

**FULL COMMITTEE HEARING ON THE IMPACT  
OF THE 700 MEGAHERTZ WIRELESS  
SPECTRUM AUCTION ON SMALL BUSINESS**

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**COMMITTEE ON SMALL BUSINESS  
UNITED STATES HOUSE OF  
REPRESENTATIVES**

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**FULL COMMITTEE HEARING ON  
THE IMPACT OF THE 700 MEGAHERTZ  
WIRELESS SPECTRUM AUCTION  
ON SMALL BUSINESS**

Wednesday, October 10, 2007

U.S. HOUSE OF REPRESENTATIVES,  
COMMITTEE ON SMALL BUSINESS,  
*Washington, DC.*

The committee met, pursuant to call, at 9:30 a.m., in Room 2360 Rayburn House Office Building, Hon. Nydia M. Velázquez [Chairwoman of the committee] presiding.

Present: Representatives Velázquez, Shuler, González, Cuellar, Altmire, Ellsworth, Sestak, Hirono, Higgins, Chabot, Akin, and Fallin.

**OPENING STATEMENT OF CHAIRWOMAN VELÁZQUEZ**

Chairwoman VELÁZQUEZ. Good morning. I call this hearing to order. This morning, the Committee will examine the Impact of the 700 Megahertz Wireless Spectrum Auction on Small Businesses. Access to the newest technology is a key ingredient for all companies to innovate and compete in a global economy. For smaller firms, however, it is critical for their success that they have access to cutting-edge equipment and infrastructure.

This much anticipated Spectrum Auction provides a unique opportunity for entrepreneurs to acquire these tools. Small firms that win the right to purchase Spectrum licenses will be able to deploy high-speed Internet access services. This will spur greater innovation and lead to lower communications costs, and improvements in service quality. Entrepreneurs operating in under-served areas will also benefit as the new technology is brought to remote parts of the country. As a result, rural businesses will be better able to compete, and advance local economic revitalization efforts.

I am pleased that the FCC has included in the Auction Rules a number of elements that should benefit small companies. In order to assist them, the rules provide certain advantages for small firms, mainly in the form of credits toward their bids. In addition, the FCC decision to offer licenses that cover smaller geographic areas may allow these companies to compete and win, despite having more limited resources than a large national carrier.

Together, these rules will allow them to start or expand wireless business operations. Entrepreneurs also have the potential to benefit from the FCC's Open Platform Requirements. These requirements, which will allow any device to be used on the Spectrum will

help level the playing field and permit for the wide-spread use of handsets. This will create new markets, and spur entrepreneurial activity in a wide range of industries.

With all this potential, a downside does exist. Some small companies have raised concerns about whether the Auction Rules are fair, and whether the benefits of the auction will, in fact, extend to them. For example, rural wireless companies contend that the FCC's decision to assign population-based benchmarks to build out requirements will hurt under-served regions. The smallest wireless companies also argue that the new rules governing bidding credits make it difficult for them to raise money, and pursue a sustainable endeavor.

Fortunately, we have two panels here today that will help us consider both sides of this issue. The witnesses will share with the Committee how they expect the auction to benefit small entities and concern they may have about certain aspects of the Auction Rules.

Let me take this opportunity to thank in advance the Chairman, and all the witnesses for their time and insights on this very important issue.

For entrepreneurs that use technology to make our firms more efficient and competitive, this auction offers great promise. It provides a unique opportunity to secure the so-called beach-front real estate of the Spectrum. This can be used to launch a new endeavor, or strengthen an existing firm's operations. Small business, both service providers and communications consumers stand to benefit greatly.

I now recognize Mr. Chabot for his opening statement.

#### **OPENING STATEMENT OF MR. CHABOT**

Mr. CHABOT. Thank you very much, Madam Chair. And I want to thank you for holding this hearing on the Federal Communication Commission's rules for the sale of Spectrum in the 700 Megahertz Band.

Although fairly technical, the Commission's regulations of the auction for this Spectrum will have a significant impact on small business providers, and users, wireless communications services.

In 1934, Congress recognized that radio waves were a scarce public resource, and authorized the FCC to award licenses for the use of radio waves, but only if the use would serve the public interest.

Prior to 1993, the FCC simply gave this resource away. That did not represent good economics, or good public policy. Economics teaches us that the best way to determine the value of a resource is to sell it in the competitive market. That way, the entities that put the highest value on the resource will pay the most for the Spectrum. The basis for their bidding will be that they will provide consumers with services that the consumers are willing to purchase.

Sale of Spectrum also represents good public management. It enables the Federal Treasury to recapture the value of this publicly-owned resource. Auctions also reduce transactions costs associated with the issuance of licenses, so it's important that the Commission's use of Spectrum Auctions—I also want to emphasize, however, that small businesses as innovators need to have their fair

opportunity to obtain Spectrum. These innovators will provide new services and technologies that might not otherwise be developed.

More importantly, small businesses tend to find niches that serve other small businesses, and may provide wireless services that large wireless companies may not. I am specifically interested in hearing from our witnesses whether the Commission adopted an appropriate balance between maximizing returns to the federal taxpayer, while ensuring that small business providers and users of wireless service will benefit from the auction in the 700 Megahertz Band. And with that, I yield back.

Chairwoman VELÁZQUEZ. Thank you. Now I welcome the Honorable Kevin J. Martin.

Mr. Martin is the Chairman of the Federal Communications Commission. He was appointed to the FCC by President Bush on March 18th, 2001, and designed Chairman by President Bush on March 18th, 2005.

Before joining the FCC, Chairman Martin was a Special Assistant to the President for Economic Policy. Prior to joining the Bush Administration, Chairman Martin worked at the FCC, and practiced law in Washington, D.C. Welcome.

**STATEMENT OF THE HONORABLE KEVIN MARTIN, CHAIRMAN,  
FEDERAL COMMUNICATIONS COMMISSION**

Mr. MARTIN. Thank you, and good morning to Chairwoman Velázquez and Ranking Member Chabot, and all the Members of the Committee. Thank you for inviting me to be here with you this morning, and I look forward to answering any questions you have after my brief opening statement.

I've had the privilege of serving at the Federal Communications Commission for over six years, including two years as the Agency's Chairman. During this period, my colleagues and I have overseen the telecommunications industry undergoing rapid and unprecedented change. These changes have seen the telecommunications industry transition from a period of sharp decline, to a time of significant growth.

Ushered in by a broadband revolution, companies and consumers, alike, are finally finding the promise land of convergence. Telephone calls are now being made over the Internet and cable systems, cell phones are now mini-computers. They send e-mail, take pictures, surf the web, play songs and videos, and hopefully soon will send and receive emergency messages in times of a disaster.

Businessmen and women are no longer tied to their desks from nine to five. They use handheld devices to access messages, files, and key information on the go. They can reach coworkers and clients from any location, and their customers are no longer just local, but global.

These technological advances and converging business models, and the digitalization of services are creating unparalleled opportunities, and considerable challenges for both small businesses and the Commission.

Almost all of this innovation is enabled by broadband deployment. Broadband technology is a key driver of economic growth.

The ability to share increasing amounts of information at greater and greater speeds increases productivity, facilitates interstate commerce, and helps drive innovation.

Perhaps the most important factor spurring both increased broadband availability, and reduced prices for individual consumers, and for businesses, is competition among broadband platforms. The upcoming 700 Megahertz Auction presents the single-most important opportunity for us to increase competition by adding a third broadband platform to a marketplace served predominantly by two broadband services, cable and DSL.

The Commission recently adopted rules that will allow the auction of more than 60 Megahertz of Spectrum in the 700 Megahertz Band early next year. This is the part of the Spectrum that broadcasters have used for analog television channels, and that will be returned as part of the upcoming DTV transition. This Spectrum is well-suited for the provision of wireless broadband, and represents a critical opportunity to continue deploying broadband services, especially to rural communities.

The rules the Commission has adopted for this Spectrum include several important provisions that will benefit small businesses, including promoting improved access to wireless broadband, facilitating the ability of small businesses to compete in the provision of wireless devices and software, and provide meaningful opportunities for small businesses to gain access to the Spectrum.

Now, significantly, because this Spectrum is well-suited for the provision of wireless broadband, the Auction represents a critical opportunity to continue deploying wireless broadband services, especially to rural communities.

The Commission has tried to ensure that these areas of the country have the same access to broadband enjoyed everywhere else. And, as such, we adopted some of the strictest build-out requirements ever implemented for wireless services.

For example, at the urging of smaller service providers, the rules requires licensees in some blocks to serve at least 70 percent of the geographic area covered by their licenses, and 35 percent within the first four years. And in the largest blocks, licensees must serve 75 percent of the population covered by their license, and 40 percent of the population within four years.

Companies that do not meet their initial four-year benchmark will have their license terms reduced from ten years to eight years, and companies that fail to meet their final benchmark will lose the unserved portion of their license areas, which will then be made available to other potential users.

This combination of geographic and population-based benchmarks will help ensure that even the most rural communities have broadband access.

As a result, wireless broadband connections will be available to businesses of all size, and in nearly every location, not just the corporate headquarters in major metropolitan areas. Entrepreneurs and mom-and-pop shops located in small towns in rural areas will be able to communicate rapidly and efficiently with their suppliers, investors, and customers located around the world. And they will be able to make those connections wherever they are, at home, or at work, or on the road.

Second, the auction rules will strengthen the ability of small businesses to compete in the provision of wireless devices and software. The license winner for about one-third of the Spectrum will be required to provide a platform that is more open to devices and applications. The companies that operate on this spectrum will not be allowed to prevent customers from using the wireless device or software of their choice on the licensee's network.

It is our goal that this open platform requirement will allow smaller businesses, nascent wireless device manufacturers, and smaller application software developers to put their products directly into the hands of consumers, without having to seek prior permission from the wireless provider, as they do today.

I had the opportunity to hear from some of these technology entrepreneurs about their struggles to bring new products to market during a recent trip to Silicon Valley. By providing for this open platform, the Commission removed some of the barriers imposed by the wireless carriers to foster greater opportunity and innovation for entrepreneurs, and, ultimately, customers alike.

This open platform requirement is designed to foster innovation on the edge of the network. When the same requirement was applied decades ago to the wire line network, we saw an explosion of innovation and choice.

AT&T subscribers went from renting expensive black rotary phones to purchasing inexpensive cordless phones with voicemail and caller I.D. Investment in the market increased, new phones and calling features were developed, and consumers, ultimately, benefited.

Many of these innovations were driven by entrepreneurs, who, for the first time, were able to make their latest innovations available directly to consumers, and compete in the equipment market to which they had previously been denied access.

Ultimately, these rules facilitated the development of the Internet, as consumers were able to attach modems to the network, and go anywhere the Internet could take them without interference from the network owners.

The Commission hopes and expects that this model will provide similar benefits for wireless entrepreneurs, by allowing them to introduce an array of niche applications and devices for the open wireless platform, including those tailored to meet the unique needs of small businesses, and individual consumers.

And, finally, the rules adopted by the Commission provide meaningful opportunities for small businesses to gain access to the Spectrum itself in the upcoming auction. The band plan makes nearly half of the Spectrum available over smaller and medium-sized geographic areas, 734 cellular market areas, or CMAs, and 176 economic areas. About one-third of the Spectrum will be available over larger regional areas, or 12 regional economic areas, and about one-sixth of the Spectrum is available on a nationwide basis that will be used exclusively as part of a public/private partnership with a National Public Safety licensee.

This distribution of geographic distribution is very similar to the geographic distribution in the AWS-1 auction from 2006. And with these changes, the total amount of Spectrum in the 700 Megahertz

Band assigned to the smallest geographic area will be more than one-third of the Spectrum available.

Licensing over smaller geographic areas benefits small businesses by reducing the cost of acquiring a license. The cost of acquiring Spectrum licenses with small geographic areas is, on average, significantly lower than the cost of acquiring licenses with larger geographic areas.

The availability of licenses divided into these smaller areas enables smaller wireless providers to fulfill business plans focused on serving smaller discreet areas of the country, including more remote, and/or rural areas. The availability of smaller licenses at auction also allows smaller providers to avoid a transaction cost associated with attaining portions of a larger license in the secondary market through partitioning or leasing Spectrum from the incumbent carriers.

To further promote the participation of small business in the upcoming auction, the Commission has provided for bidding credits for eligible small businesses, also known as Designated Entities. The Commission applied these same bidding credits in last year's AWS-1 auction, in which a significant number of licenses were won by Designated Entities. Fifty-five percent of the winning bidders in the AWS-1 auction were Designated Entities, 57 out of 104, and those Designated Entities won more than 20 percent of all the licenses sold. In all, Designated Entities and the bidders won licenses valued at over half a billion dollars, and bidding credits made a significant difference, with Designated Entity bidders winning over half of their licenses by out-bidding a non-Designated Entity that placed the second highest bid without a bidding credit.

Some entities have expressed some concern that the Commission's modification to the Competitive Bidding Rules governing Designated Entities had deterred some smaller companies from participating in the AWS-1 auction. However, Designated Entity participation and performance in the AWS-1 auction was very similar to that in comparable past auctions, when partnerships with national wireless carriers are excluded.

In addition to efforts to promote opportunities for small businesses through the upcoming 700 Megahertz Auction, the Commission has also undertaken a number of other initiatives to encourage small businesses to enter and compete in the telecommunications and media industries.

The Commission is currently considering a Notice of Proposed Rulemaking that would allow small and independently owned entities to lease extra capacity of digital television station licenses in order to operate their own broadcast channel. This new programming station would then obtain all the accompanying rights and obligations of the underlying broadcast station, such as the public interest obligations and carriage rights.

An example of this type of arrangement is the deal reached with Latino Alternative TV and Post-Newsweek that provides for carriage of LATV programming on multi-cast channels, and the Post-Newsweek stations in Miami, Orlando, Houston, San Antonio.

In this same rulemaking, the Commission is also seeking comment on several other proposals to allow qualified Designated Entities to more easily get into broadcasting, by allowing them to pur-

chase expired construction permits, and be allotted additional time to construct broadcast facilities.

The Commission is working hard on several other areas, which we can end up discussing, but I do want to thank you for your time and attention today. And I certainly appreciate the opportunity to share with you the FCC's efforts to support the growth of small businesses, and foster their participation, both in the FCC's upcoming auctions, and the telecommunications and media industries, more generally. And with that, I'd be happy to answer any questions you may have.

[The prepared statement of Kevin Martin may be found in the Appendix on page 45.]

Chairwoman VELÁZQUEZ. Thank you very much, Mr. Chairman.

Chairman Martin, the objective of Section 309(j) of the Communication Act is to promote economic development and diversification. Do you expect that open platform requirements assigned to the C block licenses will advance these objectives?

Mr. MARTIN. Well, I do think so. I think it's important not only from the perspective of an additional wireless business model, but for fostering additional innovation and opportunities for small businesses that are trying to develop software, and additional handsets.

One of the things that the Commission had people raise with the Commission was the concern that small businesses that were developing new softwares and new applications were having a difficult time getting those applications placed on devices that were sold by the larger common carriers. And trying to have a new, more open platform I think will facilitate the opportunities for that kind of new innovation to occur.

Chairwoman VELÁZQUEZ. Could you tell me, specifically, how the open platform requirements may provide opportunity for small businesses, rural telephone companies, and business owned by members of minority groups, and women to offer wireless services?

Mr. MARTIN. Well, I think that what it will allow, the open platform will allow for people that are small businesses that want to develop, like I said, a new application, or a new handset, to be able to get those services on to the wireless broadband networks.

Currently, they're not able to do that, unless they convince one of the large incumbent providers to sell their handsets, or sell their services, or include them. So I think the open platform will allow for people that don't have to go get an agreement with the large incumbent providers to provide those kinds of applications and services, and I think that will be important, both to small businesses, and to consumers.

Chairwoman VELÁZQUEZ. How would you react to the fact that some rural telecommunications companies have suggested that larger entities seeking to avoid the open platform requirements of the C block licenses may opt to be on the smaller geographic licenses? Under this scenario, the smaller entities are concerned that they will be unable to compete, and win licenses as a result. Should the FCC take steps to address those concerns?

Mr. MARTIN. Well, I think it was important for us to find a balance. And while the smaller carriers focused on rural areas, we're concerned about the fact that the open access requirement placed

on some pieces of the Spectrum might make the pieces they're more interested in more attractive to larger providers.

We could have applied the open access requirement everywhere, but the smaller carriers didn't want that, either, so they didn't want the open access requirements applied to the pieces of the Spectrum they were more interested in. And, ultimately, when we said we were going to apply it somewhere else, they were concerned it might drive some of the larger providers towards the Spectrum they were interested in. But I think we need to find an appropriate balance between not only making sure that there was Spectrum available for small telecommunications carriers who wanted to go buy Spectrum, but also make sure that we had a platform that was more open to small businesses in the development side of both handsets and applications. And I think that we are trying to find an appropriate balance with that.

Chairwoman VELÁZQUEZ. But, Mr. Chairman, our concern is to make sure that smaller entities will be able to compete and win those licenses. What actions have you taken to make sure that happens?

Mr. MARTIN. What we've done to make sure that they're going to be able to—we can't make sure that they win. We can make sure they're able to participate.

Chairwoman VELÁZQUEZ. Sure. That there is a level playing field for them to compete.

Mr. MARTIN. Right. And so, what we did is, first, we divided up a lot of the Spectrum into smaller geographic sizes, and smaller Spectrum blocks, so they could have an area where they could be able to participate, and be able to have a more realistic chance of winning, because they were smaller geographic areas, towns, as opposed to states and whole regions of the country. And, so, compared to what the Commission had previously proposed, we actually broke the Spectrum up into even smaller areas to allow them to participate.

And then we do have the Designated Entity bidding credits, which would allow them, if you qualify as a small entity, to participate and receive bidding credits in the auction. And I think that's what's going to allow them to end up competing.

Like I said, the only other alternative in the issue that you raised about the open platform, is that going to be bad for small providers, the only alternative was to do that on a level playing field everywhere, apply the open platform to everyone. And the smaller carriers said that was worse, they did not want that as an alternative. And that would have been another alternative I think the Commission could have considered. We were actually taking their views into account but not applying everywhere.

Chairwoman VELÁZQUEZ. Okay. In 2006, the FCC revised its rule for small businesses or Designated Entities, that utilize bidding credits in Spectrum auctions. The revised rule had made it very challenging for them to raise money, and imposed significant restraint on their ability to run a viable communication business.

Despite these concerns, the 700 Megahertz Auction will employ the rules as they were revised in 2006. Why did the FCC decide not to act on these concerns? And I know that the revised rules responded to the case in New York with Mr. Mario Gabelli, and we

have to make sure that this is not a give-away. But in the process, also, we have to make sure that legitimate small entities are able to win.

Mr.MARTIN. Well, I think you're absolutely right, we need to find an appropriate balance to make sure that these rules not only protect against fraud, which is what some of the concerns that were expressed in the case up in New York that you were referring to with Gabelli, but also make sure that the legitimate small businesses have an opportunity to win as a part of the process. And I think that the changes the Commission made in 2006, which were done on a bipartisan basis by the Commission, were done to respond to the significant issues around fraud that had been raised.

And I think that, actually, the changes from 2006 still allow small entities to actively participate and win in the auction that we had in 2006. So if you look, for example, in that auction, 55 percent of the winning bidders were Designated Entities, over half of the people who won licenses with the new rules you're talking about, were Designated Entities. So I think that that's a sign that despite the rule change we made, that they are still being very successful in the auction participation. They won 20 percent of the licenses, and over half of the licenses were awarded to smaller entities. And I think that's a demonstration that they were still able to be successful, and we were able to address some of the fraud concerns.

ChairwomanVELÁZQUEZ. But we still want new entrants into this process. My question is, did you consider the comments that were submitted regarding the 2006 revised rules?

Mr.MARTIN. Oh, absolutely. And the comments that were submitted, in large part, wanted us to go back to the pre-2006 rules, which had also facilitated, and/or allowed for some of the fraud that was occurring with the instances like Gabelli. And trying to make sure that these are legitimate small businesses that are interested in not just buying and flipping a license to a large provider, but that are interested in building a business, is what's important.

The most significant change that we made that the small carriers, that some of the potential licensees who want bidding credits made was, we said you have to hold the license for ten years, instead of five years, so you can't just hold it for five years, and then flip it to a larger provider. And extending that time frame from five to ten years made it much more difficult for them to flip the license, as opposed to trying to build a legitimate business. And that was, frankly, the concern we had with some of the fraudulent activity that was going on. And I know that, as I said, some do not want that, some want to be able to flip it quicker to larger entities, but I think that's an important rule change that I think was a good change by the Commission. And I think that it still did not deter people from participating as a Designated Entity. Fifty-five percent of the licenses were won by new small entrants, and I think that's a demonstration that it was actually a successful balance.

ChairwomanVELÁZQUEZ. Thank you. Now I recognize Mr. Chabot. I have other questions, and when we finish here, we'll go to a second round.

Mr.CHABOT. Thank you, Madam Chair.

Chairman Martin, could you describe again in some detail the procedures that the Commission used in evaluating the economic consequences of the auction rules on the Designated Entities?

Mr.MARTIN. The economic consequences of all of the auction rules on the DEs? I mean, I think that we try to make sure we're determining—first, we focused on the Designated Entity bidding credits, because that was the most contentious issue as it related to small new entrants. And we did evaluate the concerns that had been raised about wanting to go back to the previous rules. We determined that the changes in the rules had still allowed Designated Entities to be successful in the auction, and at the same time, that we think it's a more appropriate means of preventing fraud, so we thought that was an appropriate rule change.

We did look at the impact of the balance of rules, both auctioning off some of the licenses in larger areas, and made sure that we reserved a significant portion of the Spectrum for smaller bidders to be able to participate by having smaller geographic areas for them to be able to buy Spectrum in. So I think that we—every auction, we try to find a balance of some opportunities for small businesses to be able to participate on a smaller geographic area basis, but also some larger pieces of geographic areas and pieces of Spectrum to be sold, because that, at times, facilitates, for example, new entrants on a larger scale. And, so, I think that is appropriate balance that we had, but we certainly evaluated what the impact would be on small businesses.

Mr.CHABOT. Thank you. In developing auction rules, does the Commission perceive that the public interest is, essentially, equivalent to obtaining maximum revenue from the sale of the Spectrum? And would there be situations in which the Commission adopts rules that do not maximize revenue, but instead maximize other public interest values?

Mr.MARTIN. Absolutely. I mean, we do not consider the public interest being simply maximizing revenue. And, indeed, the rules we adopted do not maximize revenue. If we wanted to maximize revenue, all of our studies show we would sell all of the Spectrum basically in the largest geographic area possible, if not nationwide, and all of it on a very large Spectrum-basis, with no build-out requirements, whatsoever. And, so, all of those things, dividing up the country into smaller pieces, reduces the overall amount of money that's raised, but it provides an important opportunity for smaller players to get in and provide service.

In addition, build-out requirements also decrease the value of the Spectrum. The economists would say that the way to achieve the most value for the Spectrum from the Treasury standpoint would be allowing an incumbent to buy it and not use it, because it would prevent entry by anybody else. So he might be willing to pay a premium for the opportunity to not even build it out. So strict build-out requirements, and dividing the Spectrum up into smaller geographic areas, both reduced the amount of money that the Treasury will receive from the auction, but they provide other very important public interest benefits, and so the Commission doesn't maximize revenue. And I think we do make sure that the Spectrum is being put to use, and that there's other opportunities.

Mr.CHABOT. Thank you. And, finally, Verizon has challenged the Commission's auction rules in the D.C. Circuit. What would be the impact on the auction if Verizon were to win its challenge?

Mr.MARTIN. Obviously, it would depend upon, when the Court ended up hearing on it. Verizon has filed a lawsuit. They actually asked the court to consider hearing this on an expedited basis, because they said it was important as it related to the auction, and the court just ruled last week and denied that request, and said that they would not hear that request on an expedited basis.

Mr.CHABOT. So then relative to the impact, if they were to win the challenge, can you comment on that?

Mr.MARTIN. Well, it, obviously, depends upon when they won the challenge, and whether that ended up ultimately being appealed. I mean, the Commission has had, in the past, its auctions that have been appealed after they've already occurred. And if the Commission ends up winning those appeals, then there's no change. And if, ultimately, the person challenging the auction wins, the Commission has to go back and undo the auction, which is what occurred in the context of the one auction that had to be unwound, so to speak. And so that would depend upon when Verizon actually won their suit, if they win.

Mr.CHABOT. Thank you. Madam Chair, I yield back my time.

ChairwomanVELÁZQUEZ. Mr. González.

Mr.GONZÁLEZ. Thank you very much, Madam Chair. And welcome, Mr. Chairman. And I know you probably think that we don't appreciate your service, but we do. And I've had the privilege of hearing you as a witness before, before Energy and Commerce.

A couple of observations, first of all. When we talk about small businesses, and this is such a different environment here, because that is a first concern here, is where does the small business factor in the auction. It seems to me, despite your testimony, that it really isn't about owning Spectrum for small businesses. That somehow the benefits of this auction, and the conditions that have been attached in open platform will somehow benefit small businesses by having handset manufacturers, I really don't know the small business handset manufacturer, to be honest with you, or application providers, software providers. And, also, that certain areas, small businesses will have access to the Internet. And I think there's some legitimacy to that. But I really don't see the Spectrum rules benefiting small businesses, as far as ownership. And we're going to have a panel of witnesses a little later that may disagree or agree with me.

Secondly, I do believe that maximizing the monies that will be derived from the auction is a primary concern to the FCC, because we've told you, Members of Congress, when we were debating the Deficit Reduction Act, we're placing \$10 billion, and that's on the low-end of what you're going to get. Your reserve price probably adds up to about \$10 billion, so I think the public owns the airwaves, you're the auctioneer. You have a fiduciary duty, in my opinion, to maximize the monies that will be realized from that sale.

I'm going to be citing testimony from some of the witnesses in addressing different aspects of the auction, and the concerns that are expressed by some of these witnesses. First of all, the condi-

tions, no leasing, reselling, wholesaling to other entities. And I will then refer to the testimony of Shelley Spencer at page 2.

“Another key to our success in acquiring the Spectrum in the former, or in previous auctions, which were recently rescinded, by the way, it permitted us to lease half of our Spectrum to Sprint and Nextel. This is Spectrum which we are not using in our own network, and for small businesses, the ability to lease a portion of the Spectrum can provide immediate revenue. And as for us, provide the collateral necessary to raise the capital to purchase Spectrum, and build our own network.” So I do want you to be able to address that.

The second area, “That larger companies will be attracted to the smaller licenses that they don’t see as being encumbered by the open platform conditions that you have placed on the Block C.” And so I’ll go to page 4 of Christopher Guttman-McCabe’s testimony, because I think he frames it very well.

“Incumbents that choose to participate in this auction and want a nationwide or regional presence will be left with a choice between bidding with a few large licenses with new and very specific service obligations, or bidding on the many licenses, as many as 734 in some Spectrum blocks, needed to achieve the same area of coverage. While this is an unfortunate choice for all carriers, it may have the greatest impact on small businesses. As a result of the new license conditions, if large incumbents choose to aggregate many of the smaller, less encumbered licenses, small businesses will be hard-pressed to raise the amount of capital needed to compete head-to-head in an auction with larger established carriers, particularly in the tighter credit markets that exist today.”

Next, we’ll go into, “Open platforms will open markets for small handset manufacturers, small software companies, and small added-value resellers.” And I’ll go to page 3, and I can find it quickly, of Mr. Edward Kelly Bond, President of Public Communications, Incorporated, who, in essence:

“Unfortunately, the FCC’s current plan for auction and licensing the 700 Megahertz Bands presents only limited opportunities for small businesses to participate. Small businesses have virtually no opportunity to participate in the provision of the anticipated high-speed service to be offered on the upper 700 Megahertz C Block Spectrum. Small businesses have no opportunity to acquire the huge C Block licenses in the auction, and the FCC’s construction requirements do not encourage the large C Block licensees to work with small businesses. Since the open platform requirements apply only to the C Block licenses, the open platform requirements may be of little benefit to small carriers.”

Lastly, on the Regulatory Flexibility Act, page 5 of Mr. Bond’s testimony reads-

Chairwoman VELÁZQUEZ. Mr. González, time has expired, so I’m going to give you 30 seconds.

Mr. GONZÁLEZ. I’m just-

Chairwoman VELÁZQUEZ. But I will allow for the Chairman to answer your question.

Mr. GONZÁLEZ. Well, the last thing, and I think this is dear to the Chairman’s heart here, I mean, Chairwoman Velázquez. And this is what Mr. Bond states:

“There is a law that exists, which I know this Committee is all too familiar with. It is called the Regulatory Flexibility Act.”

As a regulatory agency, the FCC under this Act is charged with giving particular consideration to whether or not its rules will negatively impact small carriers, and particularly rural telephone companies. We cannot honestly think of one instance in which the Commission ever outlined in a final order that had found circumstances that warranted adopting different rules for small rural carriers.”

And I know that is multi-faceted, and I'll ask if Chairman Martin is not able to respond now, if he would in writing.

Mr.MARTIN. I'd be happy to end up responding both in writing and now. Although, Chairwoman, if you want to go to the next questions, that's okay. No, I'm just kidding.

Let me respond, and say a couple of things. First, I think that there are often conflicting and competing interests that are involved in the Commission's rules that we're trying to balance when we're trying to come up with their auction.

There's no question about we want to try to develop opportunities for small businesses to participate. But you also indicated that you think it's important for us to maximize revenue. Those two are competing and conflicting interests that do not always coincide.

Actually, to maximize revenue, we should provide less opportunities for small providers to participate, because they, in general, pay less for smaller pieces of Spectrum than if we sold a larger amount. So that's one example of how the competing and conflicting interests have to be balanced to come up with something that's fair to all the different parties.

Another example is that you indicated that you were concerned about our limitations on wholesaling. Actually, we allow for a Designated Entity to wholesale up to 50 percent of the capacity that they've bought. What we don't do is what some who wanted to change our Designated Entities require, they wanted us to require wholesaling for pieces of the Spectrum. And what we determined was that requiring wholesaling would have too much of an adverse impact on the amount of money people would pay for that Spectrum, because incumbents would not want to participate if we required wholesaling. But they're allowed to wholesale up to 50 percent of what they buy, but they are not required to wholesale. And many of the small businesses, or some of them who had argued for us requiring wholesaling, understood that if we had a wholesale requirement, it would actually deter many of the larger providers from even playing, which would actually drive down the revenue that we would gain.

So I think those are just two examples of how the interest that the Commission has, and the interest that I think everyone has, are often competing and conflicting, and we have to try to find a balance. But I think in our 700 Megahertz order, we have tried to provide a balance that allows them, for example, to wholesale a significant amount of what they buy, but they're not required to wholesale at all, that we sell off a large portion of the Spectrum in a large geographic area, that has some open platform requirements, which we think will facilitate some small businesses. And, at the same time, sell a significant amount of the Spectrum, with

more than half of the Spectrum is sold in small and medium-size geographic areas, without any encumbrances, whatsoever, without any encumbrances on open access at all. And I think that's an example of how we tried to find an appropriate balance, and give small businesses an opportunity.

Chairwoman VELÁZQUEZ. Any answer on the Regulatory Flexibility analysis, because that was my next question. So we can take this opportunity for you to answer.

Mr. MARTIN. Well, I think the Commission is both statutorily required to, and does, undergo a Regulatory Flexibility Analysis in all of our orders to determine the impact of our decisions on small businesses. And we do end up taking all that into account. I'm not aware, off the top of my head, of any court challenge that has said that have insufficiently done that Regulatory Flexibility Analysis in recent times, but I'll go back and try to get you any further answers. But the Commission is always open, if there's ways that the Committee thinks we might be able to improve that Flexibility Analysis. We'd be happy to work on that.

Chairwoman VELÁZQUEZ. So you're aware that you conducted-

Mr. MARTIN. Oh, absolutely.

Chairwoman VELÁZQUEZ. So, I will ask that you submit to this Committee the economic analysis that you conducted on the impact that it will have on small businesses.

Mr. MARTIN. Sure. We always end up having to, and we're happy to submit the Regulatory Flexibility Analysis.

Chairwoman VELÁZQUEZ. Thank you. Ms. Hirono. Mr. Sestak, he's gone. Mr. Higgins, he's gone. Mr. Shuler.

Mr. SHULER. Thank you, Madam Chair.

I simply have one question. We discussed that if a licensee doesn't perform the benchmarks with the build-out within 10 years. Has the Commission explored, I know this is under new regulations, have you explored ways to kind of provide incentives after five years that maybe they could—I understand why they don't flip it, and I believe what you're saying, because that would create—obviously, people would be getting it just for flipping those. Is there any other ways that we can kind of expedite that, make it a little faster; especially, in rural areas. I mean, ten years can be a life time.

Mr. MARTIN. No, no. Our rule on Designated Entities says, if you qualify for a bidding credit, you are not allowed to flip it. You have to keep it for 10 years. Our build-out requirements actually kick in earlier. So, for example, after four years, we have a benchmark, and we say if you don't—both geographic and population, depending upon which license you want. If you don't meet that benchmark after four years, we actually shorten the time of your license from ten years to eight years. And that's a significant deterrent to not building out over a large part of either your population or geographic area. So we actually have benchmarks along the way to make sure that people are progressing, and making progress towards getting to that. We don't want to just have a requirement that says you have to build it out over ten years, and get to the end of the ten years and say you didn't do anything. And that's why we have the benchmark actually less than halfway through,

to make sure you're doing it, and meeting what's a very aggressive benchmark.

And, indeed, the wireless industry was very opposed to, in general, that aggressive benchmark, because it's a more aggressive benchmarking along the way than we've ever used before, to make sure that those areas in rural areas are being built-out, because we can't afford to wait for ten years for it to be getting out to those people.

Mr.SHULER. Chairman Martin, thank you. And, Madam Chair, I yield back.

ChairwomanVELÁZQUEZ. Mr. Ellsworth.

Mr.ELLSWORTH. Thank you, Madam Chair.

Chairman, could you discuss how the e911, how we can ensure the availability in the open platform for e911?

Mr.MARTIN. Well, we end up having some very strict rules on wireless 911 capability, and indeed, increasing it on all the different platforms that we have, that the Commission regulates.

Since I became Chairman, we've been very aggressive in making sure that all the different platforms have 911 capability, so that when—voice over IP providers are now required to provide 911, and deliver every call to the local police and fire department. And we have very aggressive requirements on the wireless industry, that they're having to do, as well.

And we will enforce those, and the Commission was clear, they would provide to all of the providers who win in the 700 Megahertz Auction, as well. So it would apply to whoever is winning all the different pieces of Spectrum.

Mr.ELLSWORTH. Thank you. I have no other questions.

ChairwomanVELÁZQUEZ. Mr. Altmire.

Mr.ALTMIRE. Chairman Martin, thank you for being here today.

I'm encouraged by the prospect that wireless broadband services might expand the service areas where reliable broadband is available, and provide more options for consumers in areas served by a limited number of providers, rural, and under-served areas. So when would you expect the entities that win licenses at next year's auction to begin to roll-out wireless broadband services?

Mr.MARTIN. Well, whenever you're talking about rolling out a service that requires you to put up new infrastructure, go out actually in the communities and put up towers, and turn on service, that takes a while, turning on the services. That's actually the reason why people were so concerned about that four-year benchmark, where we're saying you've got to be providing service, for example, to about 40 percent of your population, and a significant portion of your geographic area with those four years. So, certainly, within four years, you're going to be having to be serving more than about a third of the area already, so they'll start turning it on, I would think, once you've bought the Spectrum, paid a lot for it, you want to turn it on as quickly as you can. But it does take a while to go get the approval from the local communities to put a new antenna, and put that antenna up, and get power to it, and turn it on, and begin selling handsets, so that takes a while.

I would think within a year they might be able to start serving some places, but that four-year benchmark is a good sign for how far along they should be.

Mr.ALTMIRE. Are there any areas of the country that you feel might be lagging behind, or similarly, that are further ahead in the process, and maybe would be used as a model for other areas to look at?

Mr.MARTIN. Well, unfortunately, because this Spectrum is currently utilized by television signals, it's been very difficult for anybody to—even for some of the pieces of the Spectrum were sold, for them to utilize it very effectively. So in this piece of Spectrum, in these frequencies, I can't say that I think anybody's really that much further ahead.

Probably the one furthest ahead is a company called Qualcomm has rolled out service media flow, which is a mobile video service to telephones, that is provided by Verizon and several other providers. And they're using actually some of the frequencies from digital television channels that they have actually either won, or negotiated with television channels to let them begin providing service. So they're probably the most aggressive, and already utilizing some of the 700 Megahertz today. But I think that was a somewhat unique service, so I'm not sure how comparable that would be for others to follow.

Mr.ALTMIRE. For my last question, I wanted to follow-up on what Mr. Chabot had talked to you about. And the FCC has proposed reserve prices for Spectrum licenses which amount to more than \$10 billion.

Mr.MARTIN. That's right.

Mr.ALTMIRE. As, of course, you know. At these prices, small businesses cannot participate without access to significant capital. Are you concerned that rules governing Designated Entities may inhibit their ability to raise capital?

Mr.MARTIN. As I said, I think they were able to be very successful in raising capital, and still winning effectively in the last auction we had for similar kinds of Spectrum. And in that auction, over half of the winners were Designated Entities. And we based that reserve price on the amount of money that was garnered in this auction, where they effectively participated. So what we did is, we said that to try to get an estimate for how much this Spectrum should be worth, we looked at what was the most recent auction we had, and let's utilize that as a benchmark for how much this Spectrum should be worth. And in that auction, that was the auction in which Designated Entities were able to win more than half the licenses. So I think that is a sign that they will be able to effectively compete.

Mr.ALTMIRE. Thank you. I have no further questions.

ChairwomanVELÁZQUEZ. Yes. Ms. Hirono.

Ms.HIRONO. Thank you, Madam Chair.

I'm referring to the testimony of Mr. Edward Bond, Mr. Chairman. And I think that we want to allow small companies to directly bid for these bands, and then also to encourage the larger licensees to work with the small businesses. And, so, I'm referring to his testimony on it looks like page 4 or 5 of Mr. Bond's testimony, where he says that:

"A better approach would be for the FCC in trying to promote the direct bidding by small businesses to license the Spectrum based on smaller license areas, rather than huge regional areas."

Can you respond to that part of my question?

Mr.MARTIN. Sure. In the 700 Megahertz Band, in all of the television, in all of the frequencies we're to sell, that the Commission is going to get back as a result of the DTV transition, a third of those channels are going to be sold in the smallest geographic areas. I haven't seen Mr. Bond's testimony, but in the smallest geographic areas that anybody propose, the cellular market areas or towns. So I think that is a significant opportunity for them to be participating.

Are we doing it all on a small basis? No, but I think that's a lot of Spectrum to be offering on a very small basis.

Ms.HIRONO. Then his second point has to do with, you want to encourage the larger licensees to work with the smaller providers. And that, currently, your proposed rules provide few or no incentives for this to happen, because you're allowing the large companies to basically focus on serving the urban or populated areas. So can you respond to how you can better encourage partnership between the large bidders and the smaller companies that want to get into the market?

Mr.MARTIN. Well, I'm not sure exactly what he's referring to on trying to encourage them to work together. But I will say that I think the most important thing that we can end up doing to try to facilitate that, is to make clear, if in the larger geographic areas that we sell, you have an obligation to serve that whole area, and all of those communities in there. And you can't just serve the urban are, as you said in your question. You've got to go serve all of those areas, which is why we have very strict build-out requirements.

Now one of the ways they can meet those build-out requirements is working with other providers, if they would like to. I think that would allow them, and encourage them to do that, but I think that's the most important thing that we can do to encourage it, is to say, if you win a large geographic area, you've got to serve the smaller communities in that area, as well. You can't just serve the big urban area.

Ms.HIRONO. Just one clarification. I think, as I recall in your testimony, that you said that they would have to serve 75 percent of the population.

Mr.MARTIN. That's right.

Ms.HIRONO. That's not 100 percent. But at some point, do they need to serve 100 percent, including the rural areas?

Mr.MARTIN. In areas where—if they haven't met their benchmarks, we take back away the areas they haven't served. But to be clear, and this is an important, I guess, important to put in context. The Commission has never had a requirement as high as the requirements we put in this auction on what they should end up providing service to. And, indeed, the industry in total, and I think this would probably be both the smaller providers, and the largest providers, were opposed to the very requirements you're talking about, of being able to serve at least 75 percent of the population and a very high percentage of the geographic area. And, so, the Commission was trying to find a balance with that, but this was the most aggressive the Commission had ever been in what we were requiring people to provide service to.

Ms. HIRONO. Thank you.

Chairwoman VELÁZQUEZ. Let me follow-up on Ms. Hirono's question to you.

In the next panel, some of the witnesses, like Mr. Bond, raised the issue of how—it's going to be more expensive for a small entity to cover rural areas, because they are more spread out, they don't have the resources and the infrastructure. So rural communication companies have raised concerns about the population-based build-out requirements that the FCC assigned to the larger licenses. This company contends that population-based benchmarks will not encourage licensees to provide service to rural areas. How do you respond to that?

Mr. MARTIN. That's the very reason why we have actually a mix of our requirements. Some of the licenses are required to be built out on a population-basis, and some are required to be built-out on a geographic basis, to make sure that all of the different areas are covered. And, so, some of the small carriers wanted to make sure that we had a geographic basis, to make sure that all the rural communities were covered.

Some small carriers were concerned that would actually become too difficult for them to end up doing, and wanted a population everywhere. And, so, the Commission, again, tried to find a mix where we've said some of the licenses can be built-out on a geographic area-basis, and some need to be built-out on a population-basis, to try to provide opportunities both ways, to different carriers who wanted to be in different-

Chairwoman VELÁZQUEZ. In 2006, the FCC conducted the Advanced Wireless Services Auction. Fifty-seven of the 104 winning bids were submitted by small businesses. According to one of the witnesses that will be testifying today, due to government user's needs, small entities may have to wait as long as five years before they begin to benefit from the Spectrum. Mr. Chairman, for a small business, small entity, five years is a long time, so what steps are you taking, or you will be taking to accelerate the relocation process, so that these firms are not impacted by extended delays?

Mr. MARTIN. The Spectrum that we were auctioning off in that AWS-1 auction was actually Spectrum that we were taking back from government users, and NTIA, which is a division of the Department of Commerce, is responsible for moving government users off of those pieces. They've got a schedule for when the government users are supposed to be off, but the Commission regulates commercial private users, not the government users, themselves.

So to the extent that there's concerns about the government users moving off, the Commission has very little that they can end up doing. NTIA is the one responsible for making sure that government users exit according to the schedule that has been laid out. But the auction was conducted with a schedule of when people were going to be leaving, and I assume that everything is on track with that. I haven't heard, in particular, anything that that's not.

I think, though, the fact that the Spectrum was going to be unavailable for such a long period of time, because there were current government users who were going to be leaving over a certain period of time, only highlights why this Spectrum should be worth significantly more, because this Spectrum is going to be available

at a date certain. We know on the DTV transition in 2009. And that's the very reason why I think us using that Spectrum as an example of how much we should be able to raise, and using that as a benchmark, is why that's a reasonable benchmark for us to be using, because this Spectrum should be worth more, because it's available even quicker.

Chairwoman VELÁZQUEZ. Thank you very much. Mr. Chabot, do you have anything? Well, with that, the gentleman is excused, and I thank you for your time, and your cooperation, and your insights into this issue.

Mr. MARTIN. Thank you very much.

Chairwoman VELÁZQUEZ. And we'll expect for some of the questions that you were not able to provide some of the answers, to be sent to this Committee.

Mr. MARTIN. Sure. Thank you.

Chairwoman VELÁZQUEZ. I will ask the second panel to please take your seats.

Mr. Chairman, would you please name for the record a staff person who will stay at this hearing?

Mr. MARTIN. Oh, sure. Aaron Goldberger will stay.

Chairwoman VELÁZQUEZ. Thank you.

Okay. We're going to start with our second panel. And each of the witnesses will have five minutes to make your testimony. And we're going to start with Mr. E. Kelly Bond. He is CEO and President of Public Service Communications, based in Reynolds, Georgia. Public Service, through its subsidiaries, holds Spectrum in regions of Alabama and Georgia. Mr. Bond is Chair of the Wireless Committee of the National Telecommunications Cooperative Association, and is a member of the Rural Telecommunications Group.

Welcome, sir.

**STATEMENT OF EDWARD KELLY BOND, CEO AND PRESIDENT,  
PUBLIC SERVICE COMMUNICATIONS, REYNOLDS, GEORGIA**

Mr. BOND. Thank you, Madam Chair.

Good morning, and thank you for the invitation to be here.

The upcoming 700 Megahertz Auction, if structured and managed appropriately, represents a tremendous opportunity for the FCC to help deliver broadband capabilities to all areas of the United States.

Because of the characteristics of the 700 Megahertz Spectrum, I believe it will be economical to deploy broadband services to many rural areas that would otherwise have been uneconomical to serve. That's why the segment of our industry has argued so strenuously that it's essential for Congress and the FCC to develop policies that will ensure rural carriers have access to 700 Megahertz Spectrum, and, in particular, the 700 Megahertz Auction.

My fear is that consistent with past practices, large nationwide telecommunications carriers will be in the best position to win many of these licenses that will soon be auctioned, and they will once again overlook rural towns, and their outlying areas, concentrating on the most profitable, highly populated areas.

While such a market-based approach to the provision of broadband is understandable, it is not justifiable when there are small and rural companies ready and willing to provide service to

such rural areas. And I suggest that rural carriers and rural businesses have different incentives when it comes to their regions' economic survival. Bringing new businesses and jobs to my service area is a win-win situation.

The FCC's current plan for auctioning and licensing the 700-megahertz band by design limits opportunities for small businesses to participate. Small businesses have no opportunity to acquire the huge C block licenses in the auction. And the FCC's construction requirements do not encourage the large C block licenses to work with small business.

And if I may interject, the discussion just now about the build-out requirements, as proposed, the build-out requirements are more burdensome on the small carrier than the large carrier.

A far better approach for small business would be for the FCC to license the spectrum based on smaller license areas and the huge regional areas. Instead of creating licenses so large that only multi billion-dollar companies can bid on them, division of the spectrum across the smaller CMA divisions would allow for fair and equal participation by all size companies.

Also, the FCC should change the current construction requirements for the C block from population-based benchmarks to geographic based-benchmarks. This would encourage large licensees to work with small businesses to maximize employment of service to secondary and rural markets.

In addition, the FCC and Congress should ensure that to the extent services provided using 700-megahertz spectrum are mobile or portable, the customers of small carriers are able to roam on the networks to be built by the nationwide carriers.

The FCC and Congress should ensure that nationwide carriers do not deny their own customers the ability to roam in rural areas where there is a small business carrier that is providing technically compatible services.

Another way that FCC can ensure that rural citizens have access to new 700-megahertz-based applications is to require open access on the entire 700-megahertz platform and all future auctions of spectrum intended for personal communications services.

If large nationwide carriers are allowed to dominate the 700-megahertz auction, they will control massive amounts of spectrum. Such concentration in the hands of a few goes against the entire grain of section 309(j) of the Communications Act and seems contrary to congressional intent.

We question the benefit to the public of allowing large carriers with huge budgets to gather spectrum with the potential purpose of preventing its use by others.

There is no question that rural carriers, more than others, need less burdensome regulations. As a regulatory agency, the FCC under this Act, is charged with giving particular consideration to whether or not its rules will negatively impact small carriers and particularly rural telephone companies.

We cannot honestly think of one instance in which the Commission ever outlined in a final order that it had found circumstances that warranted adopting different rules for small carriers. We ask how can this be?

Instead of discouraging small businesses, the FCC should carefully study the impact of its regulations on small businesses, and should ensure that rules and policies encourage small and rural businesses to deploy broadband services.

By instituting the suggestions I have outlined today, which we have repeatedly made in formal presentations and filings with the FCC, policy-makers could encourage the deployment of broadband connectivity to rural citizens and rural businesses with high-speed connections throughout America.

I thank you for the opportunity to speak. And I invite your questions.

[The prepared statement of Mr. Bond may be found in the Appendix on page 56.]

Chairwoman VELÁZQUEZ. Thank you, Mr. Bond.

Our next witness is Ms. Shelley Spencer. Ms. Spencer is President of WIREFREE Partners, based in Vero Beach, Florida. WIREFREE Partners currently deploy wireless networks in 16 metropolitan markets, where it holds spectrum licenses.

Prior to joining WIREFREE Partners, Ms. Spencer was General Counsel and founder of Airgate, a wireless company that built, owned, and operated a network in the southern Eastern U.S. covering more than 6.5 million people.

Welcome.

**STATEMENT OF SHELLEY SPENCER, PRESIDENT, WIREFREE PARTNERS, LLC, LAYTONVILLE, MARYLAND**

Ms. SPENCER. Thank you, Madam Chairwoman, Ranking Member Chabot. And let me also thank you for your leadership. I think it is very timely since we just found out on Friday the auction is going to start January 24th and significant dollars will be due from all bidders by December 28th. So thank you for keeping this on the radar screen.

As I sit here today, we are constructing a state-of-the-art network in our 16 markets. And that network I think shows the story of what small businesses can do.

We are not a rural telephone company. So I think we have a different story here today. And I hope that the message doesn't get lost that small businesses can also serve urban markets.

We have Cincinnati as our market. We have Austin, Texas. We also have McAllen, Texas. So there is a variety of markets. And small businesses can bring value to every one of those markets, be they rural or urban, but that all counts on the FCC and the FCC's rules.

My companies have participated for ten years in spectrum auctions, each time as a small business. And we have seen the rules go back and forth. Significantly, the network that we are building today operates on spectrum 1 in 2005.

We chose not to participate in the AWS auction in 2006 precisely because the rules changed and we didn't feel we could raise the capital. We are likely to sit on the sidelines in 700 megahertz because, again, we don't think we can raise the capital.

But the story for small businesses can be bright. Just like other industries, small businesses in wireless generate new jobs, bring

new competition, and bring innovative services. My companies over the years have created over 250 new jobs.

We are bringing service to business customers that aren't being provided today by the national carriers. As a small company, we can pay attention. We can bring those niche services that other people like. But we need to have access to spectrum.

I think it is important to recognize that small businesses in wireless are unique in two very important ways. First, we have to get access to spectrum. And the only way to do that is to buy it from somebody else or go to an auction. And that is expensive.

Second, we have to raise a lot of capital, not just to buy the spectrum but to build the network. My company in the 2005 auction paid 152 million for spectrum. That is a lot for a small business.

That included, significantly, a \$44 million bidding credit, without which we wouldn't have been able to purchase the spectrum. It also included our ability to lease half of our spectrum to Sprint-Nextel, as mentioned by Congressman González. That today is not available, Congressman. We can lease a portion of the spectrum, 25 percent, but being able to lease 50 percent to a single entity is not permitted. Nor is wholesaling of 50 percent to a single entity. So small businesses have to face, how do we raise the money to participate in this business?

The 700-megahertz auction will require small businesses to raise millions of dollars in the next 3 months. As it is been noted today by the Committee, the auction will have to produce \$10 billion in revenue.

Just to bid on the small markets that the Chairman pointed out are key to small business opportunity takes huge dollars. For example, the minimum opening bid in New York City for the smallest market is \$59 million. That is to place one bid, the first bid.

The Cincinnati minimum first bid for the smallest market is \$2.9 million. And San Antonio will cost you 767 million if you win it on the first bid, but no one wins it on the first bid.

The capital requirements are staggering for small business. And it requires that the rules be flexible so that we can be innovative in our strategies and our finances in attract the capital.

The AWS auction was not a bright spot for small businesses, although I think the FCC chairman would quote you different statistics. If you look at the half a billion dollars that he cites that small businesses won, that is out of 13.5 billion that was spent. So half a billion was spent by small businesses. And since everything is priced on population and size of megahertz, that means that the smaller markets were what the small businesses were winning.

Also, the rural telephone companies, although they don't like the rules, did okay if you look at the percentage that they won by DEs, but the small businesses that are true entrants won less than that. We attribute the poor showing in that auction, frankly, to the rule changes. And we would expect the same in the next auction unless there is significant change, which doesn't seem to be underway.

So the future can be different, but we think small businesses really need three things. One, we need bidding credits, which are in place and are available for small businesses. But those have to be tied to flexibility to run our business.

We should be able to wholesale. We should be able to retail. We should be able to lease. We shouldn't have straitjackets because we are small businesses that other carriers don't face.

And also we can't live with a ten-year restriction of holding the business. It isn't just selling the business. We can't change our board. We can't have strategic relationships because all of a sudden we fall out of the small business category. In ten years, that is a long time in the wireless industry.

Just open the paper this morning, and you will see 700 megahertz was bought by AT&T from a small carrier. That happens every day. And to say a small business can't have that but must raise millions of dollars to participate in the auction is the death knell for small businesses.

So we appreciate your leadership and your continued support. And we hope the auction goes well. Thank you.

[The prepared statement of Ms. Spencer may be found in the Appendix on page 63.]

Chairwoman VELÁZQUEZ. Thank you very much.

Our next witness is Mr. Chris Guttman-McCabe. Mr. McCabe is Vice President, Regulatory Affairs, for the CTIA - The Wireless Association. CTIA is an international trade association representing all sectors of wireless communications, including service providers, manufacturers in wireless data and Internet companies.

Prior to joining CTIA, Mr. Guttman-McCabe practiced law in Washington, D.C.

Welcome, sir.

Mr. GUTTMAN-McCABE. Thank you.

**STATEMENT OF CHRIS GUTTMAN-Mc CABE, VICE PRESIDENT,  
REGULATORY POLICY, CTIA-THE WIRELESS ASSOCIATION**

Mr. GUTTMAN-McCABE. Good morning, Chairwoman Velázquez, Ranking Member Chabot, and distinguished members of the Committee. On behalf of CTIA and its hundreds of carriers and manufacturer members, I want to thank the Committee for focusing its attention on the upcoming 700-megahertz auction. This spectrum and the recently auctioned AWS spectrum will continue to facilitate the wireless industry's provision of broadband to the person.

Over 150 wireless companies provide service to more than 243 million Americans today. These companies have in excess of 25 billion in capital expenditures each year and account for over 253,000 jobs in America. Last year there were 1.8 trillion minutes of use in the United States. There currently are 18.7 billion SMS text messages issued per month.

From a public safety perspective, there are 291,000 wireless calls to e911 each day. More than 15 companies manufacture handsets for use in the United States market. There are hundreds and hundreds of handsets available to American consumers. And perhaps even more staggering, there are over 1,000 companies that display their products and services at CTIA's annual shows each year.

All of these products and services are provided to the American consumer for one-fourth of the average price per minute that consumers in Europe experience. In addition, U.S. subscribers use 834 minutes per month. That is 500 minutes more than the next closest country in Europe.

In addition, U.S. subscribers enjoy benefits involving less cost, more minutes, more offerings, more carrier choices than anyone on the planet. Other countries envy this market, the market that has developed in the United States. And the country, its regulators and legislators should be proud.

The 700-megahertz spectrum referred by some as beach-front property could help to continue that trend. Unfortunately, when the Commission sought comment on the potential service rules for the spectrum, a small subset of new entrants promoted proposals designed to tailor the auction to their own unique business models and promoted proposals that were designed to prevent access by some incumbents.

Much of the debate during this process has centered on proposals put forth by a group of well-funded companies with a combined market capitalization of one-half trillion dollars. Companies will spend the next few months reviewing the rules and making decisions whether to participate in the auction, but it is arguable that these new conditions, which contradict the FCC's past policies of supporting license flexibility, could have a negative effect on the ability of small businesses to take part in and ultimately win licenses in 700 megahertz.

Specifically, the Commission's open platform and geographic build-out requirements could place 700-megahertz licenses out of the reach of small businesses.

As referenced in the letters that we attached to my written testimony, a coalition of 139 companies, all of which would qualify as small businesses, oppose the open access requirement. Additionally, 55 companies and organizations, again the majority of which would qualify as small businesses, oppose the geographic build-out requirement.

In setting the ban plan and service rules for the 700-megahertz spectrum, the Commission adopted a mix of spectrum and license sizes as well as regulatory requirements. For example, in the upper C block, a 22-megahertz block of spectrum, the Commission has imposed an open platform condition.

CTIA and many large and small incumbent carriers argued that removing carriers' ability to control the handsets permitted on its network limits the ability of the carrier to manage the security, the quality, and the viability of its wireless networks.

Further, with the fast pace of innovation in this industry, having the government try to predict or direct where the industry should go is a troubling concept.

Similarly, the upper D block is subject to a public-private partnership obligation. The additional obligations this condition places on the D block licensee will likely make it less attractive to small businesses.

In the lower band licenses, the Commission adopted a geographic build-out that potentially limits the desire of small businesses to purchase that spectrum.

Requiring carriers to serve those areas where there are few, if any, people may require small business licenses to build sites that they cannot afford to maintain. Specifically licensers will need to reach 35 percent of the geographic area in 4 years and 70 percent by the end of the license term.

To put this into perspective, according to the U.S. census, 87 percent of our population lives in 8 percent of the geography. Taken collectively, the Commission's decision to encumber the 700-megahertz license with new service obligations could significantly impact small business opportunities.

On the spectrum front, this Committee also could help licensees that won spectrum in the recent AWS auction. Some of the 104 winners, many of whom were small businesses, may have to wait as long as four years to begin operation. Companies purchase license in the AWS auction and have been unable to begin serving customers as government incumbents have yet to clear the spectrum. And the process of coordinating operation prior to relocation has proven difficult.

We urge this Committee to help small businesses with AWS licenses by working with those agencies to ensure the timely relocation or prior to relocation the coordination of the use of that spectrum.

In addition to asking and investigating issues regarding small business access to spectrum, this Committee also could aid small businesses by helping to ensure that unnecessary, unfunded mandates are not placed on wireless carriers. This was referenced in Mr. Bond's testimony.

In the last 18 months alone, carriers large and small have faced the prospect of having to upgrade their networks to face new CALEA, e911, CPNI, Emergency Alert, Katrina, and other unfunded mandates. Perhaps even more than access to spectrum, these additional burdens on the provision of wireless service threaten to significantly impact the viability of small carriers.

Finally, I commend the Committee for its recent hearing on the need to extend the Internet tax moratorium. CTIA urges the Committee to continue to press for lower, simplified taxation, not only for Internet service but also for wireless service. It, too, is a critical input for many small businesses.

Thank you, Madam Chair. And I look forward to your questions. [The prepared statement of Mr. Guttman-McCabe may be found in the Appendix on page 71.]

Chairwoman VELÁZQUEZ. Thank you, Mr. McCabe.

Our next witness is Mr. Christopher Libertelli. Mr. Libertelli is Senior Director of Government and Regulatory Affairs for Skype, a global Internet communications company. Skype's software allows users to make telephone calls from their computer to other Skype users free of charge or to land lines and cell phones for a fee.

Before joining Skype, Mr. Libertelli was senior legal adviser to FCC Chairman Michael Powell.

Welcome.

**STATEMENT OF CHRISTOPHER LIBERTELLI, SENIOR DIRECTOR, GOVERNMENT AND REGULATORY AFFAIRS, NORTH AMERICA, SKYPE COMMUNICATIONS**

Mr. LIBERTELLI. Madam Chairwoman, Ranking Member Chabot, and members of the Committee, thank you very much for offering us the opportunity to testify before the Committee this morning on an issue that is central to Skype's future and the future of small business on the Internet.

As the Committee knows well, during the 1990s, America began a transition from the dial-up to the broadband Internet access. Small business benefited enormously from this transition. The Internet empowered a small business with a good idea with the chance to become a corner store in the global information economy.

Today policy-makers are presented with the next chapter in the development of the Internet: the transition to the mobile broadband Internet. If we get this transition right, the backbone of the U.S. economy, small business, will be in position to compete on a global scale with competitors in Europe, China, and India. If we get this wrong, one of the most important trends in Internet communications, mobility, will be less open to U.S. entrepreneurship and innovation.

Unfortunately, the mobile Internet bears very few similarities to the Internet that allows small business to thrive. Today, openness on the wireless Internet is at risk, which is why the FCC's 700-megahertz auction and its open access provisions are crucial to Congress' innovation and small business policy.

For Skype, business users are more than 30 percent of our global community of more than 220 million registered users. Skype allows people to communicate with their customers and colleagues using text, voice, and video, to communicate more affordably but also to change the way people think about communications.

Take, for example, Anita Campbell, who is the editor of the popular Small Business Trends Web site based in Lynchburg, Virginia and Cleveland, Ohio. Controlling the costs of a mobile phone bill that kept creeping higher is a priority for her. So she uses Skype to make outbound telephone calls. She uses Skype to complement, not replace, her primary connection to the phone network. By doing so, she was able to cut her wireless plan down to 450 minutes from 1,000, saving approximately 40 percent.

But it is not merely about saving money, as important as that is to small businesses. Consider another company, Media Internet, based in New York City. In its New York office, they use Skype in a related program called Unyte to teleconference from one cubicle to another or with remote offices in Argentina. As a result, conveying an idea which used to take half an hour can take ten minutes or less.

The impact of openness principles on small business is real. All of these innovations are taking place on the wired Internet. There is no reason why we can't have the same level of innovation on the wireless web.

Shorthand for 700-megahertz open access policy is in our view a no blocking and no locking rule, something we refer to as Carterfone. By that we mean that a small business or any consumer should be able to use any wireless telephone handset or

Internet device as long as that device is technically compatible with the network. It also means that small business users should be able to use any software on that device without the permission of the network operator. This is the rule in every other sector of the broadband market except wireless. And we should correct that.

In testimony before the House Commerce Committee, FCC Chairman Kevin Martin updated the Carterfone story for the wireless environment by explaining that openness will “ensure that the fruits of innovation swiftly pass to the hands of consumers.”

Chairman Martin, Commissioner Copps, and Commissioner Adelstein made good on that vision a few months ago in the 700-megahertz rule. And we fully support them.

In the aftermath of the on-again/off-again Verizon restrictions on the political speech of an abortion interest group, the wasteful cat and mouse game over unlocked Apple iPhones, we need no further evidence of the importance of open access principles for the wireless market.

I would like to close by stressing two major benefits that an open access policy has for small businesses. The first is that in the small businesses’ role as a consumer of wireless services. In this respect, they will have more advanced, more affordable tools for their business needs with open access.

For small business users, there is a second perhaps unique benefit. Small businesses will have the opportunity to build Internet applications and devices sold directly to consumers, subject only to the reasonable technical constraints, rather than the competitive concerns, of wireless operators.

In short, small businesses are both consumers of Internet communications services and creators of mobile applications. Twelve years ago, eBay started as a small business. Four years ago, Skype started as a small software company. An unconstrained wireless marketplace offers almost unlimited potential for the next eBay, the next Skype.

America’s small businesses can have a pro-consumer, pro-innovation policy in wireless if the FCC’s 700-megahertz policies are implemented and carried forward throughout the wireless market.

Thank you.

[The prepared statement of Mr. Libertelli may be found in the Appendix on page 84.]

Chairwoman VELÁZQUEZ. Thank you, Mr. Libertelli.

Our next witness is Mr. Jeffrey Black, who is the founder, Chairman and Chief Strategy Officer of TalkPlus. TalkPlus brings advanced mobile phone features to customers, including an application which allows users to add a second phone number to their mobile phone.

Mr. Black is a member of the Wireless Founders Coalition for Innovation, a group of wireless industry entrepreneurs who have founded wireless companies that now generate billions of dollars of revenue and have created thousands of jobs.

Thank you.

**STATEMENT OF JEFFREY BLACK, CHAIRMAN, FOUNDER AND  
CHIEF STRATEGY OFFICER, TALKPLUS, INC., SAN MATEO,  
CALIFORNIA, ON BEHALF OF THE WIRELESS FOUNDERS CO-  
ALITION FOR INNOVATION**

Mr. BLACK. Thank you, Madam Chair and Ranking Member Chabot, and distinguished members of the Committee.

The topic before the Committee is critically important to the future of business entrepreneurs in the wireless industry. I am here today as a member of the Wireless Founders Coalition for Innovation, which is a group of seasoned industry entrepreneurs who have founded wireless companies who have generated billions of dollars of revenue and have generated thousands of jobs.

Many of us are now working in our second, third, and sometimes our fourth wireless start-ups. Many of those are actually still in the garage stage.

I personally have built my career as a serial entrepreneurs with 27 years of experience in the high tech industry, founding several companies, including IMI, iAtlas, Hotels.com, and PartnerVision Ventures. Currently I am the founder, Chairman, and Chief Strategy Officer of TalkPlus, a next-generation mobile software company which develops advanced calling services for small businesses.

These features are very critical for some of the things coming up. Imagine if you had the ability to have a phone locally somewhere and you can actually add a D.C. phone number onto your current phone right now. That is one of the types of services.

So these types of innovations can flourish as a result of the upcoming spectrum auction because the FCC has wisely adopted the so-called open access conditions. Open access is a familiar idea that applies to everywhere except for the wireless industry. Those who build and maintain our highways don't get to dictate the type of cars that we drive. The electric company can't limit your type of choice of vacuum cleaners you buy. Nor can your ISPs tell you if you can launch a Web site.

However, in the wireless world, wireless carriers dictate the devices and applications that can be used on their networks. We believe the wireless industry is ripe with opportunities for innovation and economic growth, but the large wireless carriers currently act as gatekeepers to block or deter many of these opportunities.

From firsthand experience, we know that negotiating with the large carriers for access to their networks can be a difficult and time-consuming process that can add months, if not years, to the launch of a new venture.

An open access framework, by contrast, would enable innovation at Internet speed. To make this auction a boon for small business and entrepreneurs, we urge this Committee to prod the FCC to take two important steps: one, strictly enforce the open access requirements; and, two, ensure that the rules will give small businesses and start-ups bidding credits to enter into the market and capitalize on these new rules.

What start-ups and small businesses are looking for is equal access to the network, to the phone, and to all the features that carriers get access to. In short, what level of access a carrier gets to this new network, small business should get the same access. Let

the consumers, not the carriers, dictate who can offer the best and the brightest applications.

Carriers argue that they need absolute control over the consumer experience and which applications they have access to. But if a consumer wishes to use a free instant messaging service offered by a small business, instead of using the carrier's own messaging service, how will that harm the network?

Simply put, there is no reason. Apart from commercial self-interest, why a carrier needs to ban video streaming, voice over IP, and other applications makes no sense. The only devices and applications that should not be allowed are those that actually harm the network.

Today's barriers significantly raise the costs and the risks of a start-up entrepreneur bringing a new mobile product or service to the market. The impact of this on American ingenuity is tragic.

If you are a small business with a big idea, venture capitalists strongly urge you to target Europe and Asia before attempting to introduce your application in the United States. It is not because the other countries are more forward-thinking or their consumers are smarter or more tech-savvy. No. It is because these countries give consumers more choices and drives sales and innovation.

Wireless entrepreneurship could take a huge step forward in the U.S. if the United States were to be more like the public Internet. What makes the Internet so friendly from an entrepreneur's perspective is openness. One does not have to ask Comcast or AT&T's DSL Division for permission to launch an application, a service, or a device. As Nike would say, we just do it. But in the wireless industry, we have to ask permission to innovate.

So, in conclusion, America is not innovating in the wireless at nearly the rate that it could be. While all the ingredients for innovation, wireless broadband networks, IP network, IP network stacks, advanced multimedia devices, are readily available in other countries, the U.S. incumbent operators are too hesitant to try a new recipe for change.

The upcoming spectrum auction gives small businesses a chance to compete in the wireless world and offer consumers new and exciting services. The FCC has taken small steps in this direction. And I urge the Committee to push the FCC to finish the job and enable small businesses to compete and innovate.

[The prepared statement of Mr. Black may be found in the Appendix on page 90.]

Chairwoman VELÁZQUEZ. Thank you, Mr. Black.

Ms. Spencer, I would like to address my first question to you. You stated in your testimony that in 2006, after the revised rules, you decided not to participate in that auction because you felt that it would be really difficult for you to raise the money.

When I asked the Chairman the same question about how the revised rules will have unintended consequences for small entities, his answer was that out of 101, 57 competed and they won. But then I asked him out of the 57 how many were new entrants. I believe he didn't answer. Are you aware of how many of the 57 were new entrants?

Ms.SPENCER. Chairwoman, I don't know the exact number, but I can tell you of the DEs that one licenses, I think a few things are important. One, they want 20 percent of the licenses. So he is taking the best number.

Maybe our four percent of the revenue is the worst number. And there are some numbers in between. And one is that 20 percent of the licenses in that auction went to DE.

Seventy percent of those went to rural telephone companies that claimed in their application. So the remaining 30 percent went to new entrants. However, of that, I believe there were a handful. Many companies that we had competed against in prior auctions, like myself, did not come to that auction.

ChairwomanVELÁZQUEZ. Mr. Bond, do you have any recommendations about how the Commission's rule could be refined to provide flexibility to pursue proven business models without undermining the safeguards against abuse? Ms. Spencer?

Ms.SPENCER. Oh, I am sorry. I thought you said Mr. Bond.

ChairwomanVELÁZQUEZ. I am sorry. Ms. Spencer?

Ms.SPENCER. Okay. Well, I think the fraud issue was what the Commission was concerned about. And we are concerned about that, too. But I think the rule changes actually didn't go to the Gabelli situation. With Gabelli, it was a question of, was the small business he was investing in a legitimate small business?

There are ways to address that. The construction requirements are one way. You have to have a service. But what the Commission did is look and say, "Well, we are not going to let you lease. We are not going to let you wholesale." Gabelli wasn't doing any of that. So it is kind of like we had the problem and we applied a Band-Aid somewhere else.

So I think there are a lot of rules. The Commission gets applications. They can review applications. Challenges can be brought. And people do that. Other bidders bring that.

But the construction requirements here are very severe, as has been pointed out. So there are ways to make sure people use the spectrum. But the answer of doing these other kind of line of business restrictions and the ten-year hold, you cannot talk to a venture capitalist.

You can't talk to Wall Street and say, "Lend me money" because they get into the details of what you can and cannot do. And they don't see how you can navigate in the competitive market.

ChairwomanVELÁZQUEZ. Well, how would you react to the answer provided by the Chairman that the fact that 57 small entities were able to get the licenses compared to the 100—

Ms.SPENCER. Well, I congratulate them.

ChairwomanVELÁZQUEZ. Apparently they didn't have a problem raising the money.

Ms.SPENCER. Yes. Well, I think we are all tough on companies. And Mr. Bond can address this more. They have a base. You know, so what they are doing is they are buying spectrum to add onto their business. A new entrant has nothing. We are starting from zero. So I think that is part of it.

And, frankly, the rule changes were late. So I think people, some people, may have had their money and it wasn't affected.

ChairwomanVELÁZQUEZ. Thank you.

Mr. Bond, can you tell me and the Committee if any of the associations that your company is a part of have brought legal actions against the FCC regarding the regulatory flexibility analysis.

Mr. BOND. I am aware, I was told of one as we were listening to the Chairman's testimony. And I understand that during the local number portability proceedings, that we did bring and rules were stayed as they applied to local telephone companies. So that is one that I am aware of.

Chairwoman VELÁZQUEZ. My concern is if there are concerns out there regarding the fact that the FCC didn't conduct a responsible analysis regarding the regulatory flexibility act, I didn't see the complaints and comments submitted to FCC. I don't see a big number.

Mr. BOND. Yes, ma'am.

Chairwoman VELÁZQUEZ. Mr. Libertelli, Skype along with Google and other Internet companies have been strong supporters of the open platform requirement, which will allow individuals to use any device for the 700-megahertz frequencies.

Looking forward, what will the wireless market look like after the auction? And why are the open platform rules important to you and your customers?

Mr. LIBERTELLI. Chairwoman Velázquez, I think there are two dimensions to the answer to your question. The first is we think that after the 700-megahertz auction is completed in these open device and application principles are put into the market, you will see consumers take greater control over the way they use communication services and wireless.

So in the story I mentioned in my testimony, you will see small businesses take control over the amount of overage they typically have with a wireless service and try to reduce the cost of doing business.

The other dimension to this, which I think is critically important, is that if the 700-megahertz rules are put in place and openness principles prevail, you will start to see more and more small—and I mean very small—companies, zero to ten people, build mobile applications that plug into applications like Skype.

We try to approach this with some amount of humility. We can't always figure out what the next great Internet application will be, but we can partner with companies who are themselves small businesses to develop that application and jointly provide that choice to consumers.

So we would expect to see more consumer empowerment on the service side and more innovation on the development side.

Chairwoman VELÁZQUEZ. Thank you.

Mr. Bond, I share your concerns regarding the Regulatory Flexibility Act. And I just want for you and other associations that really represent small businesses to understand that the Regulatory Flexibility Act is an important tool of this Committee under the jurisdiction of the Small Business Committee.

So when a federal agency is going to issue a regulation or a rule, they have to comply to do the proper economic impact on small businesses. And that we can use to bring the agency before this Committee.

And so in helping us do our job, it is important for trade associations that represent small businesses to submit the comments and to raise the concerns in big numbers so that it will give us the arguments to bring those agencies before the Committee.

Mr.BOND. Yes, ma'am. And we do make it a practice to comment. I thought the question was more tailored towards legal action. And it is very expensive to challenge legally.

Small businesses don't have the resources to go down that path. And the associations being funded by small businesses are limited in resources as well. But we do make it a practice to comment.

ChairwomanVELÁZQUEZ. From your testimony, it sounds as though broader communication companies have a great deal of uncertainty about how the upcoming auction will impact their businesses.

Mr.BOND. Yes, ma'am.

ChairwomanVELÁZQUEZ. Do you expect that your small business customers will benefit from the open platform requirements that the FCC assigned to the C block licenses?

Mr.BOND. Absolutely. Small business customers—and I will speak as both a rural telephone company, rural carrier, and small business customer myself—need access to the high-end equipment.

I mean, speaking as a carrier, a wireless carrier, one of the hard tasks that we had was to get equipment to sell to our customers. We are on the tail end of the supply chain. All of the new equipment, the stuff that is advertised, the stuff that is promoted is tailored for and sold by the large carriers. And in most cases, we can't get that equipment until it is generations old.

ChairwomanVELÁZQUEZ. Thank you.

Mr. Chabot?

Mr.CHABOT. Thank you, Madam Chair.

Mr. Black, you mentioned I think that regulations, among other things, make it more difficult to innovate in the wireless world versus the Internet. How would you change this? Are there any things that we could do that would remedy that or at least head in the right direction?

Mr.BLACK. Well, the important part here is all about open access to both the networks and the phones. And there are some things that go beyond that also that would really help out, especially for start-ups and people building software. And that would be open access to the billing systems, too.

So what we are looking for is the ability to bring a product to market without having to spend millions and millions of dollars to build a product just so the carrier can turn around and say, "I am sorry. We are not interested." And that happens all the time.

So a lot of start-ups are now looking at saying, "Okay. I can build a product in Silicon Valley. Oh, but why don't I just go launch it in Europe and Asia?" because it is easier to get onto the phones in those other countries because most other countries outside the United States, they are not locked phones.

Mr.CHABOT. Thank you very much.

This is for the whole panel. Are there services that are available to large users of wireless services that are unavailable to small business users? And if so, what competitive disadvantage does it

place the small business user in? And what could be done about that? I would invite anyone who wants to comment. Mr. McCabe?

Mr. GUTTMAN-MCCABE. Yes. Thank you, Congressman. I can't picture services that are available to one category of users versus another, but I do think it's instrumental. And you've brought up the idea of looking at this 700-megahertz auction not only from the perspective of companies being able to access spectrum, small business entities, but also from the perspective of small business users.

Part of our concern with regard to the open access concept is, as you hear Mr. Black talk about the benefits of Europe and Japan and how his company or others may benefit there, I don't think that's a model we want to replicate from the perspective of the small business user.

In Japan, they charge five times the amount that they do in the United States per minute of use. And as a result, users in Japan use about 130 to 150 minutes per month compared to 800 in America. So the small business user in the United States has access to a device that has opened up untold riches and rewards to that small business user. You look to Europe. Europe charges on average four times as much per minute, and they use one-fourth the minutes of use.

So I'm not sure. While that concept may benefit Mr. Black, I'm not sure it benefits consumers as a whole and particularly small business users. I think that the majority of small business users are moving away from their land line phones and moving to using at times solely a wireless phone. I think that benefits. We have 1.8 trillion minutes of use. And there's a reason for that. And so to me there are some concerns.

Mr. Libertelli suggests that we should have some open access so that his devices can be used more regularly in the United States. I have two devices from two of our members. One is WiFi-based. One is not. One is used on the CMRS network. Both have Skype downloaded on it.

I went to Skype's Web site, used Skype's instructions on how to do it. I bought the phones. I bought one phone online, not through the carrier. I bought the second phone at the carrier. And both are able to be used. In fact, it's almost going to be cute in an FCC meeting with the Chairman's advisers and call Chris from them and demonstrate.

[Laughter.]

Mr. GUTTMAN-MCCABE. But the reality is both of these work. They work on Skype's software. There is a reason some would argue why Skype isn't taking off as much in the United States, and that is because the settlement rates from Vermont to New Mexico to Washington, D.C. are not as cost-prohibitive as the settlement rates from Finland to Germany to the United Kingdom.

So I would argue that as the Commission looks at expanding this to open access, we have WiMax and Sprint using an open access platform. We have T-Mobile that is using a WiFi at home product. We have Nokia that is taking out full-page ads in every major city saying they have open access devices to battle the Apple product. We have Motorola saying the same. I mean, you can go on the list again and again. And my concern is that the FCC is going to try

to put an imprint on an industry that is taking off, and they are going to be behind.

This is our phone 12 years ago. This is the wireless phone 12 years ago. This is a year-old already, and it has everything we could want to do from our business office in it. And I am terribly troubled that we are going to trip up this industry. And we are going to have something like Japan and Germany and Great Britain. And I don't think that will benefit the small business community that you are so ably representing.

Mr.CHABOT. Let me tell you a very quick story related to what you are just saying. My daughter kept telling me years ago that I should watch the Seinfeld series. She said, "Dad, it is just the kind of humor you would really find funny."

I never did it, never watched it. And she gave it to me for Christmas. I think it was the last year or something like that. So I have sort of started out in the first season. I think I am in the third or fourth season now.

I think it started in '93 if I am not mistaken or something like that, year before I got elected up here. And you see them whip out these phones now.

[Laughter.]

Mr.CHABOT. And, I mean, it is really humorous to see that. And it was a cutting-edge technology at the time.

In any event, let me just ask one more. Were there any of the other witnesses who wanted to comment on that? Yes? You can both go, just whichever.

Mr.BLACK. Okay. I am sorry. I have got to cut in here a little bit.

We are talking apples to oranges. And we need to explain something, a real simple concept here. When you compare the United States with Europe and Asia and other countries, we are the only country in the world that every caller pays. I call you. I pay for my part of the call. You call, and you answer the phone, you are paying for your side.

In Europe, it is a caller pays world. I call you. I pay for both legs of the call. All right? So let's not skew the numbers we are throwing out here because it does skew the numbers quite a bit. It also means that people are going to call less often.

But wait a second. There is another concept. Everything in Europe is international. So it is like calling from Boston to San Francisco to Miami, and those are all international calls. That is why the rates are so much higher. I mean, if you call across the United States, we are the only country in the world that has unlimited calling plans. So we can skew the numbers all we want, but it is irrelevant.

Now, if we take it to the other side, if we talk about Skype, since we are picking on Skype, here is a Verizon phone Skype has banned. Here is a T-Mobile phone, can't get it to work here. My Blackberry, the carriers all have it in their networks. If I use too much on here, they will cut me off. Skype is not a valid application on here. And, just for fun, here is an iPhone. I tried the best I could to get it to work.

Now, it gets more interesting. We are talking about downloading an application onto the phone. I can actually do things in the world. With TalkPlus, we have a technology that allows us to add

features to these phones that the carrier doesn't support and that the phone doesn't support.

So let's use Skype as an example. I can actually make a Skype call on this phone. And the way I would do it is different than Skype would do it. Skype would do it predominantly using the data channel most of the time. It is how they would like to do it.

I actually put the call in the voice channel, which means I work exactly the way a carrier wants to work. Yet, the carriers till won't let us on the deck. No harm, no foul to the network at all. Anything we do, all calls are held in the voice channel. There is no reason that should be cut off. They still won't let on the network.

Mr.CHABOT. Thank you.

Mr. Libertelli?

Mr.LIBERTELLI. Just a brief response. I think you know you are making progress when your opposing side starts to make your argument for you.

Mr. McCabe's phone that he held up indeed does run Skype. And the point is this. If you were to take that device and walk outside of a WiFi environment and try to use Skype, the terms of service for the major wireless operators, AT&T and Verizon, specifically block his ability to use Skype to have a conversation. That is what is at stake here. It is that kind of blocking behavior that needs to be corrected.

Mr.GUTTMAN-MCCABE. If you don't mind, just to correct one thing.

Mr.CHABOT. Go ahead.

Mr.GUTTMAN-MCCABE. The numbers that I stated are Merrill Lynch numbers. They are not CTIA. They are not industry numbers. They are adjusted for calling party pays. They are numbers that reflect the fact that the different countries have different ways of charging.

Additionally, this is a T-Mobile phone. And T-Mobile doesn't prevent. This is a Sprint/Nextel phone. Sprint/Nextel doesn't prevent. And the idea that the 22-megahertz license would just be one more, it wouldn't be everyone else.

What we argue is there are at least two here. The iPhone, you can download Skype onto the iPhone. And so the reality is there are services and produces available that counter the arguments that people are making, including Mr. Black, who has successfully built and some of his members have successfully built and sold small businesses in the wireless space.

Mr.CHABOT. Thank you all.

ChairwomanVELÁZQUEZ. Mr. González?

Mr.GONZÁLEZ. Thank you very much, Madam Chair.

I neglected to commend Committee staff for an excellent memorandum, by the way. I think we neglect at times to thank them for their hard work.

The first observation—I am going to split my questioning in two categories. One is going to be spectrum ownership. I don't think that is going to happen for small business. So then the fall-back position is going to be this wonderful C block with open access, whatever that truly means.

But the biggest fear—and I think that Mr. McCabe was the one that framed it best. And I repeat it basically from his testimony to

the Chairman, to Chairman Martin. And I will pose this to Ms. Spencer.

Do you believe that the big bidders' attention will be diverted from the encumbered block C spectrum, the open access, into other areas and that those other areas, where the big bidders will be putting their money, would be those areas that would be most attractive to the smaller bidders?

Ms.SPENCER. Well, I think that your kind of beginning here is right. Spectrum ownership has kind of gone away for small businesses, unfortunately. So I would hope that everybody could have an opportunity here. But I think unless the rules change, the small bidders aren't going to come in big numbers anyway. So it is somewhat they are going to play everywhere.

I would say on the open access, you know, if we can't get spectrum directly, where are small businesses going to play? And it is probably with them. So I would guard that C block and say, "Then that is okay."

Mr.GONZÁLEZ. Okay.

Ms.SPENCER. You know, open access is a fall-back for small business if we can't get it ourselves.

Mr.GONZÁLEZ. It is a self-fulfilling prophecy. And if we really believe FCC is not thinking ahead, we are all kidding ourselves. They have set up this game in a way where I do believe this is going to transpire. So then you are going to have to fear where are your Verizons and AT&T's, the open platform on block C but in a way bleeds over to other areas. And then down the road we will be into access fees, special access fees, roaming fees, and all of that business. I mean, this is where it is all going. I don't know why we keep kidding ourselves.

The bottom line is little, small business is not going to own spectrum. If you own spectrum, you build out networks, I mean, what you have done in your business life. So let's go into this open access, open platform, and all that means.

Mr. Black, let me ask you, if you came up with an application for a way for Charlie González to order something on eBay and pay for it that mimics and competes with PayPal, would eBay allow that? The answer is no.

[Laughter.]

Mr.GONZÁLEZ. Because, you know, go and talk to Google or anyone. These are the big guys. Skype. You know, small business. You were bought for \$2.6 billion by eBay. eBay has a policy. They own PayPal. They don't allow anyone else to compete in that little environment. Why don't we have an open platform, open access so that Mr. Black can come up with some sort of application and compete with what eBay basically monopolizes in their site?

I mean, let's just say that is what is really going on. And I think that I am right on this evaluation. But for Mr. Libertelli and Mr. Black, who pays for the network? Does Skype pay for the network? Does eBay pay for the network? Does Mr. Black's enterprise pay for the network? I mean, what I am saying, who is building out the network?

And so we do have special relationships. And I recognize that they can be problematic. But those contractual relationships are

with device manufacturers, application providers, search engine providers, content aggregators, all of that in the business world.

Now, you are asking government basically to come in and say that you shouldn't have exclusive relationships at a certain level of the Internet world, such as networks with devices and others, but we shouldn't be interfering with the other exclusive relationships that you are allowed to engage in at an entirely different level, such as PayPal and so on. And there are many other examples that would go beyond eBay and Skype.

So I am just saying, who pays for the network? I mean, what you are telling me, Mr. Libertelli and Mr. Black, is, the AT&T's and the Verizons of this world have buses and you would like to get on that bus. Right? That is open access, open platforms. But you guys also have cars. But you are not going to let anyone else get in that car and hitch a ride because I do believe it is a monopoly.

I just really have always had a problem with that argument. We will see how this works out. But I do believe it is going to move on spectrum because when it is all said and done, it is about the sale of spectrum.

When it is all said and done, what we have is not an unintended consequence. I think it could have been anticipated that you are going to make that other spectrum that is unencumbered more attractive, which may have provided the best opportunities for small businesses to bid on it. I think that is gone. Now we have to live with what open access really means.

So my real question comes down to, Mr. Black and Mr. Libertelli, what are you doing to build out a broadband network that is so desperately needed in this country in the way of the wireless Internet?

ChairwomanVELÁZQUEZ. Time has expired, but I will allow for the witnesses to answer.

[Laughter.]

Mr.LIBERTELLI. If I could try to offer a response?

ChairwomanVELÁZQUEZ. Yes, sure.

Mr.LIBERTELLI. There is a lot in that question. And I understand some of the concerns you have expressed in there. The answer to your question is that AT&T doesn't pay for these networks. Consumers pay for these networks. That is the answer to who is funding the deployment of 700-megahertz spectrum or wireless spectrums generally.

So we shouldn't be sort of under the notion that somehow the—

Mr.GONZÁLEZ. And I agree with you.

Mr.LIBERTELLI.—cost from consumers—

Mr.GONZÁLEZ. I think maybe content aggregators and application providers and such, maybe you should share some of that expense, rather than just the consumer.

Mr.LIBERTELLI. And a company like eBay pays millions of dollars to buy network services from network operators every year. So each part of the ecosystem as a consumer is contributing to the deployment of these networks.

ChairwomanVELÁZQUEZ. Mr. Black?

Mr.BLACK. I would second that. If you look at what TalkPlus does, our users drive more minutes and more data plans for the carriers. So carriers in the United States have a very low amount.

The threshold of the number of people who actually have a data plan is actually very low in the United States. So every time a TalkPlus user goes online with a carrier, no matter which carrier it is, we drive their data plans. So we are actually driving revenues for them, both on the data side and we are driving it on the voice side.

If you treat this like the Internet in a way, which one is more valuable: the infrastructure people buying the pipes or all the e-commerce that goes across it? That is the first part.

The second part is there is no place to innovate right now. And that is the part that is not being talked about here. If a start-up has an application and they want to go to a carrier and say, "I have got a great application. Can I put it up in your catalog in the sky?" and they look at you and they go, "Okay," one of two things. They can say, "Yes." And on average, they will take 40 to 50 percent of your gross revenues.

Could you imagine what the carriers would do if NAPA, where they get their phone numbers from, required them to pay 40 to 50 percent of their gross revenues to get phone numbers, which is critical for any carrier to survive? Verizon, Sprint, T-Mobile, every one of them, would go out of business in a year flat.

So there is no place to innovate right now unless we can actually make this happen.

Chairwoman VELÁZQUEZ. Time has expired.

Mr. McCabe, I would like to address my last question to you. Do you really think that there is a place in today's industry for small carriers given the fact that recently there have been several acquisitions announced that will consolidate mid-sized carriers into large national carriers?

Mr. GUTTMAN-MCCABE. Madam Chair, let me take that from two different perspectives; second, address the question about consolidation and some concerns that I think those at this table and elsewhere share.

But first I think there absolutely is a place for different size carriers, small, medium, or large. The FCC calls them tier 1, 2, and 3. It makes sense from the perspective that carriers don't build out to the entire geographic area of the country. They don't build out generally to 100 percent of the population in areas. It is just cost-prohibitive.

Some companies decide to build a business model around focusing on those high-cost areas and accordingly go to the FCC for universal service funding. And I know we have been in front of this Committee and others suggesting that wireless carriers should continue to have access to the Universal Service Fund as more and more people move towards a wireless device.

So I think absolutely there is a place for it. I think that companies, contrary to Congressman, will continue to have access to spectrum. I think it will be difficult at times, particularly when you come to an auction like 700, where the hype has been built up so much that it is almost as if this spectrum has been designed for a specific purpose, which is sort of a fourth generation network.

But you look at the previous 700-megahertz auction, and companies were able to secure some licenses. And I think going forward, this is certainly not the last time we will be looking for spectrum.

I can assure you there have been discussions about this is the last great piece of spectrum.

I am already in discussions with NTIA about where we can go next to get spectrum. It is part of my job. I have been doing it for six years. And I imagine that—

Chairwoman VELÁZQUEZ. Are you hopeful that there will be new entrants?

Mr. GUTTMAN-MCCABE. Yes. I am hopeful that there will be new entrants. In the AWS, Action Spectrum Co., while it wasn't a small company, it was a brand new provider of the cable providers. Additionally, Metro PCS and Leaf, which were small companies, decided to participate on a grand scale and secured financing.

With regard to the consolidation issue, I think—and I reference this in my testimony—I am concerned that in a competitive industry such as ours, where margins are thin, when you begin to pile on, almost like a Christmas tree and ornaments, regulatory requirements, you really start to squeeze that margin. That margin gets tighter and tighter. And Mr. Bond and Ms. Spencer can address this much better than I can. That margin gets tighter and tighter, particularly if you don't have the economies to spread those costs over.

So when you look at issues like e911, CALEA, CPNI—we just ended up in a debate with the Commission over upgrades, over Katrina backup power issues. And we have played in the Regulatory Flexibility Act space to suggest that there should be a difference.

But those areas do cause significant concern and do really press on the margins.

Chairwoman VELÁZQUEZ. Any other comment?

Mr. BOND. Yes, ma'am.

Chairwoman VELÁZQUEZ. Mr. Bond?

Mr. BOND. I think it is important to realize that this spectrum auction was tailored around specific applications and apparently tailored for specific carriers or specific sized carriers. Of the 20 percent of the spectrum that is allocated to CMA-sized geographic areas, where small carriers actually have an opportunity to bid, versus the much larger regions that the other 80 percent is allocated to, where you have to be a multi billion-dollar company to have a chance at bidding at those.

The question was asked, is spectrum pretty much resigned now to the large carriers and the small carriers are left out? Unless the rules are changed and unless the designs for these auctions are set up in such a way that it is a level playing field for all size carriers, the answer is absolutely yes.

But it is self-fulfilling. I mean, that is the path we are obviously taking. And that is one reason why I am here today to say possibly we need to stop going in that direction.

Chairwoman VELÁZQUEZ. We hear you.

Ms. SPENCER. The other thing, Madam Chairman, I would just point out is that when Congress gave the FCC auction authority, it included specifically in 309(j) that you cited at the beginning of this hearing a requirement that the auction be designed to give opportunity for small businesses and rural telephone companies and those owned by women and minorities.

So the statute says it has got to work that way. The question I think we're posing is that it is not right now and will it change?

ChairwomanVELÁZQUEZ. Okay. Mr. Chabot, do you have any other question?

[No response.]

ChairwomanVELÁZQUEZ. Well, with no further question, I would like to again thank the witnesses for your testimony. Members have five legislative days to submit additional material or statements for the record. Thank you again. This hearing is adjourned.

[Whereupon, at 11:36 a.m., the foregoing matter was concluded.]

STATEMENT  
of the  
Honorable Nydia M. Velázquez, Chair  
Committee on Small Business  
Hearing on the Impact of the 700 MHz Wireless Spectrum Auction on Small Business  
Wednesday, October 10, 2007

This morning the Committee will examine the impact of the 700 megahertz wireless spectrum auction on small businesses.

Access to the newest technologies is a key ingredient for all companies to innovate and compete in a global economy. For smaller firms, however, it is critical for their success that they have access to cutting-edge equipment and infrastructure. This much-anticipated spectrum auction provides a unique opportunity for entrepreneurs to acquire these tools.

Small firms that win the right to purchase spectrum licenses will be able to deploy high speed Internet access services. This will spur greater innovation and lead to lower communications costs and improvements in service quality. Entrepreneurs operating in underserved areas will also benefit as new technology is brought to remote parts of the country. As a result, rural businesses will be better able compete and advance local economic revitalization efforts.

I am pleased that the FCC has included in the auction rules a number of elements that should benefit small companies. In order to assist them, the rules provide certain advantages for small firms – mainly in the form of credits toward their bids. In addition, the FCC’s decision to offer licenses that cover smaller geographic areas may allow these companies to compete and win – despite having more limited resources than a large national carrier. Together, these rules will allow them to start or expand wireless business operations.

Entrepreneurs also have the potential to benefit from the FCC’s “open platform” requirements. These requirements – which will allow any device to be used on the spectrum – will help level the playing field and permit for the widespread use of handsets. This will create new markets and spur entrepreneurial activity in a wide-range of industries.

With all this potential, a downside does exist. Some small communications companies have raised concerns about whether the auction rules are fair and whether the benefits of the auction will in fact extend to them. For example, rural wireless companies contend that the FCC's decision to assign population-based benchmarks to build out requirements will hurt underserved regions. The smallest wireless companies also argue that the new rules governing bidding credits make it difficult for them to raise money and pursue a sustainable endeavor.

Fortunately, we have two panels here today that will help us consider both sides of this issue. The witnesses will share with the Committee how they expect the auction to benefit small entities and concerns they may have about certain aspects of the auction rules.

For entrepreneurs that use technology to make their firms more efficient and competitive, this auction offers great promise. It provides a unique opportunity to secure the so-called "beachfront real estate" of the spectrum. This can be used to launch a new endeavor or strengthen an existing firm's operations. Small businesses – both service providers and communications consumers – stand to benefit greatly.

**Opening Statement**

**Hearing Name** The Impact of the 700 Megahertz Wireless Spectrum Auction on Small Business

**Committee** Full Committee

**Date** 10/10/2007

**Opening Statement of Ranking Member Chabot**

"I would like to thank the Chairwoman for holding this hearing on the Federal Communications Commission's rules for the sale of spectrum in the 700 megahertz band. Although fairly technical, the Commission's regulations of the auction for this spectrum will have a significant impact on small business providers and users wireless communications services.

"In 1934, Congress recognized that radio waves were a scarce public resource and authorized the FCC to award licenses for the use of radio waves but only if the use would serve the public interest. Prior to 1993, the FCC simply gave this resource away. That did not represent good economics or good public policy.

"Economics teaches us that the best way to determine the value of a resource is to sell it in a competitive market. That way, the entities that put the highest value on the resource will pay the most for the spectrum. The basis for their bidding will be that they will provide consumers with services that the consumers are willing to purchase.

"Sale of spectrum also represents good public management. It enables the federal treasury to recapture the value of this publicly-owned resource. Auctions also reduce transactions costs associated with the issuance of licenses.

"For these reasons, I strongly support the Commission's use of spectrum auctions. However, I also understand that small businesses, as innovators, need to have their fair opportunity to obtain spectrum. These innovators will provide new services and technologies that might not otherwise be developed. More importantly, small businesses tend to find niches that serve other small businesses and may provide wireless services that large wireless companies may not.

"I am specifically interested in hearing from our witnesses whether the Commission adopted an appropriate balance between maximizing returns to the federal taxpayer while ensuring that small business providers and users of wireless service will benefit from the auction in the 700 megahertz band.

"With that, I yield back."

**Written Statement**

**Of**

**The Honorable Kevin J. Martin  
Chairman  
Federal Communications Commission**

**Before the  
Committee on Small Business  
U.S. House of Representatives**

**October 10, 2007**

Good morning Chairwoman Velazquez, Ranking Member Chabot, and Members of the Committee. Thank you for inviting me to be here with you this morning. I have a brief opening statement and then look forward to answering any questions you may have.

I have had the privilege of serving at the Federal Communications Commission for over six years, including two years as the agency's Chairman. During this period, my colleagues and I have overseen a telecommunications industry undergoing rapid and unprecedented change. These changes have seen the telecommunications industry transition from a period of sharp decline to a time of significant growth. Ushered in by the broadband revolution, companies and consumers alike are finally finding the promised land of convergence. Telephone calls are now being made over the Internet and cable systems. Cell phones are now mini-computers. They send e-mail, take pictures, surf the web, play songs and videos, and hopefully soon will send and receive emergency messages in times of disaster. Business men and women are no longer tied to their desks from 9 to 5. They use handheld devices to access messages, files, and key information on the go. They can reach co-workers and clients from any location. Their customers are no longer just local, but global. These technological advances, converging business models, and the digitalization of services are creating unparalleled opportunities and considerable challenges for both small businesses and the Commission.

Almost all of this innovation is enabled by broadband deployment. Broadband technology is a key driver of economic growth.

The ability to share increasing amounts of information, at greater and greater speeds, increases productivity, facilitates interstate commerce, and helps drive innovation.

Perhaps the most important factor spurring both increased broadband availability and reduced prices for individual consumers and for businesses is competition among broadband platforms. The upcoming 700 MHz auction presents the single most important opportunity for us to increase competition by adding a third broadband platform to a market place currently served predominantly by two broadband services - - cable and DSL.

#### **700 MHz Auction**

The Commission recently adopted rules that will allow the auction of more than 60 megahertz of spectrum in the 700 MHz band early next year. This is part of the spectrum that broadcasters have used for analog television channels and that will be returned as a part of the upcoming DTV transition. This spectrum is well-suited for the provision of wireless broadband and represents a critical opportunity to continue deploying broadband services, especially to rural communities. The rules the Commission has adopted for this spectrum include several important provisions that will benefit small businesses, including:

- Promoting improved access to wireless broadband;
- Facilitating the ability of small businesses to compete in the provision of wireless devices and software; and

- Providing meaningful opportunities for small businesses to gain access to the spectrum.

Significantly, because this spectrum is well-suited for the provision of wireless broadband, the auction represents a critical opportunity to continue deploying wireless broadband services, especially to rural communities. The Commission has tried to ensure, these areas have the same access to broadband enjoyed elsewhere in the country. We adopted the strictest build-out rules ever implemented for wireless services. For example, at the urging of smaller service providers, the rules require licensees in some blocks to serve at least 70 percent of the geographic area covered by their licenses (35 percent within 4 years). And in the largest block, licensees must serve 75 percent of the population covered by their licenses (40 percent within 4 years). Companies that do not meet their initial four-year benchmark will have their license terms reduced from 10 years to 8 years. Companies that fail to meet their final benchmark will lose the unserved portions of their license areas, which will be made available to other potential users.

This combination of geographic and population-based benchmarks will help ensure that even the most rural communities have broadband access. As a result, wireless broadband connections will be available to businesses of all sizes and in nearly every location, not just corporate headquarters in major metropolitan areas. Entrepreneurs and “mom-and-pop” shops located in small towns and rural areas will be able to communicate rapidly and efficiently with suppliers, investors, and customers located around the world. And they will be able to make those connections wherever they are – at home, at work, or on the road.

Second, the auction rules will strengthen the ability of small businesses to compete in the provision of wireless devices and software. The license winners for about one-third of the spectrum will be required to provide a platform that is more open to devices and applications. The companies that operate on this spectrum will not be allowed to prevent consumers from using the wireless device or software of their choice on the licensees' networks. It is our goal that this open platform requirement will allow smaller businesses – namely, nascent wireless device manufacturers and smaller application software developers – to put their products directly into the hands of consumers without having to seek prior permission from the wireless providers, as they do today. I had the opportunity to hear from some of these technology entrepreneurs about their struggles to bring new products to market during a trip to Silicon Valley. By providing for this open platform, the Commission removed some of the barriers imposed by the wireless carriers to foster greater opportunity and innovation for entrepreneurs and their customers alike.

This open platform requirement is designed to foster innovation on the edge of the network. When the same requirement was applied decades ago to the wireline network, we saw an explosion of innovation and choice. AT&T subscribers went from renting expensive black rotary phones to purchasing inexpensive cordless phones with voice mail and caller ID. Investment in the market increased, new phones and calling features were developed, and consumers benefited.

Many of these innovations were driven by entrepreneurs, who for the first time were able to make their latest innovations available directly to consumers and compete in the equipment market to which they had previously been denied access. Ultimately, these rules facilitated the development of the Internet, as consumers were able to attach modems to the network and go anywhere the Internet could take them without interference from the network owners. I expect this model to provide similar benefits for wireless entrepreneurs by allowing them to introduce an array of niche applications and devices for the open wireless platform, including those tailored to meet the unique needs of small businesses and individual consumers.

Finally, the rules adopted by the Commission provide meaningful opportunities for small businesses to gain access to the spectrum itself in the upcoming auction. The band plan makes nearly half of the spectrum available over smaller and medium-sized geographic areas [Cellular Market Areas (CMAs) and Economic Areas (EAs)], about one-third of the spectrum available over larger regional areas [Regional Economic Area Groupings (REAGs)], and about one sixth of the spectrum available on a nationwide basis that will be used exclusively as part of a public/partnership with a national public safety licensee. This distribution is very similar to the geographic distribution in the AWS-1 Auction from 2006. With these changes, the total amount of spectrum in the 700 MHz band assigned to the smallest geographic area will be more than one-third of the spectrum available.

Licensing over smaller geographic areas benefits small businesses by reducing the cost of acquiring a license. The cost of acquiring spectrum licenses with small geographic service areas is, on average, significantly lower than the cost of acquiring licenses with larger geographic areas. The availability of licenses divided into CMAs and EAs enables smaller wireless providers to fulfill business plans focused on serving smaller, discrete areas of the country, including remote and rural areas. The availability of smaller licenses at auction also allows smaller providers to avoid transaction costs associated with obtaining portions of larger spectrum licenses in the secondary market through partitioning, disaggregation, or leasing.

To further promote the participation of small businesses in the upcoming 700 MHz auction, the Commission has provided for bidding credits for eligible small businesses, also known as designated entities. The Commission applied these same bidding credits in last year's AWS-1 auction, in which a significant number of licenses were won by designated entities. Fifty-five percent of the winning bidders in the AWS-1 auction were designated entities (57 of 104), and those designated entities won 20 percent of all the licenses sold (215 of 1087). In all, designated entity bidders won licenses valued at over half a billion dollars. Bidding credits made a significant difference, with designated entity bidders winning over half (120 of 215) of their licenses by outbidding a non-designated entity that placed the second highest bid without a bidding credit.

**Additional Opportunities**

In addition to its efforts to promote opportunities for small businesses through the upcoming 700 MHz auction, the Commission has undertaken a number of other initiatives to encourage small businesses to enter and compete in the telecommunications, and media industries.

In the area of spectrum access, the Commission recently allocated 50 megahertz of spectrum in the 3650 MHz band for wireless broadband services. This spectrum will be available on a nationwide, non-exclusive basis and will be shared by multiple providers. This approach will allow an unlimited number of small operators to enter the wireless broadband market quickly, easily, and with minimal cost, and is especially well suited for use by small businesses. The Commission has also made available 255 MHz of unlicensed spectrum in the 5 GHz band, an 80 percent increase in the spectrum available in this region of spectrum, which will allow small companies to develop cutting-edge wireless networking gadgets and bring their products to market with minimal regulatory delay.

On the wireline side, the Commission has taken steps to minimize filing requirements and develop streamlined processes for smaller telephone companies. Telephone companies whose operating revenues are below \$129 million do not file Automated Reporting Management Information System reports, do not submit cost allocation manuals for review, and may account for their operations using a streamlined version of the Commission's Part 32 accounting rules.

In addition, small local telephone companies can take advantage of the Commission's streamlined tariff process. For small carriers seeking to transfer control of their domestic assets or operating authority, the Commission's streamlined section 214 rules ease the burden associated with obtaining FCC authorization for these transfers.

In order to enhance the participation of small businesses, women, and minorities in the television industry, I have proposed allowing these entities to lease spectrum from existing broadcasters to distribute their own programming. Each broadcaster has 6 MHz of digital spectrum. Thanks to digital technology, broadcasters are able to fit more than one channel of programming into that 6 MHz block. Broadcasters who continue to broadcast only one channel of programming (like they have done in the analog world) therefore have additional spectrum left over that can be used to air other channels of programming. The Commission is currently considering a Notice of Proposed Rulemaking that would allow small and independently-owned entities to lease the extra capacity of digital television station licensees in order to operate their own broadcast channel. This new programming station would then obtain all the accompanying rights and obligations of other broadcast stations, such as public interest obligations and carriage rights. An example of this type of arrangement is the deal reached by Latino Alternative TV (LATV) and Post-Newsweek that provides for carriage of LATV programming on the multicast channels of Post-Newsweek stations in Miami, Orlando, Houston, and San Antonio.

In this same rulemaking, the Commission is also seeking comment on several other proposals to allow “qualified designated entities” to more easily get into broadcasting by allowing them to purchase expired construction permits and be allotted additional time to construct broadcast facilities.

In looking at the MVPD market, I believe there are some steps we can take to make it easier for independent programmers and niche networks to get carriage on cable and satellite systems. Recently, the Commission asked whether we should limit the ability of large media companies to tie or bundle their programming. Eliminating tying and giving consumers more choice would be an important step toward leveling the playing field between independent programming voices – those not affiliated with the large broadcast, cable and satellite distributors – and competing channels that are owned by cable and satellite. Under the current system, many cable and satellite-owned networks are bundled into the offerings not necessarily because viewers are demanding them, but because the distributor has a financial interest in maximizing their distribution. Under a system in which viewers do the choosing, those channels that do not benefit from a corporate parent will be able to attract viewers on a more equal footing.

The Commission has taken some important steps to provide more opportunity for small businesses in radio with the advent of the Low Power FM service. Low Power FM provides a lower-cost opportunity for more new voices to get into the local radio market. The Commission currently is considering an Order that would ensure that LPFM stations have reasonable access to limited radio spectrum.

In addition, the Commission will open a filing window this month for the submission of applications to establish new noncommercial educational (NCE) radio stations. The procedures established by the Commission to select among competing NCE applicants awards points to new entrants that do not have attributable interests in other media properties.

Through its Office of Communications Business Opportunities, the Commission also provides a range of outreach services to assist small businesses and new entrants. Senior Commission staff also attends various seminars and conferences to listen to and address the needs of small businesses.

**Conclusion**

Thank you for your time and your attention today. I appreciate the opportunity to share with you the FCC's efforts to support the growth of small businesses and to foster their participation in FCC auctions and in the telecommunications and media industries generally. With that, I would be happy to answer any questions you may have.



Statement by  
Edward Kelly Bond  
President  
Public Service Communications, Inc.  
Reynolds, Georgia

Before the  
United States House of Representatives Committee on Small Business  
“Examining the Impact of the 700 MHz Spectrum Auction on Small  
Business”

October 10, 2007

Good morning, and thank you for the invitation to be here. My name is Edward Kelly Bond, and I am the President of Public Service Communications, Inc. I am also the Chair of the Wireless Committee of the National Telecommunications Cooperative Association (NTCA)<sup>1</sup> and am a member, and former Board member of the Rural Telecommunications Group, Inc. (RTG).<sup>2</sup>

Public Service, through its subsidiaries, holds spectrum licenses in rural regions of Alabama and Georgia. In addition to traditional voice and broadband services, Public Service is currently looking forward to using our AWS and 700 MHz licenses that were acquired in earlier auctions, to provide more robust and economical broadband service to our customers, many of them located in outlying rural areas. Also, in the past we have provided cellular and PCS services.

Truly, Public Service, like many of its customers, is a small business. As the President of a small, independent company, I understand the struggles that small businesses face as well as their critical need for robust telecommunications capabilities in this interconnected world of ours. Be it Bangalore, India or Reynolds, Georgia, businesses have a vital need for telecommunications capabilities, especially broadband telecommunications. The upcoming 700 MHz auction, if structured and managed appropriately, represents a tremendous opportunity for the FCC to help deliver broadband capabilities to all areas of the United States, and not just the most densely populated and profitable areas. I am here today to testify that it is small businesses that have the incentive and expertise to provide broadband capabilities in rural America.

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<sup>1</sup> NTCA is a 501(c)(6) industry association representing rural telecommunications providers. Established in 1954 by eight rural telephone companies, today NTCA represents 575 rural rate-of-return regulated incumbent local exchange carriers (ILECs). All of its members are full service local exchange carriers, and many members provide wireless, cable, Internet, satellite and long distance services to their communities. Each member is a "rural telephone company" as defined in the Communications Act of 1934, as amended. NTCA members are dedicated to providing competitive modern telecommunications services and ensuring the economic future of their rural communities.

<sup>2</sup> RTG is a Section 501(c)(6) trade association dedicated to promoting wireless opportunities for rural telecommunications companies through advocacy and education in a manner that best represents the interests of its membership. RTG's members have joined together to speed the delivery of new, efficient, and innovative telecommunications technologies to the populations of remote and underserved sections of the country. RTG's members provide wireless telecommunications services, such as cellular telephone service and Personal Communications Services, among others, to their subscribers. RTG's members are small businesses serving or seeking to serve secondary, tertiary, and rural markets. RTG's members are comprised of both independent wireless carriers and wireless carriers that are affiliated with rural telephone companies.

The 700 MHz spectrum bands are one of the best vehicles for delivering broadband services to high cost rural regions. 700 MHz spectrum has the capability of delivering huge amounts of data at high speeds, and the robust propagation characteristics of 700 MHz spectrum make it ideal for rural settings where long distances, extreme terrain, and a dispersed population are an everyday consideration. Because of these favorable characteristics of 700 MHz spectrum, I believe it will be economical to deploy broadband services to many rural areas that would otherwise have been uneconomical to serve with other spectrum bands. That is why our segment of the industry has argued so strenuously that it is essential that Congress and the FCC develop policies that will ensure that rural carriers have access to 700 MHz spectrum.

My fear, however, is that, consistent with past practices, large, nationwide telecommunications carriers will be in the best position to win many of the licenses that will soon be auctioned, and that they will once again overlook rural towns and their outlying areas, instead concentrating on the most profitable, highly populated pockets of their vast license areas. While such a market based approach to the provision of broadband is understandable, it is not justifiable when there are small and rural companies that are ready and willing to provide service to such rural areas using public spectrum resources. I suggest that rural telecommunications carriers have a different view of the market and different economic incentives when it comes to the provision of telecommunications services that are vital to their region's economic survival.

Rural telecommunications carriers serve less densely populated areas and work to provide service throughout their entire license areas. These rural carriers already have the basic telecommunications infrastructure in place, the local expertise, and trained employees to make serving high cost rural areas economically feasible. As residents of the regions they serve, small businesses are also motivated by the public interest and not just profit when deciding where to provide service.

Under section 309(j) of the Communications Act of 1934, as amended, the FCC has the statutory responsibility to ensure that small carriers are able to have a realistic chance of acquiring spectrum, rather than having their local spectrum warehoused by nationwide carriers or speculators. The FCC's response to 309(j) was to limit small carriers' access to the AWS-1 spectrum by segmenting 78% of the spectrum into blocks that could not be reasonably bid on by small business. In the 700 MHz band as a whole, 66% of the spectrum will be similarly segmented, and in the up-coming auction, 81% will be beyond the reach of small businesses. Rest assured, if a small telecommunications carrier is able to successfully bid on 700 MHz spectrum, it will want to provide service and start making a return on its investment as soon as possible. It is these small, individualized investments that will do the most to spur broadband investment and innovation in rural America. Unless small, rural businesses are able to

acquire 700 MHz spectrum, however, then this incredible opportunity to encourage the deployment of broadband service to rural areas will be lost.

Unfortunately, the FCC's current plan for auctioning and licensing the 700 MHz bands presents only limited opportunities for small businesses to participate. Small businesses have virtually no opportunity to participate in the provision of the anticipated high speed services to be offered on the Upper 700 MHz C block spectrum. Small businesses have no opportunity to acquire the huge C block licenses in the auction, and the FCC's construction requirements do not encourage the large C block licensees to work with small businesses. Since the "open platform" requirements apply only to the C block licenses the open platform requirements may be of little benefit to small carriers.

A far better approach would be for the FCC to be licensing the spectrum based on smaller license areas rather than huge regional areas. True, the FCC will be auctioning one block, the Lower 700 MHz B block, on the basis of Cellular Market Areas (CMAs), and this will provide an opportunity for a limited number of small businesses to acquire licenses. But because only a handful of companies will be able to compete for the Upper 700 MHz blocks, there will be tremendous competitive pressure from small, mid-sized and regional bidders on the Lower 700 MHz B block licenses. Accordingly, many, many small companies will find that they have no chance of acquiring a license.

Also, in order to provide meaningful opportunities for small businesses to participate in the 700 MHz auction process, the FCC should change the current construction requirements for the C block from population-based benchmarks to geographic based-benchmarks. This would encourage large licensees to work with small businesses to maximize the deployment of service to secondary and rural markets. A large carrier licensee will still focus on the areas of high concentration where it can make the most profit, but the requirement for building out the rural areas will force attention to these areas and perhaps encourage it to seek partnerships with small business, such as Public Service, interested in serving our area. However, as it stands today, there are no incentives for the larger carriers to partition or disaggregate their licenses because they are able to meet their buildout requirements by merely serving the populated urban centers of the license areas. Accordingly, if the FCC or Congress is unwilling to license additional blocks on the basis of small geographic areas, then at a minimum, the FCC should tighten the construction obligations for the C block by making them geographic area based.

In addition, the FCC and Congress should ensure that, to the extent services provided using 700 MHz spectrum are mobile or portable, the customers of small carriers are able to roam on the networks to be built by the nationwide carriers. The FCC's recent roaming order falls far short of insuring that rural carriers are able to negotiate fair and reasonable rates with the large carriers and it does not provide the needed oversight of the process. The FCC and Congress

should ensure that the nationwide carriers do not deny their own customers the ability to roam in rural areas, when there is a small business carrier that is providing technically compatible service. As long as customers are allowed to leave their "home" areas and roam on other compatible networks at just and reasonable rates, broadband applications will be available to all citizens at all times. Thus, requiring data and high speed application roaming will broaden consumer choice and open up the broadband market to new and unforeseen possibilities.

In Public Service's opinion, another way the FCC can ensure that rural citizens have access to new, 700 MHz-based applications is to require open access on the entire 700 MHz platform and all future auctions of spectrum intended for personal communications services. Isn't it time to do with spectrum what was accomplished in the telephone (wireline) arena with the deregulation of inside wire. For far too long, small carriers have been on the tail end of the equipment supply chain and must scour the secondary market for the equipment that their customers demand. To put this another way, Nokia or Apple will not design a handset or mobile device for my network. This situation does a disservice to rural customers who may like to spend their hard-earned money on a new gadget for business or for pleasure.

For example, if one of my customers wants to purchase a new mobile broadband device at Best Buy or a similar store, it makes sense to allow them to use it on my network and on other networks when they roam. Public Service believes open access will not only allow small carriers to compete with their nationwide competitors, it will also spur the sale of and create more demand for new mobile devices. Requiring open access for devices, coupled with the unrestricted roaming I discussed above, will benefit consumers and carriers, and will open up the broadband market to new and unforeseen possibilities.

If large, nationwide carriers are allowed to dominate the 700 MHz auction, they will control massive amounts of spectrum. Such concentration in the hands of a few goes against the entire grain of section 309(j) of the Communications Act and is contrary to congressional intent with regard to how the FCC should manage and allocate the radio spectrum regime. We question the benefit to the public of allowing large carriers with huge budgets to gather spectrum with the sole purpose of preventing its use by others.

There also is no question that rural carriers, more than others, need less burdensome regulations. And this does not mean simply providing a rural small business with more time to comply with a particular regulation. There will never be a reasonable economic or technological opportunity for a small business to comply with regulations that are generally constructed to apply to much larger entities. Likewise the standard waiver process the FCC is so fond of relying upon often is not a viable option for small businesses. The filing fee alone

for certain types of waivers is \$5,000 with no assurance whatsoever that you will secure the relief that is so essential to your economic viability.

There is a law that exists which I know this committee is all too familiar with. It is called the Regulatory Flexibility Act. As a regulatory agency, the FCC under this Act, is charged with giving particular consideration to whether or not its rules will negatively impact small carriers and particularly rural telephone companies. We cannot honestly think of one instance in which the Commission ever outlined in a final order that it had found circumstances that warranted adopting different rules for small rural carriers. It is always the same boiler plate language suggesting there is no such case to be made. We ask how can this be? If it is the intent of the FCC to eliminate the small carrier so that only a few large carriers remain, we believe they are on the right path. Can there be a more obvious example than the allowing of the re-formation of the AT&T giant. Instead of discouraging small businesses, the FCC should carefully study the impact of its regulations on small businesses, and should ensure that its rules and policies encourage small and rural businesses to deploy broadband services.

By instituting the suggestions I am outlining today, and which we have repeatedly made in formal presentations and filings with the FCC, policymakers could encourage the deployment of broadband connectivity to rural citizens and rural businesses. Clearly access to broadband will allow businesses to relocate to rural areas that have experienced economic slowdowns as traditional, family-oriented agricultural businesses are replaced by multinational corporations, and textile businesses and manufacturers relocate overseas. There are plenty of knowledge workers and other businesses that can relocate to once vibrant towns with their lower costs of living, and where commutes are measured in minutes rather than hours. We've seen Japanese auto manufacturers outsource to the United States. With high speed connections throughout America, we can expect to see this favorable economic trend continue.

As a provider of broadband, I can attest to the difficulty and costs of broadband solutions in a rural setting. The 700 MHz spectrum band presents a fantastic opportunity for rural carriers to finish the job of providing ubiquitous broadband in high cost regions as long as rural carriers have a reasonable chance at acquiring the spectrum. In fact, the propagation characteristics of this spectrum are perfectly situated for providing broadband to rural markets. It will reach fairly far in terms of distance so long as it is not overloaded with customers. Public Service, like its colleagues that are members of NTCA and RTG, is entrepreneurial in its approach to deploying whatever technology it takes to ensure that our customers have state of the art services that are at least comparable, if not superior to those available anywhere else in the nation. To make this case consider the fact that according to NTCA's latest broadband survey, 99% of the respondents were offering broadband services of a digital subscriber line (DSL) nature, 32% were engaged in fiber to the home (FTTH) or fiber to the curb (FTTC), 20% utilized unlicensed wireless, 16% licensed

wireless, 14% satellite, and 12% cable modem. Ensuring that rural carriers can get a hold of 700 MHz spectrum will ensure that rural carriers are able to continue their excellent record of service in terms of rapidly increasing the number of rural citizens with broadband access, and will also ensure that the citizens will have access to mobile broadband applications.

I thank you for the opportunity to speak about these issues and welcome any questions.

**Testimony of Shelley Spencer  
President of Wirefree Partners, LLC  
Before the  
U.S. House of Representatives  
Committee on Small Business  
On the  
“The Upcoming 700 MHz Auction and Its Impact on Small Business”  
October 10, 2007**

Chairwoman Velázquez, Ranking Member Chabot and Members of the Committee, my name is Shelley Spencer, and I am the President of Wirefree Partners. Wirefree Partners is a small business managed by entrepreneurs with a track record in running successful small wireless companies using licensed spectrum. We have participated in multiple spectrum auctions, each time as a small business. While we have not always succeeded in acquiring spectrum, we consistently have analyzed the business opportunity presented by each auction – an opportunity that is heavily influenced by the FCC’s auction rules. As a small business owner and woman entrepreneur with extensive experience in the wireless industry, I am pleased to share with you the realities faced today by small businesses seeking to be a part of the wireless revolution in the U.S. by acquiring licensed spectrum through auctions. It is my sincere hope that the opportunity to acquire spectrum will continue to be available for entrepreneurs and small businesses who contribute so significantly to the growth and health of the U.S. economy.

**I. Small Businesses in the Wireless Industry Create Jobs, Expand Service Offerings and Foster Innovation.**

For the past thirty years, my partners and I have run numerous, successful small wireless companies. Most recently these companies have generated over 250 new jobs, extended the reach of wireless services to more than seven million people in underserved

areas, and promoted competition. For each of these companies, the ability to acquire licenses or use spectrum has been the foundation of our business.

Small business entrepreneurs have been leading pioneers since the early days of the wireless industry. As in other industries, small businesses have led innovation in the wireless industry. My partners held cellular and paging licenses at the dawn of those industries and competed against the incumbent providers in creating market share and service acceptance. In 1996, we participated in the first auction of Personal Communications Services (“PCS”) spectrum (spectrum on which most cell phones operate today). This auction had rules specifically adopted to promote small business participation. With each subsequent auction we have diligently analyzed the opportunities for small business. In the late 1990s, we built a company that developed and managed a PCS network in the Southeast covering more than seven million people in three states and creating more than 200 new jobs.

In 2005, our current company purchased 16 licenses to provide wireless services in the FCC’s auction of PCS spectrum. We paid \$152 million in high bids for those licenses – a modest amount for valuable spectrum but a high number for a start up enterprise. Significantly, our spectrum cost included a 25% bidding discount available to qualified small businesses in that auction. This bidding discount saved use \$44 million in spectrum costs. Another key to our success in acquiring the spectrum was former FCC policies, which were recently rescinded for auctions after April 2006, that permit us to lease half of our spectrum to Sprint-Nextel. This is spectrum which we are not using in our own network. For small businesses, the ability to lease a portion of the spectrum can

provide immediate revenue and, as for us, provide the collateral necessary to raise the capital to purchase spectrum and build our own network.

As I sit here today we are finishing construction on our state-of-the-art network operating center that we will use to offer innovative, wireless services to business customers. Our network launch is scheduled for early 2008. As a local provider with licensed spectrum, we are able to offer small and large businesses secure wireless services with custom features that can be tailored to their particular business model. With a total investment in our network and initial operations costs of over \$12 million (excluding our spectrum costs), we are creating new jobs, offering new services and filling a market niche for customized wireless services. Small businesses are, and continue to be, a vital and vibrant part of the wireless industry but they must have a means to acquire spectrum.

**II. The 2006 AWS Auction Resulted in A Historically Low Average of Valuable Licenses Acquired by Small Businesses.**

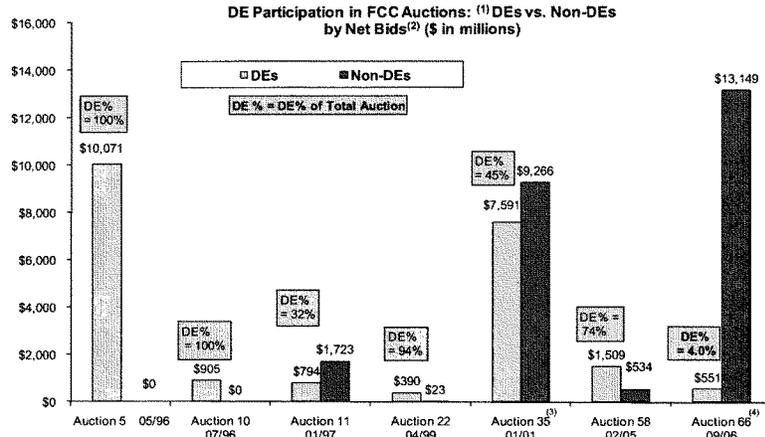
Small business bidders have not fared well in recent FCC auctions due to new regulatory restraints. In 2006, just prior to the auction of 90 MHz of spectrum for Advanced Wireless Services ("AWS"), the FCC changed the eligibility criteria for small businesses and significantly restricted small business' use of spectrum for leasing, wholesaling, and reselling. This greatly limits a small business' ability to evolve and grow during its ten year license term. Under the current rules, the only valid business model for a small business acquiring spectrum through an auction is to be a retail wireless carrier. This forces them to compete in the most competitive market in the wireless industry and into a battle for retail consumers that is fought increasingly on a nationwide basis and is one of the most expensive forms of service delivery. The current

rules also impose harsh penalties on growth and acquisitions for bona fide small business licensees for the full ten year license term – which is a lifetime in the wireless industry. For example, the acquisition of additional spectrum in the 5<sup>th</sup> year of a license term could throw a licensee out of the small business category and require them to repay in full their bidding discount. Similarly, partnerships allowing other companies to resell a small business' network services, after the network is built and operating, could disqualify the licensee as a small business and require it to pay back in full the bidding discount that allowed the company to acquire the spectrum, create jobs, build their network and offer service.

Based on these rule changes, my company determined there was no viable opportunity for small businesses in the AWS auction – we couldn't raise the money, we couldn't run the business and we couldn't grow the business saddled with the new regulatory restraints. Significantly, these restrictions do not apply to large business bidders with whom small businesses directly compete for spectrum, subscribers and financing. The auction rules confirmed our business judgment. In that auction, small businesses won less than 4% of the licenses measured by economic value. This stands in stark contrast to the historical 74% average of licenses by value won by small businesses in previous PCS auctions where small businesses were afforded bidding credits and, at times, were part of a closed bidding process.

The FCC intends to use the small business rules adopted just prior to the AWS auction in the 700 MHz auction. This does not bode well at all for small business participation or success.

Exhibit from Council Tree Communications, Inc. et al. v. FCC No. 06-2943 (U.S. Court of Appeals for the Third Circuit):



<sup>(1)</sup> Auctions 5 and 10 included only Closed Licenses (i.e., for DEs only). Auctions 11, 22, 35 and 58 included both Closed and Open Licenses (with Open Licenses available both to DEs and non-DEs and with DEs receiving bidding credits). Auction 66 was the only one of these to include Open Licenses only.

<sup>(2)</sup> Net Bid is the gross bid less any DE bidding credits.

<sup>(3)</sup> Auction 35 results overturned by Supreme Court ruling in the NextWave case.

<sup>(4)</sup> Winning bids as of close of Auction 66.

### III. In the Wireless Industry A Small Business Must Raise Millions of Dollars to Start A Business.

A small business in the wireless industry is a multi-million dollar business by necessity. The wireless business is a capital-intensive business and requires bidders to raise significant capital in advance of the auction just to acquire spectrum. For the 700 MHz auction, scheduled to start in January 2008, the FCC has proposed that bidders seeking to bid on even one license, in the six major regional economic areas, deposit between \$28 and \$57 million prior to the auction. The deposit to bid on the nationwide "D block" license is \$128 Million. The bidding for the smallest market size license (for the New York City region) starts at \$59 million, the minimum bid for Cincinnati is \$2.9

million and the San Antonio market's first bid must be at least \$797,000. Overall, the FCC is proposing a reserve price for all the licenses in the 700 MHz auction of slightly over \$10 billion. Beyond acquiring spectrum, a new wireless company must also fund its network expenses and operating costs, making the full budget for even small wireless carriers larger than most small businesses.

These numbers are staggering for a small business and require innovative thinking, creative financing, competitive strategies and potential alliances with larger companies all of which are inhibited by the current FCC rules. The benefits of having small businesses involved in all areas of the wireless industry are well worth it to the American people. According to the Small Business Administration ("SBA"), small businesses generated 60 to 80% of the new jobs in the U.S. annually during the last decade. More than 45% of the private payroll in the U.S. is by small business employers. In addition, as in the wireless industry, small businesses are leaders in innovation. SBA reports that small businesses receive 13 to 14 times more patents per employee than large patenting firms.<sup>1</sup> Women business owners, like me, are an important part of that small business growth. The last Census found that in 2002, women owned 6.5 million businesses in the U.S. and that these women-owned firms generated over \$940 billion in revenues while employing 7.1 million workers.

**IV. Small Business Ownership of Spectrum is Best Promoted Through Bidding Discounts, Flexible Rules and Regulatory Certainty.**

Federal policies can foster auction participation and success by small businesses if they balance the need for flexibility to raise capital and compete with the need to confirm a small business' legitimacy. Congress recognized that disseminating licenses by auction

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<sup>1</sup> See Frequently Asked Questions, [www.sba.gov/advo/](http://www.sba.gov/advo/).

would have a direct impact on the diversity of licensees unless the auction rules include provisions to ensure that licenses were available not just to large companies but also to small businesses, businesses owned by women and minorities and rural telephone companies.

As veterans of spectrum auctions, my partners and I have seen the FCC's auction rules vary significantly, sometimes erratically, from significant, ongoing regulation of small businesses and other designated entities, to less regulation and more control left to the individual businesses. Not surprisingly, the most successful auctions for small businesses have been those in which a portion of the spectrum was reserved for bidding by small businesses and small businesses were provided bidding discounts.<sup>2</sup> Based on our experience in creating new wireless companies with licensed spectrum as the core asset, we have found that spectrum policies must adhere to three fundamental principles for small businesses to have a meaningful opportunity to be a part of the wireless future. Small businesses need:

- (1) a meaningful opportunity to participate and bid against large carriers in auctions through bidding credits and/or closed bidding;
- (2) less government regulation to give small businesses more flexibility to run their businesses in a competitive wireless market including the ability to enter into commercial transactions with other wireless industry participants; and
- (3) regulatory certainty, stability and sufficient notice of auction and service rules so small businesses can raise the capital necessary to fund their auction participation and build their businesses.

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<sup>2</sup> Under the FCC's Designated Entity (DE) program, qualified small businesses and rural telephone companies are eligible for bidding credits of 15 or 25 percent, depending on the size of the entity measured by gross revenues and total assets.

The current rules for the 700 MHz auction do not meet these standards. Unless some changes are made, this auction is likely to produce few small business licensees in what is viewed by many as the last major auction of wireless spectrum in the near future.

I greatly appreciate the opportunity to appear before the Committee on this important topic and I look forward to your continued interest in promoting viable small business participation in the wireless industry and in spectrum licensing. I would be happy to answer any questions you may have.

**WRITTEN TESTIMONY**

**of**

**Christopher Guttman-McCabe**

**Vice President, Regulatory Affairs**

**CTIA-The Wireless Association®**

**Before the**

**United States House of Representatives Committee on Small Business**

**October 10, 2007**

On behalf of CTIA-The Wireless Association®, I want to thank the Committee for focusing its attention on the important and timely issue of the 700 MHz spectrum auction. CTIA is grateful for the opportunity to present its views on this important topic on behalf of our carrier members and 244 million wireless consumers. My comments are focused on the impact on small businesses of the Federal Communications Commission's ("FCC" or "Commission") service and auction rules for the spectrum currently used by analog television broadcasters, commonly known as the 700 MHz spectrum. This spectrum and the recently auctioned AWS spectrum will continue to facilitate the wireless industry's provision of broadband to the person.

The 700 MHz spectrum, referred to by some as "beach-front property," is particularly notable for its favorable propagation characteristics and its potential to provide greater in-building wireless coverage, making it well-suited to provide mobile wireless broadband. Not surprisingly, when the Commission sought comment on the potential service rules for the spectrum, a number of new entrants to the telecommunications sector emerged as potential bidders. Throughout this rulemaking

process, parties have shared ideas about how to best bring spectrum to market. Unfortunately, a small subset of new entrants have promoted proposals that would control the licensing process through license conditions in an effort to tailor the licenses to their own unique business models and prevent others from bidding on the spectrum. The debate during this process has centered on proposals put forth by a small group of well-funded companies with a combined market cap of one-half trillion dollars.

These new conditions on licenses and licensees, some of which were adopted by the Commission, contradict the FCC's past policies supporting license flexibility and could have a deleterious effect on the ability of small businesses to take part in, and ultimately win, 700 MHz licenses. Specifically, the Commission's open platform and geographic build out requirements could place 700 MHz licenses out of the reach of small businesses. As referenced in the attached letters, a coalition of 139 companies (the majority of which would qualify as small businesses) opposed the open access requirement, and 55 companies and organizations (again, the majority being small businesses) opposed the geographic build out requirement.

In setting the band plan and service rules for the 700 MHz spectrum, the Commission adopted a mix of spectrum and license sizes. In the lower 700 MHz spectrum, the Commission will auction one 12 MHz license on an Economic Areas ("EA") basis, a second 12 MHz license as Cellular Market Areas/Rural Service Areas ("CMA/RSA") and an unpaired 6 MHz license on an EA basis. The Upper 700 MHz band will include one 22 MHz block licensed as Regional Economic Area Groups ("REAGs") and a separate 10 MHz nationwide license.

Generally speaking, large incumbent carriers prefer large license service areas, while smaller license service areas are generally more appealing to small businesses as they allow for the opportunity to obtain service territory more appropriate for a small business's scale and scope. The nature of the spectrum and/or the additional obligations the Commission has imposed on the licenses in the 700 MHz spectrum, however, may cause carriers to change their auction strategies or seriously re-examine their participation.

For example, in the Upper C block, a 22 MHz block of spectrum divided into 12 large REAGs, the Commission has imposed an open platform condition. As a result, the C block licensee will be required to accept any technically compatible handset onto its network, subject to a few exceptions. CTIA and incumbent wireless carriers nearly uniformly opposed an open platform requirement because handsets are an integrated part of a wireless network. Removing carrier control of the handsets permitted on its network limits the ability of the carrier to control the security, quality and viability of its wireless network.

Similarly, the Upper D block is subject to the public/private Public Safety partnership obligation. The winning bidder in this block will be required to negotiate with the Public Safety community and, as a condition of the license, build a Public Safety-grade wireless network for our nation's first responders. The additional obligations this condition places on the D block license will likely make it less attractive to small businesses as the cost to achieve the coverage and redundancy required to create a new Public Safety network are likely out of the price range of any business that could be considered "small."

In the lower band licenses, the Commission adopted a geographic build out requirement that potentially limits the desire of small businesses to purchase the spectrum. Smaller EA and CMA/RSA licenses will be subject to benchmarks for coverage over the term of the license. Far from the “substantial service” standard the Commission has used for previous wireless spectrum licenses, 700 MHz licensees face shorter license terms and forfeiture of service territory as potential penalties for failure to meet Commission benchmarks. While larger license areas will be subject to a more reasonable population-based build out requirement, the small licenses most attractive to small businesses will be subject to geographic coverage benchmarks. Specifically, EA and CMA/RSA licensees will need to reach 35% of its licensed geographic area by the end of four years and 70% of the geography by the end of the license term. To put this in perspective, according to the United States Department of Agriculture and the United States Census, more than 87% of the population lives on just 8% of the geography. We think it makes little sense to emphasize the coverage of geographic areas where no one resides.

Incumbents that choose to participate in this auction and want a nationwide or regional presence will be left with a choice between bidding on a few large licenses with new and very specific service obligations, or bidding on the many licenses – as many as 734 in some spectrum blocks – needed to achieve the same area of coverage. While this is an unfortunate choice for all carriers, it may have the greatest impact on small businesses. As a result of the new license conditions, if large incumbents choose to aggregate many of the smaller, less encumbered licenses, small businesses will be

hard-pressed to raise the amount of capital needed to compete head-to-head in an auction with larger established carriers – particularly in a tighter credit market.

As CTIA advocated in the underlying service rules proceeding before the Commission, geographic build out requirements are inappropriate for several reasons. First, the fact is there are large parts of this country that are so sparsely inhabited that it does not make sound economic sense to force carriers to build in those areas. Requiring carriers to serve those areas where there are few, if any, people may require small business licensees to build sites that they cannot afford to maintain. In contrast to a larger carrier, which can cross-subsidize some of its extremely low traffic sites with the revenue generated by subscribers in more densely populated areas, a smaller carrier – particularly a new entrant – may lack the established base of consumers to make such investments.

Moreover, because the licenses in the 700 MHz auction subject to geographic build out requirements have overlapping areas, the net result of the geographic build out requirements will be the mandatory build out of multiple unsustainable networks to high-cost areas. This irrational policy is particularly egregious in the face of a *voluntary* mechanism to facilitate coverage in sparsely populated areas – the Universal Service Fund.

Taken collectively, the Commission's decisions to encumber the 700 MHz licenses with new service obligations could present an insurmountable obstacle to small businesses. Direct competition with large incumbent carriers for the small spectrum blocks combined with irrational build out obligations could drive the cost of spectrum and operations well beyond what a small business could afford.

There are also proposals pending to change the Commission's designated entity ("DE") rules. CTIA has always supported the concept of DE bidding credits. The current policy attempts to balance the interests of a legitimate DE program with the policy of ensuring that those who do not need bidding credits do not receive them. CTIA will follow any potential changes to the DE program as the Commission considers proposed changes.

There is another set of small businesses with difficulty and delay gaining access to spectrum – Advanced Wireless Service ("AWS") licensees. Many of the 104 winning bidders in the AWS auction are small businesses. After successfully competing in the auction and paying for a license, however, these licensees may have to wait as long as four years before they will begin to benefit from the spectrum because incumbent government users must be relocated prior to commercial use. For example companies like Union Telephone Company, NTELOS and Cricket Communications purchased licenses in the AWS auction and have been unable to begin serving customers as government incumbents have yet to clear the spectrum and the process of coordinating operation of the spectrum plan prior to relocation has proven difficult with some agencies. We urge this Committee to help small businesses with AWS licenses by ensuring the timely relocation of government-owned incumbent radio systems. This small step will substantially aid those small businesses holding AWS licenses that they cannot currently use. Additionally, this Committee could also aid small businesses by helping to ensure that unnecessary, unfunded mandates are not placed on wireless carriers.

Finally, I commend the Committee for its recent hearing on the need to extend the Internet tax moratorium. CTIA urges the Committee to continue to press for lower, simplified taxation not only for Internet service but also wireless service, as it too is a critical input for many small businesses.

Thank you for the opportunity to speak today and I look forward to your questions.



Expanding the Wireless Frontier

July 16, 2007

The Honorable Kevin J. Martin, Chairman  
The Honorable Michael J. Copps  
The Honorable Jonathan S. Adelstein  
The Honorable Deborah Taylor Tate  
The Honorable Robert M. McDowell  
Federal Communications Commission  
445 12<sup>th</sup> Street, SW  
Washington, D.C. 20554

Re: WT Docket Nos. 06-150, 06-169 and 96-86; PS Docket No. 06-229

Dear Mr. Chairman and Commissioners:

We have learned through recent media accounts that the Commission's proposed service rules seek to impose an "open access" requirement on 22 MHz of the Upper 700 MHz band spectrum. On behalf of the approximately 139 undersigned small and regional operators and organizations, we write to urge you to reject an "open access" mandate in this spectrum. The FCC should refrain from imposing novel and untested open access conditions, which favor a single entity, on the 700 MHz spectrum critically needed by small and regional carriers to increase coverage and services.

The proposed open access mandate in the 700 MHz band would significantly hinder small carrier participation in the 700 MHz auction and in many cases foreclose their ability to deploy this spectrum in small and rural markets. The open access and public safety requirements on the licenses in the Upper 700 MHz band will force large carriers, deterred by open access requirements, to pursue licenses in the Lower 700 MHz band. As a result, both large and small carriers will be bidding on the same 24 MHz of spectrum in the lower 700 MHz band. This is particularly troubling because the spectrum in the Lower 700 MHz band uses smaller license areas intended to benefit small and regional carriers. Although many smaller licenses may initially cost more, large carriers will likely choose to bid on the many smaller licenses rather than accept larger, encumbered licenses. The end result would be fewer small and regional license winners in the 700 MHz auction.

Ultimately, we believe that the undersigned small carriers and the millions of consumers we serve will be the net losers from an open access requirement in the Upper 700 MHz band. The proposed open access requirements trade the benefits of rural deployment by small and regional licensees, and their proven track record of providing service to their customers, for – at best – speculative gains of an open access network.



In sum, we fear that encumbering the Upper 700 MHz licenses with onerous conditions will result in small and regional carriers having little chance of securing licenses to deliver innovative 700 MHz wireless services to their subscribers.

Pursuant to Section 1.1206 of the Commission's Rules, this letter is being electronically filed with your office. If you have any questions concerning this submission, please contact the undersigned.

Sincerely,

**Companies:**

Alaska Communications Systems, Inc.  
 Blooston Rural Carriers  
 All West Communications, Inc.  
 BEK Communications Cooperative  
 Big Bend Telephone Company  
 Cannon Valley Communications, Inc.  
 CC Communications  
 Chibardun Telephone Cooperative, Inc.  
 Clear Lake Independent Telephone Company  
 Command Connect, LLC  
 Communications 1 Network  
 Eastern Colorado Wireless, LLC  
 FMTC Wireless, Inc.  
 Hancock Rural Telephone Corp. d/b/a Hancock Telecom  
 Harrisonville Telephone Company  
 Haviland Telephone Company, Inc.  
 Heart of Iowa Communications  
 Interstate Telecommunications Cooperative  
 Kennebec Telephone Company, Inc.  
 Ligtel Communications, Inc.  
 Manti Telephone Company  
 Mid-Rivers Telephone Cooperative, Inc.  
 Midstate Communications, Inc.  
 Nucla-Naturita Telephone Company  
 Ponderosa Telephone Company  
 Red River Rural Telephone Association, Inc.  
 Santel Communications Cooperative  
 Smithville Telephone Company  
 South Slope Cooperative Communications Co.  
 Venture Communications Cooperative  
 Webster Calhoun Cooperative Telephone Association  
 Yadkin Valley Telephone Membership Corp.  
 Cincinnati Bell Wireless  
 CTIA – The Wireless Association®

**Corporate Headquarters:**

Anchorage, AK  
 Kamas, UT  
 Steele, ND  
 Alpine, TX  
 Bricelyn, MT  
 Fallon, NV  
 Dallas, WI  
 Clear Lake, IA  
 Sulphur, LA  
 Kanawha, IA  
 Wiggins, CO  
 Nora Springs, IA  
 Maxwell, IN  
 Waterloo, IA  
 Haviland, IN  
 Union, IA  
 Clear Lake, SD  
 Kennebec, SD  
 Ligonier, IN  
 Manti, UT  
 Glendive, MT  
 Kimball, SD  
 Nucla, CO  
 O'Neals, CA  
 Abercrombie, ND  
 Woonsocket, SD  
 Ellettsville, IN  
 North Liberty, IA  
 Highmore, SD  
 Gowrie, IA  
 Yadkinville, NC  
 Cincinnati, OH  
 Washington, DC

East Kentucky Network, LLC d/b/a Appalachian Wireless  
General Communication, Inc.

Mohave Wireless

NTELOS, Inc.

Rural Cellular Association, on behalf of its approximately 100  
small and regional wireless carrier members, available at

[http://americanroamer.com/rca/rca\\_members.html](http://americanroamer.com/rca/rca_members.html)

U.S. Cellular Corporation

Westlink Communications, Inc.

Prestonburg, KY

Anchorage, AK

Kingman, AZ

Waynesboro, VA

Chicago, IL

Ulysses, KS



Expanding the Wireless Frontier

June 12, 2007

**Electronic Filing**

Ms. Marlene H. Dortch, Secretary  
Federal Communications Commission  
445 12<sup>th</sup> Street, SW  
12<sup>th</sup> Street Lobby, TW-A325  
Washington, DC 20554

Re: ***Ex Parte Communication***  
**PS Docket No. 06-229; WT Docket Nos. 96-86, 06-150, 06-169**

Dear Ms. Dortch:

On behalf of 55 large, medium and small companies and organizations, we respectfully submit this *ex parte* presentation to express our united opposition to adoption of any geographic build-out requirements under consideration in the *700 MHz Service Rules* proceeding.

Less than three years ago, the Commission addressed performance requirements in the *Rural Wireless Order* and rejected the notion of requiring licensees to deploy services where it would be "economically unsustainable." Yet today, the Commission has put forward a proposal that would impose geographic build-out requirements.

The Commission should not compel licensees to engage in premature, uneconomic, or unsustainable network deployment. It does not serve consumer interests to force multiple licensees to construct networks outside of the competitive pressures of the market. This could have the opposite of the intended effect, actually delaying services to consumers as carriers are forced to return spectrum they otherwise would have developed. Additionally, the interim geographic requirements will likely force companies to choose the last generation technology instead of the next generation technology, as fourth generation technologies are scheduled to become available during the initial interim benchmark years.

The wireless market is capital-intensive, and forced buildout in certain areas will only short-change investment elsewhere in broadband network deployment, improved coverage, or greater capacity.



The Commission should reject the proposal to adopt a performance requirement based on geographic build-out.

Sincerely,

*/s/ Christopher Guttman-McCabe*

Christopher Guttman-McCabe  
CTIA – The Wireless Association®  
On behalf of:

**Companies:**

Alaska Communications Systems  
Alltel Wireless  
Aloha Partners, L.P.  
Blooston Rural Carriers  
All West Communications, Inc.  
BEK Communications Cooperative  
Big Bend Telephone Company  
Cannon Valley Communications, Inc.  
CC Communications  
Chibardun Telephone Cooperative, Inc.  
Clear Lake Independent Telephone Company  
Command Connect, LLC  
Communications 1 Network  
Eastern Colorado Wireless, LLC  
FMTC Wireless, Inc.  
Hancock Rural Telephone Corp. d/b/a Hancock Telecom  
Harrisonville Telephone Company  
Haviland Telephone Company, Inc.  
Heart of Iowa Communications  
Interstate Telecommunications Cooperative  
Kennebec Telephone Company, Inc.  
Ligtel Communications, Inc.  
Manti Telephone Company  
Mid-Rivers Telephone Cooperative, Inc.  
Midstate Communications, Inc.  
Nucla-Naturita Telephone Company  
Ponderosa Telephone Company  
Red River Rural Telephone Association, Inc.  
Santel Communications Cooperative  
Smithville Telephone Company  
South Slope Cooperative Communications Co.  
Venture Communications Cooperative  
Webster Calhoun Cooperative Telephone Association  
Yadkin Valley Telephone Membership Corp.

**Corporate Headquarters:**

Anchorage, AK  
Little Rock, AR  
Providence, RI  
Kamas, UT  
Steele, ND  
Alpine, TX  
Bricelyn, MT  
Fallon, NV  
Dallas, WI  
Clear Lake, IA  
Sulphur, LA  
Kanawha, IA  
Wiggins, CO  
Nora Springs, IA  
Maxwell, IN  
Waterloo, IA  
Haviland, IN  
Union, IA  
Clear Lake, SD  
Kennebec, SD  
Ligonier, IN  
Manti, UT  
Glendive, MT  
Kimball, SD  
Nucla, CO  
O'Neals, CA  
Abercrombie, ND  
Woonsocket, SD  
Ellettsville, IN  
North Liberty, IA  
Highmore, SD  
Gowrie, IA  
Yadkinville, NC

Centennial Communications Corp.	Fort Wayne, IN
Cleveland Unlimited, Inc. d/b/a Revol	Independence, OH
Coalition for 4G in America	
Access Spectrum, L.L.C.	Bethesda, MD
The DIRECTV Group, Inc.	Greenwood Village, CO
EchoStar Satellite, L.L.C.	Englewood, CO
Google Inc.	Mountain View, CA
Intel Corporation	Santa Clara, CA
Skype Communications S.A.R.L.	Luxembourg
Yahoo! Inc.	Sunnyvale, CA
Corr Wireless Communications, LLC	Oneonta, AL
CTIA – The Wireless Association®	Washington, DC
East Kentucky Network, LLC d/b/a Appalachian Wireless	Prestonburg, KY
General Communication, Inc.	Anchorage, AK
Leap Wireless International, Inc.	San Diego, CA
MetroPCS Communications, Inc.	Dallas, TX
Nex-Tech Wireless	Hays, KS
SpectrumCo LLC	Washington, DC
T-Mobile USA, Inc.	Bellevue, WA
Triad AWS, Inc.	Burlingame, CA
Union Telephone Company	Mountain View, WY
U.S. Cellular Corporation	Chicago, IL
Verizon Wireless	Basking Ridge, NJ

The Testimony of  
Mr. Christopher Libertelli  
Senior Director, Government and Regulatory Affairs  
Skype | North America

Before the House Small Business Committee  
October 10<sup>th</sup>, 2007

**I. Introduction and Background**

Madame Chairperson, Ranking Member Chabot and members of the Committee.

My name is Christopher Libertelli and I am the Senior Director of Government and Regulatory Affairs at Skype, the global Internet communications company. Thank you very much for the opportunity to testify before the Committee on an issue that is central to Skype's future and the future of small business on the Internet.

During the 1990s, America began a transition from dial-up to broadband Internet access. Small businesses benefited enormously from this transition, as more and more entrepreneurs and innovators went online to reduce the cost of doing business and address new markets. The transition allowed any entrepreneur with a good idea and an Internet connection the chance to become a corner store in the global information economy. Traditional barriers of business fell away, and were displaced by an "always on" world of global markets.

Today, policymakers are confronted with the next chapter in the development of the Internet: the transition to the mobile, broadband Internet. The stakes for small business could not be higher. If we get this right the backbone of the US economy, small businesses, will be in position to compete on a global scale with competitors in Europe, China, India and the rest of the world, all of whom are poised to leapfrog the United States by deploying fast mobile broadband connections. If we get this wrong, the most important trend in Internet communications – mobility – will be closed off to entrepreneurship and innovation.

Eleven years ago, eBay was a small business. Four years ago, Skype was a small business. eBay and Skype grew and are successful because the Internet was open. Neither eBay nor Skype required the permission of the dominant phone companies to access their customers over the Internet. Unfortunately, the mobile Internet bears few similarities to the Internet that allows small business to thrive. Today, openness on the wireless Internet is at risk, which is why the Federal Communications Commission's 700 MHz auction and its 'open access' provision are crucial to this Congress' small business and innovation policy.

Because the 700 MHz auction has not yet begun, the debate over the open access provision of those rules can have an abstract quality. To provide the Committee with

concrete understanding of what is at stake in this proceeding, I would like describe a few Skype user stories before discussing the merits of the FCC's 700 MHz open-access policy.

## **II. The Impact of Internet Communications on Small Business**

At Skype, business users and entrepreneurs have always been part of the Skype story and currently make up more than 30 percent of Skype's global community of more than 220 million registered users. Small businesses are flocking to Skype because it allows people to innovate in the way they communicate with their customers and colleagues – using text, voice, video, and the power of the Internet to allow people to communicate in ways not previously possible. It not only allows people to communicate more affordably, it also enables transformative improvements in the very ways we communicate. In a survey of 250 businesses using Skype conducted earlier this year, 95 percent claimed to have saved on their telecommunications costs. But an astounding 80 percent also said that using Skype had increased employee productivity. It is precisely these kind of communications improvements that can drive the next generation of small business productivity improvements.

Our argument is that by allowing more open access on the wireless Internet, including services using the 700 megahertz spectrum, small businesses will experience even greater productivity and cost savings. An open wireless Internet will encourage more innovation, particularly among small technology companies who are building software product for mobile devices. And it will encourage the development of software products such as Skype that will enable small businesses to better compete against large rivals.

### *1. Anita Campbell, SmallbusinessTrends*

Anita Campbell is the Editor of the popular Small Business Trends Web site ([www.smallbiztrends.com](http://www.smallbiztrends.com)), the Small Business Trends newsletter, and also hosts Small Business Trends Radio. In her virtual business, she uses wireless as her primary phone to keep in touch with the contractors she uses throughout the country. She is based in Cleveland, her program manager is in Pittsburgh and her webmaster is in Lynchburg, VA.

Wireless was the clear choice for Ms. Campbell because of her need for mobility. She can leave the office and still conduct business. However, controlling the cost of telephone bills that keep creeping higher was also a priority for her. At the office, she could use Skype to make outbound calls to reduce her reliance on the cell phone. In this way, small businesses use Skype to complement, not replace, their primary connection to the phone network. By doing so, she was able to cut her wireless plan down to 450 minutes a month from 1000 minutes a month, cutting 40 percent of her cell phone costs.

For an investment of just \$79 (annual Skype payment plus the cost of a \$50 headset), she is saving more than \$800 (including conference call charges) a year. If she

were able to use Skype on her wireless devices, she and her co-workers would be able to run their business even more efficiently.

### *2. Paul Stacy*

Paul Stacy works for a phone distributor based in Northern Mississippi. His business requires frequent contact with business partners in Asia, South and Central America, and all over the United States. Among the losses after Hurricane Katrina was the long distance service for both landlines and cell phones in his area. That kind of communications failure can cripple a small business and would have crippled his if not for Skype. When traditional phone service was restored a week later, Mr. Stacy continued to use Skype, especially for his international collaboration. And now, when he travels overseas, he takes Skype with him to stay in touch. This way, he no longer has to pay \$65 for a short five-minute international call back to the U.S. in order to let his family know that everything was fine.

### *3. Unyte/MediaInternet*

Based in New York City, MediaInternet, Inc. is a technology company that helps connect media buyers and sellers. Since February of 2006, the company's CEO Charlie Deane has been using Skype, together with a conferencing and collaboration utility from WebDialogs (which was recently acquired by IBM) called Unyte, on a daily basis to collaborate with colleagues at three large satellite offices in Argentina and with partners and clients around the world.

As they say, a picture is worth a thousand words. So is the case with Unyte. MediaInternet's corporate culture embraces collaborative teleconferencing not only between hemispheres but also between cubicles. In its New York office, they use Skype to teleconference even from one cubicle to another. That way, people don't have to get up from their seats. Employees can explain anything graphically. Before, they had to draw a diagram, scan it, and send it via e-mail to the other person for them to understand. Now, they just launch Unyte within Skype and they are ready to start discussing things on the spot. By sharing the same image, everything gets much more fluid. As a result, conveying an idea – which used to take half an hour – takes 10 minutes or less.

### **III. The 700 MHz Auction**

The Committee can draw two important conclusions from these examples. The first is that the availability of Skype is extremely important to small business – whether start-ups, established companies, those based in a home office or even on the road. Skype is important not merely because it offers small business a way to reduce the costs of communications, but because Skype permits small businesses to draw upon the power of the Internet in a simple and convenient way. Whether it is video conferencing, file transfers, text messaging, or the ability to send payments to other users, Skype gives small businesses the power to do what once only big businesses could do. And it's not

just Skype. As, the Small Business Administration points out, 97% of the companies innovating with using voice over the Internet are small businesses.

The second conclusion that this Committee can draw is that mobility and the capability to harness the power of the Internet regardless of location are fundamental enablers for small businesses. Without that, all the gains small business has made relative to its competition will grind to a halt. A recent survey reported in the Wall Street Journal shows that 89% of small business owners use cell phones in their businesses.<sup>1</sup> That's where "open access" to mobile telecommunications networks comes in. The lack of open access to present mobile networks is of concern to the FCC and should be of concern to this Committee.

*A. The Open Access Provisions of the FCC's 700 MHz Auction Rules*

What do we mean by open access in the wireless market? The shorthand for open access is "no locking and no blocking." By that we mean that a small business, or any consumer, should be able to use any wireless telephone handset, Internet device, computer modem, etc. as long as that device is technically compatible with the network. It also means that the small business user should be able to use any software on that device, without the permission of the network operator.

In testimony before the House Commerce Committee this summer, Federal Communications Commission Chairman Kevin Martin made the case for mobile network operators being "required to provide a platform that is more open to devices and applications."<sup>2</sup> He explained the benefits of such a requirement as follows:

A network more open to devices and applications can help ensure that the fruits of innovation on the edges of the network swiftly pass into the hands of consumers. Consumers would be able to use the wireless device of their choice and download whatever software they want.

We could not agree more.

Chairman Martin and his colleagues made good on that vision a few months ago in the FCC's landmark 700 MHz decision. It is difficult to overestimate the importance of the 700 MHz spectrum to the future development of the broadband infrastructure in this country – this prime spectrum resource will stimulate innovation and productivity in our commercial and information sectors of our economy and will give new technology and interoperability opportunities to public safety agencies in carrying out their critical responsibilities.

It is all the more important, therefore, that the FCC chose this new band of frequencies to put wireless network open access into practice. In this regard, the FCC

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1 The Wall Street Journal Online, October 1, 2007, "Managing Technology."

2 Written Statement of The Honorable Kevin J. Martin, July 24, 2007, at 6.

determined that licensees for one of the spectrum blocks to be auctioned – the large, 22-megahertz Upper 700 MHz C Block – will be required to provide a platform that is open to a wide variety of devices and applications. The C Block operator will be required to allow customers, device manufacturers, third-party application developers, and others to use any device or application of their choice, subject to certain reasonable conditions related to management of the wireless network.

In taking this step, the FCC found that, despite some level of competition in the wireless marketplace, such competition alone has not been sufficient to prevent practices that constrain consumer access to wireless broadband networks and limit the services and functionalities provided to consumers over those networks. The FCC specifically found evidence of wireless service providers blocking or degrading consumer-chosen hardware and applications without appropriate justifications. Such conduct is anti-consumer and particularly anti-small business.

By endorsing open access for 700 MHz, the FCC recognized that the national wireless carriers wield enough market power to restrict consumer access to broadband networks. Specifically, wireless consumers and software companies must play “mother may I?” with the carriers, who play gatekeeper, determining what people may do with their phones. The FCC also determined that carriers exert too much influence over handset design in a way that’s particularly harmful to users like small businesses.

The interest of preserving openness of the Internet, whether on a computer or over a wireless connection, is a bigger discussion than just what happens with the 700 MHz airwaves. However, this auction is a critical test of the principle of preserving Internet freedom and Web innovation. While Skype and others would have liked to have seen the FCC apply these the open access/open platform requirements more broadly in today’s wireless arena and not wait until 2009 to unleash the benefits of a “no locking, no blocking” policy, we commend the Commission for taking this critical first step and urge them to hold the line against the expected backlash from wireless carriers who wish to maintain “walled garden” barriers to innovation and consumer choice.

#### *B. Wireless Carterfone*

Skype is a proponent of a consumer-focused open Internet policy in the 700 MHz band and throughout the existing market for wireless services. Skype filed what we call our wireless *Carterfone* petition last February; it is still pending at the FCC. In its petition, Skype asked the FCC to enforce its *Carterfone* rules in the wireless market and rule on the legality of the carriers’ restrictions on subscribers’ ability to use unlocked phones and other devices, as well as their ability to have full access to the Internet applications.

*Carterfone* is the 1968 FCC and court case that established the right of consumers to use any telephone, fax machine, modem, etc. with their telephone service, as long as it does not cause physical harm to the phone network. On one hand the *Carterfone* decision was about letting a small entrepreneur connect his device to a big company’s network,

but on the other it was about unleashing an explosion of innovative hardware and services and was a cornerstone of development of the Internet. A decision that in turn helped unleash business opportunities for thousand upon thousands more small businesses.

As wireless networks get faster, protecting the future of wireless networks is as important as *Carterfone* proved to be. The comments on Skype's petition filed by consumers, consumer groups, high-tech industry trade associations, and others were strongly in support of the application to wireless networks of the principles in the Commission's Broadband Policy Statement. The comments also confirmed that control over handset design and the applications that run on wireless handsets has shifted too far in the direction of the wireless carriers. In this regard, consumers must be placed at the center of this country's broadband wireless policy framework.

While the FCC has made a very significant step in this direction with its 700 MHz ruling, this is only the beginning of what needs to be done with these rules. Recent reports highlighting how carriers block content over their networks only underscores this point. In the aftermath of the on-again/off-again Verizon restrictions on the political speech of an abortion interest group, the possible AT&T restrictions on subscriber messages critical of AT&T, the wasteful "cat and mouse" game over unlocked Apple iPhones, and the FCC's finding that wireless service providers have blocked or degraded consumer-chosen hardware and applications without appropriate justification, we need no further evidence of the importance of open access *Carterfone* principles for the wireless market now.

I would like to close by stressing the particular importance of a wireless open access policy to small business. An open access policy provides two huge benefits to small businesses. The first is in the small businesses' role as substantial consumers of wireless telecommunications and Internet services. In this respect, they will have more advanced, more flexible, more powerful tools for their business needs at much lower prices. For small business users there's a more important – almost unique – opportunity here. They could have a new world of opportunities to sell software, Internet applications, devices and accessories directly to consumers of wireless services subject only to the reasonable technical concerns – rather than the competitive concerns – of wireless carriers.

As I stated when I began my testimony today, Skype started as a small business. What new "Skypes" are out there waiting for an opportunity to bring their ideas and their innovations to the public? An unconstrained wireless marketplace offers almost unlimited potential for small business. Just look at what resulted from *Carterfone* open access policy – it was an unqualified success. America's small businesses can have the same pro-consumer, pro-innovation policy in wireless if the FCC's 700 MHz policies are implemented and carried forward throughout the wireless Web.

Thank you.

**Written Statement of**

**Jeffery Black**

**on behalf of**

**The Wireless Founders Coalition for Innovation**

Before the

COMMITTEE ON SMALL BUSINESS

UNITED STATES HOUSE OF REPRESENTATIVES

OCTOBER 10, 2007

**I. BACKGROUND**

Thank you Chairman Velázquez, Ranking Member Chabot, and distinguished members of the Committee for the opportunity to address the Committee on a topic that I see as critically important to the future of small business entrepreneurs in the wireless industry. I am here today as a member of the Wireless Founders Coalition for Innovation, which is a group of seasoned wireless industry entrepreneurs who have founded wireless companies that now generate billions of dollars of revenue and have created thousands of jobs. We have brought innovation to the wireless industry by creating new business models, launching new services, and addressing pressing consumer needs that were previously overlooked by the large wireless carriers.

I have built my career as an entrepreneur with 27 years of experience in the high-tech industry. Along the way I have founded several companies including IMI, iAtlas, Resorts.com, Hotels.com and PartnerVision Ventures. Currently, I am the Founder, Chairman and Chief Strategy Officer of TalkPlus, a next-generation cell phone company founded in Silicon Valley in 2004. TalkPlus brings advanced mobile phone calling features to customers, features which are currently not offered by any large cellular provider. Our most popular service is an application

which allows users to add a second phone number to their mobile phone, creating a virtual presence for the user in any of the 30 countries where phone numbers are currently available through our service, including anywhere in the United States. This is particularly useful for small business owners who are able to give potential customers a sense of a local presence in many places throughout the United States and abroad. Just imagine if a small business owner could have a mobile phone in Washington, D.C. (202 area code) that also included a New York number (212 area code) and a London number (44 country code) all at the same time on one phone. Small businesses could establish a virtual presence (anywhere).

In addition to my entrepreneurial experience, I am also a 14-year veteran of Digital Equipment Corp (HP) where I helped launch several new industries, including, but not limited to Internet Search Engines (AltaVista and iAtlas). Back in the early days of the Internet, there were no rules to follow and no one to get in your way. This atmosphere bred competition – a race to new horizons – and because of this companies like Google and Yahoo! now have multi-billion dollar market caps. Imagine what would have happened if they were required to get permission from the Internet backbone providers before they started.

In addition to being a serial entrepreneur, I am also an inventor with several U.S. and international patents to my name – both issued and pending patents. Several of these patents are specific to the wireless industry.

Other members of our Coalition have also made great accomplishments in the U.S. wireless market. For example:

- Amol Sarva was among the first four team members of Virgin Mobile USA, the first and most successful mobile virtual network operator (MVNO) in the United States, Virgin Mobile pioneered pre-paid calling plans and in just five years has gone from zero to nearly 5 million customers and achieved over \$1 billion in revenues.

- John Tatum, also co-founded Virgin Mobile USA as its first President and has partnered with Mr. Sarva in several other wireless ventures.
- Fabrice Grinda founded Zingy, one of the first mobile content companies, which built the market for ringtones and mobile entertainment in the United States. Zingy grew from \$0 to over \$50 million in revenue in 4 years.
- Jason Devitt was the founder of Vindigo, which publishes more than twenty different applications for mobile phones including its famous city guide.
- Pat McVeigh was CEO of Omnisky, one of the first service providers to market a national wireless data product. He was CEO of PalmSource, the company that created the revolutionary Palm operating system.
- Sam Leinhardt founded Penthera, which has created one of the world's first software platforms for mobile television broadcasting, as well as founding three prior technology companies and having served as CEO of a mobile email software maker acquired by Nokia.
- Alex Asseily founded Aliph, which created revolutionary, military-grade audio technology for wireless phones and the Jawbone wireless headset.
- Martin Frid-Nielsen founded Soonr, a novel service that very flexibly gives consumers access to their PC data from any mobile device or network, and holds four patents in wireless data synchronization.

These are just a few examples of our membership, and most of us are now working on our second, third, or fourth wireless startups, many of which are still in the “garage stage.” We are creating the next generation of wireless applications and are pushing the envelope to help Americans (and the world) be more productive, save money, feel more secure, and – not to be ignored – have more fun by using wireless services. We are all about innovation and moving the industry to the next level.

## **II. EXECUTIVE SUMMARY**

The Wireless Founders Coalition for Innovation has been involved in the 700 MHz proceedings at the FCC for the past several months and has endorsed proposals put forth by Frontline and several public interest groups. In particular, we have supported the so-called

“Open Access” conditions, some of which the FCC has adopted. Open Access is an unfamiliar term for a very familiar idea. The companies or governments who build and maintain our highways don't get to dictate what kind of car you drive. Your electric utility can't limit your choice of a vacuum cleaner; and you don't have to ask your broadband provider such as AT&T for permission to launch a web site. However, in the wireless world, the wireless carriers dictate the devices and applications that can be used on their network. For example, I need Verizon Wireless for permission to sell a phone that runs on their network or an application that runs on their phones. We believe the wireless industry is ripe with opportunities for innovation and economic growth, but the large wireless carriers currently act as gatekeepers to block or deter many of these opportunities. From firsthand experience we know that negotiating with the large carriers for access to their networks can be a difficult and time-consuming process that can add months if not years to the launch of a new venture and hinder the “trial-and-error” process intrinsic to the entrepreneurial process. An Open Access framework, by contrast, would enable innovation at “Internet speed.”

My personal experience working with the large carriers is instructive on these points. TalkPlus has been successful *in spite* of a huge number of hurdles raised by the large wireless incumbents, but these impediments have prevented us from fully penetrating the market and reaching all the customers who would be interested in our services. Who knows how many other ventures have failed to pass through the “gauntlet or star chamber” of the wireless incumbents’ technical and business requirements processes?

As entrepreneurs we are not only visionaries, we are pragmatists. We know it is difficult for the FCC to force the large carriers to open up their existing networks retroactively. But the upcoming spectrum auction presents a key opportunity to shape the rules going forward and we

applaud the Commission for adopting Open Access conditions for one blocks of spectrum, the so-called C Block. We believe, however, that this effort will have been wasted if it does not create opportunities for entrepreneurs to freely explore new ideas, services, and business models. Therefore, the FCC must take two important steps: (1) it must make certain these Open Access requirements have “teeth” and that the incumbents are not able to easily work around them; and (2) the FCC must also ensure that its rules will give small businesses and startups of varying business models the ability to enter the market and capitalize on these new rules. What startups and small business are looking for is “equal access” – to the network, to the phone, and all levels of application programming levels that a carrier gets today. In short, whatever level of access a carrier gets to this new network, small businesses should get the same. Let the consumer decide who can offer the best and brightest applications.

The upcoming spectrum auction could prove to be a pivotal event in the history of the wireless industry, marking the transition to the age of the “wireless Internet.” But this will only happen if the FCC makes the right decisions, if it seizes the entrepreneurial opportunity and gives small businesses and the American people a chance to participate in the upside from a new and improved approach to wireless policy.

### **III. PROTECTING NETWORK HARM VS. PROHIBITING NETWORK USES**

For decades prior to the FCC’s seminal decision giving consumers choice – the *Carterfone* decision – consumers were prohibited from attaching *any* device to the telephone network unless it was expressly sanctioned (and leased, not sold) by Ma Bell. Basically, the phone company kept competition at bay by arguing that it couldn’t keep phone service running without “absolute control” over the network. Finally, in 1968, the FCC called their bluff, and said that so long as a manufacturer shows that its device won’t harm the network, there’s no

reason to keep it out of the hands of the public. The result was an explosion in innovation. Phones became available in every shape and color imaginable. There were also a few other remarkable innovations, like the fax machine, the answering machine, and the modem, which generated billions upon billions of dollars of new economic productivity.

Yet today, wireless carriers control subscribers' wireless devices much as AT&T once controlled the wireline experience. One can get a sense of the operators' proprietary control over the networks by looking at the restrictions they place on their retail customers. By way of example, here is an excerpt from the Terms of Service that currently apply to Verizon Wireless's data services (emphasis included in the original):

**DATA PLANS AND FEATURES**

Data Plans and Features (such as NationalAccess, BroadbandAccess, GlobalAccess, Push to Talk, and certain VZEmail services) may ONLY be used with wireless devices for the following purposes: (i) Internet browsing; (ii) email; and (iii) intranet access (including access to corporate intranets, email, and individual productivity applications like customer relationship management, sales force, and field service automation). **The Data Plans and Features MAY NOT be used for any other purpose. Examples of prohibited uses include, without limitation, the following: (i) continuous uploading, downloading or streaming of audio or video programming or games; (ii) server devices or host computer applications, including, but not limited to, Web camera posts or broadcasts, automatic data feeds, automated machine-to-machine connections or peer-to-peer (P2P) file sharing; or (iii) as a substitute or backup for private lines or dedicated data connections. This means, by way of example only, that checking email, surfing the Internet, downloading legally acquired songs, and/or visiting corporate intranets is permitted, but downloading movies using P2P file sharing services and/or redirecting television signals for viewing on laptops is prohibited. A person engaged in prohibited uses, continuously for one hour, could typically use 100 to 200 MBs, or, if engaged in prohibited uses for 10 hours a day, 7 days a week, could use more than 5 GBs in a month.**

As you can see, Verizon spills quite a bit of ink telling users what they are *not* allowed to do using their wireless data connections. You may use your wireless connection for simple e-mail or web browsing, or corporate applications but *not* for "any other purpose." Not for instant messaging. Not for voice over IP. Not for Internet video. Not for downloading games. Not for any other lawful consumer Internet application invented in the past 15 years, really. Customers

are on notice that using the network in lawful but non-approved ways puts them at risk of having their service terminated.

Like the old AT&T monopoly, wireless carriers argue that unless they dictate exactly *how* and *with what device* a consumer uses the wireless network, it will all come tumbling down. Indeed, in response to the Coalition's call for an open access network, one of the incumbent carriers responded that just four Slingboxes can take down a cell site. But is a Slingbox, or any other device designed to allow consumers to remotely watch video, inherently "unsafe"? And are other prohibited services – like VoIP or free text-messaging services – inherently harmful to the network? Of course not. In fact, these services and others like streaming TV and video conferencing have already launched in both Europe and Asia.

Instead, like any use of the network, some applications may make more use of the network than others, and regardless of the use, some consumers will use the network more intensively than others. This is not a new problem. Carriers deal with the issue of voice capacity by charging for minutes of use on the network. Customers who use lots of minutes pay more than those who do not, and the price mechanism gives customers an incentive to ration their usage. Equally important, the pricing mechanism gives carriers an incentive to increase capacity so that they can generate more minutes and hence more revenue. What if carriers simply charged data users for the amount of capacity they use, just as they charge voice users for minutes of use? In that case, streaming video users would pay more for using more network capacity and, if the price was too high, they might reduce their use of streaming video applications. That is the marketplace at work.

Carriers also argue that they need absolute control over the consumer experience, lest the consumer should stumble upon a device or use that provides a lesser quality or otherwise

different experience than that offered by the carrier. But if a consumer wishes to use a free instant messaging service offered by a small business, instead of the carrier's own paid messaging service, how is that a "harm" to the network? It simply means that the consumer is free to make their own decision as to a tradeoff between price, quality and a host of other variables. Maybe the consumer is an "early adopter" who is willing to try out a start-up's new product on the leading edge of technology. Early adopters are notoriously willing to accept tradeoffs in product quality in order to have the "newest thing." Fortunately for the rest of us, it is these early users who allow innovative products to cross the chasm from laboratory to the mass market.

Simply put, there is no reason, apart from commercial self-interest, why a carrier needs to ban streaming video devices, webcams, voice over IP, or any other such application. These prohibitions are akin to telling subscribers what conversations they can or cannot have on their mobile phones (*e.g.*, quick chats about what to pick up for dinner are ok, long conversations with old friends are not). The only devices and uses that shouldn't be allowed are those that would actually harm the network. For example, a device that would operate above acceptable power limits would cause interference to other users, and certainly it is reasonable for a carrier to ban it. But particularly as we move to an all-IP wireless world, there is no inherent reason that one byte of traffic should be allowed while another byte is deemed "harmful." Similarly, if a device meets a published technical specification of acceptable "behavior" (or, for that matter, if it is type approved by the FCC), there is no reason to require special permission from the carrier before it can connect to the network.

#### IV. OBSTACLES TO INNOVATION IN WIRELESS

Wireless entrepreneurship is not for the faint of heart. The wireless industry is dominated by four large nationwide carriers: Verizon, AT&T, Sprint, and T-Mobile, *a.k.a.*, “The Big 4.” Members of our Coalition have dealt extensively with the Big 4, as partners, suppliers, customers, and competitors. We have developed business relationships at all levels of management and some of these relationships have even grown into friendships. The Big 4 counts among its ranks many bright and talented people, including more than a few visionaries and technical wizards. Dealing with these people is often a pleasure; dealing with their organizations is more difficult. The Big 4 are large, generally risk-averse companies which exercise very tight control over their networks.

An entrepreneur looking to create a new device or service that somehow touches one of these networks typically has to get some measure of approval from the carrier. For a new device this might involve waiting six months or longer while it undergoes “device certification,” even when the device is merely a cosmetically-altered variant of some previously tested device. For a new software application this might involve lengthy negotiations over “deck placement” of the software, which means where the application would go on the carriers’ menu. This can be difficult when the new application competes with an inferior product offered directly by the carrier itself. As discussed above, the carriers’ Terms of Service also prohibit many cutting edge applications that involve passing data traffic “over the top” of carrier networks. In addition, carriers will limit or remove built-in features of mobile phones like WiFi or BlueTooth that can spark entirely new industries. Each of these barriers significantly raises the cost and risk of a start-up or entrepreneur bringing a mobile product or service to market. The impact of this on American ingenuity is tragic. If you’re a small business with a big idea, venture capitalists

strongly urge you to target Europe and Asia before attempting to introduce an application in the United States. This is not because other countries are more forward looking, or their consumers are smarter or more tech savvy. No, it is because those countries give consumers choice, and that drives demand and supply. In the United States, on the other hand, consumer choice is barred by paternalistic decisions made by the wireless carriers.

This turnaround from wireless leader to wireless follower is a cause for concern. At the launch of the mobile phone the United States had the most advanced mobile industry in the world. Now, 25 years later, the newest applications tend to be on the market in Europe and Asia for over a year before they make it to the United States. Here is the really tragic part: many of these applications are not being built abroad, but instead being built and developed by companies in our country. These companies, while desiring to offer services in the U.S., are being forced to start abroad in order to secure funding and then hopefully break into the Big 4 in order to reach consumers.

My own experience with TalkPlus is instructive. While we have been able to get around some of the barriers presented by the Big 4 providers and offer our services to their customers, this has not been the case with Verizon. Verizon not only controls which applications are allowed on its platform, but it locks down its phones so that consumers may not add any new applications. Per Verizon's process, we spent the time and money to construct an application for Verizon's network, and while they said they might be interested, they have dragged the process out for well over a year without allowing our applications to be put on their platform, but continuing to tell us it is a possibility.

The worst part was, even if we had succeeded in getting approval of our application, they would charge us an excessive amount of our gross profits just to gain access. It is common

practice for some carriers to charge as much as 40% to 50% of a startups gross revenues. This is essentially prohibitive for a small start-up company, and it is merely a function of the power the wireless incumbents are able to exert in such a closed industry. Imagine what would happen if the Big 4 carriers were required to pay the North American Numbering Plan Administration 40% of their gross revenues simply for receiving block of phone numbers within the United States. If these carriers were to live under the same rules that small businesses must live under today, they would each go out of business within 12 months.

The experience of other countries around the world is quite different. In Japan for example, DoCoMo, a major wireless provider, charges third parties less than 10% of its revenues to add applications to its wireless platform and that platform contains more than 5,000 applications. In addition, NTT DoCoMo already has over 20 million mobile phones that utilize an electronic wallet feature that allows mobile users to purchase everything from subway tickets, airline tickets to simply shopping in malls – all on their mobile phone bill. So imagine walking over to a Coke machine, pressing a few buttons on your mobile phone and a Coke can pops out. This is already in practice in both Europe and Asia.

The structure of the wireless industry in the U.S. means that small businesses such as TalkPlus have to spend great sums on advertising costs in order to attract customers. On an open network, however, a directory would inevitably be created which would list all the applications available to consumers and consumers would then choose which appeal to them. Instead of spending time and money finding the eyeballs, the eyeballs would find us naturally. The result would be that small companies would have a much stronger valuation, because of the decreased risk and the access to wireless providers' platforms, thereby increasing their ability to secure funding.

Of course, it is possible to navigate through these obstacles. We have done it before. Our experience tells us, however, that the path can be arduous, especially when compared to our experiences in other sectors of the telecom industry, particularly the Internet. Experience also tells us that these efforts often do not succeed or do so slowly or at substantial costs. For every success story there are several other ventures that were not able to navigate the carrier maze.

#### V. REQUIREMENTS FOR INNOVATION IN WIRELESS

Wireless entrepreneurship would take a huge step forward if wireless was more like the Internet. What makes the wireline Internet so friendly from an entrepreneur's perspective is its Openness. One does not have to ask Comcast or Time Warner Cable or even Verizon's DSL division for permission to launch a new product, service, or device. To borrow the Nike slogan, you can "just do it." In wireless, on the other hand, you can "just ask the Big 4." If you are skillful – or lucky – enough to make it through to the other side, the upside can be large. Yet entrepreneurship is an iterative, trial-and-error process. Having to engage with the Big 4 at each cycle in the process can slow time to market and increase risks and costs for the entrepreneur. One should not have to negotiate with an access provider to offer a product elsewhere in the value chain. Based on my experiences and those of my fellow Coalition members, I would like to offer a few observations about what it takes to innovate in wireless.

*First*, innovation requires small bets with real customer feedback and iterations. This is the "try, try again" rule. Entrepreneurs need "laboratory" settings to commercialize ideas that may initially look small but turn out to be quite big. This means access to real, live customers using real, live networks. This is very difficult to do in the current market where businesses must spend millions to create applications that the Big 4 might refuse to carry. By contrast, most Internet services can be developed, trialed, refined, and redeployed multiple times in a fraction of

the time and at a fraction of the cost. This is one reason the Internet is such a great breeding ground for innovation.

*Second*, freedom to enter the market is essential. It is very difficult to know, *a priori*, where the good new ideas will come from or the magnitude of their impact on the market. For example, IBM gave up the rights to the Microsoft operating system. Yahoo declined to acquire Google's search engine. And of course AT&T believed the cell phone would never become a "mass market" product. Innovation often happens from the edge of a market. Some of the most important inventions in telecommunications, including the Hayes Smartmodem, online services, the answering machine, and speakerphones were all commercialized by outsiders to the Bell System. Yet these new products and services were only made possible by the FCC's *Carterfone* decision and Part 68 rules, which removed the Bell companies from their traditional role as gatekeeper of the network.

*Third*, the most disruptive innovations are typically the ones most easily dismissed by market incumbents. Some innovation is merely incremental and accretive to the existing business franchises of the incumbents. But the big changes are often disruptive (or appear so initially) and threaten them. More fundamentally, it is easy to see why a market leader such as Verizon Wireless so fiercely opposes opening up its networks. They have a closed business model that makes a lot of money and they fear that a loss of network control will mean a loss of their position.

We firmly believe in the right and necessity of any carrier to obtain a fair payment for the investment they make in the infrastructure of any network they develop. However, when a public resource such as radio spectrum is provided on a monopoly basis, it is our opinion that the public interest is clearly best served by creating an environment where applications and services

are fairly accessible by all users of the network. The clear example of the Internet should guide this process: the underlying wires and fiber optic cables that deliver the Internet are often (but not always) delivered on carrier networks. However, the applications which are most often accessed are almost never provided by those same carriers, and the computers which connect users to those networks are also not supplied by those carriers. The market has shown this method as superbly successful, and is a profitable arrangement for all involved.

The upshot is that America is not innovating in wireless at nearly the rate it could be. While all the ingredients for innovation – wireless broadband networks, IP networking stacks, advanced multimedia devices – are readily available, the incumbent operators are too hesitant to try a new recipe for change. We think the industry needs a good test kitchen.

#### **VI. THE OPEN ACCESS SOLUTION**

Our Coalition believes that the Open Access requirements adopted for one block in the upcoming spectrum auction provide a concrete and actionable way to carve out a portion of the wireless market for entrepreneurial activity. Specifically, we believe the FCC can unlock a wave of entrepreneurial energy if it ensures that its Open Applications and Open Devices rules are enforced, not only in name but truly in practice.

##### *Open Applications*

The FCC's Open Applications rules prohibit carriers from blocking users' access to innovative new applications, as long as they do not jeopardize the integrity of the network. Service providers will not be able to block certain applications or use discriminatory standards or pricing for third-party applications. This will enable customers to access "over the top" Internet-style applications of all kinds. These would include many kinds of services currently prohibited under the Big 4 subscriber contracts. Verizon Wireless, for example, prohibits the use of VoIP,

webcams, and other media services. Under the new Open Access rule, these kinds of Terms of Service will not be allowed. Entrepreneurs would be free to create a low-cost voice offering or, say, a mobile social network with videoblogging capabilities. The only limits on new service ideas will be the entrepreneur's imagination, not the wireless operator's Terms of Service.

#### *Open Devices*

The Open Devices rule ensures, with limited exceptions related to the security of the network, that users can connect any device of their choosing to their wireless network, provided it meets certain publicly specified technical standards. The consumer device industry has undergone a revolution in the past few years. Modular design and contract manufacturing now make it possible for even an upstart to sell sophisticated, purpose-built devices. In particular, radio frequency technology is becoming increasingly commoditized, which means that it is now possible to embed wireless capabilities into devices using off-the-shelf component parts. We envision a wave of opportunity in the device space, including the evolution of cell phones toward "broadband communicators," the addition of wireless community features to portable media and gaming devices, and even using wireless to provide cheap connectivity to otherwise "dumb" appliances. We are starting to see these kinds of devices emerge with local area Wi-Fi capabilities, but the possibilities are even greater once the devices can access the sort of wide area 4th generation networks that will operate in the band of spectrum being auctioned. Bringing a new product to market is always a risky proposition, but it is made more risky by the need to pass a carrier's certification process, which as noted above is filled with uncertainty, is non-transparent, and can take many months. Under the Open Devices rule, entrepreneurs will be free to bring new devices to market, gauge customer reaction, and evolve the product all in the time that it otherwise would have spent languishing in a Big 4 lab somewhere.

**VII. BIDDING CREDITS: THE KEY TO SUCCESS FOR SMALL BUSINESSES**

As this Committee is well aware, the participation of small businesses is essential to competition and consumer choice within an industry. In recognition of this important principle, Congress set out objectives for the FCC to implement in order to ensure that small businesses had ample access to FCC licenses. The FCC has adopted competitive bidding rules as a means of accomplishing this goal, and more specifically a process for eligible designated entities (“DEs”), including small and minority owned businesses, to secure bidding credits in FCC auctions for spectrum licenses. These rules are intended to address the obvious disparity in funding that exists between large incumbents and small businesses, and the effect this has on the ability to acquire FCC licenses.

In spite of Congress’s clear directive to facilitate the entrance of new small businesses, and a recognition by the FCC of the important role such new entrant small businesses serve, the Commission’s current DE rules do not adequately encourage small business participation. The main problem is that the rules do not allow otherwise eligible small businesses who wish to operate under a wholesale business model to qualify for the DE credit. Without this credit it is nearly impossible for small businesses to compete with incumbents such as Verizon and AT&T who are willing to pay a great deal of money for these licenses, including the premium to prevent new entrants.

This discrimination against a wholesale model is problematic for two reasons which directly affect small businesses. First, a wholesaling new entrant would spur competition for devices and applications by smaller businesses, such as TalkPlus, because it delinks the network provider and end user. This allows a point of market entry between them, preventing much of the current discrimination against new applications and services present in the wireless market.

Second, a wholesale model will encourage new entrant wireless providers to emerge, as this is the most realistic model for new small businesses to employ. Small businesses are not able to sustain the massive costs that accompany being a full-scale retail provider and compete with companies like Verizon who have over 2000 retail outlets and an almost \$2 billion annual advertising budget. Instead a wholesaling model offers them an “in” to the wireless industry.

Congress has made clear that new entrants and small businesses are integral to competition. In order to satisfy its obligation to facilitate such opportunities, the FCC must adopt a DE rule which allows an otherwise eligible small businesses operating as a wholesale provider to obtain the DE bidding credit and participate in the 700 MHz auction.

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In conclusion, the upcoming spectrum auction should give small businesses a chance to compete in the wireless world and offer consumers new and exciting services. The FCC has taken some small steps in the right direction, and I urge this Committee to push the FCC to finish the job and enable small businesses to compete and innovate.

