 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. The activity index at the start of the auction (round 0) will be set at 0. The current activity index is equal to a weighting factor times the number of new bids received on the license in that round plus one minus the weighting factor times the activity index from the prior round. The percentage increment is then calculated as the smaller of (a) a minimum percentage increment multiplied by one plus the activity index and (b) a specified maximum percentage increment. The Commission will initially set the weighting factor at 0.5, the minimum percentage increment at 0.1 (10%), and the maximum percentage increment at 0.2 (20%). Hence, at these initial settings, the percentage increment will fluctuate between 10% and 20% depending upon the level of activity for the license.

### Equations

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

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

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

where,

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

C = activity weight factor

$B_i$  = number of bids in the current round (round i)

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

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

N = minimum percentage increment or percentage increment floor

M = maximum percentage increment or percentage increment ceiling

$X_{i+1}$  = dollar amount associated with the percentage increment

$Y_i$  = high bid from the current round

Under the smoothing methodology, once a bid has been received on a license, the minimum acceptable bid for that license in the following round will be the high bid from the current round plus the dollar amount associated with the percentage increment, with the result rounded to the nearest thousand if it is over ten thousand or to the nearest hundred if it is under ten thousand.

### Examples

License 1

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

Round 1 (2 new bids, high bid = \$1,000,000)

1. Calculation of percentage increment for round 2 using the smoothing formula:

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

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

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

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

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

Round 2 (3 new bids, high bid = \$2,000,000)

1. Calculation of percentage increment for round 3 using the smoothing formula:

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

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

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

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

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

Round 3 (1 new bid, high bid = \$2,400,000)

1. Calculation of percentage increment for round 4 using the smoothing formula:

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

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

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

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

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

As stated above, until a bid has been placed on a license, the minimum acceptable bid for that license will be equal to its minimum opening bid. The additional bid amounts are calculated using the difference between the minimum opening bid times one plus the minimum percentage increment, rounded as described above, and the minimum opening bid. That is,  $I = (\text{minimum opening bid})(1 + N)\{\text{rounded}\} - (\text{minimum opening bid})$ . Therefore, when  $N$  equals 0.1, the first additional bid amount will be approximately ten percent higher than the minimum opening bid; the second, twenty percent; the third, thirty percent; etc.

In the case of a license for which the standing high bid has been withdrawn,<sup>22</sup> the minimum acceptable bid will equal the second highest bid received for the license. The additional bid amounts are calculated using the difference between the second highest bid times one plus the minimum percentage increment, rounded, and the second highest bid.

The Bureau retains the discretion to change the minimum acceptable bids and bid increments if it determines that circumstances so dictate. The Bureau will do so by announcement in the Automated Auction System. We seek comment on these proposals.

#### **D. High Bids**

At the end of a bidding round, the Automated Auctions System will determine the high bid on each license. In the event of identical high bids on a license in a given round (*i.e.*, tied bids), we propose to use a random number generator to select a high bid from among the tied bids. Remaining bidders will be able to submit higher bids in subsequent rounds.

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<sup>22</sup> See Section II(E) "Information Regarding Bid Withdrawal and Bid Removal," *infra*.

A high bid will remain the high bid until there is a higher bid on the same license at the close of a subsequent round. A high bid from a previous round is sometimes referred to as a “standing high bid.” Bidders are reminded that standing high bids confer activity credit.<sup>23</sup>

#### **E. Information Regarding Bid Withdrawal and Bid Removal**

For Auction No. 46, we propose the following bid removal and bid withdrawal procedures. Before the close of a bidding period, a bidder has the option of removing any bid placed in that round. By using the remove selected bids function in the bidding system, a bidder may effectively “unsubmit” any bid placed within that round. 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 high bidder may withdraw its standing high bids from previous rounds using the withdraw function in the bidding system. A high bidder that withdraws its standing high bid from a previous round is subject to the bid withdrawal payment provisions of the Commission rules.<sup>24</sup> 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 efficient backup strategies as information becomes available during the course of an auction. 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 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.<sup>25</sup>

Applying this reasoning, we propose to limit each bidder in Auction No. 46 to withdrawing standing high 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 would likely encourage insincere bidding or the use of withdrawals for anti-competitive purposes. The two rounds in which withdrawals are utilized will be at the bidder’s discretion; withdrawals otherwise must be in accordance with the Commission’s rules. There is no limit on the number of standing high bids that may be withdrawn in either of the rounds in which withdrawals are utilized. Withdrawals will remain subject to the bid withdrawal payment provisions specified in the Commission’s rules. We seek comment on this proposal.

#### **F. 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.”<sup>26</sup> For Auction No. 46, the Bureau proposes to employ a simultaneous stopping rule approach. A simultaneous stopping rule means that all licenses remain open until bidding closes simultaneously on all licenses.

Bidding will close simultaneously on all licenses after the first round in which no new acceptable bids, proactive waivers, or withdrawals are received. Thus, unless circumstances dictate otherwise, bidding will remain open on all licenses until bidding stops on every license.

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<sup>23</sup> See Section I.C. “Activity Rules,” *supra*.

<sup>24</sup> See 47 C.F.R. §§ 1.2104(g), 1.2109.

<sup>25</sup> *Part 1 Third Report and Order*, 13 FCC Rcd at 460, ¶ 150.

<sup>26</sup> See 47 C.F.R. § 1.2104(e).

However, the Bureau proposes to retain the discretion to exercise any of the following options during Auction No. 46:

1. Utilize 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 submits a proactive waiver, withdrawal, or a new bid on any license on which it is not the standing high bidder. Thus, absent any other bidding activity, a bidder placing a new bid on a license for which it is the standing high bidder would not keep the auction open under this modified stopping rule. The Bureau further seeks comment on whether this modified stopping rule should be used at any time or only in stage three of the auction.
2. Keep the auction open even if no new acceptable bids or proactive waivers are submitted and no previous high bids are withdrawn. In this event, the effect will be the same as if a bidder had submitted a proactive waiver. The activity rule, therefore, will apply as usual, and a bidder with insufficient activity will either lose bidding eligibility or use a remaining activity rule 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) only for licenses on which the high bid increased in at least one of a specified preceding number of rounds.

The Bureau proposes to exercise these options only in certain circumstances, such as, 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 increasing the amount of the minimum bid increments for the limited number of licenses where there is still a high level of bidding activity. We seek comment on these proposals.

### **III. Conclusion**

Comments are due on or before June 6, 2002, and reply comments are due on or before June 13, 2002. Because of the disruption of regular mail and other deliveries in Washington, DC, the Bureau requires that all comments and reply comments be filed electronically. Comments and reply comments must be sent by electronic mail to the following address: [auction46@fcc.gov](mailto:auction46@fcc.gov).<sup>27</sup> The electronic mail containing the comments or reply comments must include a subject or caption referring to Auction No. 46 Comments. The Bureau requests that parties format any attachments to electronic mail as Adobe<sup>®</sup> Acrobat<sup>®</sup> (pdf) or Microsoft<sup>®</sup> Word documents. Copies of comments and reply comments will be available for public inspection during regular business hours in the FCC Public Reference Room, Room CY-A257, 445 12th Street, SW, Washington, DC 20554.

**In addition, the Bureau requests that commenters fax a courtesy copy of their comments and reply comments to the attention of Kathryn Garland at (717) 338-2850.**

This proceeding has been designated as a “permit-but-disclose” proceeding in accordance with the Commission’s ex parte rules.<sup>28</sup> 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.<sup>29</sup> Other rules pertaining to oral and written ex parte

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<sup>27</sup> Comments and reply comments in response to this Public Notice may not be filed using the Commission’s Electronic Comment Filing System, which is used for the Commission’s docketed rule making proceedings.

<sup>28</sup> See 47 C.F.R. §§ 1.1200(a), 1.1206.

<sup>29</sup> See 47 C.F.R. § 1.1206(b).

presentations in permit-but-disclose proceedings are set forth in Section 1.1206(b) of the Commission's rules.<sup>30</sup>

For further information concerning this proceeding, contact the Auctions and Industry Analysis Division, Wireless Telecommunications Bureau, as listed below:

For legal questions: David Hu (202) 418-0660

For general auction questions: Lyle Ishida (202) 418-0660  
Lisa Stover (717) 338-2888

For service rule questions: Brian Marenco (202) 418-0838

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<sup>30</sup> *Id.*

Auction No. 46  
Attachment A  
DA 02-1257

Market Number	Description	License Number	Frequencies	Channel Block	Population	Bandwidth (MHz)	Bidding Units	Upfront Payments	Minimum Opening Bid
<b>MEA Licenses (1390-1392 MHz)</b>									
MEA001	Boston	WSMEA001	1390-1392		8,672,944	2	87,000	\$87,000	\$87,000
MEA002	New York City	WSMEA002	1390-1392		29,027,017	2	290,000	\$290,000	\$290,000
MEA003	Buffalo	WSMEA003	1390-1392		1,529,735	2	15,000	\$15,000	\$15,000
MEA004	Philadelphia	WSMEA004	1390-1392		7,942,319	2	79,000	\$79,000	\$79,000
MEA005	Washington	WSMEA005	1390-1392		7,745,433	2	77,000	\$77,000	\$77,000
MEA006	Richmond	WSMEA006	1390-1392		3,897,805	2	39,000	\$39,000	\$39,000
MEA007	Charlotte-Greensboro-Greenville-Raleigh	WSMEA007	1390-1392		9,825,342	2	98,000	\$98,000	\$98,000
MEA008	Atlanta	WSMEA008	1390-1392		7,341,931	2	73,000	\$73,000	\$73,000
MEA009	Jacksonville	WSMEA009	1390-1392		2,168,038	2	22,000	\$22,000	\$22,000
MEA010	Tampa-St. Petersburg-Orlando	WSMEA010	1390-1392		5,528,763	2	55,000	\$55,000	\$55,000
MEA011	Miami	WSMEA011	1390-1392		5,025,606	2	50,000	\$50,000	\$50,000
MEA012	Pittsburgh	WSMEA012	1390-1392		4,148,373	2	41,000	\$41,000	\$41,000
MEA013	Cincinnati-Dayton	WSMEA013	1390-1392		4,325,459	2	43,000	\$43,000	\$43,000
MEA014	Columbus	WSMEA014	1390-1392		2,100,613	2	21,000	\$21,000	\$21,000
MEA015	Cleveland	WSMEA015	1390-1392		5,077,339	2	51,000	\$51,000	\$51,000
MEA016	Detroit	WSMEA016	1390-1392		10,041,377	2	100,000	\$100,000	\$100,000
MEA017	Milwaukee	WSMEA017	1390-1392		4,634,011	2	46,000	\$46,000	\$46,000
MEA018	Chicago	WSMEA018	1390-1392		12,495,510	2	125,000	\$125,000	\$125,000
MEA019	Indianapolis	WSMEA019	1390-1392		2,753,182	2	28,000	\$28,000	\$28,000
MEA020	Minneapolis-St. Paul	WSMEA020	1390-1392		6,018,051	2	60,000	\$60,000	\$60,000
MEA021	Des Moines-Quad Cities	WSMEA021	1390-1392		2,733,385	2	27,000	\$27,000	\$27,000
MEA022	Knoxville	WSMEA022	1390-1392		1,364,665	2	14,000	\$14,000	\$14,000
MEA023	Louisville-Lexington-Evansville	WSMEA023	1390-1392		4,059,317	2	41,000	\$41,000	\$41,000
MEA024	Birmingham	WSMEA024	1390-1392		3,082,737	2	31,000	\$31,000	\$31,000
MEA025	Nashville	WSMEA025	1390-1392		2,002,283	2	20,000	\$20,000	\$20,000
MEA026	Memphis-Jackson	WSMEA026	1390-1392		3,850,949	2	39,000	\$39,000	\$39,000
MEA027	New Orleans-Baton Rouge	WSMEA027	1390-1392		4,310,367	2	43,000	\$43,000	\$43,000
MEA028	Little Rock	WSMEA028	1390-1392		2,309,255	2	23,000	\$23,000	\$23,000
MEA029	Kansas City	WSMEA029	1390-1392		2,903,432	2	29,000	\$29,000	\$29,000
MEA030	St. Louis	WSMEA030	1390-1392		4,436,804	2	44,000	\$44,000	\$44,000
MEA031	Houston	WSMEA031	1390-1392		5,513,511	2	55,000	\$55,000	\$55,000
MEA032	Dallas-Fort Worth	WSMEA032	1390-1392		9,575,762	2	96,000	\$96,000	\$96,000
MEA033	Denver	WSMEA033	1390-1392		3,952,116	2	40,000	\$40,000	\$40,000
MEA034	Omaha	WSMEA034	1390-1392		1,638,440	2	16,000	\$16,000	\$16,000
MEA035	Wichita	WSMEA035	1390-1392		1,094,213	2	11,000	\$11,000	\$11,000

Auction No. 46  
Attachment A  
DA 02-1257

Market Number	Description	License Number	Frequencies	Channel Block	Population	Bandwidth (MHz)	Bidding Units	Upfront Payments	Minimum Opening Bid
MEA036	Tulsa	WSMEA036	1390-1392		1,259,636	2	13,000	\$13,000	\$13,000
MEA037	Oklahoma City	WSMEA037	1390-1392		1,695,572	2	17,000	\$17,000	\$17,000
MEA038	San Antonio	WSMEA038	1390-1392		2,944,684	2	29,000	\$29,000	\$29,000
MEA039	El Paso-Albuquerque	WSMEA039	1390-1392		2,114,287	2	21,000	\$21,000	\$21,000
MEA040	Phoenix	WSMEA040	1390-1392		3,458,935	2	35,000	\$35,000	\$35,000
MEA041	Spokane-Billings	WSMEA041	1390-1392		1,727,716	2	17,000	\$17,000	\$17,000
MEA042	Salt Lake City	WSMEA042	1390-1392		2,444,454	2	24,000	\$24,000	\$24,000
MEA043	San Francisco-Oakland-San Jose	WSMEA043	1390-1392		11,956,167	2	120,000	\$120,000	\$120,000
MEA044	Los Angeles-San Diego	WSMEA044	1390-1392		19,333,536	2	193,000	\$193,000	\$193,000
MEA045	Portland	WSMEA045	1390-1392		2,999,719	2	30,000	\$30,000	\$30,000
MEA046	Seattle	WSMEA046	1390-1392		3,990,811	2	40,000	\$40,000	\$40,000
MEA047	Alaska	WSMEA047	1390-1392		550,043	2	5,500	\$5,500	\$5,500
MEA048	Hawaii	WSMEA048	1390-1392		1,108,229	2	11,000	\$11,000	\$11,000
MEA049	Guam and the Northern Mariana Islands	WSMEA049	1390-1392		176,497	2	1,800	\$1,800	\$1,800
MEA050	Puerto Rico and U.S. Virgin Islands	WSMEA050	1390-1392		3,623,846	2	36,000	\$36,000	\$36,000
MEA051	American Samoa	WSMEA051	1390-1392		46,773	2	1,000	\$1,000	\$1,000
MEA052	Gulf of Mexico	WSMEA052	1390-1392		0	2	1,000	\$1,000	\$1,000

**Total MEA Licenses**

**2,524,300    \$2,524,300    \$2,524,300**

**EAG Licenses (1392-1395 MHz and 1432-1435 MHz, Paired)**

EAG001	Northeast	WSEAG001A	1392.0-1393.5 / 1432.0-1433.5	A	41,567,654	3	624,000	\$624,000	\$624,000
EAG001	Northeast	WSEAG001B	1393.5-1395.0 / 1433.5-1435.0	B	41,567,654	3	624,000	\$624,000	\$624,000
EAG002	Mid-Atlantic	WSEAG002A	1392.0-1393.5 / 1432.0-1433.6	A	42,547,218	3	638,000	\$638,000	\$638,000
EAG002	Mid-Atlantic	WSEAG002B	1393.5-1395.0 / 1433.5-1435.1	B	42,547,218	3	638,000	\$638,000	\$638,000
EAG003	Southeast	WSEAG003A	1392.0-1393.5 / 1432.0-1433.7	A	44,516,919	3	668,000	\$668,000	\$668,000
EAG003	Southeast	WSEAG003B	1393.5-1395.0 / 1433.5-1435.2	B	44,516,919	3	668,000	\$668,000	\$668,000
EAG004	Great Lakes	WSEAG004A	1392.0-1393.5 / 1432.0-1433.8	A	41,560,906	3	623,000	\$623,000	\$623,000
EAG004	Great Lakes	WSEAG004B	1393.5-1395.0 / 1433.5-1435.3	B	41,560,906	3	623,000	\$623,000	\$623,000

Auction No. 46  
Attachment A  
DA 02-1257

Market Number	Description	License Number	Frequencies	Channel Block	Population	Bandwidth (MHz)	Bidding Units	Upfront Payments	Minimum Opening Bid
EAG005	Central/Mountain	WSEAG005A	1392.0-1393.5 / 1432.0-1433.9	A	40,926,336	3	614,000	\$614,000	\$614,000
EAG005	Central/Mountain	WSEAG005B	1393.5-1395.0 / 1433.5-1435.4	B	40,926,336	3	614,000	\$614,000	\$614,000
EAG006	Pacific	WSEAG006A	1392.0-1393.5 / 1432.0-1433.10	A	41,437,956	3	622,000	\$622,000	\$622,000
EAG006	Pacific	WSEAG006B	1393.5-1395.0 / 1433.5-1435.5	B	41,437,956	3	622,000	\$622,000	\$622,000
<b>Total EAG Licenses</b>							<b>7,578,000</b>	<b>\$7,578,000</b>	<b>\$7,578,000</b>
<b>Nationwide Licenses (1670.0-1675.0 MHz and 2385.0-2390.0MHz), Unpaired</b>									
NWA001	Nationwide	WSNWA001	1670.0-1675.0		252,556,989	5	12,628,000	\$12,628,000	\$12,628,000
NWA002	Nationwide	WSNWA002	2385.0-2390.0		252,556,989	5	12,628,000	\$12,628,000	\$12,628,000
<b>Total Nationwide Licenses</b>							<b>25,256,000</b>	<b>\$25,256,000</b>	<b>\$25,256,000</b>
<b>Total for Auction No. 46</b>							<b>35,358,300</b>	<b>\$35,358,300</b>	<b>\$35,358,300</b>