

**REMARKS OF FCC CHAIRMAN AJIT PAI
TO THE BROADBAND INDIA FORUM WEBINAR CELEBRATING WORLD WI-FI DAY**

JUNE 19, 2020

Hello, everybody! It's great to be with you today. I'm especially honored to be part of such an impressive lineup of speakers. I saw that Digital Communications Commission Chairman and Telecommunications Secretary Shri Anshu Prakash was scheduled to appear. And later today, you'll be hearing from Chairman Ram Sharma of the Telecom Regulatory Authority of India. I have the deepest admiration for my Indian counterparts, and I am proud to call them friends. When I say I long for the days that I was with my friends in person, I truly mean it. That's because the last time we were together was one of the last times I can remember things feeling normal before the coronavirus lockdown.

Back in February, I was honored to represent my country as part of a U.S. delegation to India that was headed by the President of the United States. I kicked off my trip with a visit to Telecom Regulatory Authority of India, where Chairman Sharma graciously hosted a town hall with the agency's talented officers. Later that day, I met with Secretary Prakash for an in-depth discussion on spectrum. Throw in a state banquet at Rashtrapati Bhavan, seated across the table from A.R. Rahman, and it was quite the trip. (The only thing missing was one of my favorite drinks—Thums Up.)

Fast forward two weeks, and I was hunkering down in my home for the foreseeable future. Going into a months-long quarantine is a challenge under any circumstances. Doing so almost immediately after one of the most spectacular trips of your life can really leave a person longing for the way things were.

But even though I can't be with you in person, I'm truly grateful for this opportunity to meet with you remotely.

And, of course, we aren't gathering for any ordinary reason. We've come together to celebrate World Wi-Fi Day, which is tomorrow. You could make the case that every day has been Wi-Fi Day since the pandemic took hold. I'm guessing almost all of us are using Wi-Fi right now to be a part of this video conference. Our children have relied on Wi-Fi for their schooling. And I'm sure I'm not the only one here who has used Wi-Fi to stream unhealthy amounts of movies and television shows over the past three months.

At its core, Wi-Fi's most important application might simply be keeping us connected to our families and friends, as well as the outside world. That's been true during the pandemic. It was true before. And it will be true once this emergency is over, which will hopefully be soon. That's why I think it's appropriate that the focus of this event is on the power of Wi-Fi to help bridge the digital divide—to connect the unconnected.

You've picked the perfect day to have this discussion. And no, I'm not talking about the fact that World Wi-Fi Day is tomorrow. I'm talking about the fact that it's the FCC's birthday. That's right. Eighty-six years ago today, on June 19, President Franklin Roosevelt signed into law the Communications Act of 1934, establishing the FCC. I bring up when the FCC was created in part because of why it was created. This law explicitly directs the Commission to make wire and radio communication "available . . . to all the people of the United States."

That's a worthy and enduring commitment, when you think about it. In 1934, the U.S. government thought it was so important that every American have access to the telephone network that it created a new agency dedicated to that purpose. Now think about the countless ways that we rely on high-speed broadband connectivity today. Telemedicine, precision agriculture, distance learning, so many other applications—and, yes, the occasional voice call.

The Internet has become the indispensable platform for innovation, job creation, and free expression. So we have an economic and moral imperative to make this connectivity available to all the people we serve.

Promoting the availability of Wi-Fi and advances in this technology are key pieces of any strategy to provide connectivity for all. Even before anyone had heard of COVID-19, Wi-Fi already carried more than half of the Internet's traffic, and offloading mobile data traffic to Wi-Fi was vital to keeping our cellular networks from being overwhelmed. In a very real sense, Wi-Fi is the fabric that binds together all our digital devices. And Wi-Fi will be even more important in the years to come. By one estimate, the economic value created by Wi-Fi in the United States is projected to double by 2023—reaching nearly \$1 trillion.

So what is the FCC doing to harness the power of Wi-Fi to bridge the digital divide?

In the immediate term, we've expanded access to Wi-Fi as part of the Commission's response to the coronavirus. Recognizing that social distancing was going to force huge segments of our economy and much of our daily lives to move online, the FCC decided that our top priority during the pandemic would be making sure that as many Americans as possible would have access to communications services and that no American would have their Internet and voice services cut off due the disruptions caused by the pandemic.

And so, in mid-March, we called on broadband and telephone service providers to take what we call our Keep Americans Connected Pledge. The pledge, which we extended until June 30, has three core commitments. First, no consumer would lose service due to an inability to pay a bill because of the disruptions associated with the pandemic. Second, no one would be charged late fees because of the pandemic. Third, and notably for today's event, Wi-Fi hotspots would be opened up to anyone who needed them.

More than 780 broadband and phone providers signed the pledge, including all of the nation's largest service providers and many of the smallest. And these Wi-Fi hotspots have been a valuable lifeline for countless Americans who don't have broadband service at home.

Looking a bit further into the future, the most important action the Commission has taken recently to promote the development and deployment of Wi-Fi services is our plan for the 6 GHz band.

With our growing reliance on Wi-Fi, we are going to need faster, stronger Wi-Fi networks. The good news is that Wi-Fi 6, the next generation of Wi-Fi, has already started rolling out. Wi-Fi 6 will be over two-and-a-half times faster than the current standard, and it will offer better performance for connected devices. But in order to fully take advantage of the benefits of Wi-Fi 6, we need to make more mid-band spectrum available for unlicensed use.

And that's exactly what the FCC did on April 23. The Commission unanimously approved my proposal to make the entire 6 GHz band available for unlicensed use. By doing this, we are creating a massive 1,200 megahertz testbed for innovators and innovation. This is a big deal; we are effectively increasing the amount of mid-band spectrum available for Wi-Fi by almost a factor of five.

All 1,200 megahertz of this spectrum will be available for indoor-only low power use without the added complexity of database coordination. We are also making the two largest sub-band segments, totaling 850 megahertz, available for use indoors and outdoors at a higher standard power. We'll use an automated frequency coordination system to prevent interference with incumbent services.

Going big means allowing unprecedented 160- and 320-megahertz channels for Wi-Fi. This will dramatically ease spectrum capacity as a constraint on innovation and open the door to new high-bandwidth applications.

Ultimately, I expect that 6 GHz unlicensed devices will become a part of consumers' everyday lives. And I predict the rules we adopted in April will play a major role in the growth of the Internet of

Things, connecting appliances, machines, meters, wearables, smart televisions, and other consumer electronics, as well as industrial sensors for manufacturing.

As one industry leader put it, “[T]his 6 GHz spectrum boost will launch the Wi-Fi industry into a new growth trajectory . . . and . . . it will bring low-cost Wi-Fi (and unlicensed) connectivity to places where it has never been.”

At the same time, our approach will ensure that incumbents in the 6 GHz band are protected from harmful interference. The point-to-point microwave services that already use this band are critical to the operations of utilities, public safety, and wireless backhaul. And we are ensuring that those incumbents are protected by requiring the use of automated frequency coordination systems, which will only allow new standard-power operations in areas that will not cause interference to incumbent services, and by placing conservative power limits on low-power indoor operations.

The last point I would emphasize regarding the 6 GHz band is that we aren’t done yet. In addition to our Order, the Commission voted to explore possibilities for very-low-power devices in the 6 GHz band. Very-low-power devices could enable a new and innovative generation of personal area network technologies with low latency, high capacity, and all-day battery life. These very-low-power devices could include accessibility technology for Americans with disabilities, virtual reality gaming, augmented reality glasses, in-vehicle systems, and other emerging technologies. We don’t really know what this would lead to. And that’s kind of the point with unlicensed innovation. We want to set the building blocks in place so that engineers and technologists can figure out what it could mean for consumers.

During my visit to India in February, I had a good discussion with Secretary Prakash about our 6 GHz efforts, so I know that India is interested in exploring the possibilities of unlicensed use in this band. I’m eager to work with all of you and other leaders around the world to harness the benefits of the 6 GHz band for Wi-Fi, and then working together toward global harmonization of this spectrum.

Now, while our 6 GHz initiative may be the Commission’s most significant push to expand and improve Wi-Fi, it’s hardly our only one.

Sticking in the same neighborhood on the spectrum chart, the Commission is taking a fresh look at the 5.9 GHz band. Back in 1999, the FCC allocated 75 megahertz of spectrum in the 5.9 GHz band for a service called Dedicated Short-Range Communications. Commonly known as DSRC, this technology was intended to enable ubiquitous transportation and vehicle-related communications.

But the performance has not lived up to the promise. As a result, most of this spectrum is not being used in the United States right now. After 20 years of seeing these prime airwaves largely lie fallow, I decided that the time had come for the FCC to re-think the 5.9 GHz band. So last December, the Commission launched a proceeding to end the uncertainty around the 5.9 GHz band and set a path for the deployment of new services.

Specifically, we’ve proposed to make available the lower 45 megahertz of the band for unlicensed uses like Wi-Fi, dedicating the upper 20 megahertz of spectrum for a new vehicle communications technology called C-V2X, and asking whether the remaining 10 megahertz should be allocated to C-V2X or DSRC.

Thanks to its neighbor, this spectrum in the lower 45 megahertz of the 5.9 GHz band would punch above its weight. The adjacent 5.725-to-5.850 GHz band is currently available for unlicensed operations in the U.S., making this 45 megahertz sub-band ideally suited for unlicensed use. Having more contiguous spectrum here is essential for the larger channels needed to support innovative use cases.

And we’ve recently seen tantalizing glimpses of the punch this spectrum could pack for consumers—specifically, how the lower 45 megahertz of this band can be used to solve problems right now, like improving rural broadband access. In response to the COVID-19 pandemic, the Commission

has granted Special Temporary Authority to over 150 broadband providers to use the lower 45 megahertz of the 5.9 GHz band. We've allowed them to use this spectrum to meet the connectivity challenges posed by this national emergency, especially in rural areas.

These actions have delivered meaningful results. Multiple fixed wireless providers that are being allowed to use the 5.9 GHz band report that it has enabled faster speeds, increased coverage, and expanded network bandwidth. Collectively, they show the promise of the 5.9 GHz band for unlicensed use. And they reinforce my belief that the best course for the United States is to dedicate the lower 45 megahertz of the band exclusively for unlicensed operations like Wi-Fi.

Wrapping up, the United States and India clearly have common interests when it comes to spectrum policy. I look forward to building on today's dialogue and exchanging ideas on how we can work together to expand Wi-Fi and bridge the digital divide. Even more important, we share common values as the world's oldest and largest democracies. And naturally, given my background, India will always have a special place in my heart. Thank you for this opportunity to help further the important relationship between our two great nations.