Opening Statement of Chairman Greg Walden
Subcommittee on Communications and Technology hearing on
"The Race to 5G and its Potential to Revolutionize American Competitiveness"

November 16, 2017

Thank you, Madame Chairman. I want to welcome our witnesses to this hearing on fifth generation wireless technology, often called "5G," and its potential to revolutionize American competitiveness.

The Chairman of the Subcommittee is correct – we are in a global race to develop and deploy 5G networks. Let there be no mistake: the race to 5G is a sprint, not a marathon. Even as we speak, competitors in Europe, Asia, and elsewhere are working to steal the mantle when it comes to having the best, most robust, and fastest communications networks.

Mobile, cellular technology was developed in the United States first. We have seen it evolve from first generation networks that were only capable of voice service, to digital second-generation networks capable of voice and text, to third generation networks capable of voice, text, and basic Internet, to today's fourth generation LTE networks that unleashed true mobile broadband and video service. Approximately every 10 years American consumers have seen a generational leap in wireless connectivity and applications. Just as we were the first to deploy mobile technology, so we must be first to deploy 5G throughout the ecosystem of networks, services, and applications that constitute our communications architecture.

So, what is 5G? In short, 5G represents the next generational shift that will provide broadband speeds faster than existing wireless networks by at least an order of magnitude. It will do so by combining existing low- and mid-band spectrum with higher, millimeter-band frequencies previously thought to be unusable for mobile broadband. It is only through combining low-, mid-, and high-band spectrum that we can realize the full promise of 5G in urban, suburban, and rural areas.

It's been noted that 5G will enable enhanced mobile broadband, ultra-low-latency, and massive machine-to-machine communications. Examples of these benefits are in power generation and distribution through smart grid technology such as sensors on substations to report outages, as well as supply and demand readings on transmission lines that will allow dynamic pricing on smart home meters – potentially saving consumers hundreds of dollars annually on their power bills. We also anticipate increased efficiencies in the manufacturing sector through the application of 5G enabled sensors, controllers, and data analytics that allow for greater automation, predictive maintenance, and supply chain management.

One of the most prominent examples of 5G applications is in autonomous vehicles. Earlier this year, our committee, and then the full House, unanimously voted for the first self-driving car legislation ever considered by Congress – the SELF DRIVE Act. This bill is critical to the development and deployment of self-driving car technology, which has the potential to save tens of thousands of lives each year. But the regulatory certainty provided by the SELF DRIVE Act will depend on the availability of spectrum. If America is to win the race to 5G, then we must figure out how to make more spectrum available for commercial service in addition to the regulatory reforms and international harmonization necessary to making this technology a reality.

Lastly, and most importantly, I want to emphasize that all the rhetoric around the race to 5G will be for nothing if we do not update the Communications Act to allow the Federal Communications Commission (FCC) to deposit upfront payments from prospective spectrum auction bidders directly with the Treasury. Current law prevents the Commission from doing so. I want to applaud the Chairman of this Subcommittee for including provisions in the FCC Reauthorization bill to allow the Commission to do so. I also want to recognize the bipartisan work of Representatives Guthrie and Matsui in introducing stand-alone legislation to do the same thing. Let me be clear: absent a change in law, the FCC cannot hold any auction of consequence to bring about the 5G revolution. We must all work together on a bipartisan basis to change the law, so the Commission can again hold meaningful spectrum auctions. The inability to do so will mean the loss of billions in auction proceeds for deficit reduction.