

“Broadband to the Home: Broadband to America”

FCC Commissioner Deborah Taylor Tate

Broadband Properties Summit

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Thank you, Mike, for your kind introduction. I also would like to thank Scott DeGarmo and Hilda Legg for the invitation to speak before you today. And I would like to offer congratulations to all those individuals and companies who received awards at this event. Many of you have been the pioneers in this sector, and we owe you a debt of gratitude for your role in the deployment of broadband, especially in the rural parts of this great country.

The Broadband Properties Summit is a premier event for the nation’s leading developers and providers of broadband service. And as industry leaders, you recognize that broadband is critical to our country’s future – critical not only to the communications sectors but indeed to every sector of the economy, from healthcare to education and financial services and more. Having just returned from the 7<sup>th</sup> APEC-Tel meetings – an Asian-Pacific Ministers of Communications and Information conference in Bangkok – I can assure you that broadband is the number one issue globally as well.

In Bangkok we had sessions ranging from cyber security to digital prosperity to challenges facing universal service. Your agenda here also is ambitious, focused on the practical applications of technology to achieve broadband deployment. While the U.S. leads the world in broadband connections – 100 million as of the beginning of this year –

there is still much to do. I want to assure you that whether the issue is the recent and very successful \$19 billion spectrum auction, or support for a rural healthcare initiative, or numerous other issues across all platforms – all of these underscore the Commission’s efforts to promote broadband to all Americans, regardless of their race, gender, income, or zip code. We apply this goal of promoting broadband at all times, and to all services we oversee. Whether considering rules for phone service, cable service, terrestrial wireless service, or satellite service, the overarching and critical communications goals of the Commission include the promotion of broadband deployment.

### **Why Broadband Matters**

Why does this matter? Even if we looked only at the economic effects, the gains from further broadband deployment would be enough to get our attention. A recent study by Connected Nation estimated that increased availability of broadband across the U.S. would have a positive economic impact of \$134 billion.

But of course, this is about more than just numbers. A broadband connection to the World Wide Web literally is a connection to our very wide world. With the click of a mouse, our children can go on an educational adventure – to the Louvre or the Library of Congress, on an exploration of the Great Barrier Reef or the Great Wall of China. Adults can attend class at a university across the country while holding a job across town. They can also participate in local civic affairs or even get involved in politics at the national level. In fact, in just one presidential cycle, Internet advertising has gone from essentially zero to estimates that they will exceed \$100 million in 2008. In addition, workers can

positively impact their productivity and even obtain virtual employment opportunities. Families can get better access to healthcare, such as teledentistry, telepsychiatry and even telesurgery. Telecommuting for doctors makes the physical distance between provider and patient immaterial, and this ability to shrink distances that isolate our most remote communities makes broadband particularly critical in rural areas. I am very involved with issues such as telemedicine and electronic medical records in Tennessee and know that Hiawatha Broadband was discussed in a previous panel, and I applaud what you and many others are doing for our most remote and sometimes isolated citizens. I have had the opportunity to see first hand in Alaska how broadband communications enables this kind of empowerment for those who are most physically isolated. In short, broadband revolutionizes how we communicate, how, where and when we work, how we educate our children, the delivery of healthcare and public safety, as well as how we entertain ourselves.

### **How We're Doing**

Because broadband is critical to our country's future, there is much work yet to be done. But before I describe where we should look to go, let me say a few positive words about how far we've come.

Providers like you should be applauded for the more than 100 million broadband connections in the country as of mid-2007, and our policies should encourage you to continue to invest heavily in broadband deployment. The Telecommunications Industry Association estimates that broadband spending was \$15 billion in 2007 and that this

figure will rise dramatically over the next couple of years, to \$23 billion by 2010. More than 99 percent of the U.S. population lives in zip codes where a provider serves at least one customer. Broadband via DSL is available to 82 percent of the households that receive service by a local exchange carrier, while broadband via cable modem is available to 96 percent of households that receive cable television. Virtually all of our schools have high-speed Internet connections, and have had them for a number of years, thanks in large part to the E-rate program. Workplace broadband connections are more and more common.

This investment is part of the revolution occurring in the broadband marketplace as true convergence has become a reality, with the Internet breaking down the barriers that previously separated networks. Telecommunications companies are deploying next generation fiber networks. Cable operators continue to upgrade their networks to enable them to offer digital video, broadband and voice service. Wireless carriers are upgrading their networks and acquiring spectrum to offer advanced mobile services and even video in the palm of your hand.

At the same time, we can and should improve broadband access to more of our citizens. Much has been made of the recent OECD report that the U.S. ranks 15<sup>th</sup> among 30 OECD nations in broadband penetration. But in order for such a statistic to be useful, we need to understand what it really means. For example, as the Phoenix Center points out, the OECD report does not consider differences in the size of households across countries, not does it count Internet access that is available via the thousands of hotspots

and libraries in the U.S. Moreover, broadband usage depends on a variety of factors, ranging from demographics, to educational levels, to, of course, the price of broadband.

When considering broadband penetration in the U.S. – and what policymakers might do to promote more of it – we should be mindful of the unique characteristics of the U.S. market. And when we compare the U.S. market to that of other countries, we should be mindful of how countries differ. For example, failure to properly consider differences in household size or population density across countries can confuse the analysis. To illustrate with an example that is a bit more personal for me, consider South Korea, which has an impressive level of broadband penetration. While South Korea is about the same size as my home state of Tennessee in terms of geography, it is much larger in terms of population. In fact, in order to equal the population of South Korea, Tennessee would need to add a few people to its current population, roughly everyone in the nearby states of Mississippi, Alabama, Georgia, South Carolina, North Carolina, Virginia, and Kentucky. High population density enables the achievement of a higher penetration rate. These are basic economics of the industry that you, the providers of service across the U.S., understand better than anyone. It's easier to achieve a high penetration in Manhattan than Mississippi.

This is not to say that there is no role for policy. We all want broadband to do as much to promote jobs in Mississippi as it does in Manhattan. The question, therefore, is what is the right policy?

## **Regulatory Philosophy**

I have been a strong proponent of a light regulatory touch for broadband service provided over cable systems, telephone lines, power lines, and wireless platforms. This helps ensure what we refer to as a level playing field – or equality of regulation – among competing providers, no matter the technology or business model.

Such a light-touch approach also is consistent with my regulatory philosophy, which is simple, straightforward, and built on a long tradition of limited but effective government. It calls for, first and foremost, regulatory humility – something I have tried to practice, both as a state regulator and now a federal one. I look to and especially encourage the industry – you – to put forward creative, market-based solutions whenever possible. I recognize that most of the consumer benefits we see in the communications sector of the U.S. economy are directly related to the significant levels of competition in this sector, driven by deregulatory policies that have encouraged investment and thus fostered that competition.

Of course, I also understand the need for regulation to promote well-specified social goals that otherwise might not be addressed, such as E911. More specifically, I understand the need for regulation if and when there is a clear market failure. Such market failure is probably less common in communications markets as compared to other sectors, but we should not assume that it does not exist.

At the same time, we should not assume there will not be “government failure,” such as when we adopt rules and regulations that we expect will benefit consumers but, in the long run, do not in fact do so. I recognize that policymakers, like businesspeople in the market, make mistakes, too. Perhaps this is why former President Ronald Reagan used to say that the nine most feared words were “I’m from the government and I’m here to help.” Well, I’m from the government, and I’m here to listen. My door is always open and I value your input as we consider such critical issues and their impact on broadband deployment.

In short, I favor a common sense, balanced approach to regulation, one that neither overreaches nor fails to respond to specific problems. There are many recent examples of how the Commission has taken such a balanced approach.

### **Policies Promoting Broadband**

With regard to our deregulatory policies, the Commission has removed major impediments to broadband deployment. There are many examples. (1) We have classified broadband provided by DSL, BPL and wireless technologies as “information services” that will be subject to fewer of our outdated legacy rules. (2) We streamlined our video franchise process, which will make it easier for new entrants such as telcos to provide broadband service as part of a triple play – voice, video and data. (3) We recently launched a \$400 million, nationwide pilot program to promote broadband for healthcare facilities. (4) We also recently made available more spectrum for the provision of wireless broadband services in the 700 MHz auction that raised more money

than any spectrum auction in U.S. history. This spectrum is part of the DTV transition – scheduled for February 17, 2009 – and portions of it will be used to provide commercial services, to include fixed and/or mobile wireless broadband services, while other portions will be used to provide an interoperable broadband network for the benefit of public safety.

[For more information, check out the website at [www.dtv.gov](http://www.dtv.gov).]

(5) In addition, we have taken steps to reform our universal service program so as to make it more efficient and more able to provide service where it is most needed. As Chairman of the Joint Board on USF, I can assure you we are reforming this \$7 billion program to more clearly focus on its original purpose of insuring all Americans have access to communications – including advanced services. I look forward to moving toward fundamental reforms and welcome your input to insure the stability and continuity of the fund while also insuring it supports the necessary infrastructure for broadband to flourish, even in remote and insular areas.

(6) Finally, as you have suggested, the Commission is taking action to obtain more granular information about broadband deployment. Just last month, we adopted an order that will help us collect significantly better data on the deployment of broadband services across the country. I also appreciate and encourage private, state and local efforts to enhance the availability of such information. As one example, the moderator of a previous panel, Drew Clark, has established a new website, [BroadbandCensus.com](http://BroadbandCensus.com). This website encourages consumers to input data on which broadband providers serve



their particular area, lets them test download and upload speeds, and then makes this data available to other consumers. This is precisely the type of empowerment and education that benefits consumers, often more effectively than government regulations.

### **Public/Private Partnerships**

As a former state official, I also have been a champion for innovative public-private partnerships, in areas ranging from economic development to education to health care. Connect Tennessee is a great example of just such a venture, which is focused on promoting broadband in my home state of Tennessee, a state with a significant rural population. Connect Tennessee coordinates with governments, communities, businesses, and service providers to identify supply and demand conditions and tailor services to unmet needs. The program identifies barriers to consumer adoption where broadband exists and applies GIS mapping to identify areas where there is no broadband service, as well as where people live and businesses are located. It then helps establish a “business case” scenario to build out broadband. This program is patterned after the successful Connect Kentucky program which, in a few short years, has built out broadband networks that provide access to 95 percent of Kentucky’s population, and Tennessee hopes to do the same by 2010.

When something works, we should encourage others replicate it. Thus, a national Connected Nation has emerged from the successful model of Connect Kentucky, with projects that include not only Tennessee, but also Ohio, South Carolina, and West Virginia. All of these states have significant rural populations, which makes broadband

deployment a challenge. But our rural and less-populated states and regions should not be left off the Information Super Highway, and thanks to innovative thinking by groups such as Connected Nation, it looks like they won't be.

### **Private Sector and Policy**

As industry leaders, I ask for your input on what policymakers should do – and perhaps even more importantly, what we should not do – recognizing that staying out of the way is sometimes the wisest course of action for government. We must choose a path that is carefully balanced, providing the appropriate regulatory relief which resolves a specific “harm,” allowing networks and carriers to respond to marketplace demands efficiently and effectively, ensuring that consumers are informed and protected and competition is encouraged through the least intrusive and least costly regulatory action.

Finally, because so many of you are network providers, I want to recognize the important role you play in network management. Earlier this month I was at Stanford University as part of a Commission hearing on network management, and in February the Commission held a hearing at Harvard University on the same issue. The question that is being asked – and it should be asked – is what is “reasonable network management.” All network providers recognize that, with the widespread deployment of broadband, the type and level of Internet traffic is changing dramatically. One researcher recently reported that in December 2007 a record 10 billion videos were viewed online. The largest U.S. broadband provider says consumer broadband traffic on its network has doubled in the last two years alone, and broadband customers are using 40% more bandwidth per year.

One report estimates that the amount of information transmitted across the Internet in the U.S. will be 50 times larger by 2015, equal to 50 million Libraries of Congress. Building faster pipes will be important, but this alone may not be sufficient. Even in Japan, where network speeds reach 100 mbps, congestion is a concern.

As usage increases exponentially, the need for reasonable network management becomes clear. At the same time, such reasonable network management should be consistent with the Commission's four principles of network neutrality, adopted in 2005. These principles state that consumers are entitled (1) to access the lawful Internet content of their choice; (2) to run applications and use services of their choice, subject to the needs of law enforcement; (3) to connect their choice of legal devices that do not harm the network; and (4) to competition among network providers, application and service providers, and content providers. From the inception, the Commission made it clear that these principles were subject to reasonable network management.

We again should be clear that we are talking about legal content and applications. While the good news is that widespread deployment of new technologies, including peer-to-peer applications, holds tremendous promise to allow networks to run more efficiently, the bad news is that, like any tool or technology, it can also be misused. I am particularly concerned with the ability of new technologies to promote some of the most harmful threats online – child pornography, piracy, and privacy violations.

## **Voice for Children**

Since arriving at the Commission, I have tried to be a strong and consistent voice arguing on behalf of children and families, and arguing against the increasing level of coarseness and indecent programming, as well as the negative impact of unhealthy food advertisements on the epidemic of childhood obesity. For those of you in the content arena, I call on you to be part of the solution, using broadband to educate our children, not just to entertain them. I am very pleased that, at the multi-national level, much is occurring regarding the protection of our personal information – information about where we go and what we do, as well as personal financial and health-related data – and more importantly, the protection of our children. The International Telecommunication Union, the first lady of Egypt, the APEC ministerial meetings – all are raising the dialogue to a global level. Throughout all of our societies, we recognize our children are our greatest natural resource.

Today, of course, I hope to raise your awareness of this issue of protecting our children in the on-line world. I encourage all of you to adopt policies and provide tools in order for parents and caregivers to be able to provide a safe environment in the online world as well as the offline one. I continue to be concerned about the amount and type of illegal and dangerous online activities, which put our children in harm's way, and the digital generation gap by which parents don't even know all of the capabilities as well as the risks the Internet entails.

With regard to piracy, I'm from Nashville – Music City, USA – and so I see first-hand the effects of illegal use. Two-thirds of the 20 billion illegal downloads worldwide each year are of U.S. recorded music. We've suffered \$203 million in lost earnings due to piracy in Tennessee alone. For the country as a whole, the U.S. Chamber estimates piracy costs our economy \$12.5 billion dollars each year, including negatively impacting research and development in pharmaceuticals and software and more, as well as the impact on thousands of Americans who are our nation's – indeed the world's – songwriters and storytellers.

### **Conclusion**

In closing, I want to thank you again, not only for the opportunity to speak with you today, but for the important work you do every day. As I hope I've made clear, the deployment of broadband is critical for our economic well-being, and for the numerous opportunities it creates in terms of education, healthcare, virtual jobs, and our multi-national competitiveness.

While policymakers have the ability to make rules that impact broadband deployment, we need to listen carefully to those who actually develop, invest in and deploy the service – that is, all of you, so please stay involved in these issues. For broadband, it is especially important that we get the policies right, to ensure that our children are protected, our citizens are connected, and our country is competitive for generations to come.