

STATEMENT OF COMMISSIONER JESSICA ROSENWORCEL

Re: *Unlicensed Use of the 6 GHz Band, ET Docket No. 18-295; Expanding Flexible Use in Mid-Band Spectrum Between 3.7 and 24 GHz, GN Docket No. 17-183.*

You may not know it, but your life runs on unlicensed spectrum. It might have been the laptop you popped open this morning to check your e-mail. Or it could have been the baby monitor you used to keep tabs on your little one last night. Maybe it was the fitness tracker you counted on to count your steps or the music you streamed through your phone to power you through a jog. Or it could have been the traffic application you checked before hitting the road for your daily commute after closing your garage door remotely with the press of a button. No matter who you are or where you live, the odds are good that you have benefited from unlicensed airwaves and Wi-Fi.

These conveniences are not the gifts of the spectrum gods. They are the byproduct of wireless policy choices that were made at the Federal Communications Commission more than three decades ago. A renegade band of engineers at this agency led the charge. They challenged the status quo by suggesting that spectrum that was not licensed to individuals could be useful for all. Instead of having the FCC dictate what could be done in certain bands, the agency would leave it up to the public. So the FCC opened a handful of underused frequencies—airwaves that were widely viewed as “garbage bands”—to anyone who followed some basic technical rules.

This was radical. It was edgy stuff. It was a bet that access to some airwaves by public rule rather than private license would lead to a whole new world of wireless uses.

It was a good bet. Because in time a standard was developed known as 802.11—and this is where Wi-Fi was born. Today, Wi-Fi adds more than \$500 billion to the United States economy every year—and \$2 trillion globally. It has democratized internet access, helped carriers manage their networks, and fostered all sorts of wild innovation. In fact, it’s the perfect sandbox for experimentation, because access does not require contract or permission.

As exciting as this is, it means the airwaves used by Wi-Fi are getting crowded. Already our current Wi-Fi bands are congested because they are used by more than 9 billion devices. By the end of the decade, we will see as many as 50 billion new devices connecting to our networks through the internet of things. Add this up. We’re going to need a significant swath of new unlicensed spectrum to keep up with demand.

Now is the time to do something about it. Earlier this year, Congress directed the FCC to increase the spectrum resources we devote to Wi-Fi. That opportunity could come from the 6 GHz band—the subject of our rulemaking today. It’s an ideal place to explore Wi-Fi expansion because it’s close to our existing Wi-Fi bands. It also offers an opportunity to introduce wider channels—channels that will be able to take advantage of the new 802.11ax or Wi-Fi 6 standard and deliver speeds even faster than 1 gigabit per second. In other words, this is how we develop next-generation Gigabit Wi-Fi.

I appreciate that my colleagues have made changes to this rulemaking at my request. In particular, I am grateful this effort now contemplates more opportunities for low-power, indoor Wi-Fi devices throughout the 6 GHz band. This will promote economies of scale and facilitate use of the same standards with the nearby 5 GHz band.

This last point is important. Because the demands on existing unlicensed airwaves are so great, we need an effort beyond the 6 GHz band. We need a fresh look at Wi-Fi opportunities in the 5.9 GHz band. This is overdue. It was back in 1999 when this agency set aside 75 megahertz of spectrum in this band for Dedicated Short Range Communications, or DSRC, which was designed to let cars talk to each other in real time to help reduce accidents. But in the nearly two decades since the FCC allocated this

spectrum, that has not happened. Testing on DSRC continues, but only a few thousand vehicles have DSRC on board out of the more than 260 million cars on the road. That's not surprising when you consider that autonomous vehicles have already moved on to newer technologies.

That's why the FCC committed to completing tests by January 15, 2017 to address the safe operation of Wi-Fi devices in this band. But nearly two years later this agency is silent. No results have been released. No decisions have been made. And in the intervening time the market has mostly moved past the test plan we developed. Given these facts, it is time for the FCC to take a fresh look at this band and update our efforts.

Wi-Fi is a powerful force in the economy. It can foster innovation without license. It can offer a jolt to the internet of things. It can make our lives more connected and more convenient every day. It's time for more of it—and the 6 GHz band and 5.9 GHz band are the right place to start. Let's get to it.