## Prepared Remarks of FCC Chairman Tom Wheeler GSMA Mobile World Congress February 24, 2014 – Barcelona, Spain

Thank you, Dr. Dugan, for that introduction and thank you GSMA for welcoming me and Commissioner Rosenworcel. I also want to acknowledge Vice President Neelie Kroes.

This is my first international trip since becoming FCC Chairman. One lesson I've learned so far is that no matter where I go or how far I travel, I can't get away from Randall Stephenson.

This is also my first time on this side of the podium at Mobile World Congress.

I've been privileged to be on the board of GSMA, LTD for the past half dozen or so years and have always attended this session.

Many of the leaders of this organization I'm proud to call friends. The work behind MWC is driven by John Hoffman. Anne Bouverot keeps GSMA reaching for new heights. And we should all pause to remember the father of MWC, this summit, and the man who made GSMA what it is today, Rob Conway who tragically passed away last month.

I've been in the mobile business since 1987 when I was part of a group that won and built a cellular license. That led to 12 years as CEO or CTIA, then almost a decade as an investor focusing on wireless, and now Chairman of the FCC.

When I took this job, I published an E-Book (available for free on Kindle) called "Net Effects." In that book, I tried to explain a regulatory philosophy rooted in the history of networks. That history comes down to two things: The networks that connect us are the force that defines us and we are living through history's fourth great network revolution. That fourth revolution is driven by the most powerful and pervasive platform in the history of the planet – the mobile device in the pocket or purse.

The first three network revolutions reshaped the human experience.

The 15<sup>th</sup> century printing press sparked the original information revolution to produce the scientific method, incite the reformation, and spread the Renaissance.

Four-hundred years later, the steam railroad became the first high-speed network and brought the original death of distance.

On the heels of the railroad, the telegraph became the first electronic network, producing not only instantaneous communications but also the telephone, radio, television, and ultimately the Internet.

Historically, the greatest period of network-driven economic and social change was the one-two punch of the railroad leaping great distances and the telegraph ending time as a factor in information distribution. The economic and social realities created by those realities defined the 19<sup>th</sup> and the 20<sup>th</sup> centuries.

The fourth Network Revolution that is being led by wirelessly pervasive processing power has not yet had an equivalent impact on humankind – but it clearly has the potential to do so. We are at the beginning of a new age of network connectivity, and I look forward to working with all of you to seize that opportunity.

The challenge we face as a society is how to build on the momentum of the fourth Network Revolution.

The specific challenge we face as regulators is how to harness the power of mobile to promote prosperity and opportunity.

This begins with removing unnecessary barriers to mobile infrastructure investment and buildout. A recent development in the U.S. shed light on why this matters. As many of you know, Google has begun building fiber broadband networks in three U.S. cities. Last week, Google made headlines when it announced that it was exploring 34 new cities for its gigabit networks. But in the blog post announcing this news, Google said that whether or not they decide to build wasn't dependent on who's willing to offer the biggest tax incentives; they said it will depend more on their ability to "access existing infrastructure – like utility poles" and "existing conduits … to place fiber."

I don't expect the public to get excited about utility poles and conduits anytime soon, but as Google shows, these types of issues make a big difference when it comes to network deployment – whether wired or wireless.

Recently, on incumbent network CEO raised the same issues with me. If we want broadband ubiquity, the ability to construct the infrastructure in a timely manner is essential.

In recent years, the FCC has eased access to utility poles and adopted rules to establish a shot clock to speed the approval process for erecting a new wireless antenna or putting a new antenna on an existing tower. Last fall, the FCC proposed to take additional actions to facilitate infrastructure deployment. We're reviewing the public comments now, and we will continue to explore ways to cut red tape and unleash private investment. Simply put, we can't have high-speed broadband without high-speed deployment.

A second area of focus is protecting and empowering consumers. Our consumer empowerment agenda has many elements.

One is promoting competition, as exemplified by our rules mandating data roaming among mobile broadband providers. We also want to empower consumers with tools to help them navigate the mobile marketplace. Last November, we released the FCC Speed Test App which allowed Google Android phone users to run test on their own smartphones to find out how fast their mobile network is where they work, live and travel. Such information also anonymously populates an FCC database to crowdsource network measurement. Today, I'm pleased to announce that the iPhone or iOS version of the FCC Speed Test App is now available for download, further extending this program.

Another way we are protecting mobile consumers is by preserving a free and open Internet. Last month a federal court affirmed the FCC's authority to regulate broadband Internet access services and upheld our transparency rule, but vacated our no-blocking and no-unreasonable-discrimination rules. Under our transparency rule, which remains in full force and effect, wired and wireless Internet access providers must continue to disclose their network management practices, performance characteristics and the terms and conditions of their broadband services.

Last week, I announced my intention to propose new rules to fulfill the goals contained in the no blocking and anti-discrimination rules that the Court sent back to us. In the meantime, major Internet service providers have responsibly indicated they will continue to honor the safeguards articulated in our previous open Internet order, thus providing continued protection for the open Internet until new rules can be put in place.

Obviously, one more major component of the FCC's mobile agenda is spectrum policy.

We are committed to bringing more spectrum capacity to market... and fast. President Obama has set a goal of freeing up 500 MHz of spectrum, and thanks to years of effort, the spectrum pipeline is reopening. We are about to finish our first spectrum auction since 2008 of 10 MHz in the H-Block. Two other major auctions will follow the first in fall 2014 and the world's first incentive auction, which is now planned for mid-2015.

The incentive auction will repurpose a large swath of spectrum from broadcast-only to more flexible uses, including mobile. It will bring together willing sellers of spectrum rights with willing buyers, through a two-sided auction. Technology makes it practicable. The marketplace makes it profitable. The FCC, through both its rules and auction design, will make it possible.

Let there be no mistake about the degree of difficulty of this undertaking. We are attempting something never done before. But as with our original spectrum auctions twenty years ago, the risks are well worth taking.

The Incentive Auction presents a two-part challenge of making the right fact-based policy decisions in an open and transparent manner and building user-friendly back-end systems and ensuring that they are exhaustively tested and ready to work from the start.

We know the world is watching, and we will get this right. While we're talking about the incentive auction it is also important to emphasize that the accompanying rebanding will include additional opportunities for unlicensed use. One of the FCC's great success stories was the creation of unlicensed uses in the 2.4 GHz band in the 1980s, which resulted in innovations like WiFi and Bluetooth. The rebanding of the broadcasting spectrum for wireless purposes will result in nationwide guard bands that the Commission proposed to make available for use by unlicensed devices.

Just as our mobile agenda is not limited to spectrum policy, our spectrum agenda is not limited to incentive auctions.

We have been working to free additional spectrum for unlicensed use in 5 GHz.

We also have an open proceeding on a new and innovative approach to licensing and spectrum access across 100 megahertz in the 3.5 GHz band. That rulemaking sets out a model for intensive sharing between new and incumbent users in a manner that will maximize efficiency and promote liquidity.

I recall sitting at a GSMA board meeting shortly after spectrum sharing had become a policy proposal in the U.S. The opposition to such a concept was loud and vociferous. I am glad that initial intemperate reaction has subsided. The fact of the matter is spectrum is finite, and we must wean ourselves of analog era spectrum if we are to realize the promise of the digital future.

Of course, identifying new "clean" spectrum will continue to be important, but we are living in a new era of sharing with respect to licensed spectrum uses.

Our rulemaking for the band known as AWS-3 represents an opportunity to free new spectrum for flexible use wireless service, including commercial wireless services, while facilitating a coordinated approach to sharing with incumbent federal users.

We will also need to find new ways to make use of new spectrum possibilities, including high-frequency spectrum that may become usable due to technological advances.

Efforts to use spectrum more efficiently will also play a key role.

But the bottom line is rooted in Mark Twain's observation about real estate – that they aren't making any more, and everyone will need to continue to think creatively to meet the world's spectrum needs.

Thank you.