## STATEMENT OF COMMISSIONER MIGNON L. CLYBURN

Re: Use of Spectrum Bands Above 24 GHz for Mobile Radio Services, GN Docket No. 14- 177; Establishing a More Flexible Framework to Facilitate Satellite Operations in the 27.5-28.35 GHz and 37.5-40 GHz Bands, IB Docket No. 15-256; Petition for Rulemaking of the Fixed Wireless Communications Coalition to Create Service Rules for the 42-43.5 GHz Band, RM-11664; Amendment of Parts 1, 22, 24, 27, 74, 80, 90, 95, and 101 to Establish Uniform License Renewal, Discontinuance of Operation, and Geographic Partitioning and Spectrum Disaggregation Rules and Policies for Certain Wireless Radio Services, WT Docket No. 10-112; Allocation and Designation of Spectrum for Fixed-Satellite Services in the 37.5-38.5 GHz, 40.5-41.5 GHz and 48.2-50.2 GHz Frequency Bands; Allocation of Spectrum to Upgrade Fixed and Mobile Allocations in the 40.5-42.5 GHz Frequency Band; Allocation of Spectrum in the 46.9-47.0 GHz Frequency Band for Wireless Services; and Allocation of Spectrum in the 37.0-38.0 GHz and 40.0-40.5 GHz for Government Operations, IB Docket No. 97-95

So I am about to ask a question that may seem odd coming from this side of the bench, particularly since this body stands minutes away from taking "a significant step towards securing the Nation's future in the next generational evolution of wireless technology": Just what is 5G?

Today's vote is both a monumental step, as well as a perfect example of why I am so excited about the direction we are headed when it comes to spectrum policy. Breaking away from the conventional model of exclusive, indefinite licenses; innovative sharing rules for bands, and in frequencies we never dreamed possible . . . all of this affirms just how serious we are about meeting the communications bandwidth needs of our citizens.

But I am willing to bet that your answer to the question "what is 5G?" would be different from the person sitting next to you, and the next person, and the next. Nonetheless, what we do know, and can all agree on, is that the next wireless evolution promises to fundamentally change the way we live, interact, and engage with our communities. Indeed, there is seemingly no limit on how what we refer to as 5G could impact our everyday existence.

A refrigerator that not only alerts you to a near empty egg carton, but automatically adds that item to a virtual shopping list, enabling a delivery to your door by week's end, without any action from you. Or a piece of equipment in a factory that automatically pings a repair person at headquarters about a potential malfunction well before the machine shuts down. Or remote surgery being performed in the Alaskan Bush by a preeminent surgeon thousands of miles away.

Some of our cities already have smart technologies, such as New York City's LinkNYC free public WiFi network, which I had the pleasure of seeing in May as part of my #ConnectingCommunities tour, or Boston's solar powered benches, that not only charge gadgets, but also monitor air quality and sound levels – and all of this will become even more prevalent in a 5G world.

But what is inspiring to many, and to me, are the possibilities we have yet to conceive . . . those truly extraordinary use cases that we are on the cusp of realizing. What an exciting new frontier, and today's *Order* provides a strong framework that promises to unleash more innovation, spur additional competition and incite boundless creativity. And if that were not enough, what is even more thrilling, is the fact that America is leading the way.

Each of us has worked diligently to craft a regulatory regime that carefully balances the needs of all stakeholders invested in the future of the 28 GHz, 37 GHz and 39 GHz bands. This *Order* also provides room for innovators to develop pioneering products in the 64-71 GHz unlicensed band, which opens up a whole new range of possibilities. And in the *Further Notice*, we identify 18 gigahertz of additional spectrum for 5G use cases, and seek comment on the use of bands above 95 GHz.

But in the midst of all this excitement and promise, as we collectively figure out just what 5G is, let us not forget that there are pockets in this nation, where people are still living in a 2G and 3G reality. They include the unserved and underserved who are just as anxious to reap the benefits of successful spectrum policies as you and me.

When we think about what the goals of our next generation networks should be, ubiquity and affordability have to be a part of the success matrix, for we must be sure that we are not just giving those who already have the most even more, while doubling down and widening the digital divide for those with none or not enough because of a lack of forethought when setting the standards and business cases for 5G. We need to be as creative, flexible and forward thinking on the community and opportunities inclusion fronts as we are on the technological innovations front.

There must be room for service offerings that benefit those in the urban high-rent district as well as those who are struggling on the rural prairies. We must think of ways to leverage both fixed and mobile 5G for the currently un-connected, and make a solid commercial case for doing so. America will only truly win the 5G race if all of our citizens benefit, and it is my sincere hope as we strive to ensure competitive opportunities that we deliver ubiquitous rewards to everyone.

I would like to thank Jon Wilkins, Julie Knapp, Mindel De La Torre and their staff at the Wireless Telecommunications Bureau, Office of Engineering and Technology, and International Bureau for their commendable work on this item, and a special thank you goes to Brian Regan and Jose Albuquerque. I am grateful for your tireless efforts on this item, and ever more excited to discover, along with you, all the cutting-edge innovations that await us in 2020 and beyond.