

**Reply Comment of the Staff of the Bureau of Economics
of the Federal Trade Commission¹**

The staff of the Bureau of Economics of the Federal Trade Commission (FTC) appreciates this opportunity to provide its views on the competition issues raised in the Federal Communications Commission (FCC) Public Notice regarding the auction of advanced wireless services licenses.² In this public notice, the FCC has outlined a number of potential changes to the rules previously employed in wireless spectrum auctions.

This comment focuses on the rule changes most relevant to the mission and experience of the FTC, which are those relating to information disclosure during the auction and how this disclosure relates to the competitive environment in the auction. Our experience in competition issues and our

policies;⁶ competition, rate deregulation, and cable television service;⁷ common ownership of cable systems and national television networks;⁸ the “must carry” rules applied to cable television systems;⁹ the rules regarding the transfer of broadcast licenses;¹⁰ network ownership of financial interests and syndication rights;¹¹ spectrum allocation and standards for digital audio broadcasting;¹² the regulation of “900” telephone number services;¹³ and the development and deployment of advanced wireless services by local exchange carriers.¹⁴ Moreover, the FTC has reviewed proposed mergers involving commmergers involving f(g0.0007 Tw 10 7.98 131.82 616.88 Tm(9)TjETtion of – T598.4

self-created packages of some subset of all the licenses to be sold in the auction. Because the issues surrounding package bidding are very complicated, requiring extended discussion and analysis, and are less related to the mission of the FTC, we will limit our comments to the rules regarding information disclosure.

In previous spectrum auctions, the FCC has typically revealed some of the content of bidder applications before bidding commences; most notably the licenses selected by each of the bidders. Throughout the auctions, the identity of each bidder and its bid for each license have generally been released after every bidding round.¹⁵ The FCC proposes “not to reveal until the close of the auction: (1) bidders’ license selections on their short form applications and the amount of their upfront payments; (2) the amounts of non-provisionally winning bids and the identities of bidders placing those bids; and (3) the identities of bidders making provisionally winning bids.”¹⁶ After each bidding round, the FCC would reveal the number of bidders who placed bids for each license and the amount of the current highest bid.

auction that is targeted at a bidder who deviates from a collusive strategy, and may also make the deviation more difficult to detect. These two effects are often postulated to make a collusive agreement more difficult to maintain.²¹ For instance, collusion facilitated through the types of bid signaling, retaliatory bidding, and bid jumping strategies found in the empirical literature on previous FCC auctions would not be feasible under these new rules. While it is perfectly reasonable to adjust the rules to dissuade observed suspicious behavior, it should be noted that some of the collusive strategies detailed in the theoretical literature do not depend on being able to identify bidders.²²

Also noteworthy is that the information being withheld could potentially be useful to bidders in ways that do not relate to any sort of anti-competitive behavior, as pointed out in the FCC Public Notice and numerous submitted comments. For instance, the value a bidder places on a particular license may depend (positively or negatively) on whether another particular bidder also obtains a license in that region. Under the proposed rules, the bidder would not be able to know who was winning licenses in that region until after the auction had concluded. This would be more of a concern, however, if the entire spectrum for these types of services was being auctioned off at one time. Since this auction is only for 90 MHz, the uncertainty bidders face about the possible interdependencies rests only upon the potential interdependencies on the part of the spectrum offered in this auction.

The FCC Public Notice and several comments on it²³ state that since there is a common-value aspect to these auctions, it may also be a concern that reducing the amount of information revealed throughout the auction will make it more difficult for bidders to correctly estimate the value of a license to them based upon the bids of others. This concern is mitigated to some degree, however, by the fact that the FCC would reveal the number of bidders who placed bids for each license. We also note that a theoretical paper shows that the effect of anonymity on auction revenue in an affiliated-values English auction is ambiguous.²⁴ To our knowledge, the full implications of bidder anonymity have not been worked out for SMR auctions. We agree with the FCC's position, however, that this is likely to be less of a concern now that spectrum markets are relatively mature, and bidders can use the outcomes of past auctions to help refine their estimates of the worth of licenses currently for sale.

²¹ Stigler (1964) and Klemperer (2002).

²² Brusco and Lopomo (2002).

²³ For instance, "Comments from Paul Milgrom and Gregory Rosston" and comment from the Center on the Study of Auctions, Procurements and Competition Policy (CAPCP) at Penn State University.

²⁴ See Feinberg and Tennenholtz (2004).

Conclusion

There are both advantages and disadvantages to withholding the bidder information detailed in the FCC Public Notice. We believe the balance of evidence suggests that in today's relatively mature wireless markets, the positives outweigh the negatives, and we support the FCC's proposal not to reveal information about bidder identities and actions during the auction.

Respectfully submitted,

Michael A. Salinger,
Director Bureau of Economics
Federal Trade Commission

References

Bajari, P. and Fox, J. (2005), “Complementarities and Collusion in an FCC Spectrum Auction”, NBER Working Paper No. 11671.

Brusco, S. and Lopomo, G. (2002), “Collusion via Signalling in Simultaneous Ascending Bid Auctions with Heterogeneous Objects, with and without Complementarities”, *Review of Economic Studies*, 69, 407-436.

Cramton, P. and Schwartz, J. (2000), “Collusive Bidding: Lessons from the FCC Spectrum Auctions”, *Journal of Regulatory Economics*, 17 (3), 229–252.

Cramton, P. and Schwartz, J. (2002), “Collusive Bidding in the FCC Spectrum Auctions,” *Contributions to Economic Analysis & Policy*, 1 (1), Article 11.