Remarks of Commissioner Deborah Taylor Tate
"Convergence and Connectivity"

Global Forum 2007
"Global Convergence 2.0: Integration and Innovation"

As Prepared

Thank you, Miriam, for the opportunity to be here today in Venice, a perfect venue for a conference on convergence and innovation. It is said that this city was never a blank slate. Rather, it was built from remnants of cities – a convergence of Roman arches and statuary, Moorish windows, facades from Constantinople, timber from the alpine forests of the northern Balkans, carved friezes from Greek temples, Istrian stone for facings, and glass made locally in Murano. Venice, the "City of Bridges," truly served as a bridge linking Western Europe with very different cultures, like China, the Byzantine Empire, and the Islamic World. This city's famous citizen, Marco Polo, knew something about communicating across cultures, which spawned commerce and trade that generated wealth and financed great achievements in art, architecture, literature, and music. We, too, seek to spawn new developments in some of the most exciting technologies of our time, and this forum is an ideal means to do so.

The schedule worked perfectly, as after this Global Forum I will be on my way to Geneva for final negotiations at the World Radio Conference, discussing issues such as the spectrum allocation for 3G and 4G services. The rules adopted there will allow new services to enter the market and will also protect incumbent services from interference, and they are coordinated by countries from around the world. Again, reiterating what a converged and connected world we now inhabit.

I congratulate you, Miriam, along with Sylviane Toporkoff and Sebastien Levy, for arranging these continuing dialogues. I also wish to thank Mayor Massimo Cacciari for opening this event, and the Fondazione Giorgio Cini for hosting us. As I meet with my counterparts from all over the world, I am reminded that our countries share so many issues. In the past few months, I have met with colleagues like Chairman Shehadi of the Lebanon Telecommunications Authority, who is trying to rebuild the infrastructure of his beautiful land; negotiated bilaterals with Vice Minister Xi of the Chinese Ministry of Information Industry at the State Department in Washington; spent 3 days in in-depth discussion with Anatel and the Ministry of Communications in Brazil; and last Friday hosted Professor Alexandridis, the President of Greece's Hellenic Telecom & Post Commission. In our conversations, both official and personal, we shared themes of developing our economies in an increasingly competitive and globally interconnected environment, and adopting policies that incentivize and encourage the development of new technologies. In the U.S., for example, we are committed to our monumental DTV transition, across our entire nation, all in one day. This will enable us to make available 100 megahertz of spectrum in the valuable 700 MHz band for new and innovative uses that hold much promise for devices, for providers, and most importantly, for consumers. In addition, we have established rules for a nationwide broadband network for public safety first responders who with each national disaster realize the limitations of our present fragmented system and the crucial need for interoperability.

It is truly appropriate that this year's Global Forum discusses innovation and convergence in the same context. Innovators constantly engage in what the economist Joseph Schumpeter called "creative destruction" – destroying entrenched business

models and technologies through some innovative vehicle to create value, whether in goods or services, for consumers. At the same time, certain technologies are converging, allowing us to do more things with the same wire or radio waves, or with the same device – whether communication with family, sharing in-depth research with a colleague halfway around the world, or for entertainment, such as a movie theater that now resides in the palm of your hand, or a mobile communications device that is a personal banking institution.

Several of the implications of disruptive technology are of particular import to me personally, and I am spending a lot of time in the U.S. and abroad discussing these issues. Three I would like to focus on today include (1) Promoting the deployment of broadband service to all our people, especially in our most rural and remote areas; (2) Protecting our children through Internet safety; and (3) The War on Piracy.

Access to Broadband

Connecting to the Internet at broadband speeds means connecting to the world – *literally*. The Internet can, with the click of a mouse, take our children 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. It can help promote civic participation by adults, and access to healthcare for families. Access to the Internet at broadband speeds can increase workers' productivity, which makes us all wealthier – individuals, firms, and societies.

The market to provide broadband service is changing every day, due to endless innovations in communications technology by different types of providers. This makes it

all the more important for those of us in government to practice regulatory humility and not assume we can pick the best technology or service. In the U.S., we have opted for a light regulatory touch for broadband service provided over cable systems, telephone lines, power lines, and wireless platforms, which 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. A light regulatory touch promotes vigorous competition, and last year the number of broadband connections by all these competing providers increased by 61 percent, to a total of 82.5 million lines.

Each platform competes in unique ways. For example, telephone companies and cable companies seek to offer services – wireline voice, wireless voice, video, and high-speed Internet access – with triple-plays and quadruple-plays that include a broadband component. We have provided regulatory relief to traditional telecom companies to add multi-channel video to compete with cable, and they are doing so – AT&T with U-verse and Verizon with FiOS, which I am sure you will hear more about at the conference. Cable companies are competing with telecom companies by adding voice service – most often VOIP – and cable already has 32 million broadband connections. As providers build bigger pipes, access to high-speed Internet service grows even faster and hopefully more affordable.

Using wireless transmissions, satellite service providers offer broadband and, increasingly, so do terrestrial wireless service providers. In the U.S., we estimated there were about 23 million *wireless* broadband connections last year, counting satellite and mobile devices, and I hope we will observe an even greater increase for 2007.

The convergence of wireless technologies is especially exciting in the U.S., where our technology-neutral approach to policy has allowed CDMA and GSM to compete head-on. This competition has produced dramatic results, with wireless providers employing a quarter million people and generating annual industry revenues well over $100 billion. Most notably from this competition, there are over 240 million mobile subscribers in the U.S. who use over *two trillion* minutes every year. As these mobile technologies compete to offer Internet access with, for example, EDGE and EV-DO, we see a convergence in which more functions – such as authentication and network security and quality of service – can be handled at the network level. This convergence will make interoperability easier, lower costs, and facilitate improvements to network design.

Much has been written about WiMax, from the potential for another "last mile" broadband connection to the home, to fast connections that may reach 20, or 50, or even 75 mbps. Two providers, Sprint-Nextel and ClearWire, have committed to building a WiMax network sufficient to cover 100 million Americans by the end of 2008. Given the departure of the Sprint-Nextel CEO, we are awaiting updates regarding the timeline and continued commitment to the incredible advancement and possibly 3rd pipe for American consumers. And let's not forget WiFi, the technology of choice for coffee shops and community centers around the world. Best of all, the type of technology no longer matters in this world of convergence; we communicate and connect in cyberspace.

Public-Private Partnerships

I also would like to highlight another type of convergence today, and that is a convergence of interests – public, private, global, and local – dedicated to providing

greater access to broadband communications. This convergence is leading to new collaborations. It moves beyond government simply writing a check to a service provider or issuing requirements that providers expand into particular areas. Rather, one of the most innovative and effective solutions in the U.S. has been through public/private partnerships. One example is Connected Nation, a non-profit group that coordinates governments, communities, businesses, and service providers to identify supply and demand conditions and tailor services to unmet needs. Through GIS mapping of areas without access to broadband, this effort outlines a "business case," identifies barriers to consumer adoption, and helps develop plans for broadband expansion. In the State of Kentucky, which is approximately the size of South Korea and has almost half of its population living in rural areas, a local public/private partnership, "Connect Kentucky," envisions 100 percent broadband coverage of the entire state by the end of this year. My home state of Tennessee recently launched "Connect Tennessee," and there are other examples where cities, local mayors, communities and even neighborhoods are leading efforts to attract broadband providers rather than waiting on a government program. This is truly what democratization of the Internet means. Most public policy issues are never solved entirely by the government. That is why I generally believe in market-based solutions and in creative approaches, such as public/private partnerships, which converge at the intersection of technology (GIS mapping), consumer needs, and proven business models – all of which is "in the public interest."

Protecting our Children

I also want to briefly address an issue that more leaders are recognizing every day. As we work to deploy broadband and access to the Internet to every family in America, we also must recognize and educate our citizens regarding the potential dangers of the Internet to our children. Just as the Internet can transport our children to the Louvre or the Library of Congress in a mouseclick, so can it take them to the back alleys of abuse and sexual exploitation. In fact, one in seven youth between the ages of 10 and 17 in the US has been sexually solicited online. Parents need to be just as aware of the dangers in their online world as they are in their offline one.

I am pleased that many companies have made important efforts to help in this effort, including starting education and outreach campaigns to teach parents about the tools that are available to protect their kids online. For example, cable companies hosted a "teen summit" with Miss America to reach teens by video. The Entertainment Software Association recently hosted a Congressional forum on Capitol Hill, and nonprofit groups such as Common Sense Media have partnered with Internet service providers to offer ratings systems and blocking tools. To reach young children, the Internet Keep Safe Coalition has developed animated programs and a mascot to teach online safety. The National Center for Missing and Exploited Children also has developed a variety of resources for both parents and kids, such as NetSmartz, an award-winning interactive educational program.

Now that wireless devices are being marketed to children as young as six, I have encouraged the wireless industry to be part of the solution as well. I have been working with Microsoft, Google, CTIA, and some of the largest wireless carriers about their

particular solutions to this critical issue. I encourage you, in your leadership positions, to do the same. And let me be clear. This is not about censorship. It is about illegal activities online – child solicitation and worse – that are criminal. We as government leaders along with law enforcement officials have addressed issues that have already arisen in cyberspace, such as financial fraud and identity theft. Now we must begin applying this expertise to child protection. I welcome and encourage these efforts.

War on Piracy

Finally, a real world example of disruptive technologies causing angst to my heart is the problem of piracy, *especially given that I am from Nashville – Music City USA*. Like Nashville, Venice is home to great music – opera. It was here that opera expanded beyond control of the nobility and the courts and garnered support with publicly attended performances. From Monteverdi to Verdi to Puccini and those who perform their works, Venice helped make them stars, the prima donnas. Thus, it is appropriate that Venice would be the place to call upon you, the leaders gathered here, to help preserve the music, the art, the stories for centuries to come.

While technology has enhanced our ability to distribute and share more music and art than ever, and at faster speeds, it also has allowed pirating and counterfeiting of great works – our music, our movies, our songs, and our stories. In the U.S., piracy and counterfeiting cost the economy up to *$250 billion* annually across all industries – from movies and music to software, retail, auto parts, and pharmaceuticals. Ask Disney or Ralph Lauren or Lilly what is their number one issue and it's the same: piracy. Nor is this just an American malady. It is affecting *your* designers, *your* artists, and *your*

cultural gifts to the world. Just as we would not allow an individual to walk in and steal a painting from the Gallerie dell'Accademia, we cannot allow this to continue unchecked.

When I recently visited Brazil, I brought country music cds as gifts. I also said this gift is a personal request for you to do all you can as leaders to stop the 1.3 billion illegal downloads in Brazil each year. A few weeks later, the American Chamber hosted a forum on piracy, and I hope that this is a first step in cracking down on this illegal activity. Just as I have asked for help from the brilliant creative minds in software giants in the U.S., I ask for your help here today as well, as we all do what we can to protect these precious treasures for future generations.

Conclusion

In closing, we should remember that technology speaks a language of peace, as did commerce, a lesson taught seven centuries ago by Marco Polo. This language is understood across cultures and respected for its tremendous ability to connect us in new ways – from e-commerce, e-government and e-911 alerts, to access to educational and healthcare and the "virtual" jobs of the future. But ensuring that the advances in technology continue – and that they serve all of us, especially our children – requires a global dialogue in this shared language. I look forward to staying connected with many of you as we work together to address the exciting challenges that convergence has presented, in order to embrace all its potential and possibility for innovation, for our economies, and for future generations.