REMARKS OF FCC CHAIRMAN JULIUS GENACHOWSKI
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Thank you, Anne Bouverot and GSMA, for inviting me to speak. It's a pleasure to be at GSMA's Mobile Asia Congress.

As this conference makes clear, the world is going mobile. There are roughly four billion mobile subscribers worldwide with about six billion subscriptions. China alone added thirty million subscriptions in just the last quarter, and India added another twenty-one million. Global mobile penetration now tops 80%, and it recently passed 100% in the U.S.

And increasingly, when we talk about mobile, we're talking about mobile broadband.

Worldwide, the number of mobile broadband subscribers has increased 45% annually over the past four years. 30% of handsets sold in the most recent quarter were smartphones, and the majority of new phones being sold in North America and Western Europe are now smartphones. As a result, mobile broadband subscriptions are up to 1.2 billion worldwide.

In fact, there are twice as many mobile broadband as fixed broadband subscriptions, which is not surprising when you consider mobile broadband is often the only way people can get online in developing countries.

What's remarkable is that we're still in the early innings of the mobile revolution. There's still a tremendous upside. Less than 20% of the world's mobile subscribers have smartphones, so there's considerable room for more uptake. A study by Ericsson that came out this month projects the number of mobile broadband subscriptions will approach five billion by 2015.

And some recent developments are going to put the mobile revolution into overdrive.

Tablets are a game-changer, ushering in what people are calling the post-PC era. Apple shipped nearly forty million iPads in its first eighteen months. To put that growth into context, that's triple the number of iPhones sold in its first eighteen months.

4G is here, which will offer wireless speeds comparable to what we've been used to on wired networks. 150 carriers in sixty countries have 4G deployment commitments, and within five years, LTE will be available to around 35% of the world's population.

And the emergence of cloud computing is going to make our mobile devices more powerful than anyone would have imagined just a few years ago.

The opportunities of the mobile revolution are huge. With mobile broadband, children can replace fifty-pound backpacks with interactive digital textbooks that personalize lessons to their skill set. Mobile broadband can enable remote medical monitoring – wireless devices that can help diabetes patients track their glucose levels, or help heart disease patients monitor cardiovascular data.

Each of these areas – education and health care, as well as energy – has enormous potential to provide new broadband-fueled market opportunities. And as large as these can be, they can be part of an even larger economic opportunity.

In 2009, people downloaded 300 million mobile apps. Last year, that number increased more than sixteen times to five billion downloaded mobile apps. By 2015, the "apps economy" is projected to generate $38 billion in sales. That's a remarkable figure when you consider that in 2008, the first app store hadn't yet opened.

And mobile applications unleash tremendous social benefits. In India, more than 200 million farmers receive government subsidies via their mobile devices. We've seen in Japan, Haiti, and elsewhere how modern communications networks can save lives and speed relief.

In 2009, mobile online shopping brought in $1.4 billion. Last year, it jumped to nearly $4 billion. In 2011 alone, eBay and Amazon project $6 billion in mobile sales.

The opportunity to use mobile money for billions of unbanked people around the world is a game changer. And location-based services are another new and growing industry enabled by mobile broadband. According to McKinsey, location-based services could enable $600 billion in consumer surplus annually.

With the emergence of machine-to-machine wireless technology, pretty much everything can become connected – from appliances to vehicles to medical devices.

Qualcomm projects that by 2020, the Internet of Things will consist of fifty billion connected devices around the world, which will drive efficiencies and improved services in areas like energy, transportation, manufacturing, and health care.

Add to all this the jobs impact of 4G buildout. A new Deloitte study estimates that investment in 4G mobile broadband networks in the U.S. alone, which is already underway, will add up to $151 billion in GDP growth over the next four years, creating 771,000 new jobs.

The bottom line: mobile broadband is being adopted faster than any computing platform in history, and could surpass all prior platforms in its potential to drive economic growth and opportunity.

All of us are here to answer the same question: How do we seize the opportunities of mobile broadband?

First, we must seek to ensure that everyone has access to robust mobile broadband.

In the U.S., roughly eighteen million Americans live in areas where they simply can't access broadband at home, and millions of Americans live, work, and travel in areas without any mobile broadband coverage. Virtually every country has deployment challenges, and in many countries the challenges are dramatic. These challenges extend to both last-mile and middle-mile networks. Altogether, 3G is available to only about 45% of the world's population.

And somewhat ironically, although wireless presents new solutions for last-mile connectivity, it exacerbates middle-mile challenges, as much more backhaul is needed to accommodate growing mobile traffic.

To make sure mobile broadband is universally available, we need to close the infrastructure deployment gap.

The private sector, which owns and operates the vast majority of our global Internet infrastructure, will be indispensable to addressing many of these gaps and challenges, as well as making the massive investments required to deliver robust networks. There's also an important but limited role for government to play.

President Obama has provided important leadership – embracing broadband as key to innovation and economic growth, and setting ambitious goals for 4G wireless deployment.

Last year the FCC released our National Broadband Plan – a comprehensive, data-driven strategy to maximize broadband deployment, adoption, and use, and unleash the benefits of high-speed Internet – wired and wireless.

Since the Plan's release, we have been busy executing – actively putting the Plan's recommendations into action.

We recently took a major step on one of the Plan's biggest recommendations. The Commission unanimously approved a once-in-a-generation overhaul of our principal universal service program and our intercarrier compensation system. This action will transform legacy 20th century telephone programs into a 21st century broadband infrastructure program – the Connect America Fund – which reaffirms America's universal service commitment for the digital age.

Over the next decade, the Connect America Fund will use targeted, accountable public-private partnerships to help extend broadband infrastructure to the approximately eighteen million Americans who currently live in areas without access to high-speed Internet.

Reflecting the growing importance of mobile broadband, we established for the first time a Mobility Fund that will expand 4G mobile broadband to tens of thousands of road miles, where millions of people work, live, and travel, including dedicated support for Tribal areas.

And for the first time in the history of America's Universal Service Fund, we'll be using market-based mechanisms to distribute funding. The Mobility Fund will use a reverse auction, in which providers seeking to serve different areas of the country compete against one another other to cover the most unserved road miles at the lowest cost to the Fund.

The Commission has also made it a priority to remove barriers to broadband infrastructure deployment. The costs of obtaining permits and access to pole attachments and rights-of-way can amount to a significant portion of the cost of fiber-optic deployment. Last year, we adopted a shot clock to speed local review of tower and antenna applications.

Earlier this year, we streamlined the process and substantially reduced the cost of attaching wired and wireless equipment to utility poles. And we adopted an order in August of this year to remove barriers to use of spectrum for wireless backhaul, which will help accelerate the deployment of 4G networks across the country, particularly in rural areas.

This is the blood-and-guts work that is moving private investment from the sidelines to the streets, and enabling companies to put people to work – and to do so by building out our broadband infrastructure, which in turn drives more economic growth and job creation.

The next priority in seizing the opportunities of mobile broadband is ensuring that mobile broadband is ubiquitous and robust. To do that, we need to tend to not only our physical infrastructure, but also our invisible infrastructure – spectrum.

Demand for spectrum is rapidly outstripping supply, and that demand will only increase.

Smartphones now outsell PCs, and compared to old feature phones, they place twenty-four times the demand on spectrum. For tablets, it's more than 120 times as much.

We need to tackle the looming spectrum crunch by dramatically increasing the new spectrum available for mobile broadband, and the efficiency of its use.

In the United States, we have a mandate from President Obama to allocate 500 MHz of additional spectrum for mobile broadband by 2020.

To unleash more spectrum for mobile broadband, we have worked with our Congress to lay the groundwork for an innovative policy proposal – voluntary incentive auctions for spectrum.

Under this proposal, Congress would give the FCC the authority to run two-sided spectrum auctions. We would auction spectrum for flexible wireless broadband services, and the spectrum in the auction would be voluntarily contributed by current licensees like TV broadcasters or mobile satellite operators, who would in return receive a portion of the proceeds of the auction.

These auctions provide an incentive-based, market-driven path to move spectrum to its highest-valued use, bringing market forces to bear on spectrum licenses that have been shielded from competitive dynamics for decades. As spectrum exhaust becomes a larger issue worldwide, we anticipate that incentive auctions can become a key element of policymakers' toolkits in many countries.

We must also prioritize and set concrete global targets for the allocation of additional globally harmonized spectrum for mobile broadband.

Therefore, the upcoming ITU World Radiocommunication Conference should ensure that there is a conference agenda item for mobile broadband at WRC-15, and between these two world conferences the mobile industry should work with governments to find additional spectrum to alleviate the upcoming spectrum crunch. We believe this would best be achieved in a Joint Task Group at the ITU-R.

At the same time, we must have the foresight to remain committed to making more spectrum available on a global basis for unlicensed use. Unlicensed spectrum fosters the kind of experimentation that leads to vitally important mobile innovations such as WiFi, cordless phones, and Bluetooth.

In the U.S., we have released the largest amount of spectrum devoted to unlicensed use in twenty-five years. We expect this to lead to services like "Super WiFi" and to spur experimentation with new, innovative technologies and services.

In addition to unleashing spectrum and spurring deployment of mobile broadband infrastructure, we also need to ensure the free flow of data across borders.

Earlier I mentioned that the emergence of cloud computing creates enormous opportunities for mobile. The free flow of data across national borders is essential to unlock the great promise of both mobile computing and cloud computing, a nascent, global industry of around $68 billion. Imagine where this industry will be in just two years, much less five or ten.

I spent the past few days in Beijing, meeting with government officials and business leaders, and the future of the cloud and the importance of an Internet without borders were key topics of discussion. I emphasized the importance of increased market access, greater Internet freedom, and stronger intellectual property protections. I believe these are win-wins for both China and the U.S., promoting economic growth and innovation in both our countries.

We're at a key moment when it comes to the future of the mobile Internet.

Working together, we can harness the power of mobile broadband to promote economic growth, job creation and broad opportunity.

Working together, we can drive improvements in education, savings in health care costs, and greater energy efficiency.

Working together, we can make sure that mobile helps with disaster response and recovery all over the world, as we've seen in Japan and Haiti; and that mobile promotes freedom and opportunity around the globe, as we've seen so dramatically in the Middle East and North Africa.

Working together, we can unleash the full potential of mobile broadband and build a brighter future for billions of people around the world.

Thank you.