

Prepared Remarks of FCC Commissioner Mignon L. Clyburn

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“Mobile Broadband Spectrum Policy”

Good morning. I wish to thank all of you for being here this morning and Chris Pearson, thank you so much for the kind introduction. It is a pleasure to join all of you at a time, when so many exciting things are happening in the field of telecommunications.

It has been a whirl-wind year for me, the FCC, and I know for 4G–Americas. You are not strangers to the fast pace of change in the communications industry, and it is most noteworthy that you recently reached two significant milestones.

It's been 10 years. Congratulations! And my goodness, haven't those years just flown by! I sometimes complain to my family and friends about how time just speeds by us, but the never ending desire for our own time to slow down, cannot be compared to the excitement of working in this industry. It has been an incredibly busy 10 years, and 4G-Americas, is a testament to how dynamic our communications industry really is.

That other milestone I want to highlight represents the dynamic nature of your work. In 2002, an organization known as 3G–Americas, was created with an objective: “to address and promote future generation technologies.” For back in 2002, 3G technology was the future. And in just a decade, I can confidently say that today we are living yesterday's future.

The transition to 4G-Americas' embodies the change happening in today's market. It represents the necessity for the communications industry to keep up with the vivacity of the changing landscape.

Today, we measure the speed of communication by how quickly we can access the web and by the quality of online videos streamed directly into our hands. But none of you here are strangers to the significance and impact of high-speed connectivity on the world around us.

4-G and LTE mobile broadband technologies are vastly different from the technology it seemed we once used to access the Internet. Each of us would cringe today if we heard the noise our computers once made when accessing the internet not so long ago. In the nineties, business phones didn't fit in our pockets – they were dressed in thick leather cases and accessorized our pad folios. Things have changed, and the once repetitive motion of flipping open a phone and pulling out its flimsy antenna are as ancient to us as bell-bottoms.

Today, phones are so small that people struggle every day, trying to find where they are hidden! And while I can joke about how much we have progressed in the last decade, our thoughts cannot be focused only on our past. Our industry does not rely on the advances that have already been made – telecommunications and the public's insatiable demand for more technology require us to look forward. We cannot lose sight of what lies ahead.

This is a period of great potential for both the industry and its consumers. The future promises challenges and uncertainty, but it also presents great opportunity for which we must adapt and, yes, face together.

I've been in this regulatory space for over fifteen years, and have had incredible opportunities to travel to developed and developing nations in recent years. What I do know for sure is that what drives the communications industry today is the same energy that transitioned us into the 21st century – a human demand and desire to be connected to one another.

Demand is the catalyst which drives innovation – from the first transatlantic cable placed 154 years ago, just a few years before Chris’s time, to the 21st century service providers and trade organizations developing to connect consumers to networks around the world. Advances in research and design, improvements to service, and, yes, *even* regulations, are all propelled by demands in the market.

This industry is demanding, and those demands are keeping us on our toes. We are forced to remain alert, because being alert is what it will take to keep up. I recognize that I speak of change from a unique vantage point. The opportunity to serve as an FCC Commissioner at this point in time has given me the responsibility to continuously examine different perspectives. Changes in technology affect the entire industry, and so do changes in the regulatory environment. So for every new issue that surfaces, different approaches must be considered to determine the best course for the future.

Planning for the future makes a regulator particularly busy and especially challenged. This positive correlation between advances in an industry and a Commissioner’s expanding to-do list – just ask my staff – can be measured each month by the spike in the number of coffee cups around the office.

Over the past few weeks I have been fortunate to represent the FCC and the United States in Asia. From those exchanges, I am more convinced than ever that our nation’s role in encouraging mobile broadband deployment and adoption around the globe is vital. This is a focus that 4G-America’s has also had through your engagement in North America and Latin America.

While traveling, I met with regulators, industry groups, and business leaders from across the globe. And while I didn’t travel around the world in 80 days, I feel like it. Despite the jet-lag, I remain energized from the exchange of ideas with so many countries who share many of our stated goals.

The Global Symposium for Regulators, organized under the United Nations, offered not only a world-wide view on the telecommunications industry, but afforded us another important opportunity to share the United States’ perspective on regulation, the FCC’s role, and what is being done here to promote ICT development.

Something stood out that none of us should ever take lightly. No matter our level of expertise, and no matter how advanced we are by way of deployment or opportunities, value can always be gained from sharing each other’s perspective, for we all face similar challenges.

The spread of the technology has flattened borders, crossed digital divides, and has even empowered the most remote global players with the means to address many of the same issues. By analyzing what is happening elsewhere, we can continue to strive to maximize our markets and positively improve lives world-wide.

The setting for the global symposium offered the perfect example of this global transformation. The host country, Sri Lanka, has a fascinating telecommunication story. From the year 2002 to today, even during its own internal battles, Sri Lanka went from a national wireless phone penetration rate of less than 5% to a penetration rate of over 95%. That is an increase of over 90% in ten years.

The country has brought tele-centers to remote villages, begun ICT training, and initiated a national disaster management program as a result of the devastating tsunami. While wireless phone access may be relatively high, the country ranks one of the lowest in the world for fixed and mobile broadband access. There are still many challenges.

It is clear that the entire planet is improving connectivity-wise, and as members of 4G-Americas you are pushing that advancement and working to promote global connectivity.

Today, there are more than six billion mobile telephone subscriptions. That numerically equates to over 85% of people on this earth. One-third of the world’s population uses the internet and, incredibly, roughly half of those people use mobile broadband to access the web. High-speed internet is no longer a novelty. Our societies are already reliant and growing even more dependent on access.

As the U.S., Europe, and Eastern Asia are already boasting relatively high mobile saturation rates, the developing world will see much of the global growth going forward. During the next five years it is expected that the number of mobile broadband users will more than double, reaching over five billion subscriptions. The tempo we have seen will surely gain momentum as the entire world continues its transformation into a truly digital age.

So this means that the challenges facing our strained networks cannot be taken lightly. Earlier this month, at the International Regulators Forum in Singapore, we engaged with other regulators to discuss these challenges and opportunities. While there, I witnessed the implementation of innovative, ultra-fast broadband technology. Singapore is a small country, but their wireless penetration is astonishing! With a population of only five million, they have nearly 6½ million broadband subscribers with nearly five million accessing via 3G networks.

Singapore is on a similar pace with us, as the country's 4G LTE service was launched at the end of last year. With current coverage reaching half the country's population, Singapore is on track to meet its goal of 100% 4G coverage by 2013.

The country is notoriously efficient and is not limiting its investment to one technology. Rapid developments in Wi-Max, TV white spaces, and other broadband advances are being deployed across the country to alleviate network burdens. Partnerships between government and industry have resulted in the creation of the Singapore's Next-Generation National Broadband Network.

Singapore provides a striking example of the potential growth in future telecommunications markets. The country has stretched the realm of what is possible and is creating a fully integrated digital society. What this affirms is that we can learn from others to gain greater efficiency in our own networks. Because there is so much growth to come, the more connected we are, the more necessary it becomes for us to understand the developments around us.

While there are many international dynamics, I cannot understate the significance of all that is occurring here in the U.S. and at the FCC. The FCC has been making a lot of news lately as you may have noticed. Although I usually stand by the conviction that "no news is good news," I am excited to discuss a few of our recent developments.

Let me first begin by reiterating the importance of developing our infrastructure alongside advancements in technology. I firmly believe that we must further promote broadband in the United States and work to ensure that there is adequate spectrum allocated for both licensed and unlicensed use.

Access to broadband is no longer a luxury – it is an economic imperative. We still have families who live in areas, many of them rural, with no access to broadband. A "broadband gap" is measured in the jobs not created; economic opportunities lost; rising educational inequalities; and reduced healthcare services. Broadband has become vital to our economic wellbeing, and the need to undertake long-term planning poses a vital challenge for our nation.

In order to accommodate demand we must make more efficient use of spectrum and take a comprehensive approach. Commercial providers are implementing new innovative approaches to utilize our limited spectrum and expand wireless broadband access, but the government has a role to serve in this challenge as well.

In November 2010, the FCC acted to encourage technologies that will enable geographic sharing of spectrum. Dynamic spectrum access technologies and techniques have the potential to enable more efficient utilization of our nation's precious spectrum resource. The Commission has already freed up vacant spectrum between TV channels, known as "TV white spaces." These "white spaces" can be made available for unlicensed broadband use and help alleviate mobile network traffic. Use of Wi-Fi, WiMAX, development in small cell, cognitive, and dynamic spectrum access technologies can more effectively help to address this national challenge.

Unlicensed spectrum harnesses potential for telecommunications and provides further access to broadband technologies. Last week, during a trip to Silicon Valley, I stopped by Sprint's Mobile-to-Mobile

facility where researchers are stretching the capabilities of our current infrastructure. I met with companies like Cisco, Google, and Apple, as well as small start-ups that are all designing products and services that depend on high-speed internet access. I am inspired by the promise of these new technologies.

The FCC is devoted to ensuring that the demand for access can be met as well. Last month, the Commission took the first step towards implementing a voluntary incentive auction. This auction will enable the FCC to reallocate a substantial amount of spectrum for commercial mobile broadband services. The proposed auction is a multi-year process and all participation in the auction will be entirely voluntary by the commercial buyers and sellers.

This plan consists of a reverse auction for the FCC to purchase unused spectrum, followed by a forward auction to sell repurposed spectrum to wireless providers. First, TV broadcast licensees will be given the opportunity to submit bids to voluntarily give up their spectrum rights in exchange for payments. At the conclusion of the reverse auction, the FCC will conduct a forward auction in which the acquired spectrum will be auctioned for flexible use, focused primarily toward mobile broadband.

This auction process is unprecedented. It is the first incentive auction of its kind in the entire world. Although the process is not completely finalized, we estimate that the official rules will be announced during the middle of next year with the auction targeted to take place in 2014. Currently, the Commission is seeking comments, and I encourage interested parties to share with the FCC. Dialogue will add beneficial perspectives as we move forward.

In order to meet the demands of tomorrow, we must have a comprehensive approach to address our need for spectrum. The implementation of incentive auctions, reallocation of TV white spaces, and the development of new technologies are not the only solutions. Our approach to spectrum management must also include policies that promote more efficient uses of spectrum that has already been allocated. For example, the Commission should encourage dynamic spectrum access technologies to the extent that they can facilitate more efficient use of our resources. I understand that much of the wireless industry is already making use of small cell technologies to help them manage the increase in demand for data services. You should let the FCC know how we can promote these and other relevant spectrum management policies.

I am confident in the progress that has been made and the developments that are continuing today. But mostly, I look forward to all the work that lies before us. And with the advocacy being done today by organizations like 4G-Americas, I know that the future holds great potential.

Thank you for allowing me to join you today. I look forward to working with you, and 4G-Americas, to support the growth of our industry and this great nation.