The Honorable John M.R. Kneuer

Assistant Secretary for Communications and Information National Telecommunications and Information Administration U.S. Department of Commerce 1401 Constitution Avenue NW Washington, DC 20230

Dear Assistant Secretary Kneuer,

As the 700 MHz auction approaches, we are writing to clear up a common misconception about the nature of spectrum auctions and the impact of various rules on auction revenues.

We are economists specializing in auction theory and practice and in telecommunications industry structure. Robert Wilson was one of the original designers of the auction format that has been used in all FCC spectrum auctions. Peter Cramton has advised the FCC and several foreign governments on the design and implementation of spectrum auctions and participated in dozens of auctions as a consultant. Andy Skrzypacz teaches game theory and auction strategy at Stanford University. Simon Wilkie was Chief Economist at the FCC from 2002-2003. We are currently serving as advisors to Frontline Wireless.

At last Thursday's Senate Commerce Committee you stated that "Maximum flexibility does tend to lead to maximum revenues." While we appreciate the intuitive appeal of this viewpoint, we must point out that it has no basis in auction theory nor has it borne out in over a decade of practice both in the U.S. and abroad. In fact, the open access, wholesale, and designated entity provisions currently under consideration by the FCC are likely to *increase* auction revenues.

Open access, wholesale, and designated entity rules motivate new entrants to enter the auction, which increases demand for spectrum and intensifies bidder competition, driving up prices. Without these kinds of entry-promoting conditions, incumbent providers will face little competition in the auction and valuable licenses will sell for a song.

To understand why, one must consider the current structure of the wireless market, a market in which firms literally require a license from the government in order to compete. Verizon and AT&T enjoy economic rents from their stranglehold on low-frequency cellular spectrum, which gives them a coverage advantage that leads to higher revenue yield and market share than the other operators. Verizon and AT&T have a strong incentive to pay a "blocking premium" to maintain this position. They should be

rationally willing to pay prices higher than the true operating value of the 700 MHz licenses in order to stave off competitors and to preserve oligopoly rents.

When non-incumbent bidders decide whether to enter the auction, they weigh the high costs of bidding against their odds of winning. An FCC auction is a costly project, requiring serious bidders to commit many millions of dollars for capital carrying costs and war room operations, not to mention months of senior executive time preparing for and participating in the auction. In order to rationally participate in the auction, new bidders (and their investors) must believe they have a sufficient chance of winning that the risk-adjusted return outweighs the high participation costs.

In a "maximally flexible" auction, unfortunately, the odds of outbidding the incumbents are low enough that potential entrants do not participate. Absent rules to encourage new competitors, the incumbents' willingness to pay a high blocking premium chills demand in the auction. Ironically, even though the incumbents would be willing to pay high prices if needed to block entry, the lack of bidder competition actually allows them to pay very low prices. Thus the incumbents win in two ways: they protect their profits and they get the new licenses for scarce spectrum at low prices.

To see how restrictions on auction participation can increase revenue, consider the auction William Safire called the "the greatest auction in history," the A and B block auction of PCS licenses. In this auction, the FCC imposed eligibility restrictions through the policy of spectrum caps. Wireless incumbents were prevented from purchasing 30 MHz licenses in geographic areas in which their combined holdings would exceed the spectrum cap of 45 MHz. Despite the protests of the incumbents at the time, the A and B block auction turned out to be a noted success, and it is widely regarded as having facilitated new national and regional market entrants and true competition in wireless markets.

The open access, wholesale, and designated entity rules should have a similar effect in the 700 MHz auction. They will promote entry by new firms with different business models than the incumbents. In so doing, they will facilitate new capital formation, increase bidder activity, and boost auction revenues. And, it should be emphasized, they will only apply to a limited slice of spectrum, leaving the incumbents free to win the majority of the spectrum without any restrictions at all.

Of course, revenues should not be the primary goal of the FCC for the 700 MHz or any other auction. Indeed, Congress directed the FCC to primarily consider the efficient allocation of spectrum when administering auctions for this precious national resource. If incumbents can foreclose entry, then the FCC has failed in its mission. 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. They open entry for many retail service providers, new devices and uses of the wireless technology. We hope they would lead to the creation of the wireless Internet. The designated entity credit is a proven mechanism to stimulate auction competition and should continue to be available to new entrants.

In establishing the rules for this historic auction, 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 proposed rules do very well indeed.

Sincerely,

<u>/s/</u>

Peter Cramton **Professor of Economics** 

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/s/ Simon Wilkie Executive Director USC Annenberg Center for Communications Law and Policy

<u>/s/</u>

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Meredith Atwell Baker cc: **Deputy Assistant Secretary**