

**STATEMENT OF
CHAIRWOMAN JESSICA ROSENWORCEL**

Re: *Promoting Efficient Use of Spectrum through Improved Receiver Interference Immunity Performance*, ET Docket No. 22-137, Notice of Inquiry (April 21, 2022)

Wireless spectrum is a scarce resource. But when we put this limited resource to creative use, we can expand communications for all, foster innovation, and support our economic and national security. Our history is full of examples of us doing just that. It's why in the United States our spectrum policies have long led the wireless world. After all, it was nearly three decades ago that the Federal Communications Commission took the academic ideas of Ronald Coase and ushered in a whole new era of spectrum auctions. We also pioneered the use of unlicensed spectrum—the airwaves we now know and use every day as Wi-Fi. More recently, we blazed a trail for two-sided incentive auctions and dynamic spectrum sharing. With each of these efforts, we took spectrum scarcity and turned it into abundance.

We need to do it again.

Today, more of our civic and commercial life relies on wireless technologies than ever before. Commercial spectrum bands are increasingly crowded. This congestion is making it harder to make room in our skies for new technologies and new services. But we have to find a way, because no one wants opportunity and innovation to grind to a halt. Moreover, staying in the same place and doing the same things we have done before is not what led us to lead in the past. It won't work in the future, either. We need to do things differently—on two fronts.

First, we need smarter coordination. Earlier this year I announced a new Spectrum Coordination Initiative with Assistant Secretary Alan Davidson at the National Telecommunications and Information Administration. This initiative involves more high-level meetings on spectrum issues, updating the twenty-year-old Memorandum of Understanding between the agencies, developing a national spectrum strategy, recommitting to scientific integrity and evidence-based policymaking, and revamping technical collaboration. I am proud to say we have already made progress in a short time.

Second, we need smarter policies. To put a finer point on it, we need policies that promote more efficient use of this scarce resource. Call it an abundance agenda.

An abundance agenda needs a target, and so we are starting with today's inquiry into wireless receiver standards. Here's why—most discussions of spectrum efficiency are a one-way effort. They focus almost exclusively on transmitters. To avoid harmful interference, we typically have rules about how and when transmitters can operate. But wireless communications systems involve transmitters *and* receivers. It's a two-way proposition. Both are vital. Both matter. So we need to rethink our approach to spectrum policy and move beyond just transmitters and consider receivers, too. That's because receivers that are not sufficiently resilient can make it more difficult to introduce additional services in the same or adjacent airwaves. They can diminish the spectral environment and shut out new uses before they even begin.

There is too little in our existing spectrum policies that recognizes this truth. There is also too little that incentivizes users or manufacturers to invest in better quality receivers. But as we expand the use of our airwaves and wrestle with different uses in adjacent spectrum, we need to give consideration to the role of reception technology.

That's where today's inquiry comes in. We survey the field. We ask about earlier studies of this issue by industry, academia, the NTIA, and the FCC's own technical and legal experts, including the work of our Technological Advisory Council. We ask about different approaches—voluntary industry-led efforts, incentive systems, high-level principles, and policy statements. We explore harm claim

thresholds. We ask about the 2013 Presidential Memorandum on Wireless Innovation that encouraged the development of a program of performance criteria and ratings and the consideration of spectrum efficiency in federal procurements—think of it as purchasing policy at scale. We also ask about a rules-based approach and about our legal authority to clarify expectations about future receiver performance. And we seek comment on the challenges implementing these policies might entail and what impact they might have on receiver innovation and cost.

I look forward to the record that develops. I look forward to once again turning spectrum scarcity into abundance. I look forward to making progress.

I want to thank Commissioner Simington, who expressed interest in doing more to address receiver quality. He dug in deep, reviewed all the literature, and today's effort is informed by his work and enthusiasm for this subject. I also want to thank the staff who worked on this effort, including Bahman Badipour, David Duarte, Pat Forster, Michael Ha, Syed Hasan, Ira Keltz, Paul Murray, Nick Oros, Bob Pavlak, Siobahn Philemon, Jamison Prime, Ron Repasi, and Tom Struble of the Office of Engineering and Technology; Kenneth Baker, Linda Chang, Lloyd Coward, Thomas Derenge, Kamran Etemad, Jessica Greffenius, Kari Hicks, Tim Maguire, Madelaine Maior, Charles Mathias, Susan Mort, Roger Noel, Matthew Pearl, Paul Powell, Kambiz Rahnavardy, Blaise Scinto, Joel Taubenblatt, Jennifer Tomchin, and Janet Young of the Wireless Telecommunications Bureau; Rachel Kazan, Evan Kwerel, Paul Lafontaine, Kate Mataves, Chuck Needy, and Emily Talaga of the Office of Economics and Analytics; Jennifer Gilsenan, Dante Ibarra, Wayne Leighton, Kathy O'Brien, and Jim Schlitching of the International Bureau; Jeremy Marcus and Ashley Tyson of the Enforcement Bureau; and Deborah Broderson, Doug Klein, David Horowitz, and Bill Richardson of the Office of General Counsel.