

**STATEMENT OF
COMMISSIONER JESSICA ROSENWORCEL**

Re: *Amendment of the Commission's Rules with Regard to Commercial Operations in the 3550-3650 MHz Band, GN Docket 12-354*

Today we are taking a peek into the future of wireless topology, technology, and policy. It's an exciting thing, and how we got here makes it all the more interesting.

Back in 2010, the National Telecommunications and Information Administration (NTIA) first identified the 3.5 GHz band as one of the spectrum bands most suitable for shared use between government and commercial interests. At the time, NTIA's proposal did not receive rave reviews. The need to protect existing users in the band, including Department of Defense radars and commercial fixed satellite services, meant significant geographic limitations. As a result, the ability to make use of this spectrum was limited in some of the most populous areas of the country. Moreover, because the band is above 3 GHz, it held little appeal for mobile broadband. After all, signals at high frequency like this can fade too quickly.

As a result, for some time, the outlook for commercial opportunity in the 3.5 GHz band was not good. But now, based on recommendations from the President's Council of Advisors on Science and Technology, rather than discarding this band as junk, we are staring at new opportunities for small cells. This is a big deal.

So with this proceeding, we are exploring the future of wireless network topology. Small cells can expand connectivity and facilitate more efficient use of existing frequencies. They can cover areas that cannot be reached using macro cell services and at the same time do not present the same interference risk. In fact, the very physical characteristic that was once considered a weakness of this band—its short propagation distance—can be turned into its strength. How cool is that?

We are also exploring the future of wireless system technology. To protect existing users, access to the 3.5 GHz band will require new database systems that facilitate dynamic spectrum access. These essential databases will protect the critical services that are already using this band.

Finally, we are looking at the future of wireless policy. The demand for our airwaves is going up and the supply of unencumbered spectrum is going down. We need creative spectrum policy responses. This approach is just that. It multiplies possibilities in the 3.5 GHz band while protecting existing users. This is interesting, creative, merits our attention—and has my full support.

Thank you to the Office of Engineering and Technology, the Wireless Telecommunications Bureau, and the International Bureau for their work on this important rulemaking.