## Essential Entry: Revenues in the 700 MHz Spectrum Auction

**Peter Cramton**<sup>1</sup>

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A common misconception is that an open access provision on a sliver of the 700 MHz spectrum would reduce auction revenues. In fact, the open access, wholesale, and bidding credit provisions put forth by Frontline Wireless, will motivate new entry, enhance competition in the auction, and raise revenues.

The reason that these pro-competitive steps can increase revenues and social welfare is simple—incumbents have profits to protect, and entrants realize this, so rationally the potential entrants stay away from the auction because the high costs of participating outweigh the low odds that they will win. Thus the incumbents win in two ways: they protect their profits and they get the new licenses for scarce spectrum at low prices.

This view is based on long-established economic principles, a well-developed theory of auctions, decades of empirical confirmation of the theory, my experience helping governments design auctions, including the design of the simultaneous ascending auction used by the FCC, and helping firms to bid in nearly all major spectrum auctions around the world.

Although I focus on auction revenues here, revenues should not be the primary goal of the FCC in the 700 MHz or any of its other auctions. Indeed, Congress directed the FCC to primarily consider the efficient allocation of spectrum. If incumbents can foreclose entry then the FCC has failed in its mission. Recognizing this issue the FCC has placed restrictions on how much incumbents can control since the very first Broadband PCS auctions in 1994. Efficiency concerns alone dictate that this should be the case here. Nonetheless, to the extent that raising taxpayer revenues is a goal in the auction design, the E Block proposal is fully consistent with this objective, as well as other objectives, such as efficiency, competition, and innovation.

Simple rules mandating open access and wholesale on a limited amount of the spectrum will provide for a robust increase in competition that will benefit consumers and taxpayers.

Critiques of the open access plan mischaracterize the plan as a spectrum grab by rentseeking new entrants, and argue for no remedies to the obvious and clear incentives that the lowfrequency incumbents, Verizon and AT&T, have to prevent *efficient* entry. These critics apparently want the FCC to surrender its obligation to establish auction rules that promote the public interest. Of course, the FCC should do no such thing. Rather, the FCC should examine the substantial economic theory, auction theory, and empirical evidence, and make a reasoned determination based on what is best for consumers, taxpayers, and social welfare. By these measures, the E Block plan does very well indeed.

The logic of the problem absent FCC intervention is straightforward.

<sup>&</sup>lt;sup>1</sup> *Peter Cramton* teaches economics at the University of Maryland. He is advising Frontline Wireless in the 700 MHz spectrum auction.

Verizon and AT&T enjoy economic rents from their duopoly in low-frequency cellular spectrum. This spectrum gives them a coverage advantage that leads to higher revenue per user and lower churn than the other operators.

To preserve these rents, Verizon and AT&T have a strong incentive to bid for the spectrum at levels dramatically higher than the economic value of the spectrum—in particular Verizon and AT&T's private value of winning the spectrum is its economic value for additional spectrum plus its duopoly rents that would be lost with entry.

Therefore, Verizon and AT&T will outbid rivals to maintain these duopoly rents.

As a result, new entrants will lose in the auction even if they have much higher economic value.

Thus, potential new entrants will not bother to participate in the auction, since participation is costly, especially raising capital. Likely losers have a near impossible time raising capital.

Therefore, Verizon and AT&T will successfully foreclose entry and pay a low price for the spectrum. Consumers and taxpayers lose in two ways: 1) they lose the benefits of competition and innovation in the wireless services market, and 2) they lose the economic value of the spectrum in lost auction revenues.

To prevent this predictable outcome it is essential that the FCC assure new entry by adopting the open access plan: A nationwide license with true open access and wholesale provisions to discourage participation by Verizon and AT&T for this 10 MHz license. Bidding credits for small businesses and/or a small business set aside are also desirable. Verizon and AT&T can still win the remaining 50 MHz without restriction, so that they can pursue their vertically-integrated proprietary business model.

The fact that Verizon and AT&T have mounted an enormous campaign against the open access plan is proof of Verizon and AT&T's strong desire to foreclose entry and rig the auction to win all the spectrum at a very low price. If Verizon and AT&T were simply interested in additional spectrum to provide additional services, then surely they would be content with the opportunity to win 50 MHz out of the 60 MHz being auctioned without any restriction. The fact is that Verizon and AT&T are threatened by competition and innovation and they would like the FCC to rig the auction rules to foreclose this possibility.

I do not fault Verizon and AT&T for trying—they are simply acting in the best interest of their shareholders. I would, however, fault the FCC and Congress if they succumbed to this intense lobbying pressure. The FCC and Congress must do what is best for consumers and taxpayers, not the shareholders of Verizon and AT&T.