

**Remarks of
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Thank you, Andy, and the entire NSMA leadership for inviting me to be a part of your Spectrum Management 2006 conference. You are providing a much-needed forum to discuss issues that are vital not only to the spectrum policy making, but to the larger issue of our country's economic competitiveness. With recent changes and consolidation in the communications industry, it becomes even more critical that we make vibrant, spectrum-based communications opportunities available to all consumers and companies. We need to promote opportunities to expand mobile connectivity, as well as to reach our most underserved communities with broadband access.

I firmly believe that broadband access is the key to development and growth in this digital information age. It is a key that can open the door to educational and economic opportunities to communities across America, enriching people's lives. That is why facilitating access to wireless broadband is one of my core policy goals while at the FCC.

The Connecting Rural Ohio Wireless Neighborhood Project

As you all know, the power of spectrum cannot be underestimated. In the 21st century, we are reminded of that on a daily basis. Just two weeks ago, the New York Times ran a great article about the efforts of local communities to fill broadband service gaps in their neighborhoods. The medium of choice – spectrum of course!

One particular story caught my eye. It involved a number of organizations who have banded together to launch what they call the Connecting Rural Ohio Wireless Neighborhood Project. It is deploying broadband to underserved communities in Ohio's Appalachian southeast. This area has been particularly hard hit by factory closings over the past several years. It suffers from a poverty rate approaching 20 percent.

The story caught my attention because of the creativity involved in deploying this multi-band network, which was led by a team from the Ohio Academic Resources Network (OARNet) and Ohio State University.

In their most recent deployment in Chesterhill, Ohio, the team installed a Ku-band transceiver dish on the roof of the town library. The Internet backbone satellite connectivity is arranged by the American Distance Education Consortium and provided by Tachyon over the Americom-4 satellite at up to T-1 speeds. Almost a dozen computers in the library are directly connected to the satellite system through a LAN inside the building.

The team also installed a wireless access point on the site and a high-gain omni-directional transceiving antenna, and connected it to the satellite dish. The antenna transmits throughout the town an 802.11b wireless network in the 2.4 GHz band. To further improve coverage, the engineering team extended the network by installing an AVALAN point-to-point link running at 900 MHz between the library and the town water tower. A WiFi network on the water tower, operating on a different channel than the one on the library, really extends the broadband coverage over town.

The broadband connectivity allows the Project to provide educational services and job training opportunities to adults in the community and provides a valuable resource to police, fire, libraries, and other community services. The bottom line is that the broadband connection improves the quality of life and standard of living for a community desperately in need of economic development.

What the Project Means to the FCC

This kind of accomplishment can truly transform communities. My job as an FCC Commissioner is to do whatever I can to promote spectrum-based opportunities like this in the future.

Since I have been at the Commission, I have outlined an approach for spectrum policy that I call a “Framework for Innovation.” To the greatest extent possible, we should let innovation and the marketplace drive the development of spectrum-based services. I do believe, though, the Commission has a responsibility to establish ground rules for issues such as interference and availability. The Commission also has an important role in working with foreign administrations – particularly Canada and Mexico – through the ITU, regional organizations, and bi-lateral negotiations to develop international sharing and interference criteria.

The FCC domestically has the final say in making frequency assignments and other spectrum related decisions. Over the years, though, we have delegated important spectrum management functions to frequency coordinators and other private sector entities. This means that many of you, as members of those organizations and as members of NSMA, play a critical role in determining how well our spectrum resources are managed in a range of services that are critical to this country.

So we all need to work together to ensure access to spectrum and to the latest, most advanced, wireless technologies. We need to do everything we can to make available the opportunities for wireless broadband like those provided by the Connecting Rural Ohio project. My goal, which I expect you share, is to maximize the amount of communications and information that flow over the Nation’s airwaves, both on earth and through space.

To get there, the Commission has to be more creative with a term I have coined “spectrum facilitation.” That means looking at all types of approaches – regulatory, technical, or economic – to get spectrum into the hands of operators ready and willing to serving consumers at the most local levels, like the folks in Chesterhill. For example, I strongly supported guidelines to facilitate a more robust secondary market. We removed significant obstacles and provided a

framework for allowing licensees to lease spectrum more easily, while ensuring that the Commission does not lose ultimate control over the spectrum.

Another approach I am particularly excited about is cognitive or smart radios. As many of you know, cognitive radios could play a key role in shaping our spectrum use in the future, and will lead to the advent of smarter wireless devices. This will allow us to make greater use of spectrum than is possible today. I have seen them up close, and am just amazed by their potential. Smart radios can literally leapfrog the technical and legal problems that currently hamper many of today's spectrum opportunities. And, as spectrum managers and frequency coordinators, many of you have the day-to-day, on-the-ground experience that will be invaluable in ensuring that the full potential of these new devices and systems are realized – without jeopardizing existing mission critical operations.

I am also continually evaluating our service and construction rules to ensure that our policies do not undercut the ability of wireless innovators to get access to new or unused spectrum. So in developing policies, I have tried to advocate a carrot and stick approach. I want to promote flexibility and innovation. But since the spectrum is a finite public resource, I want to see results as well – particularly in the area of wireless broadband.

Just last summer, I was very pleased to work with Sprint and Nextel to secure significant build-out commitments from the companies for the deployment of services in the 2.5 GHz band in association with their merger. I initially had concerns about Sprint Nextel amassing such a wide swath of spectrum in the 2.5 band without providing any clear plan for deployment. But the companies met my concerns head on. They provided a specific schedule of implementation milestones that will ensure wireless broadband services will be deployed to at least 30 million Americans across a number of markets, both large and small. And in a report released just yesterday, one analyst confirmed that the Sprint Nextel condition would have a profound effect on the wireless landscape by resulting in an increase in broadband choice and availability across the United States.

I also pushed hard to further jumpstart wireless broadband efforts in the 2.5 GHz band by all licensees. I won an agreement for more significant safe harbors in the omnibus EBS/BRS reconsideration Order that we released last month. Safe harbors are just that – they are not a requirement; parties are not obligated to meet them. A safe harbor is non-binding, but if met, it provides operators the security that they absolutely have complied with our substantial service requirements. I believe this spectrum has so much potential, and we already are seeing companies like Clearwire provide 2.5 GHz broadband services in dozen of markets across the country. The bottom line is that if we are going to allow licensees the flexibility of a “substantial service” construction standard, we have to make sure the safe harbors are meaningful.

I also have pushed for flexible licensing approaches that make it easier for community-based providers to get access to wireless broadband opportunities. Last year, 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.

This follows in the footsteps of our decision in the 70/80/90 GHz proceeding that also broke new ground. It signaled a new approach to spectrum licensing in making spectrum available for enterprise use. As you know, this spectrum block can be used to connect buildings with multi-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 it is available to operators by just applying through an on-line database. In fact, GigaBeam is installing five links for the city of Sioux Falls 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.

I think these decisions reflect a positive trend at the Commission. We need to find the right balance between a licensing model for traditional, area-wide, mobile systems, and a model for services such as those proposed for the 3650 MHz band. That band ultimately may serve a different user group, one that often is driven by more localized, community-based needs. So in 3650 MHz, we put in place a regime that does not rely on first in time and provides equal access to all. We want to take advantage of the WiFi movement, and take it to another level.

Of course, only time will tell if the novel decisions we have made result in efficient use of these spectrum bands. But I think that given the success of unlicensed wireless networks, we are on the right track, and our creative spectrum management approach is well justified.

Keeping the FCC on the Edge of Spectrum-Based Technology

But of course, we cannot rest on our laurels. We've got to keep on the leading edge of spectrum-based technology.

So I was pleased that OET last month announced its plan to refresh the record in our ongoing efforts to make an additional 255 MHz of spectrum available for unlicensed use in the 5 GHz band. We are looking for additional comment on revised equipment authorization requirements for proposed devices in the band using dynamic frequency selection in the band. This spectrum will be such a valuable asset to the wireless broadband community, and I want to see us move forward with this final phase as quickly as possible.

We also need to move forward with NTIA on developing a joint test bed. A test bed will be crucial in considering new methods for sharing spectrum and other important spectrum management issues. Over the past few years, a lot of creative proposals grew out of the task force work from both the Commission and NTIA. I want to make sure these efforts are fully considered. A test bed will also be an important vehicle for considering and developing new spectrum management innovations for federal and non-federal use.

But despite some of these recent developments, I am concerned we are losing our spectrum edge. For instance, I am troubled by recent decisions related to the Advanced Wireless Services or AWS auction. I want the auction to be a real opportunity for new and incumbent carriers to expand existing networks and develop new and exciting wireless broadband services. I worked

hard to put in place policies and rules that would promote opportunities for all carriers in the auction, such as a more diverse group of license blocks. But I am afraid that recent decisions made by the Commission may substantially undercut that effort.

For example, I am concerned with the decision to impose blind bidding on our upcoming AWS auction in the event certain thresholds are not met. I am especially troubled by the impact of this decision on small companies. I was originally told by our staff that small companies would benefit from our blind bidding proposal because it would protect them from becoming victims of larger carrier bidding strategies. In an interesting twist, it was the smallest carriers who spoke the loudest against the proposal. They raised legitimate concerns about access to real time auction information that significantly informs their auction bidding strategy. They pointed out to us that this is a completely new spectrum block with uncertain business models and equipment opportunities. So I am worried about the chilling effect of this decision on participation by smaller and medium-sized carriers. I have heard directly from companies and investors that Wall Street shares this concern.

I also was very disappointed in our decision a few weeks ago not to deal directly with the loophole in our rules that allows large wireless companies to invest in designated entities. It truly was stunning that my colleagues did not take action to specifically address the single biggest issue facing the DE program given the overwhelming support in the record to do so. We missed a real opportunity to shut down what almost everyone recognizes has the potential for the largest abuse of our DE program. And now it appears that the changes that were adopted may actually do more harm than good to the DE community.

A different proceeding that could substantially help our wireless broadband efforts but has languished since the summer of 2004 is our rural wireless proceeding. As some of you may recall, I was disappointed in several aspects of that Report and Order. But I pushed strongly for a Further Notice that continues to explore possible re-licensing approaches and construction obligations for current and future licensees who hold licenses beyond their first term. I think this is an important dialogue. I continue to believe that we should consider an approach that provides for re-licensing in the event that market-based mechanisms still result in unused spectrum. We cannot afford to let spectrum lay fallow. If, after so many years, licensees do not plan to use or lease the spectrum they acquired in rural and other unserved areas, they should let someone else have access to it.

And we have active issues like 700 MHz and the white-spaces proceeding that really deserve our utmost consideration. There are significant opportunities in these bands and we want to make sure that we start giving them the full attention they deserve.

But my concerns about our spectrum policy making and our wireless broadband efforts are not just limited to high profile proceedings. My staff and I regularly hear from parties who are developing new technologies or are involved in ongoing proceedings, but are unable to move forward due to a lack of guidance from the Commission. Unfortunately, the list is long and probably all too familiar to many in this room. Items like the pending petitions for reconsideration in the ESV proceeding; the Fibertower petition for rulemaking for two-foot antennas in the 11 GHz band; the long standing petition to rechannelize the 18 GHz band; and

proposals to adopt a power spectral density-based emission limit, as an alternative to existing standards.

I do not necessarily know how these proceedings and waivers should be decided. But I do know that many of them touch on issues like wireless broadband and homeland security. That means they should be dealt with as quickly as possible. Technology in the wireless space moves too fast to be delayed by an unnecessarily long deliberation at the FCC.

Conclusion

If we are going to see real broadband competition, it probably has to come from wireless. And as I conclude today, I want to coin a new phrase for you; we shouldn't talk about a third broadband pipe anymore, but a third channel. Mark my words, spectrum-based services ultimately will be the key driver of competition in the broadband space.

I want to acknowledge the year-round spectrum policy and engineering discussions in which I know your group is actively involved. As I have discussed today, we all play an important role in promoting the further deployment of spectrum based services for the benefit of our country and economy. I wish you the best of luck with your conference, and I look forward to working with you on these critical efforts.