

Wednesday, June 7, 2000

Dear Evan and Walt:

The paper Rakesh Vohra and I sent around a couple of weeks ago, presenting a “bids-and-offers” procedure for package bidding, was an attempt both to lay out the bids-and-offers idea and to show how a complete implementation of the idea could be carried out.

We’ve responded to a number of follow-up queries concerning the procedure, and are a bit concerned that, with respect to helping the FCC, we might have tried to accomplish too much at once (by including the full implementation in our proposal). Since the bids-and-offers concept stands independent of the specific implementation, during this comment period I’d like to clarify the basic underlying idea for you.

When bidders are allowed only to bid on individual licenses, the question of whether to retain bids not currently part of the provisionally-winning set of bids doesn’t arise. The FCC has properly pointed out that, when (multi-license) package bids are permitted, the retention of not-currently-provisionally-winning bids is desirable, but gives rise to new problems (such as the “exclusive-or” problem, or subsequent problems involving dealing with bid withdrawals).

Our suggestion is simply to permit two different types of bids: those which are permanently retained as long as they might become part of a future provisionally-winning set of bids (we call these “bids”), and those which are retained only as long as either of two situations exists – (a) the bid is part of the current provisionally-winning set of bids, or (b) the bid could become part of a future provisionally-winning set of bids, and the bidder chooses to leave the bid on the table (we call these “offers”). In other words, an offer which is not part of the current provisionally-winning set of bids can be withdrawn by the bidder at no penalty. [In our original proposal, we suggested a fixed lifetime for non-provisionally-winning offers, but this was in the context of allowing a period of continuous-time open bid submission. With fixed rounds of sealed bids, as in the SMR procedure, we would suggest allowing offers to be retracted during an offer-withdrawal period after the close of each round, perhaps with a prespecified minimum lifespan (i.e., several bidding rounds) before a particular offer can be withdrawn.]

Obviously, offers provide bidders with more flexibility than do bids. In order to make both bid and offer submissions worthy of bidder consideration, we make it “easier” to submit a bid, i.e., it must merely top the currently-high bid (or collection of bids) on the same package: Bids can creep up slowly, by minimum increments. An offer, on the other hand, must satisfy a more stringent requirement: It must bear at least an allocated share of the minimum total bid increment (across a set of bids and offers on disjoint packages) needed to bring that offer into a new provisionally-winning set of bids. [Both bids and offers count towards “activity”.]

By allowing both bids and offers, the FCC would in a single move (1) help bidders solve the threshold problem, (2) dispose of the need for more complex bid-withdrawal procedures, and (3) provide bidders with a way to deal with the “exclusive-or” problem.

(1): As illustrated in more detail in our paper, a group of bidders can jointly overcome the threshold problem only if at least one member of the group is willing to “offer” to bear at least its allocated share of the “threshold burden.” Rather than ratcheting a bid up slowly from round to round, hoping for matching responses from other bidders, a bidder can put an offer on the table which states, in essence, “I’m willing to raise the price of this package substantially, if others are willing to help bear the threshold burden.” If others don’t respond in the near future, the bidder is free to withdraw the offer and turn its attention elsewhere.

In addition, more-than-minimal offers (i.e., offers which bear more than their allocated share of the threshold burden) serve to reduce the minimum-acceptable-offer level for other bidders, facilitating the assembly of a set of bids and offers that together become provisionally-winning bids.

(2): Since bids cannot be withdrawn, there is always a “floor” price on every allowed package. Since offers that are part of the current provisionally-winning set of bids cannot be withdrawn, there is never the need for the FCC to step in to “fill a hole.”

(3): The “exclusive-or” problem – which is, of course, only a problem when some multi-license packages are allowed and others are not – is lessened by permitting bidders who face that problem to “move” their offers from one license (or set of licenses) to a substitute at no cost. However, the price of their “freedom” is that they must bid (via offers) somewhat more aggressively than they otherwise could (via bids). Of course, the associated complications of dealing with “either-or” bid submissions, as laid out in the FCC proposal, are avoided completely. In particular, since only the higher of the currently-high bid and currently-high offer on a package could become part of a provisionally-winning set of bids, only a single computational pass through the data is needed to search for a new provisionally-winning set of bids.

In conclusion, I repeat a comment from the paper we sent out: When only bids on single-license packages are allowed, bids and offers are indistinguishable – they face the same minimum-submission-level requirements, and have identical lifespans. In other words, what we propose is not a variation of current procedures, but simply a particular extension of those procedures to package bidding. In this way, the proposal passes the “transparency” test.

Please don’t hesitate to contact us if you’d like further clarification of any issues.

Best regards, Bob Weber

Cc: Rana Shuler