

**Reverse Auctions Panel Presentation to the Joint Board on Universal Service:
Introductory Statement
Dale Lehman, Alaska Pacific University
February 20, 2007**

Economists know that market mechanisms, including auctions, are good mechanisms for answering questions when there is imperfect information.

Example: spectrum auctions work well at determining the best use (and associated value) for spectrum.

Example: in some areas, such as Latin America, reverse auctions for universal service answer: how much does it cost to extend telecommunications service into previously unserved areas?

What question would reverse auctions for universal service in the US, with multiple existing infrastructures, answer?

Some would advocate that it would reveal whether current universal service could be provided more cheaply. The only purported evidence that this is a meaningful question was provided by Tom Hazlett, and my analysis of his “evidence” sheds more light on difficulties with auctions across different technologies than providing any evidence that universal service can be provided more cheaply.

The Australian experience with reverse auctions attempted to answer this question, concluding that the incumbent’s cost was what it cost to provide universal service.

I suggest that this is largely the case in the US – universal service costs of ILECs are documented and there is no evidence that they are excessive.

CTIA proposes auctions that would relax coverage and/or quality obligations for wireless CETCs when bidding to serve wire center geographies. The CTIA proposal essentially asks reverse auctions to answer the question: can wireless providers provide something *less than* universal service for lower costs than it cost incumbent rural ILECs to provide universal service? I do not think this is a useful question – the answer is yes, but that tells us nothing meaningful. CTIA would then reduce ILEC support as a penalty for bidding more to provide universal service than a wireless carrier bids to provide less than universal service.

The Verizon proposal is for 3 auctions, in stages. First, an auction among multiple wireless CETCs, then an auction where there are multiple wireline ETCs, and eventually (after further analysis), a possible auction between different technologies to be the single universal service provider in an area.

The first auction poses the question: How much does it cost wireless providers to provide their version of universal service? This is an interesting question since we do not have good data on wireless costs and we have been supporting multiple wireless CETCs based on the ILEC's costs. As a first step, reverse auctions are a promising means for answering this question.

A complication is specifying exactly what wireless carriers would be bidding on providing. It will be necessary to detail what service improvements are desired that the support would enable. At the heart of the Verizon proposal is this section:

“The Commission, in cooperation with the states, would develop a statement that would define the winning bidder's obligations. This would, in effect, serve as a request for a quote (or RFQ). In return for the universal service support, the winning bidder would be required to offer service in the entire area, and to meet any other terms of the RFQ.”

The details of this are not clear, but are worth considering. For auctions across technological platforms, it would be necessary to define identical standards for all bidders, so wireless bidders would need to meet an appropriate standard of covering residential locations with an acceptable signal. However, for a platform-specific auction, more useful definitions are possible. For example, rural consumers may be better served by defining wireless universal service objectives to achieve an acceptable reduction in dead zones or dropped calls. While most wireless subscribers would like their cell phones to work in their homes, not all of them want the towers in their backyards that would be required to accomplish this task. More important to them might be improved quality of service where they currently use their mobile service.

Only when a precise definition of these obligations is specified, can a reverse auction be used to determine the costs and provider identity of the most efficiently delivered service.

The second auction, between multiple wireline ETCs raises issues of stranded cost that should be dealt with before an auction can proceed. An incumbent runs the risk of losing an auction and failing to recover prudently incurred investment –

incurred under the existing regulatory compact - to provide universal service. The principle of recovering such investment when there is a change of regulatory regime is well established regulatory practice, as in the electric industry. There are disagreements, of course, concerning the size of the stranded costs, but not about their existence and relevance for public policy.

Stranded investments can be reduced (but not eliminated) by auctions with multiple winners. But, auctions with a single winner have important benefits. First, overall support will be smaller since it will limit the support of duplicative networks. Second, it mitigates the problem of different providers providing different levels of service. For example, if provider A is supposed to serve 95% of an area, but only serves 90% of a service area adequately, it will be easier to discover the gaps if only provider A has the carrier of last resort responsibilities (and support). Conversely, if providers A and B both receive support, but provide different services and/or coverage in different areas, it will be more difficult to determine whether they are using support for the intended purpose – indeed, it will be difficult to determine whether they have bid for the same responsibilities at all.

As an example, consider the current situation of wireless coverage. Wireless carriers claim to cover 95% of the US population, but this data is impossible to verify and certainly suspect (given the controversies over tower sites, as well as the economics of cellular networks). Complaints are not likely to reveal the inaccuracy of the statement, however, since consumers are unlikely to complain about the lack of service from a carrier they did not choose to subscribe to. If there is only one wireless provider receiving USF support in an area, any shortcoming in their service will be readily apparent.

Successful auctions among wireless CETCs could provide important information about the feasibility of reverse auctions across differing technologies (Verizon's third type of auction). If we are successful at defining a uniform set of requirements among wireless reverse auction bidders, and these can be monitored effectively, then intermodal auctions may become feasible. But, at present, we do not know enough to ensure that different technologies would be bidding on the same thing. (Of course, CTIA advocates relieving wireless providers from having to provide the same coverage and quality as wireline providers, rendering this issue moot).

A further complication for inter-modal auctions concerns the complementary nature of wireless and wireline services. Auctions envision that the bidders are offering substitute services, but there are important complementarities with

auctions across wireless and wireline platforms. For example, if wireless providers bid assuming today's prices for access to wholesale backhaul services, and if the ILEC loses the bid, then the wholesale service prices may need to rise to replace the lost universal service support. A more extreme possibility is that the ILEC will cease operations without support, requiring the winning wireless provider to build and maintain its own backhaul facilities.

Conclusion

It is useful to imagine what questions a reverse auction could help answer. Determining the efficient costs for providing a well-defined service objective for wireless services seems a worthwhile goal. Less clear is the desirability of auctions across multiple existing technological infrastructures. The existing wireline network is ubiquitous and high quality and was built with universal service support. Increasing the risk facing rural ILECs will only threaten future investment in hopes of answering an elusive and speculative question: what are the relative costs for wireless and wireline providers to deliver *different* service definitions. This is not a question that auctions are well suited to answer at the present time.