

**REMARKS OF FCC CHAIRMAN AJIT PAI
TO THE AMERICAN COUNCIL OF TECHNOLOGY-INDUSTRY ADVISORY COUNCIL
(ACT-IAC)**

WEBINAR ON “5G: THE FUTURE OF DIGITAL CONNECTIVITY AND COMMERCE”

JULY 9, 2020

Good afternoon. It’s great to be with you.

I know that I’m here to talk about 5G. But considering that ACT-IAC is dedicated to improving the efficiency and effectiveness of government, I feel compelled to speak briefly about the FCC and its operations during the coronavirus pandemic.

ACT-IAC focuses on two strategies for improving the effectiveness of government: fostering public-private collaboration and harnessing the power of technology. And at the FCC, we’re practicing what you preach.

Looking at the landscape in early March, we quickly decided that, with the need for social distancing, our top priority would be to make sure that as many Americans as possible would have access to communications services during this difficult time and that no American would have their Internet or voice services cut off because of disruptions caused by the COVID-19 pandemic.

To that end, we engaged broadband and telephone service providers and called on these companies to take what we called our Keep Americans Connected Pledge. The Pledge had three core commitments. First, no consumer would lose service due to an inability to pay a bill because of disruptions associated with the pandemic. Second, no one would be charged late fees because of the pandemic. And third, Wi-Fi hotspots would be opened up to anyone who needed them.

The response was overwhelmingly positive. More than 750 broadband and phone providers signed the pledge, including all of the nation’s largest service providers and many of the smallest.

The initial pledge was set to expire after 60 days—in mid-May. But we recognized that consumers’ needs would persist beyond that deadline, so we asked companies to extend their commitment to June 30. And even more companies, nearly 800, did so.

By working collaboratively with industry to advance the public interest, we were able to make progress much more quickly than had we tried to pursue command-and-control regulation. For example, within 48 hours of proposing the Pledge, all of the nation’s largest broadband providers had signed on. Call me biased, but this sounds to me like a good candidate for an ACT-IAC case study on public-private partnerships.

As for harnessing the power of technology to improve government operations, the FCC was able to shift its entire operations online and transition to mandatory telework without skipping a beat—even with minimal notice. In fact, we did much more than just keep the trains running. We launched multiple initiatives to address the challenges posed by COVID-19. To share just one example, back in March, the Commission worked with Congress to secure funding for our \$200 million COVID-19 Telehealth Program, which has aided hospitals, health care providers, and patients in some of the hardest-hit areas of the country. We got Congressional approval of this program, adopted rules to stand it up quickly, and, just yesterday, we awarded the last funding available under this program. In the end, we approved 539 applications from facilities in 47 states, plus Guam and the District of Columbia. The overwhelming share of the credit for the Commission’s effectiveness over the past four months goes to our outstanding staff, but the agency’s IT infrastructure also played an indispensable and underappreciated role. And for that, I’d like to give a special shout-out to our IT staff.

Shifting to 5G, I trust that you've already heard plenty today about the ways it will be critical to our economy, quality of life, and global competitiveness. So I'm going focus on what we're doing at the FCC to realize the potential of 5G.

Yet again, I think the Commission's work is closely aligned with ACT-IAC's mission. That's because many of the policy challenges surrounding 5G involve balancing competing interests and trying to come up with mutually beneficial solutions.

At the FCC, we call our strategy for U.S. leadership in next-generation wireless technology the 5G FAST plan. It consists of three central components: freeing up more spectrum for the commercial marketplace, promoting wireless infrastructure deployment, and modernizing our regulations to promote more fiber deployment for wireless backhaul.

Each of these elements requires engagement with external partners, especially our work to repurpose spectrum for 5G.

Earlier this year, for example, the FCC successfully completed the auction of airwaves in the upper 37 GHz, 39 GHz, and 47 GHz bands. By making available 3,400 megahertz in three different bands, this was the largest spectrum auction in our nation's history. But before holding it, we first needed to resolve how to deal with incumbent licensees. So we established a new form of incentive auction that simultaneously set prices for new licensees and made offers to incumbents to vacate the band. That kind of innovative thinking was big win for American leadership in 5G and for market-based solutions to sharing spectrum.

Or consider our approach to sharing in the 3.5 GHz band. For years, federal users occupied the bottom 100 megahertz of the band. And even though they made little use of it across much of the country, commercial use was extremely limited, and this valuable spectrum largely lay fallow.

So in 2015, the FCC voted to create a dynamic, three-tiered, hierarchical framework to coordinate shared federal and non-federal use of the 3.5 GHz band. Incumbents, which include federal users, comprised the highest tier and would receive protection from all other users, followed by Priority Access Licenses, or PALs, on the second tier, and General Authorized Access, or GAA, on the third tier.

This new spectrum paradigm reflects the input of not only our government counterparts at the National Telecommunications Information Administration and Department of Defense, but also broadband providers of all types, large and small, fixed and mobile. And operators of Spectrum Access Systems and Environmental Sensing Capabilities—through a voluntary industry standards body, WinnForum—developed the technology to ensure that commercial users wouldn't interfere with incumbents. Thanks to these efforts, the FCC was able to move forward with commercial deployments in this band in September 2019.

Unfortunately, the rules that the Commission adopted in 2015 didn't do enough to encourage investment and innovation with respect to the Priority Access Licenses. So I asked my colleague, Commissioner Mike O'Rielly, to lead a re-examination of the rules governing the Priority Access License tier. We determined that the earlier decision to license PALs by census tracts was ill-suited for 5G deployment, so we replaced that plan with county-based licensing. And to encourage more investment in the band, we also extended the license terms from 3 years to 10 years and created an expectancy of license renewal. These reforms have made 3.5 GHz licenses much more appealing for 5G operations and will encourage the rapid deployment of next-generation wireless networks in the band.

Two weeks from today, the Commission will begin the auction of 3.5 GHz Priority Access Licenses, making available 70 megahertz of valuable mid-band spectrum for 5G. Over 270 applicants have qualified to bid, and I look forward to seeing the results.

Mid-band spectrum, such as the 3.5 GHz band, is particularly appealing for 5G because it combines good geographic coverage with good capacity. And we have systematically identified

additional mid-band airwaves that were being underused and have set plans to put these airwaves to work for the American people.

In July 2019, the Commission adopted flexible new rules for the 2.5 GHz band. This is our nation's single largest band of contiguous spectrum below 3 GHz, and it's well-suited for 5G deployment. But it's dramatically underused today—existing licenses cover only about one-half of the country, and most of the spectrum is vacant west of the Mississippi River. We opened a Rural Tribal Priority Window so that Tribal Nations in rural America have early access to 2.5 GHz spectrum. This is a critical opportunity for rural Tribes, which are too often on the wrong side of the digital divide, to get the spectrum they need to deploy 5G networks. And we intend to auction any remaining spectrum after this window closes. In the end, this spectrum will yield about 200 megahertz for 5G and other wireless services.

The Commission's biggest move to free up mid-band spectrum for 5G is in the 500-megahertz swath of spectrum from 3.7 GHz to 4.2 GHz—what we call the C-band. This spectrum is mostly used by fixed-satellite companies to beam content to video and audio broadcasters, cable systems, and other content distributors. However, with advances in technology, these companies can now provide the same services using considerably less spectrum.

That's why the FCC recently voted to clear the lower 280 megahertz of the C-band and make this spectrum available for 5G through a public auction that will begin on December 8. All eligible space station operators currently using this spectrum have committed to an accelerated relocation to the upper 200 megahertz of this band—meaning that the lower 280 megahertz will become available for 5G two to four years earlier than otherwise would have been the case (and the remaining 20 megahertz will be used as a guard band).

In addition to pushing more spectrum out in the marketplace, we continue to knock down regulatory hurdles and promote infrastructure build-out, spurring record-breaking capital investments in essential infrastructure, including fiber and small cells. Indeed, hundreds of thousands of small cells will need to be deployed each year to meet growing mobile data demands.

On top of all these efforts to promote the development and deployment of ultra-fast, high-capacity 5G networks, the Commission is committed to making sure those networks are secure. When 5G is embedded in almost every aspect of our society and economy—from businesses to homes, hospitals to transportation networks, manufacturing to the power grid—that means securing our networks will become much more important and much more difficult. An important part of network security is the integrity of the communications supply chain—that is, the process by which products and services are manufactured, distributed, sold, and ultimately integrated into our communications networks.

For years, U.S. government officials have expressed concern about the national security threats posed by certain foreign communications equipment providers. Hidden “backdoors” to our networks in routers, switches, and other network equipment can allow hostile foreign powers to inject viruses and other malware, steal Americans' private data, spy on U.S. companies, and more.

The equipment at the heart of 5G networks currently comes from just a few global suppliers. And the largest right now is the Chinese company Huawei. This has raised concerns, given the company's close ties to the Chinese military and Communist Party and the fact that Chinese law requires all companies subject to its jurisdiction to comply with requests from the country's intelligence services, and bars disclosure of these requests to any third parties.

To counter this risk, the FCC has prohibited the use of money from our Universal Service Fund to purchase or obtain any equipment or services produced or provided by companies posing a national security threat, including Huawei. We have also initiated a process to catalog, remove, and replace unsecure equipment from USF-funded communications networks. We've denied authorization to China Mobile, which is owned by the Chinese government, to enter the U.S. market. And we've issued show-

cause orders to other Chinese state-owned companies that received such authorizations many years ago, asking them to explain why those authorizations shouldn't be revoked. Finally, Congress recently passed and the President signed into law the Secure and Trusted Communications Networks Act to further strengthen the integrity of communications networks and the communications supply chain. On July 16, the FCC will vote to start the process of implementing that law.

To finish where I began, I'm optimistic about the future of 5G in our country because we are implementing a plan that embraces one of the strategies recommended by ACT-IAC for improving the effectiveness of government: fostering public-private collaboration. The United States has the world's best innovators and entrepreneurs. They helped us lead the world in the development and deployment of 4G wireless technology. And I believe that by making more spectrum available for commercial use, removing obstacles to the deployment of wireless infrastructure, and modernizing regulations to promote fiber deployment, the FCC is empowering American businesses to build on our 4G success, establish American leadership in 5G, and create a wireless future that will benefit us all.

Thank you again for the opportunity to be with you. I look forward to your questions.