

**REMARKS OF FCC CHAIRMAN AJIT PAI
AT THE WI-FI ALLIANCE VIRTUAL MEMBERSHIP MEETING**

JUNE 2, 2020

Hey, everybody! It's good to be with you. And I'm happy to see you on GoToMeeting. That might seem like a weird thing to point out. But after almost three months of quarantine, using meeting software different than Zoom counts as big excitement.

Thank you all for welcoming me. Thank you to Edgar Figueroa for your leadership. Most important, thank you for your advocacy for faster, better Wi-Fi in general and for your contributions to the Commission's new 6 GHz rules in particular. You helped to build the intellectual and technical foundation for these rules. For that, I am deeply grateful. Finally, thank you for recognizing me with your Wi-Fi Champion Award. I'll admit I'm a bit anxious about delivering my remarks *before* Edgar's awards presentation. A small part of me worries that when I'm done talking, I'll learn that the Wi-Fi Champion Award is actually going to the movie "Moonlight."

When I was told I was receiving the Wi-Fi Champion Award, I figured it was for one of two things. One, you wanted to recognize the Commission's work on the 6 GHz band. Or, two, you appreciate my insistence on always spelling Wi-Fi with a hyphen. For the purposes of my remarks, I'm going to assume this recognition is for the former.

Some might point out that it's been nearly six weeks since the Commission adopted its *6 GHz Order*, and ask: Isn't it a bit late to still be taking a victory lap? To them, I would say: It's a really big victory.

The headline, as you know well by now, is that we're making the entire 6 GHz band—a massive 1,200 megahertz testbed for innovators and innovation—available for unlicensed use. By doing this, 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 would be available for indoor-only low power use without the added complexity of database coordination. We also make the two largest sub-band segments, totaling 850 megahertz, available for use indoors and outdoors at a higher standard power. For outdoor use, we will 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.

And we're doing all of this while protecting from harmful interference some important incumbent services in the 6 GHz band, including the operations of utilities, public safety, broadcasters, and wireless backhaul. Our automated frequency coordination systems will *only* allow new standard-power operations in areas that will not cause harmful interference to incumbents.

Why is this such a big deal? It's partly because Wi-Fi has become such a big deal. Wi-Fi carries more than half of the Internet's overall traffic, and offloading mobile data traffic to Wi-Fi is vital to keeping our cellular networks from being overwhelmed. In fact, Cisco projects that 59% of mobile data traffic will be offloaded to Wi-Fi by 2022, which is not that far away.

The coronavirus pandemic has really amplified how indispensable Wi-Fi has become in our lives. Our homes have turned into our offices and our classrooms, testing the limits of our Wi-Fi networks like never before. If you have a family like mine, you've got two parents who may be on a connected device, two kids on a connected device, and maybe even some Wi-Fi connected appliances. That's a lot of data being transmitted over the unlicensed airwaves.

Making 1,200 megahertz available for unlicensed use is a once-in-a-generation step to meet this growing demand for Wi-Fi capacity. Think for a moment about what this will mean for innovation. The good news is that the next generation of Wi-Fi, commonly called Wi-Fi 6, 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. And I expect entrepreneurs to use this band to push the boundaries of what consumers think is possible with applications and services.

Speaking of consumers, another reason to celebrate is that they will actually see the benefits in the not-too-distant future. This is not a case in which a year-one decision may yield results in a decade. The consumer-facing pop for Wi-Fi 6 is going to be relatively short term—perhaps even in time for the upcoming holiday season.

By taking the extra time to work with all key stakeholders, we can say to everybody involved that this is a true win-win. By assuring incumbents that we would protect them from harmful interference outdoors, we didn't have to require automated frequency coordination systems indoors. This will mean a huge savings in terms of time. Companies won't have to create a more complicated system indoors. It also saves a lot in terms of cost from the end-user perspective. There were some estimates that requiring that kind of system could add as much as \$100 to the cost of some of the routers. Both in terms of time and costs, consumers are going to see the benefits of this sooner rather than later.

The last point I would emphasize is that we aren't done yet. In addition to the *Order*, the Commission voted in April 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, isn't it? We want to set the building blocks in place so that engineers and technologists out there can figure out what it could mean for American consumers.

We look forward to acting quickly to make 6 GHz available for these very-low-power uses. That will require a strong factual foundation. So, for those of you who have helped us get to this point on 6 GHz, the work isn't done. Please participate in this next phase of our 6 GHz proceeding and give us the facts we need to move even further to facilitate unlicensed use of the band.

Thanks again for having me. Thanks to all of you for helping us get to this point. Let's keep working together to power the Wi-Fi future forward!