REMARKS OF FCC CHAIRMAN JULIUS GENACHOWSKI
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Thank you. It's always fun to be at CES. Where else can you find a USB stick that's also a bottle opener?

I'm not making that up.

I look forward to a discussion with Gary Shapiro very soon, but first a few remarks.

It's great to be back at CES. I spent this morning on the floor, seeing endless rows of innovative new products.

A few things worth noticing:

First, the number of companies displaying on the floor. Over 3,000 companies – large, medium and small – all working on what they hope will be the next great innovation, the next great product that will create new industries and new jobs.

Second, virtually every new product on the CES floor is fueled by broadband Internet -- by connectivity and bandwidth, wired and wireless. If you shut off the Internet, virtually nothing on the CES floor would work.

Third, in addition to breakthrough entertainment devices and services, the innovative new products here involve education, health care, energy, business solutions, and other categories.

Yes, we saw smartphones and smart TVs. We also saw smart textbooks, smart appliances, smart thermostats, and smart health and fitness equipment. We saw the work to develop smart cars, smart homes, smart businesses, and smart cities.

And so CES is a very good place to discuss a question Tom Friedman posed last week in The New York Times.

Friedman asked: What plan will ensure that America has a "strategic bandwidth advantage" that will enable "job engines of the future?"

The context was a column about smart cities – about how 21st century infrastructure – in particular ultra-high-speed broadband – can enable the development of the high-value goods and services that will drive economic growth.

Friedman's point about bandwidth enabling innovation, and creating economic value, is certainly on display here at CES.

The value of almost every technology innovation at this show goes up as bandwidth goes up.

When these devices can do more, and do it faster, and particularly when competition and innovation means they can do more for less, they deliver increasing value for our economy and improvements to our quality of life.

And as Netscape founder Marc Andreessen has noted, increased bandwidth dramatically enhances the increasing power of software, which lowers the cost to start and run businesses and vastly expands the market for online services.

And as the quality of network-connected apps, services and devices goes up, they generate increasing consumer demand, which drives increased investment in networks – creating a virtuous cycle with a growing broadband economy and ongoing job creation.

This is why, from Day One at the FCC, we focused the agency on a mission: harnessing the power of broadband Internet to drive economic growth and benefit all Americans.

Starting with our National Broadband Plan, we set out a comprehensive strategy to develop a world-leading broadband ecosystem, from infrastructure to applications, and ensure a strategic bandwidth advantage for the United States.

What are our bandwidth-related strategic goals for the United States?

First, we need ubiquitous broadband, so that we have the most attractive market in the world for high-speed broadband apps and services.

This will maximize incentives for innovators and entrepreneurs to develop and launch products here, to start and grow their companies here, while exporting to the rest of the world.

This requires world-class wired and wireless infrastructure, and it requires all entities in the broadband ecosystem – including network operators, device developers, and apps creators – to have access to the platforms and inputs they need to succeed.

Second, we need to unleash spectrum so that mobile broadband can achieve its vast potential in driving economic growth and job creation.

We need to address the looming spectrum crunch, and we need to ensure the availability of unlicensed spectrum as a platform for American innovation.

Third, we need broadband innovation zones to fuel U.S. leadership in broadband applications, services and products.

Ultra-high-speed test beds can eliminate bandwidth as a constraint on innovation, and give America's great innovators and entrepreneurs a destination for experimentation and invention.

In the coming era of cloud computing and Big Data, if we don't create these innovation zones based on massive bandwidth in the U.S., other countries surely will, and in a flat, hyper-connected world, capital and jobs will flow in that direction.

Fourth, we need universal broadband adoption, so that every American is taking advantage of our 21st century communications platform – for finding and landing jobs, for connecting to education in and out of the classroom, for obtaining health care information, diagnosis and even treatment, and for participating in your community.

Right now, one-third of our population doesn't have broadband at home - 100 million Americans - held back by issues including cost, a lack of digital literacy, and an under-appreciation of the value of broadband.

Closing the broadband adoption gap would increase the size of the U.S. broadband market by 50%, while giving tens of millions of Americans a meaningful opportunity to participate in the digital economy and modern society.

At the FCC, we're using all the levers at our disposal to deliver on these strategic goals.

We are modernizing out-of-date programs and focusing them on our strategic priorities.

We've done this, for example, with our once-in-a-generation reform of the Universal Service Fund from an inefficient program focused on old-fashioned telephone service to a fiscally responsible, targeted program focused on delivering universal broadband access by the end of the decade.

We are working to ensure the smart use of government assets like rights of way and spectrum, focused on creating strategic advantages for the U.S.

We need government agencies that control rights-of-way to move forward on ideas like "Dig Once," so that fiber can be laid every time a road is opened for repair.

And we need to take the right steps on spectrum (more on that in a minute).

We've removed barriers to wired and wireless broadband buildout, and we'll do more.

We are promoting competition, and preserving the freedom and openness of the Internet – giving innovators the incentives and the real ability to develop and launch their products in the U.S., while also ensuring incentives to invest in networks.

We are driving public-private initiatives – channeling private resources to advance the public interest.

As part of our Jobs4America initiative with the teleservices industry, we'll see 100,000 new broadband-enabled customer-service jobs created in the U.S. over the next two years, including tens of thousands of jobs on-shored from overseas, and tens of thousands of at-home jobs that will provide new work opportunities for disabled veterans, others with disabilities, and single parents.

Just today, at an "Insourcing American Jobs" forum, the President met with business leaders and challenged them to bring jobs back to the United States and make additional investments here in America. Through our work, we've seen that businesses can and will do this.

Also, our major Connect to Compete Initiative that involves many companies, including those in the cable industry, tech, software, and CEA members, will offer low-cost broadband rates to families eligible for the National School Lunch Program, as well as expand digital literacy programs, including into libraries.

And we are encouraging private-sector and non-profit leadership to meet our country's broadband strategic goals.

We increase our chances of developing strategic advantage for the U.S. through initiatives like Gig.U, which promotes the development of university communities as next-generation testbeds for innovation, and fiber-to-the-home projects like the one in Chattanooga, Tennessee, the Google Fiber project in Kansas City, and community broadband initiatives throughout the country.

There is a lot of good news in our broadband economy, which in many respects is thriving.

Over the last two years, broadband innovation, investment and job creation are all up.

The U.S. captures 30 percent of all Internet revenue worldwide and more than 40 percent of net income.

The opportunities of the broadband economy are huge, but so are the challenges.

And that's why there will be no slowing down on the strategic broadband initiatives we are driving.

Nowhere are the opportunities and challenges greater than with mobile broadband.

On the opportunity side, we have recently regained world leadership in mobile innovation, thanks to many of you here at CES.

Our "apps economy" is the envy of the world.

We now have the most 3G subscribers in the world.

And while Europe led in getting to scale for 3G, we have a strong early lead in getting to scale for 4G, the next generation of mobile broadband.

Private investment in the mobile broadband economy is up by double-digit percentages, driving real job creation – with projections for even greater job creation over the next few years.

But the challenges to mobile success are very real, and I'd like to close by addressing an essential part of our strategy to seize the opportunities of mobile broadband – voluntary incentive auctions.

This is a mechanism to free up a very significant amount of high-quality spectrum for wireless broadband through a two-sided auction where existing license holders can voluntarily turn in

their spectrum in exchange for fair compensation. Because we would realign the spectrum, the spectrum we auction would have far greater value than the spectrum we'd receive, generating about $25 billion in cash for the Treasury.

As you know we've asked Congress to give the FCC the authority to conduct incentive auctions.

My message on incentive auctions today is simple: we need to get it done now, and we need to get it done right.

Why do we need to get it done now?

Few areas hold more promise for creating jobs, growing our economy, and expanding opportunity than the mobile sector.

And a big reason we lead the world in mobile innovation is that we have led the world in spectrum policy.

Over the years it has given us a strategic bandwidth advantage.

In the 1990s, we were the first country to conduct spectrum auctions, and it was our DTV transition plan that gave us a head start on 4G deployment.

The FCC was also the first agency in the world to allow unlicensed use of what were once called the "junk bands" of spectrum, which American innovators used to invent cordless phones, Bluetooth, and Wi-Fi.

We are the first country in the world to free up "white spaces" spectrum for unlicensed uses such as Super Wi-Fi and recently certified the first commercial white space device, with more in the pipeline.
And the first rollout of a white space network is planned for later this month in Wilmington, North Carolina.

But America's global leadership in mobile, and the strategic bandwidth advantage so many have worked hard to create, is being threatened by the looming spectrum crunch.

At the FCC, we identified the problem and began sounding the alarm about the spectrum crunch almost three years ago – to some debate at the time.

But in a world of tablets, ultrabooks, and 4G phones that consume more and more data, the debate has been settled.

The plain fact is that aggregate consumer demand for spectrum for broadband is increasing at a very rapid pace.

To meet this demand, we'll need to drive the development and deployment of spectrally efficient technologies like small cells and smart antennas; we'll need to further develop policies and practices to increase spectrum sharing through dynamic spectrum access, secondary markets and other initiatives.

But that won't be enough.

If we don't authorize incentive auctions and make much more spectrum available for mobile broadband, we are going to get swamped by an ocean of demand and risk our competitive advantage in the race to lead the world in mobile innovation.

American consumers will face slower speeds, more dropped connections, and higher prices.

And future innovators will be incentivized to launch their businesses in countries that beat us in the race for the best wireless infrastructure.

The price of that will be measured in lost jobs, investment, and innovation.

That's why the incentive auction concept needs to become law now.

But getting it right is as important as getting it done.

In fact, doing it wrong would undermine the reasons to adopt incentive auction legislation in the first place.

We're close, but we're not there yet. There is broad bipartisan agreement that we need incentive auctions, and the Senate Commerce Committee passed bipartisan legislation giving the FCC incentive auction authority on a 21 to 4 vote.

It did it in a manner that would give the FCC sufficient flexibility to conduct incentive auctions in a way that would generate massive value. And the Senate Commerce bill also provided essential funding to fulfill a vital 9/11 Commission recommendation that we build an interoperable mobile broadband network for first responders.

As we get down to the wire on incentive auctions, the sticking points are proposals that would pre-empt the FCC's open, fact-based process and predetermine spectrum allocation and auction design in an unprecedented manner.

One proposal would prohibit the FCC from allocating any recovered spectrum to innovative unlicensed use; another would eliminate traditional FCC tools for setting terms for participation in auctions.

A broad range of America's top experts on auctions agree that it would not be wise to prejudge or micromanage FCC auction design and band plans.

Doing so could significantly diminish the value of spectrum auctions, and stifle mobile innovation.

In endorsing incentive auctions, 112 leading economists from across the ideological spectrum wrote: "Giving the FCC the authority to implement incentive auctions with flexibility to design appropriate rules would increase social welfare."

That's economist-speak for more innovation, more economic growth, and more improvements in our quality of life.

Why would it be a mistake to tie the agency's hands?

This is an incredibly fast-moving space, and any policy that pre-judges or predicts the future runs a great risk of unintended and unfortunate consequences.

We don't know what the world will look like when the FCC adopts auction rules.

Even a visionary like Bill Gates once said that "no one will need more than 637 kilobytes of memory for a personal computer."

And consider that two years ago, there were no tablets at CES.

We know how hard it is to change a law.

In this dynamic space, locking restrictions into a statute would be a real mistake.

And the consequences of a mistake are greater than in the past.

We've never had more global competition, and the race to lead the world in mobile innovation is particularly intense.

The costs of tying our hands could be devastating in the fast-moving and competitive global economy.

Allocating spectrum by statute is problematic not only because it prejudges the future in an essentially irreversible way.

It's a mistake because it preempts an expert agency process that's fact-based, data-driven and informed by a broad range of economists, technologists and stakeholders on an open record.

The proposals on the table to restrict the FCC's flexibility in its area of technical expertise would be a significant departure from precedent.

Spectrum- and auction-related issues pose hard questions.

I believe they should be answered based on the evidence, on an open record, as close as possible to the time when they need to be made.

Since receiving auction authority almost twenty years ago, the FCC has conducted more than 80 spectrum auctions, raising more than $50 billion in revenue, in a manner that has garnered respect from experts around the world.

As the 112 economists wrote, "The original auction system implemented in 1994 was novel, but the FCC was able to implement the path-breaking auctions that were the basis for successful auctions around the world. We expect that the same will be true of incentive auctions."

Now a few words on the two specific proposals to restrict FCC flexibility on implementing incentive auction authority.

First, the proposal to prevent the FCC from designating any new spectrum for unlicensed use risks suppressing major innovation of the sort that gave us Wi-Fi.

Stanford economist Jonathan Levin, who just won the prestigious Clark Medal, estimates that Wi-Fi generates up to $37 billion in economic benefits – per year.

Unlicensed spectrum has generated hundreds of billions of dollars in economic value, and holds the key to even more.

If any area tells us it's a mistake to lock in spectrum policies earlier than you have to, it's the development of innovation on unlicensed spectrum, from cordless phones to Bluetooth to Wi-Fi.

Initially, people thought the spectrum bands that came to be used for these purposes were useless.

But by releasing spectrum for unlicensed use, the FCC built a platform for innovation, and the innovators came.

Wi-Fi as an unlicensed innovation has gone from something that wireless carriers opposed and that wireless devices didn't accommodate, to something that wireless carriers embrace as indispensible to their networks; and indeed, in a reversal from the norm for mobile phones where cellular networks have been the default and Wi-Fi the option, tablets today have Wi-Fi as the default and cellular networks as the option.

We shouldn't ignore the lessons of history and close the door to consideration of new wireless platforms for innovation.

Yet the proposals to restrict FCC flexibility would do just that.

I want to thank CEA for its consistent support of incentive auctions and FCC flexibility, and its recent statement that any incentive auction bill should, quote, "include provisions for both licensed and unlicensed spectrum use, as both are essential to advancing innovation in America."

Two days ago, a bipartisan group of Senators – Senators Kerry, Snowe, Warner, and Moran – released a letter describing the many substantial benefits of unlicensed spectrum, and urging that Congress not prohibit the FCC from allocating spectrum for unlicensed use.

"It may be that the spectrum cleared is best left for licensed use," they wrote, "but Congress should defer to the FCC to make the proper determination of optimizing the allocation of spectrum given the dynamic nature of the industry and wireless technologies."

What about the second issue on the table – the proposal to prohibit the agency from imposing eligibility conditions on auction participants?

The Senators' letter expresses serious concern with this proposal too, on several grounds, including competition, a core FCC mission and indispensable driver of innovation and investment. They wrote: "This could have a deterring effect on fostering competition and maximizing auction proceeds to pay for a public safety network and deficit reduction."

I strongly agree with their concerns.

The group also urged the "[m]aintaining of the FCC's current range of tools for structuring a spectrum auction."

Spectrum is a vital public asset.

Spectrum planning and auction design is complex and technical work. I align myself with a long list of experts who agree with this point made by the group of bipartisan Senators: "We must suppress our desire to be overly prescriptive to derive some predetermined outcome and because of the ever-changing landscape allow the FCC to set the proper course, over the long-term, to maximize the full economic and social benefit that wireless spectrum offers."

Congress will make a decision on incentive auctions by March 1.

The costs of inaction – and the costs of incorrect action – are enormous.

At stake is U.S. leadership in mobile.

At stake is a key pillar of a powerful strategic plan to harness communications technology to drive our economy and enduring job creation.

In this flat, hyper-connected world, capital can flow anywhere and so can the job creation that comes with leadership in innovation and investment.

As I said, Tom Friedman asked an important question last week: Does our country have a plan to ensure the U.S. has a strategic bandwidth advantage that will enable the job engines of the future?

Getting incentive auctions done, and done right, is critical to answering that question affirmatively.

The opportunity is too great, the stakes too high, to get this wrong.

Let's work together to get this done, and done right for the American economy and the American people.