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COMMITTEE ON ENERGY AND COMMERCE
SUBCOMMITTEE ON TELECOMMUNICATIONS AND THE INTERNET
U.S. HOUSE OF REPRESENTATIVES

Oversight of the Federal Communications Commission – the 700 MHz Auction

April 15, 2008

Good morning Chairman Markey, Ranking Member Stearns and Members of the Subcommittee. It is a privilege to be with you once again this morning to discuss the results of the 700 MHz auction and its importance to the nation's broadband future. Thank you for this opportunity to share our views.

The Transformation of Wireless Communications – from Phones to Connections

Verizon Wireless considers the 700 MHz spectrum auction as nothing short of transformative for the nation and for the American consumer. This spectrum will allow our company and the wireless sector of the technology industry to accelerate growth, offering a broad array of 21st Century products and services to the American people, while still remaining intensely competitive.

The results of this auction, along with last year's Advanced Wireless Service (AWS) auction, demonstrate that a wide range of large and small players, plus several new entrants, are poised to deliver the benefits of 4G (Fourth Generation) wireless broadband services to Americans over the next few years. The competitors in the 4G world will include all four existing national wireless service providers (Verizon Wireless,

AT&T, T-Mobile and SprintNextel), *plus* at least two new national competitors (the Cable joint venture, which acquired a 20 MHz nationwide footprint in the AWS auction, Echostar, which acquired a 6 MHz nearly nationwide footprint in the 700 MHz auction, and Cox Cable, which won over twenty licenses in large markets throughout the country in the 700 MHz auction), *plus* several regional carriers, such as US Cellular, MetroPCS, Cellular South and Leap/Cricket, all of which supplemented and/or expanded their existing footprints either with 700 MHz or AWS spectrum. In addition, CenturyTel, a regional landline service provider that exited the wireless business several years ago, has reentered the market by purchasing 700 MHz licenses largely overlapping its existing landline territory, enabling it to offer wireline/wireless bundles to its customers.

Taken together, wireless companies will have paid more than *thirty billion dollars* to the United States Treasury in these two 4G auctions (700 MHz and AWS). In the coming years our companies will add billions more to that amount as we invest the capital to build new coverage, improve existing coverage, and upgrade networks to new 4G standards such as LTE and WiMAX. These investments will fuel the job creation, innovation, and robust competition that have been the hallmarks of the wireless sector for the past two decades. The biggest winner, of course, will be the American consumer.

Verizon Wireless invested in the 700 MHz spectrum because we see an exciting and enormous future in wireless data growth – not only the products and services we know today, but those not even yet envisioned.

Wireless data growth is exploding. Text messaging took seven years to hit ten billion messages in a single month on the Verizon Wireless network, but then only *seven more months* to reach twenty billion messages in a single month to and from our

customers (February 2008). Soon we will surpass one billion text messages *per day* on our network. Data revenues currently comprise more than 20 percent of our revenue, up dramatically from just a couple years ago. We can only imagine what the future has in store, but we are only at the beginning of tremendous growth in this area, with more opportunities and challenges than we can fully grasp.

Since the early days of wireless, companies have measured their growth by the number of customers. To begin to understand how wireless will grow in the future, we will need to move beyond characterizing the scope of the industry in terms of a percentage of the population, but instead to thinking about people, their devices and their connectedness. In other words, we need to think about the future in terms of "connections."

The future is about people and their devices and their need to manage those devices—like digital media players, energy systems, appliances, medical devices. It is in these connections that we see tremendous opportunity for wireless innovation. Whether we think about people connecting with people, people connecting with their devices, or even devices connecting with other devices, wireless will become what some are calling "the third screen." All the innovation that has been confined to the desktop and the TV screen will move rapidly to mobile environments, and the incredible connections that simply aren't possible in a tethered world will become possible through products and services designed specifically to leverage the unique capabilities of advanced wireless technology.

Deployment of the 700 MHz spectrum will unleash a host of new broadband devices and applications to rival anything available today on wired broadband networks. Doctors

will be able to access medical records and CAT scans wirelessly; firefighters will have wireless access to images of building interiors and floor plans. As a nation, we now have all the pieces in place to make that explosive growth happen, to move toward a broadband future that promises to improve the lives of Americans in many ways, to stimulate economic growth, and to establish our world leadership in wireless broadband deployment.

Verizon Wireless' Plans to Deploy 700 MHz Spectrum

Verizon Wireless purchased 700 MHz spectrum to build on our unmatched network, widely known for having the highest quality and reliability in the nation. We have invested over $50 billion in our network over the past 8 years to ensure our customers continue to enjoy America's most reliable wireless service. We were the first wireless company to deploy 3G technology in the United States, and we are excited to take that to the next level – 4G. There are three key components to our overall wireless data and broadband strategy:

- The innovation and potential for new services that will be unlocked through our Open Development Initiative, which we announced prior to the auction start;
- The global reach and IP-based service inherent in the LTE platform we intend to deploy for our 4G products and services; and
- The depth and breadth of the spectrum won in the 700 MHz auction.

Verizon Wireless' Open Development Initiative. Our Open Development Initiative (ODI) invites third parties to develop devices and applications customers want that we do not currently offer. We announced this initiative last November because it made

business sense for us to take the market in the next logical direction, primarily due to the explosive growth we have seen in data services. As I indicated when I appeared before the subcommittee last summer, we have never objected to dynamic, market-driven open access models. Instead, we did not believe it was necessary for the government to hard-wire its version of open access into the auction rules, inserting a fixed set of rules and a cumbersome and regulatory process into a fast-moving and constantly changing high-tech industry such as ours. With Open Development we are creating a market-driven model that can evolve and adapt quickly to the demands of customers, device and application developers, and others.

To implement this initiative, we hosted an Open Development Device Conference last month, at which we discussed the technical standards for devices other than those we sell in our stores to run on our network. The conference attracted enormous interest – more than 400 people attended in person, and thousands more watched the webcast in real time or have viewed it since. In the coming months, developers will begin submitting devices to third party labs to be tested and certified for operation on our network. We expect the certification process to take as little as four weeks to complete. Then, later this year, we will offer a "network-only" option for customers who wish to use these devices on America's most reliable network.

We are embracing Open Development because it will jumpstart the pace of innovation to the ultimate benefit of our customers. Open Development will spur innovation and expand customer choice of products and services available to run on our network. Those products and services will not be just wireless phones. The growth potential lies in connections – not only people-to-people connections, but connections of

all kinds. Through this openness, we expect a virtual tidal wave of applications to move onto our network. Some of the ideas that developers are working on are already conceptualized, like medical devices and gaming consoles, but many have yet to be defined. This is the power of innovation that we expect Open Development to bring.

LTE as the path to 4G. The right technology is essential to enable the data opportunities ahead. To achieve the pervasive connectedness and to support the devices and media-rich opportunities of the future, the speed of wireless broadband networks will have to increase to allow connections to behave more like landline broadband networks. In LTE (Long Term Evolution) Verizon Wireless sees a unique opportunity to adopt a network standard with true global scale and compatibility with its existing technology. LTE promises improvements in download speeds, potentially in the range of 75 Mbps, bringing expanded device portfolio and service options that will include "machine-to-machine" communications and real time video. Verizon Wireless has chosen LTE to enable our future wireless network to operate at very high broadband speeds, benefiting customers with exciting new data products and services.

LTE technology will also offer the benefits of a global ecosystem. We are preparing to engage in trials with our minority owner Vodafone that will help define our global deployment strategies. Infrastructure equipment vendors, equipment manufacturers, carriers and others will be able to take advantage of the simplicity, efficiencies and economies of scale created by using a global standard. Scale economies will result in lower device and infrastructure equipment costs. Because of an increasing commitment by wireless companies both here and overseas to LTE as the preferred 4G technology, and fueled by the results of the 700 MHz auction, we expect to see an acceleration of the

LTE standards, an acceleration of equipment delivery, and an acceleration of broadband applications reaching the marketplace.

700 MHz Spectrum Acquisition. The third prong is the spectrum we bid for during the recent 700 MHz auction. To compete effectively in the wireless data future envisioned in our Open Development initiative and to take full advantage of the capabilities of LTE, Verizon Wireless knew we needed greater depth and capacity in our spectrum holdings. We entered the auction with a clear set of objectives, based on what we knew was required to support our broadband strategy and provide a rich wireless offering to the American consumer.

Verizon Wireless is extremely pleased with the results of the auction. We aggregated several regional "C Block" licenses to form a nationwide footprint (with the exception of Alaska). On this strong foundation we added 102 smaller A and B block licenses, thus gaining additional capacity in key markets. We now have, on average, 85 MHz in the top 100 markets in the United States, where the greatest population densities put the most strain on network capacity. For years we have been the most efficient user of spectrum – serving 50 percent more customers per MHz than the industry average With this purchase, we have now increased our spectrum inventory to a level that puts us on par with our major competitors (except SprintNextel, which averages 123 MHz of spectrum in the top 100 markets) and have achieved the depth and breadth we need to preserve our hard-won status as providing the nation's most reliable wireless network. We can now move forward to the next wave of services and electronic devices that the enhanced data capabilities of our new network will make possible.

In addition to adding to our spectrum depth, the specific benefits of this spectrum purchase are many. The C block alone will give us 22 MHz of contiguous nationwide spectrum on a single frequency, giving us the capability to support the highest possible data speeds in a seamless nationwide service and optimize our 4G broadband deployment.

The nationwide C Block license also will provide for a seamless build-out and thus additional advantages in terms of speed, performance and capacity. As history has shown**,** aggregating spectrum post-auction takes many years and is costly to consumers. With the purchase of the C block we will be able to spend our time on broadly deploying the latest wireless broadband technology rather than aggregating spectrum.

While we stand by our position that the Commission's C Block "open access" rules were unnecessary, we are, of course, committed to live by the Commission's rules. Importantly, we believe the FCC's expectations for open access will be more than met by what will happen in the market generally and as a direct result of our open device initiative. We don't expect to be limited in any way by the FCC's definition of "open access," but rather will use it as a starting point for bringing incredible new products and services into the marketplace.

Verizon Wireless plans to launch its LTE network in 2010, only a short time after the 700 MHz spectrum is cleared. Once launched, we plan an aggressive and rapid build-out, upgrading our existing network infrastructure and moving to full deployment. We intend to fulfill the promise of the 700 MHz auction by putting this spectrum to use quickly and efficiently for the benefit of American consumers and the American economy.

Smaller Bidders and New Entrants Participated Successfully in the Auction

There are many reasons why the 700 MHz auction should be viewed as successful by federal policymakers acting on behalf of the American people. Our review of the data the FCC released after the auction reveals several important facts. Verizon Wireless purchased less than ten percent of the licenses for sale in the auction (109 of the 1,099 licenses offered), and our last bid in the auction occurred in Round 30, even though the auction continued for more than 230 additional rounds. As Chairman Martin noted in his statement at the close of the auction, 99 bidders other than the nationwide wireless companies won 69 percent of the 1,090 licenses sold in the 700 MHz auction. EchoStar, widely viewed as a new entrant, won 168 licenses in the E block to establish a near nationwide footprint for its consumer services. Another new entrant, Cox Cable, picked up 22 licenses in large markets throughout the United States.

Small and medium-sized wireless services providers also participated effectively in this auction. Many of the most successful B Block bidders were smaller, regional operators. For example, the second largest B block winner after AT&T was US Cellular's partner, King Street Wireless, L.P, which utilized the opportunities available for small businesses under the FCC's designated entity program to acquire a significant stake in the B Block (127 licenses) that overlaps and expand upon US Cellular's existing service areas in less densely populated areas of the United States. Cellular South also acquired licenses in the B Block that overlap and expand its existing service area. CenturyTel, which left the wireless business several years ago, is now reentering the market by acquiring spectrum that overlaps its local exchange areas. The fifth largest B Block winner, Triad, also an AWS licensee, though affiliated with several small wireless

operators, appears to be a new entrant and a small business. Fourteen other small bidders won five or more B Block licenses. According to the FCC, of the 87 winning bidders in the B Block, 75 were new players winning licenses in 305 rural areas of the country.

Moreover, smaller companies had a fair opportunity to participate in the bidding. Because of anonymous bidding, we had no idea who we were bidding against during the auction. We were outbid on hundreds of licenses, and only won 16.6 percent of the licenses we bid for in the B Block and 17.4 percent of the licenses we bid for in the A block. Our post-auction analysis of the round-by-round data revealed that in the majority of cases where we were bidding head-to-head with small bidders in the B Block, we won after only one or two bids. The average price paid for licenses where we were bidding against a small bidder was $.55 per MHz pop, as compared to the overall auction average of $1.20 per MHz pop.

The C Block and Google

Prospective new entrants – especially Google – had every opportunity to win the C block. Before Verizon Wireless placed its first C Block bid in round 27, nine of the twelve bidders that had placed a bid on a C Block Regional Area Grouping (REAG) had *already* ceased bidding or withdrawn their bids for C Block licenses, as Google had steadily driven up the price and eventually pierced through the reserve amount. By Round 30, Verizon Wireless became the high bidder in the C block, because the total of our bids on the individual REAG licenses exceeded Google's previously winning bid on the entire 50-state package. Although the auction continued for 230 more rounds, only one company chose to outbid Verizon Wireless on just the Alaska REAG license. Significantly, in the round just before it dropped out of the auction, Google could have

topped our entire C Block bid for an additional amount of only $242 million, substantially less than the average value by which Google's market cap increased *each* Wall Street trading day throughout 2007.

Given Google's pre-auction clamor for a new entrant in the C block, Google's post-auction declaration that it *never* intended to win the C Block (or any other) spectrum is striking. While Google claims it would have tried harder to win the spectrum if only the FCC had mandated all four (instead of two) of the open access conditions it sought, that reasoning rings hollow, as Google obviously could have voluntarily implemented the same wholesale and net neutrality conditions it wanted the FCC to mandate. Google has now admitted that its *sole* objective was to bid just enough on the C block to trigger the open access rules, then exit as quickly as possible. As the New York Times put it in the headline to its April 4, 2008 story, this was "An Auction That Google Was Content to Lose."

Now Google has moved on, launching a new campaign to capture control of the so-called "white space" spectrum without, of course, having to pay for it at auction. The campaign initially provoked an outcry from the National Association of Broadcasters, and the wireless industry has recently added its strong objection. If scientific testing can demonstrate that the white spaces may indeed be used without causing interference to existing users, then they should be licensed and sold at auction, to ensure that American taxpayers are not left holding the bag.

Public Safety Interoperability: Next Steps

While the 700 MHz auction is generally viewed as a tremendous success, it did not achieve one important objective: it failed to produce a solution to address public

safety's dire need for a nationwide, interoperable wireless broadband network. Not one of the more than 200 applicants saw sufficient economic justification in the D block experiment to bid remotely close to the reserve price in over 260 rounds of bidding. While Verizon Wireless believes that a public-private partnership may very well be an effective way to satisfy public safety's need for reliable and secure communications, we were not surprised with the result of the D block experiment. The vision was right, but the structure was fundamentally flawed.

The D block failed for many reasons. We spent a long time before the auction analyzing the D block rules, meeting with public safety and Cyren Call, and trying to construct a rational business case to justify the investment. Let me explain some of the reasons why Verizon Wireless chose not to bid for the spectrum and why we believe the D block auction failed.

First, *the D block concept failed because its economics are fundamentally flawed.* The idea behind the D Block was that someone would be willing to spend the money to build a network for public safety, in exchange for gaining access to public safety's adjoining spectrum. The problem with this approach is that the cost of building the network far exceeds the value of the spectrum. This would be true even if the network were built in accordance with typical commercial standards. It is doubly true when we consider the stringent rules the FCC established and the onerous requirements demanded by Cyren Call on behalf of the public safety licensee (The Public Safety Spectrum Trust).

Consider the minimum conditions the D Block licensee would have had to accept. It would have to construct, at its own considerable expense, a nationwide broadband network covering at least 99.3% of the U.S. population, and "hardened" to meet public

safety's more rigorous requirements. The cost of constructing such a network would run to the tens of billions of dollars, and would substantially exceed the cost of constructing a comparable network built to typical commercial standards. Moreover, because public safety users would have priority use of the network, it would be difficult to estimate how much of the network's capacity would be available for commercial use on an everyday basis.

Thus, the D block structure was fundamentally flawed because it could not create enough value on the spectrum side of the ledger to make up for the overwhelmingly greater amount of capital the buyer would have to spend on the network. This value imbalance doomed the D block to failure.

Second, *the D block failed because the rules created far too much uncertainty.* The FCC's rules require the terms of the "network sharing agreement" to be negotiated *after* the commercial operator has already purchased the D Block license. This "buy now, negotiate later" approach is backward Far too many important details were left to post-auction negotiation, leaving prospective bidders in the position of not knowing what obligations they might be incurring. If the negotiations failed to produce an agreement acceptable to public safety and the FCC, the D Block winner would have to forfeit the license, *and* pay a penalty in an amount equal to ten percent of its winning bid *plus* the difference between the winning bid and the amount the FCC would collect in a subsequent auction of the D Block – an enormous "break-up" fee. While the FCC's default penalty rule is normally necessary to curtail speculators, it represents a huge financial risk for serious prospective D Block bidders, especially given the great uncertainty inherent in waiting until after the auction to conduct negotiations with public

safety. Is it any wonder that buyers were reluctant to step forward under such circumstances? But even if many of those details had been known, the economic imbalance discussed above would still have caused prospective bidders to stay on the sidelines.

Third, *Cyren Call's role created much uncertainty*. The Public Safety Spectrum Trust, which holds the public safety broadband license adjacent to the D block, selected Cyren Call, a for-profit entity, as its advisor last October. Verizon Wireless met with Cyren Call, as did other prospective bidders. In these meetings, Cyren Call indicated that the D Block licensee and the Public Safety Spectrum Trust would act as a public-private partnership. But the more we heard Cyren Call describe how that partnership would work, the more concerned we became with the viability of the endeavor. For example, Cyren Call indicated the D Block licensee would not be allowed to recoup its capital investment through the rates it charged public safety users for network access. Cyren Call said this requirement was justified, because public safety would be contributing a portion of its adjoining spectrum for the D Block licensee's use. But Cyren Call also stated that the D Block licensee would have to pay the Public Safety Broadband Trust a $50 million annual "spectrum lease payment" for using that same adjoining spectrum. Cyren Call said the payment was necessary to cover the expenses of the Public Safety Broadband Trust.

Moreover, we were very surprised when Cyren Call indicated that the D Block licensee would not have the ability to serve public safety users directly. Instead, Cyren Call and the Public Safety Spectrum Trust would "own" the right to provide service to public safety users by reselling service on the D Block licensee's network. Cyren Call

also took a broad view of the term "public safety users," defining it to include not just first responders, but other state and local government employees and certain commercial users who interface regularly with first responders (for example, ambulance drivers, utility workers, transport workers, etc.) This raised serious concerns. Verizon Wireless currently serves hundreds of thousands of federal, state and local public safety users with no middleman, and we do not believe one is necessary to provide service to such customers in the future.

For all these reasons, we chose not to bid for the D block.

Despite the D Block's many flaws, we continue to believe that public safety can benefit when government and commercial interests develop effective partnerships. We see examples of such partnerships every day, in areas ranging from the manufacture of fighter jets and submarines for the military to the construction and operation of advanced telecommunications solutions for government agencies. These partnerships are effective because the requirements and expectations are clearly defined up front, because potential partners are solicited through transparent and competitive processes, and because both the government and the commercial entity have an opportunity to assess fully the benefits and risks. Using such an approach to develop a nationwide, interoperable broadband wireless network for public safety's use would enable both the government and the private sector to avoid the tremendous uncertainties inherent in the D Block model, while offering a far broader range of potential partnership arrangements for public safety to consider.

Thus, the question that should be asked is not necessarily "what should we do with the D Block?" The more important question is "what should we do to ensure our

nation's first responders have access to effective, reliable, interoperable communications in times of emergency?" The D Block "conditioned license" approach is clearly not the solution, as the auction results made so abundantly clear. It is economically flawed and fraught with uncertainty and risk – both for public safety and the commercial operator. Any new proposal that simply tinkers with the D Block rules around the edges but maintains the same, fundamentally flawed and imbalanced model of trading spectrum value for capital investment likewise will fail. Indeed, whether the D Block spectrum even needs to be part of the interoperability solution is something that Congress and the FCC must evaluate, as part of a more thorough assessment of public safety's needs and the role that a true public-private partnership could play in meeting those needs.

The advanced technologies that will facilitate real solutions for public safety are readily available today. The substantial assets of the private sector, both in expertise and existing infrastructure, can help accelerate deployment of these solutions. What is needed is a partnership framework that provides the proper incentives for private sector participation, a clear description of public safety's requirements, and sufficient funding to ensure the plan can be implemented successfully.

Thus, whether the D Block needs to play any role in creating a successful public-private partnership is a question that should be studied thoroughly. If Congress determines that the D Block must still play a role in this process, then other possibilities should be considered, such as reallocating the D Block to public safety, or auctioning it free and clear of any conditions (except the same build out conditions applicable to the lower A and B blocks should apply) and earmarking the proceeds to fund interoperability, rather than continuing to rely on a flawed framework that is doomed to failure.

As we move forward, Verizon Wireless remains committed to helping find and being a part of a solution to public safety's need for interoperable communications. We already operate the nation's most reliable wireless network, and in the not-too-distant future we will augment that network with 700 MHz spectrum and LTE technology, delivering new products and applications with tremendous speed and versatility to our customers. And, through our Open Development Initiative, we are welcoming niche and specialty devices, including those designed specifically to serve public safety needs. We stand ready to continue serving public safety in every way we can.

Concluding Thoughts: The Need for Regulatory, Tower Siting and Tax Reform

With the 700 MHz auction behind us, now is the time to focus anew on the need to take firm action to ensure the dreams of a wireless broadband future can be fully realized for the American economy and American consumers. It is vital that we not allow backward-looking, state-by-state utility style regulation to undermine the investment and innovation necessary to our 21st Century broadband future. As I noted during my appearance before the Subcommittee last summer, it is critically important that we move forward to implement a national framework for wireless regulation, with a single set of federal consumer rules comprising both the floor and ceiling. The States must play a role in enforcing those rules, but *not* in piling on multiple, inconsistent and conflicting rules of their own. We will be pleased to continue working with the Subcommittee to achieve this important goal.

Equally important is the need to streamline the antiquated and burdensome local approval processes for deploying network facilities. Local governments should retain their role in approving new cell towers, but the process must be streamlined with

reasonable deadlines and requirements for local authorities to identify alternative acceptable sites.

Finally, I would be remiss if I failed to mention on this day – April 15 – that wireless customers continue to be singled out for unfair, discriminatory and burdensome state and local taxes. It is imperative that policymakers relieve the burden of these taxes and help make wireless service more affordable for more Americans.

Thank you again for the opportunity to appear before the Subcommittee to address these important issues.