

**TESTIMONY OF
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**BEFORE THE
U.S. SENATE COMMITTEE ON SMALL BUSINESS AND ENTREPRENEURSHIP**

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Mr. Chairman, Senator Snowe, and members of the Committee, thank you for inviting me to testify about one of the most important infrastructure challenges confronting our Commission and the country: ensuring the ubiquitous deployment of affordable, high speed broadband to every small business that needs it. Deploying broadband infrastructure is critical to promote the economic, cultural, and social well-being of our country, particularly for small businesses and entrepreneurs, who drive so much innovation and economic growth.

Mr. Chairman, you have long recognized that broadband infrastructure is one of the best tools for promoting the entrepreneurial spirit that we have seen in our time. Its availability is fast becoming one of the key factors in the success or failure of our small businesses. I am deeply concerned about the speeds, prices, and availability of broadband services for American consumers and small businesses. To ensure that broadband is available and affordable, we must engage in a concerted and coordinated effort to restore our place as the world leader in telecommunications. This will require a comprehensive national broadband strategy that targets the needs of all Americans, including small businesses.

Mr. Chairman, I want to commend you for your leadership on this issue, not only through convening this hearing but also by serving as Co-Chairman of the Senate Democratic High Tech Task Force. Through these and many other efforts, you are drawing much-needed attention to the importance of promoting technological innovation and advanced telecommunications for providing good jobs and enhancing our standard of living. Senator Snowe, I also commend your outstanding leadership in promoting broadband for schools, libraries and health centers, as well as for all consumers, including those in rural areas.

The Role of Broadband in Promoting Economic Prosperity and Global Competitiveness

Small businesses play a driving role in creating jobs and developing new technologies. Over the past decade, small businesses have created two out of every three new jobs, employed forty percent of high tech workers, and produced far more patents than similarly focused large firms. Small businesses also purchase a massive amount of telecommunications services, spending approximately \$25 billion each year, according to a recent Wall Street Journal report.

Unfortunately, the FCC collects little reliable data about extent of broadband services available to small businesses in the U.S., or the more general state of competition among providers of telecommunications services for businesses. In a report released at the end of last year, the U.S. Government Accountability Office (GAO) recommended that the Commission collect additional data to monitor competition and to assess customer choice through, for

example, price indices and availability of competitive alternatives. GAO found that “without more complete and reliable measures of competition, [the] FCC is unable to determine whether its deregulatory policies are achieving their goals.”¹

The good news is that small businesses are voraciously integrating new services and features into their business plans. As I elaborate below, and as you will hear from the second panel, businesses of all sizes are increasingly tapping into broadband to reduce costs, increase productivity, and improve efficiency.

The bad news is that what little data that we have suggests that small businesses are starved for telecommunications choice. Many small businesses have only one choice of provider for broadband services, which deprives them of innovative alternatives and can result in higher prices. Even where there are competitive options, alternative providers rely heavily on inputs from incumbents, highlighting the importance of pro-competitive policies. GAO found that competitive providers serve, on average, less than six percent of the buildings with demand for dedicated access, leaving 94 percent of the market served by only incumbent providers.² These inputs are used not only by large businesses, but also by other communications providers, including independent wireless, satellite, and long distance providers that serve small businesses. It is noteworthy that the U.S. Small Business Administration Office of Advocacy recently commented that “[t]he combination of high prices and few alternatives creates an insurmountable burden to small carriers trying to conduct business in the telecommunications market.”³

The lack of information about the small business market is particularly troubling because broadband creates economic opportunities that were previously unattainable, and the upside potential remains vast. Broadband can connect entrepreneurs to millions of new distant potential customers, facilitate telecommuting, and increase productivity. Much of the economic growth we have experienced in the last decade is attributable to productivity increases that have arisen from advances in technology, particularly in telecommunications. These new connections increase the efficiency of existing business and create new jobs by allowing new businesses to emerge, and spur new developments such as remote business locations and call centers.

Small businesses that have seized the initiative are witnessing tremendous growth. With broadband, you need not have a global marketing department to be accessible to the world. This capability is particularly potent for small businesses given that 52 percent are home-based. In this way, broadband is an extension of the entrepreneurial spirit that has characterized our country from its earliest foundations. Just as the Pilgrims used the Mayflower to reach the new opportunities in Plymouth Harbor and the 19th century pioneers relied on stage coaches and railroads to settle the western U.S., entrepreneurs are using broadband infrastructure to reach beyond their current horizons.

Since I have joined the Commission, I have traveled across the country and seen broadband technologies harnessed in ways folks inside the Beltway might never have imagined.

¹ GAO, *FCC Needs to Improve its Ability to Monitor and Determine the Extent of Competition in Dedicated Access Services*, p. 15 (Nov. 2006).

² *Id.* at 12.

³ U.S. Small Business Administration Office of Advocacy, Comments in WC Docket No. 05-25, p. 8 (2007).

For example, at auction houses across the Midwest, entrepreneurs are using broadband technologies to conduct real time cattle auctions over the Internet. Ranchers from across the country can log in, watch real time video of the livestock and make purchases without leaving their ranches. These auction houses bridge remote locations, expand potential markets for livestock, and cut costs for ranchers to reach their customers.

Broadband can also unlock transformational opportunities through the cooperative nature of the Internet. Companies of all sizes are tapping into the power of the Internet to gather and develop ideas for new products, and to interact with and solicit the views of influential customers. The success of the on-line encyclopedia Wikipedia is just one example of how quickly open and accessible Internet-based models can outstrip their traditional predecessors. We are just scratching the surface of the opportunities that these technologies can bring.

As small businesses are increasingly empowered to use broadband in newer, more creative ways, the stage on which we all must compete is also evolving into a global one. New telecommunications networks are a key driver of this new global landscape. They let people do jobs from anywhere in the world -- whether an office in downtown Manhattan, a home on the Cheyenne River Indian Reservation, or a call center in Bangalore, India. This trend is a wake-up call for Americans to demand the highest quality communications systems across our nation, so that we can harness the full potential, productivity and efficiency of everyone in our own country. If we fail in this, be assured, our competitors around the world will take full advantage of it.

The Need for a National Broadband Strategy

We must do far more to give our citizens, our small business, and our communities the tools they need to succeed. We've made progress, many providers are deeply committed, and there are positive lessons to draw on. Yet, I am increasingly concerned that we have failed to keep pace with our global competitors over the past few years when it comes to the speeds, prices, and availability of broadband services.

For a long time, the U.S. was the undisputed world leader in communications technology. Yet, in recent years, we have tumbled from that historic position. Each year, we slip further down the regular rankings of broadband penetration. While some have questioned the international broadband penetration rankings, the fact is the U.S. has dropped year-after-year. This downward trend and the lack of broadband value illustrate the sobering point that when it comes to giving our citizens affordable access to state-of-the-art communications, the U.S. has fallen behind its global competitors.

There is no doubt about the evidence that citizens of other countries are getting a much greater broadband value in the form of more megabits for less money. A recent OECD report ranked U.S. 12th in broadband value. According to the ITU, the digital opportunity afforded to U.S. citizens is 21st in the world. For small businesses, those in rural areas, and low income consumers, the problems are often even more acute. This is more than a public relations problem. It is a major productivity problem, and our citizens deserve better. Indeed, if we do not

do better for everyone in America, then we will all suffer economic injury. In this broadband world, more than ever, we are truly all in this together and we need to tap all of our resources.

Some have argued that the reason we have fallen so far in the international broadband rankings is that we are a more rural country than many of those ahead of us. While this is debatable, even if it is the case, we should redouble our efforts and get down to the business of addressing and overcoming this challenge.

I am concerned that the lack of a comprehensive broadband communications deployment plan is one of the reasons that the U.S. is increasingly falling further behind our global competitors. Virtually every other developed country has implemented a national broadband strategy. This must become a greater national priority for America than it is now. We need a strategy to prevent outsourcing of jobs overseas by promoting the ability of U.S. companies to “in-source” within our own borders. Rural America and underserved urban areas have surplus labor forces waiting to be tapped. No one will work harder, or work more efficiently, than Americans. But too many are currently without opportunities simply because their current communications opportunities are inadequate to connect them with a good job. That situation must improve.

The Elements of a National Broadband Strategy

A true broadband strategy should incorporate benchmarks, deployment timetables, and measurable thresholds to gauge our progress. We need to set ambitious goals and shoot for affordable, truly high-bandwidth broadband. We should start by updating our current anemic definition of high-speed of just 200 kbps in one direction to something more akin to what consumers receive in countries with which we compete, speeds that are magnitudes higher than our current definitions.

We must take a hard look at our successes and failures. We need much more reliable, specific data than the FCC currently compiles so that we can better ascertain our current problems and develop responsive solutions. The FCC should be able to give Congress and consumers a clear sense of the price per megabit, just as we all look to the price per gallon of gasoline as a key indicator of consumer welfare. Giving consumers reliable information by requiring public reporting of actual broadband speeds by providers would spur better service and enable the free market to function more effectively. Another important tool is better mapping of broadband availability, which would enable the public and private sectors to work together to target underserved areas. Legislation under consideration by leaders in both the Senate and the House would enable us and other agencies like the Census Bureau to make enormous progress on this front.

We must redouble our efforts to encourage broadband development by increasing incentives for investment, because we will rely on the private sector as the primary driver of growth. These efforts must take place across technologies, so that we not only build on the traditional telephone and cable platforms, but also create opportunities for deployment of fiber-to-the-home, fixed and mobile wireless, broadband over power line, and satellite technologies.

We must work to promote meaningful competition, as it is the most effective driver of innovation, as well as lower prices. Only rational competition policies can ensure that the U.S. broadband market does not devolve into a stagnant duopoly, which is a serious concern given that cable and DSL providers now control approximately 96 percent of the residential broadband market.

The Commission must also ensure the vitality of universal service as technology evolves. With voice, video, and data increasingly flowing to homes and businesses over broadband platforms, we've got to have ubiquitous high speed networks to carry these services everywhere, so that small business owners in all parts of our country can participate in this global economy. Universal service must evolve, as Congress intended, to cover broadband services sooner rather than later. As elaborated upon below, we must also promote spectrum-based services that can play such an important role spurring both competition and greater availability of these services.

There also is more Congress can do, outside of the purview of the FCC, such as providing adequate funding for Rural Utilities Service broadband loans and grants, and ensuring RUS properly targets those funds; establishing new grant programs supporting public-private partnerships that can identify strategies to spur deployment; providing tax incentives for companies that invest in broadband to underserved areas; devising better depreciation rules for capital investments in targeted telecommunications services; promoting the deployment of high speed Internet access to public housing units and redevelopments projects; investing in basic science research and development to spur further innovation in telecommunications technology; and improving math and science education so that we have the human resources to fuel continued growth, innovation and usage of advanced telecommunications services; and, of course, we need to make sure all of our children have affordable access to their own computers to take full advantage of the many educational opportunities offered by broadband.

What is sorely needed is real leadership at all levels of government, working in partnership with the private sector, to restore our leadership in telecommunications. This Committee's attention to this issue is exactly the kind of effort that is needed. I also continue to believe that we need a National Summit on Broadband -- or a series of such summits -- mediated by the federal government, including Congress, the Executive Branch and independent agencies, and involving the private sector, which could focus the kind of attention that is needed to restore our place as the world leader in telecommunications.

Wireless: A Critical Source of Broadband Services

One of the best opportunities for promoting broadband, and providing competition across the country, is in maximizing the potential of spectrum-based services. The Commission must do more to stay on top of the latest developments in spectrum technology and policy, working with both licensed and unlicensed spectrum. Spectrum is the lifeblood for much of this new communications landscape. The past several years have seen an explosion of new opportunities for consumers, like Wi-Fi, satellite-based technologies, and more advanced mobile services. We now have to be more creative with what I have described as "spectrum facilitation." That means looking at all types of approaches – technical, economic or regulatory – to get spectrum into the hands of operators ready to serve consumers at the most local levels possible.

Of course, licensed spectrum has and will continue to be the backbone for much of our wireless communications network. We are already seeing broadband provided over satellite, new wireless broadband systems in the 2.5 GHz band, and the increasing deployment of higher speed mobile wireless connections from existing cellular and PCS providers.

During our review of the bandplan in advance of the auction last year of 90 MHz of new spectrum for the Advanced Wireless Service, I pressed for the inclusion of smaller blocks of licenses. I thought that smaller license blocks would improve access to spectrum by those providers who want to offer service to smaller areas, while also providing a better opportunity for larger carriers to more strategically expand their spectrum footprints. According to the U.S. Small Business Administration Office of Advocacy, which conducted a roundtable to discuss FCC spectrum policy, “small businesses identified the size of the license areas as the single greatest regulatory barrier to providing wireless service.”⁴ Not surprisingly, our decision to adopt smaller license blocks was well received by a number of carriers and manufacturers.

The Commission to some extent used the historic opportunity in the upcoming 700 MHz auction to facilitate the emergence of a “third” broadband platform. This is the biggest and most important auction we will see for many years to come. While the Commission recently adopted auction rules that reflect a compromise among many different competing interests, I am hopeful that there will be opportunities for a diverse group of licensees in the 700 MHz auction and that our more aggressive build-out requirements will benefit consumers across the country. We also put in place a new approach to spectrum management by adopting a meaningful, though not perfect, open access environment on a significant portion of the 700 MHz spectrum. This decision represents an honest, good faith effort to establish an open access regime for devices and applications that will hopefully serve consumers well and create opportunities for small providers for many years to come.

I have been disappointed, however, with the way that the Commission has handled its designated entity (DE) program. The bidding credits made available through this program can be a potent means of getting spectrum into the hands of small businesses and entrepreneurs. Yet, the Commission has missed the chance, time and again, to craft rational DE rules. So, I was again disappointed that, in the 700 MHz proceeding, we lost an opportunity to provide crucial bidding credits to designated entities that wholesale fully built-out network services. I think it is essential that we revisit our policies in this respect to ensure that all bidders have opportunities to bid, particularly where wholesale service is a compelling option for new and diverse providers.

Beyond the 700 MHz auction, there are other important opportunities for small businesses as both consumers and providers of broadband services. Unlicensed broadband services are an intriguing avenue for many underserved communities because unlicensed spectrum is free and, in most rural areas, lightly used. It can be accessed immediately, and the equipment is relatively cheap because it is so widely available. I have also worked closely with the Wireless Internet Service Provider (WISP) community, which has been particularly focused on providing wireless broadband connectivity in rural and underserved areas.

⁴ Letter from Eric E. Menge, U.S. Small Business Administration Office of Advocacy, to Ms. Marlene Dortch, FCC, WC Docket No. 06-150, p. 1 (Dec. 7, 2006).

But we can always do more for rural WISPs and other unlicensed users. I have heard from operators who want access to additional spectrum and at higher power levels. And the Commission has been doing just that. We have opened up 255 megahertz of spectrum in the 5 GHz band – more spectrum for the latest Wi-Fi technologies – and are looking at ways to increase unlicensed power levels in rural areas.

I also have pushed for flexible licensing approaches that make it easier for community-based providers to get access to wireless broadband opportunities. We adopted rules to make spectrum in the 3650 MHz band available for wireless broadband services. To promote interest in the band, we adopted an innovative, hybrid approach for spectrum access. It makes the spectrum available on a licensed, but non-exclusive, basis. I have spoken with representatives of the Community Wireless Network movement, and they are thrilled with this decision and the positive impact it will have on their efforts to deploy broadband networks in underserved communities around the country.

We have also made spectrum available in the 70/80/90 GHz band for enterprise use. While you may not be familiar with this spectrum block, it can be used to connect buildings with gigabit-speed wireless point-to-point links for a mile or more. Instead of digging up streets to bring fiber to buildings, licensees can set up a wireless link for a fraction of the cost -- and the spectrum is available to anyone holding a license. While others supported an auction, I successfully argued against them in this unique case, because I was concerned that auctions would raise the price of access and shut out smaller licensees. In fact, one company now is installing five links in my home state of South Dakota. The links will be used for a number of city services, including public works, police and fire departments, as an alternative to fiber.

Conclusion

In order to maintain a vibrant environment for our nation's entrepreneurs and small businesses, we need to maximize the availability of affordable, truly high-speed broadband services. I look forward to hearing from the next panel of witnesses and working with you all to create a comprehensive policy framework that advances that goal. Thank you for your leadership on this issue, and for inviting me to testify today.