

*Remarks of Chairman Genachowski on the Office of Engineering and Technology
and the Wireless Telecommunications Bureau
Presentation on White Spaces for Wireless Broadband*

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What a few years ago was a prediction is now a reality: wireless is revolution transforming our economy and changing the way we live. Wireless innovation is driving economic growth and job creation, and enabling new breakthroughs in areas like health care, education, energy, and public safety.

And the U.S. is leading the way. After years of watching South Korea, Japan and Europe making big strides, the U.S. has now regained global leadership in mobile.

The U.S. leads the world in 3G subscribers by a wide margin. We are leading the world in deploying 4G mobile broadband at scale, with 69% of the world's LTE subscribers, making America the testbed for the development of 4G apps and services.

Our apps economy is the envy of the world, creating about 500,000 jobs already. And since 2009, the percentage of smartphones globally with American-created operating systems has grown from 25% to more than 80%.

We also lead the world in Wi-Fi policy, and are a leader in the number of Wi-Fi hot spots. And we continue to lead the world in unlicensed spectrum, notably using Dynamic Frequency Selection to make spectrum available for Wi-Fi in the 5GHz band.

Our success around wireless is also creating enormous challenges.

Demand for spectrum is increasing exponentially. Most mobile subscribers now have smartphones – and soon virtually all subscribers will. And these devices aren't producing datastreams that are 10%, 50%, or even 100% more than a traditional cell phone. We're talking 24 times more. For tablets it's 120 times more. As a consequence, American networks are running at the highest utilization rate of any in the world. We need more capacity, and more efficiencies, and we need it soon.

It's a very real challenge. But it's the kind of challenge we want to have, because it comes from too much demand. Believe me, much better than the opposite.

So point one to take away from this presentation is that greater access to spectrum for broadband is critical to our economy and society.

Point two is that the old ways of unleashing spectrum for broadband are not enough.

Historically, our basic strategy has been to clear and reallocate spectrum and reallocate it. This is a strategy that has delivered tremendous benefits for America. Most recently, we did this during the DTV transition, and it's a big reason we are ahead of the world in 4G

We need to continue finding ways to clear spectrum for broadband. That's what incentive auctions are about. Incentive auctions – proposed in our National Broadband Plan – are a major innovation in spectrum policy, a new way to reallocate commercial spectrum to flexible use. And I look forward to working with my colleagues to implement the legislation recently passed.

But this tool alone won't be enough. Alone, it won't free up the quantity of spectrum we are going to need for broadband. As I said in announcing my Mobile Action Plan in early May, we need an "all of the above approach" that includes removing unnecessary regulatory barriers to flexible spectrum use and infrastructure deployment, promoting more efficient spectrum use – through, for example, small cells – and developing new policy tools to supplement the old ones.

That brings us to the third point, which is that the Commission has begun developing these policy tools, once again putting us on the cutting edge of spectrum policy innovation.

We've already got the world's first rules for White Spaces technology.

And spectrum sharing will become an increasingly important tool in our toolbox. We are in an active dialogue with our federal partners about ways in which government and commercial users can share spectrum more intensively, notably in the 1755-1780 MHz band, and other frequencies.

What's exciting and new is the prospect that technology can turbocharge sharing not only in frequency and space but also in time.

So while clearing and reallocating will still be an essential tool, adding sharing to our arsenal can significantly increase the amount of spectrum we can get to the commercial market, and the speed.

Historically, the U.S. has led the world in spectrum policy innovation. Now, more than ever, we need to continue innovating. And thanks to the outstanding work of the Wireless Bureau and OET staff, that's exactly what we're doing.

Thank you for bureau staff for their work on this presentation and, more important, for all that you are doing to help our nation seize the opportunities of mobile broadband.