REMARKS OF ACTING CHAIRWOMAN JESSICA ROSENWORCEL TO THE 10th AMERICAS SPECTRUM MANAGEMENT CONFERENCE OCTOBER 12, 2021

Good morning! It's great to join you for the tenth Americas Spectrum Management Conference. That's a big milestone, especially because with wireless, there just seems to be something about the power of ten. Every ten years a new wireless technology changes everything—from first generation analog networks all the way up to today's fifth generation broadband networks. So ten is a big deal and a good time to think about what comes next.

Now this is my first time addressing this conference as Acting Chairwoman, and suffice it to say, we've been busy.

Since January, the Federal Communications Commission has mounted what I believe is an extraordinary response to a historic crisis. Thanks to our work, six million families enduring economic hardship and food insecurity during this pandemic are now connected to high-speed internet service. That means they can keep up with work, apply for jobs, seek out healthcare, and get the information they need to receive essential services in their communities. Thanks to our program to help end the homework gap, school-aged children have access to more than three million connected devices that will help them keep up with their schoolwork and develop the skills they need for success in the digital age. Plus we have healthcare centers nationwide that are receiving \$140 million in support to assist with efforts to expand telehealth. And last week we kicked off a mid-band spectrum auction that will help ensure that 5G networks reach everyone, everywhere in the country.

This is real change, for real people. We did not choose how this coronavirus crisis began, but I believe that we do have a choice when it comes to the legacy that this crisis leaves behind.

We need to use this moment to build a foundation for new growth and new opportunity in the post-pandemic world. For this foundation, we need to build a wireless economy that can create jobs, promote fair competition, and advance both prosperity and equity. And as part of this effort, I believe we need to do two things: reinvigorate the momentum toward 5G and pave the way for 6G and beyond.

So let me take each of these in turn.

Reinvigorating the Momentum Toward 5G.

It may be hard to believe, but 5G networks already are celebrating their second anniversary in the United States. And we've come a long way in a short time. But there's more work to do, more focus to bring, more deployment to come. Because in the United States, the reality remains that most of the country has yet to experience everything that 5G has to offer them. The out-there innovations it can deliver are still a ways off because so many of them are not about connectivity delivered via phones. Because 5G is an essential part of unlocking technologies that we've been talking about and slowly developing for years: the internet of

things, telemedicine, virtual and augmented reality, smart transportation networks, smart energy grids, I could go on. And this, in turn, will drive the future of industry and expand the potential for machine learning and the possibilities of artificial intelligence.

At the FCC, we are focusing on five principles for delivering 5G that is fast, secure, resilient, and, most importantly, available everywhere in the country.

First and foremost, we are freeing up more spectrum—and especially mid-band spectrum—for 5G. Last week we kicked off an auction of 100 megahertz of prime mid-band spectrum in the 3.45-3.55 GHz band. This auction is important for more reasons than the mid-band spectrum it will make available. For starters, it will demonstrate the future viability of coordination zones that require private carriers to depend on other federal actors for information or access. Plus, it will be a bellwether for where we take our spectrum efforts from here after the C-band auction finished as the most expensive auction in our history.

On that front, I should note that we've granted more than 5,600 licenses in the C-band, and we are on track to transition these airwaves to flexible use starting this year. We've also granted more than 270 licenses in the 2.5 GHz band to address Tribal connectivity needs, and we are tackling the complexities involved in auctioning the remaining spectrum in this band. We look forward to holding that auction after the 3.45 GHz band auction is completed.

Moving up the spectrum chart, we are updating our approach to the 4.9 GHz band so that public safety has a path to 5G too, while also exploring options that would improve coordination, spur innovation, drive down costs, and facilitate other uses. As part of this effort, we are seeking comment on innovative new ideas like priority and preemption for public safety users, new kinds of excess capacity leasing, and shared access models like the Citizens Broadband Radio Service.

Finally, we are making sure there is a pipeline that continues to channel spectrum for new uses. On that front, I'd note that we are also working with our federal partners to look at the next tranche of mid-band spectrum in the 3.1-3.45 GHz band.

Second, switching from the airwaves to the ground, we are expanding the reach of fiber facilities. Our wireless networks will only be as good as the wired connections that help make them work. So, it's terrific to see that building more broadband is at the heart of the legislative discussions we are having about infrastructure in this county.

Third, on the equipment side, we are diversifying what goes into our 5G networks. This will increase security, drive down costs, and help build a bigger market for secure 5G equipment. Open and interoperable equipment is the future, and we are taking action to ensure that open RAN technology is being built here and now.

Fourth, we are not stopping at equipment diversity—we are also building security and resiliency in our supply chains. We're taking direct action to keep untrusted equipment and vendors out of our networks. With the help of a \$1.9 billion appropriation from Congress, we are launching a program at the end of this month to replace this equipment to the extent that it is present in our domestic networks today. And we are making adjustments to the FCC's

equipment authorization process to help prevent insecure equipment from ever reaching our shores and to encourage better security practices across the board.

Fifth, on the global stage, we are working with our friends and allies on setting the technology standards of the future. I believe that working with our allies and multilateral institutions in international standards development processes can multiply our strength across the globe. Greater participation in these efforts means more innovation at international scale and broader support for the democratizing possibilities of access to modern communications. So, I have more than doubled the resources we have at the agency working on these issues.

But more importantly, on this effort, I believe we have a one-of-a-kind opportunity to advance our region's leadership. My fellow American Doreen Bogdan-Martin is running to be the next Secretary General of the International Telecommunication Union. She currently serves as Director of the ITU's Development Bureau. Under her leadership, this Bureau has transformed into an organization that listens to its Members, engages with traditional partners, and builds new alliances. That is exactly what we need right now, and I believe she has much more to offer the ITU, including as Secretary General.

Paving the Way for 6G and Beyond

If you think I'm too early on this one, think again. Much like in the early days of 5G, the scrum for 6G is already intensifying.

South Korea, for example, aims to deploy 6G networks in 2028 and has announced a program to develop the core standards and technologies within the next five years. Research programs in Finland and Japan have signed agreements to collaborate on developing 6G technologies. China released its 14th Five-Year Plan for economic development in March. The blueprint makes clear that, even before the ink is dry on many 5G contracts, it is gearing up for next steps in 6G. Many other countries, including in Europe, have launched projects, programs, and alliances to shape this next, next generation of wireless technology.

Of course, you could say, on good authority, that no one knows yet what 6G will entail. You'd be right. But that's not the point—no matter how fun it might be to guess. Nor is the point to blindly throw ourselves into an undefined race to this technology standard.

Rather, the point is that if we've learned anything from our experience in rolling out 5G, it's that wireless policy is really important for our economic and national security. Yet in many ways, when it came to those early days in 5G, there were signals that needed our attention, from the need for mid-band spectrum to the vulnerabilities of supply chains to the changing dynamics of global standards development.

So let's learn from what came before. Let's acknowledge here and now that it is time to start thinking seriously about how we can better position ourselves for success with 6G. After all, in the age of ever-faster technical development, maintaining our leadership in high-priority emerging technology requires careful planning and execution.

So how do we do that? Well, I propose we take a page from the 2019 National Defense Authorization Bill, which set up a "Project Solarium" on cybersecurity. If you're not familiar with it, the Cyber Solarium was a bipartisan commission set up to evaluate competing strategies for protecting America's vital interests in cyberspace. When explaining its purpose, Senator Angus King, one of its sponsors, acknowledged that "in order to determine where we go next in cybersecurity, we must be clear-eyed about what is not working." And so the Solarium was established to come up with a strategy on how best to organize the government, increase coordination between agencies, and leverage the best talent to tackle the problem of cybersecurity. The effort resulted in more than 80 recommendations on how to overhaul the nation's approach to cybersecurity. Twenty-five of them have been signed into law, and dozens more are on track to be implemented. Thanks to the Solarium, America's cyber defenses are much more coordinated and pulling in the same direction toward clear, consistent goals.

I think what's good for cybersecurity is good for 6G. What we need now is new thinking, broader consensus, and more early focus than we had for 5G. We need a process for prioritizing and executing on spectrum objectives and for developing strategies to align the ends, ways, and means for 6G.

In other words, we need a 6G Solarium that brings together government, business, the non-profit sector, and the rest of civil society and the public to chart a new course. That way, we can pursue policymaking that works and ensure our continued wireless leadership far into the future.

Let me offer an early contribution to this cause. In July, I announced that the FCC would re-establish its Technological Advisory Council. This time, however, we would charge the council with looking beyond 5G and conceptualizing 6G—to help set the stage for our leadership. By refocusing the TAC in this way, the FCC will be able to stay on top of new developments and ensure that the nation can turn the latest scientific research into viable communications technologies that will help power our future.

I know you've already got enough 5G issues to work through these next two days. But in the wireless industry it's always a good idea to keep an eye on the issues over the horizon. So let's keep pushing to realize the full potential of 5G. While we're doing that, let's take the lessons of the past few years to put us on a smart course for the next generation of wireless technology. If we do that, the next ten years of mobile innovation can be even greater than what we saw in the past—and that would be incredible.

Thank you.