

**Prepared Remarks of Chairman Julius Genachowski  
Federal Communications Commission**

**“America’s Mobile Broadband Future”**

**International CTIA WIRELESS I.T. & Entertainment  
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Thank you, Steve. And thanks to CTIA and to each of the four companies for that contribution to One Economy, an organization that does extraordinary work. One million dollars may not buy that much spectrum these days, but through One Economy it will help a lot of people.

I also appreciate AT&T’s announcement yesterday allowing internet calling applications on the iPhone -- a decision I commend. And also Verizon’s announcement about the Android platform. These are both wins for consumers, and I look forward to hearing more about it from Ralph de la Vega, who’s up next, and from Verizon.

I’ve been on the job about three months now. After a dozen years in the private sector, yes, it’s a change. But much is similar.

First, it seems like I haven’t been able to get home at a reasonable hour no matter where I work. I’m beginning to think it’s me.

Second, people matter. We’ve been building a team of tremendous talent at the FCC, I’m proud to say, made up of professionals from inside and outside the agency, including new hires from the private sector, many with hands-on experience in the mobile industry. Our goal is an FCC that’s a model for excellence in government, smart about technology, smart about business and economics, smart about the law, history and all relevant disciplines.

There’s a third way that being at the FCC reminds me of my time in business: It’s all about mobile.

In my time as an investor and executive I saw mobile go from a futurist fantasy, to a nice-to-have part of a company’s gameplan, to a must-have strategic priority. Today every company in America -- entertainment, commerce, news, you name it -- knows it needs to have a mobile strategy.

That’s because all of you are changing the world. You’ve turned clunky one-trick handsets into sleek and powerful mini-PCs. You’ve made the Internet mobile, freeing broadband from the desktop and making it possible to imagine a world where the Internet is available to anyone, anywhere, anytime.

You're making that possible through the billions you've invested, and the billions you plan to invest.

At the FCC, we also recognize that mobile is central to our mission. No sector of the communications industry holds greater potential to enhance America's economic competitiveness, spur job creation, and improve the quality of our lives.

My goals with regard to mobile are the same that define and drive all our work: fostering innovation and investment, promoting competition, empowering and protecting consumers, all in an effort to help ensure the U.S. has a world-leading communications infrastructure for the 21<sup>st</sup> century.

My specific objectives involve unleashing spectrum for broadband; removing obstacles to 4G deployment, like delays in tower siting; developing fair rules of the road to preserve the openness of the Internet, while recognizing the differences between wired and wireless technologies; and empowering consumers by supporting a vibrant, transparent and competitive mobile marketplace.

That -- in a nutshell -- is how we will further America's leadership in mobile.

Now, let me elaborate on where we are and where we need to go.

## **I. The Promise of Mobile Broadband**

All of us in this room understand the importance and power of mobile.

And each day, more and more people from all walks of life are coming to understand it too. People are connecting wirelessly to each other and to the Internet to conduct the daily business of life: find a job, discover new music, connect with old friends, read the news, tweet -- wherever and whenever they want.

As long as they're not driving.

We all have our favorites. On a clear night last week I was outside with my kids and my iPhone. We were using an app called Star Walk. When you point it up, you can see dynamic images of the stars and constellations. After playing with it for a minute my 5-year-old daughter pointed to the sky and said: "There's Pegasus." As they say, "priceless."

Well actually, it was \$4.95, happily paid.

Like many simple delights, the Star Walk app makes it easy to forget the years of hard work and billions of dollars that went into developing the technology, the network, the operating system, the transaction platform, and the app itself.

And of course those apps are a big business and getting bigger. More than two billion have now been downloaded. They do everything from find a parking spot to -- yes, this is true -- have a virtual rabbi insert a message for the New Year into the Wailing Wall in Jerusalem.

And the “apps economy” is just one part of a much larger story. In recent years, the wireless sector has averaged a 16 percent annual rate of growth. In an economy that certainly can use some pacesetters, we need this industry to continue driving economic growth and job creation.

We also need the mobile industry to continue its progress toward global leadership.

To compete in the global marketplace in the information age, U.S. companies of every sort will increasingly need rely on world-class mobile networks.

And we need mobile leadership to help our nation address core challenges that transcend economics. From health care to energy to education, mobile will be a key component to addressing these national priorities.

Some early projects give us an exciting glimpse of what the future holds.

- At Case Western, mobile broadband powers e-textbooks for students, saving money and saving trees.
- In Denver, the city monitors its fleet in real time thanks to mobile broadband, conserving fuel and reducing carbon emissions.
- In several parts of the country, mobile broadband links doctors to cardiac monitors that can identify anomalies in a patient’s heartbeat instantly, catching problems and saving lives.

These opportunities are top of mind at the FCC, as we work on developing the National Broadband Plan that Congress and the President entrusted us with preparing by February.

## **II. Seizing the Opportunity**

More and more I hear people say that broadband is the future of mobile, and I agree. I also believe the reverse is true -- mobile is essential to the future of broadband.

And the next generation of mobile technology -- 4G -- will make all the difference. 4G will provide mobile connectivity several times faster than we have today. It will provide a mobile Internet experience comparable to today’s wireline networks -- data rates measured in megabits per second instead of kilobits, latencies in mere milliseconds.

After years of buildup, we can see 4G on the horizon.

Clearwire has launched WiMAX in 14 markets. Verizon, AT&T, T-Mobile and MetroPCS have each announced plans to launch LTE in the next year or two.

But of course it's easier to roll-out a press release than roll-out a network. There is a lot of work to do, and I know it won't be easy.

Across the mobile ecosystem, you are the innovators who will design, finance, and build these networks. You will engineer new devices, and dream up new applications.

What about the FCC? Our role is different, but we have a lot of work to do too.

### **III. The FCC's Mobile Broadband Agenda**

I mentioned before we've been bringing more MBAs into the FCC. Well, today I want to announce another type of MBA: our Mobile Broadband Agenda -- our four-part plan to promote a world-leading wireless landscape in the United States. These are the goals on which I look forward to working with the wireless industry and all stakeholders in the period ahead.

1. Unleashing spectrum for 4G mobile broadband and beyond.
2. Removing obstacles to robust and ubiquitous 4G deployment
3. Providing fair rules of the road for an open Internet -- so that it remains a vibrant platform for innovation and investment, recognizing the differences between wired and wireline technologies
4. Empowering consumers by supporting a vibrant, transparent and competitive marketplace

Let me take each in turn.

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First, unleashing spectrum for 4G mobile broadband and beyond.

Spectrum is the oxygen of our mobile networks. While the short-term outlook for 4G spectrum availability is adequate, the longer-term picture is very different.

In fact, I believe that that the biggest threat to the future of mobile in America is the looming spectrum crisis.

Now, CTIA said much the same in a letter to the FCC last week. On this point, I would note what they say about great minds. Or maybe Steve Largent and I are using the same speech writing app.

In any event, the looming spectrum crisis is a fact that has been emerging from the work of the FCC's broadband initiative.

Let's look at some numbers.

Mobile data usage is not just growing, it's exploding. By some estimates it will grow from 6 petabytes per month in 2008 to nearly 400 petabytes per month in 2013.

You don't have to know what a petabyte is to know that that's a game-changing trajectory.

We are fast entering a world where mass-market mobile devices consume thousands of megabytes each month. So we must ask: what happens when every mobile user has an iPhone, a Palm Pre, a Blackberry Tour or whatever the next device is? What happens when we quadruple the number of subscribers with mobile broadband on their laptops or netbooks?

The short answer: we will need a lot more spectrum.

There is spectrum coming online. Counting last year's 700 MHz auction, the FCC in recent years has authorized a 3-fold increase in commercial spectrum. The problem is many anticipate a 30-fold increase in wireless traffic.

I believe one of the FCC's highest priorities is to close the spectrum gap.

We must promote more efficient use of spectrum. That's why one of my earliest acts as FCC Chairman was the Mobile Innovation and Investment Notice of Inquiry that the Commission approved in August, a proceeding that includes work on ways the FCC can develop policies and promote technologies to give us greater spectrum efficiency.

Smart spectrum policy will be part of the solution. We will look at secondary markets, and spectrum flexibility policies. With Wi-Fi, we've seen the benefits of adding unlicensed spectrum to the national mix. Wi-Fi allows carriers to offload to fixed broadband as much as 40% of traffic in the home, freeing up capacity of licensed spectrum.

New technologies like smart antennas and femtocells hold promise as well, and we must explore ways to incentivize faster development and deployment of next generation technologies. It's also one of the reasons R&D in this area is so important, as my colleague Commissioner Copps has been reminding us.

Just yesterday, the Nobel Prize for physics was awarded to a British scientist for his mastery of light through technology, which led to a revolution of fiber-optic cables. Is our government doing everything it can to support R&D that will fuel Nobel-worthy breakthroughs in wireless technology? The FCC's doors are certainly open to ideas on how to maximize wireless R&D in the United States.

Even with innovative spectrum policies and innovative new technologies, experts believe we are way too likely to be caught short.

That brings me to the second way to close the spectrum gap -- reallocating spectrum currently being used for other purposes.

The less spectrum available for mobile broadband, the more service will cost and the longer it will take to make 4G ubiquitous. And that doesn't serve our national needs.

In our broadband record, carriers are telling us that they need anywhere from 40MHz to 150MHz -- each -- to bring the benefits of broadband to American consumers.

As this audience knows, it takes years to reallocate spectrum and put it to use. And there are no easy pickings on the spectrum chart.

But we have no choice. We must identify spectrum that can best be reinvested in mobile broadband.

That is something that we have to work on together, across industries, and in partnership with all stakeholders.

Unleashing spectrum for mobile broadband is the first part of our plan.

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Our second is removing obstacles to robust and ubiquitous 4G networks.

We at the FCC understand the many challenges operators face in standing up networks. We are ready to help you cut through red tape and overcome these hurdles.

On the issue of tower siting, we have heard your call. This issue is ripe for action. I have consulted with my fellow Commissioners, and in the near future we are going to move forward with a shot-clock proposal designed to speed the process, while taking into account the legitimate concerns of local authorities.

This was your idea, and we're working on other ways to improve the tower siting process. For example, I hope we can promote the sharing of best practices, including potentially creating an online clearinghouse of best ideas on the FCC's website.

In removing obstacles to 4G deployment the Commission won't stop with towers.

- We'll act promptly to process license and other requests to keep 4G roll-outs on track.
- We'll do our part to help clear spectrum that has already been allocated and licensed for 4G.
- We'll address roaming in a broadband world.

- And we will look for ways to accelerate the rollout of high-capacity middle mile connections in both rural and urban areas.

Unleashing spectrum for mobile broadband, removing obstacles to 4G deployment and, yes, developing fair rules of the road for an open Internet.

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Americans are a people on the move. A broadband world that includes both fixed and mobile is both desirable and inevitable.

As that happens, I believe it will be essential to ensure that the Internet remains open -- a vibrant platform for innovation and investment, creativity and speech, an enduring engine for job creation and economic growth.

The FCC has been looking at these issues for quite some time, and over the years a bipartisan Commission has adopted and enforced open Internet principles. It did so, however, in a way that has left many confused about the landscape -- about whether we do or don't have Internet openness protections.

As we embrace the opportunities of a wired and wireless broadband world, we shouldn't have uncertainty about whether we'll have an open Internet. That is why I said two weeks ago that the FCC should codify a fair and common-sense framework to preserve an open Internet. And later this month, I expect that the FCC will begin an open proceeding to explore how best to do so.

The goal of the proceeding will be to develop sensible rules of the road. Rules clear enough to provide predictability and certainty, and flexible enough to anticipate and welcome ongoing technological evolution.

Communications technologies are complex and changing rapidly, nowhere more than mobile, and my time in business has convinced me that the last thing we want is heavy-handed and prescriptive regulation. Our goal is to empower innovators, not lawyers.

In looking at wired and wireless Internet access, some have said that "one size doesn't fit all." I agree. We know from experience at the FCC that there are real and relevant differences between wired and wireless. Mobile poses unique congestion issues, for example. Managing a wireless network isn't the same as managing a fiber network, and what constitutes reasonable network management will appropriately reflect that difference.

I also recognize that the wireless industry has its own market structure and competitive landscape which of course we'll analyze in our proceeding. And I understand how well-intended government action can lead to unintended consequences.

There shouldn't be any confusion. I believe firmly in the need for the FCC to preserve Internet openness, whether a person accesses the Internet from a desktop computer or a wireless laptop or netbook. I also believe the question of how we accomplish that goal, particularly in the wireless context, poses some difficult questions -- questions that remain open and will be considered in the FCC's proceeding.

We are developing new techniques at the FCC designed to increase transparency and facilitate full participation. I expect we'll have public workshops and vibrant engagement with all interested parties. As someone who believes that the best answers really do emerge from a dynamic marketplace of ideas, I invite and welcome the wireless industry to roll up its sleeves with the FCC and its staff.

We all win when the wireless industry develops robust, open, and profitable mobile broadband networks.

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That's Part 3 of our Mobile Broadband Agenda. My McKinsey friends tell me that Plans should always have three parts -- but I'm a contrarian, so here's the fourth: Empowering consumers by supporting a vibrant, transparent and competitive marketplace.

Competition is the lifeblood of a thriving economy. It motivates people to reach higher, take risks, be more creative, use resources more efficiently. And it drives investment.

These simple but powerful ideas led us to introduce two Notices of Inquiry in August: one on competition and one on innovation & investment. We very consciously launched those proceedings together. They are two sides of the same coin.

The PCS auctions of the 1990s showed the power of a competitive marketplace. They allowed new carriers to enter the market and resulted in a huge uptick in dollars spent, cell sites built, and jobs created, even as prices declined to make cell phones accessible to the mass market.

The FCC will be vigilant in promoting competition.

But I want to emphasize that the power of the FCC to influence the market pales in comparison to the power of the American consumer.

Every day millions of Americans make choices that profoundly affect the strategies of carriers and device manufacturers. Because these companies pay attention to consumers as they choose new service plans, new devices, and, occasionally, choose to switch providers. The aggregate impact of these decisions is enormous.

But consumers can't act wisely in a vacuum. Information is crucial. Without reliable, clear, relevant information, consumers cannot make informed decisions. Without informed decisions, the market does not perform optimally.



That is why we are prioritizing consumer transparency. The same day we launched our competition and innovation & investment inquiries we also launched an inquiry on consumer information and disclosure. Again, the timing was not coincidental.

I welcome and encourage steps the mobile industry is taking to provide better information to consumers, but the FCC is also aware of ongoing confusion and frustration in the marketplace. Our goal is to ensure that consumers are armed with the information they need to make the market work. This is a key component of our mobile broadband agenda

#### **IV. Moving Forward: The Power of Pragmatism**

So how will we pursue this agenda? Through fact-based, data driven, open and transparent processes; staffed by dedicated, talented, and expert public servants from a broad range of backgrounds; engaging with all stakeholders, inside and outside Washington, offline as well as online.

I'm committed to using communications technologies to improve the overall operations of the FCC -- running efficiently, communicating effectively, and opening the agency to participation from everyone affected by the FCC's actions.

We will communicate through active, ongoing and forthright dialogue -- not through hidden messages. You may not always agree, but we will always be clear and you can take my words and the words of FCC staff at face value. When we say that we haven't determined what we are going to do with handset exclusivity and we want your input, we mean it. The same applies to an open Internet.

We want you to be engaged. We need you to be engaged.

I am committed to running an expert agency that works for all Americans -- that pursues high principles while recognizing the danger of dogma and the power of pragmatism.

I look forward to working with CTIA and each of you to capitalize on the potential of mobile broadband.

Working together, we can ensure that the U.S. leads the world in mobile.

Working together, we can realize the potential of our nation's mobile future.

Working together, we can build a more connected America with mobile communications unlocking a future of opportunity and prosperity for our country.

Thank you.