

**STATEMENT OF
CHAIRMAN AJIT PAI**

Re: *Unlicensed White Space Device Operations in the Television Bands*, ET Docket No. 20-36.

My top priority as FCC Chairman has been closing the digital divide. A critical part of our work on that front has been expanding the deployment of high-speed broadband in rural America. By modernizing our Universal Service Fund programs, reducing unnecessary regulatory burdens, making more spectrum available for commercial use, and reducing the cost of deploying broadband infrastructure, since January 2017, we've substantially reduced the number of rural Americans without broadband access. But we still have more work to do. And with broadband now more important than ever as a result of the pandemic, we must use every tool at our disposal to connect unserved Americans.

Today, we adopt rules that will expand the availability of wireless broadband connectivity through the use of TV white space devices—one such tool.

The TV white space spectrum—which includes unoccupied channels in the broadcast television bands—has several attributes that make it attractive for delivering wireless broadband service to rural areas. The signals propagate well over long distances, varying terrain, and even into and within buildings. The Commission first authorized unlicensed white space operations in 2008 and has expanded white space opportunities on several occasions since then, each time taking care not to interfere with broadcast television station operations. For example, in 2019, we modified our antenna height rules to allow for improved broadband coverage in rural areas.

Today, thanks in no small part to the collaborative work of key industry stakeholders such as Microsoft and the National Association of Broadcasters, we now adopt additional changes to the operating and technical rules for white space devices that will expand their ability to deliver wireless services in many rural and underserved areas.

We allow fixed white space devices in less congested areas to operate at higher power and increased height above average terrain. We create a new class of geo-fenced, mobile white space devices that may operate at higher power levels. And we reform our rules to allow for the deployment of narrowband IoT white space devices. These rules will permit operation in smaller, 100-kilohertz channels at the same maximum power level currently permitted for fixed devices.

At the same time, however, we take the critical steps necessary to ensure that these reforms don't end up causing harmful interference to broadcast television stations—which, after all, are the primary users of the band. For example, we increase the minimum required separation distances between white space devices operating at higher power or height above average terrain and protected services operating in the TV bands. And we adopt requirements for mobile white space devices to re-check their geographic coordinates at least once every 60 seconds and to cease operation if they travel closer than 1.6 kilometers to the edge of the geo-fenced area or are outside the boundary of the area.

In short, we ably thread the needle, protecting the ability of broadcast television stations to serve their communities and helping bring digital opportunity to more rural Americans and close the digital divide. Not bad for a day's work—especially after a dozen years.

For all the help on this matter, I'd like to thank: From the Office of Engineering and Technology: Chrysanthos Chrysanthou, Martin Doczkat, David Duarte, Ira Keltz, Paul Murray, Siobahn Philemon, Jamison Prime, Ron Repasi, Tom Struble, Hugh Van Tuyl, and Sean Yun; from the Wireless Telecommunications Bureau: Chris Andes, Steve Buenzow, Melissa Conway, Lloyd Coward, Joel Taubenblatt, and Jennifer Tomchin; from the Enforcement Bureau: Daniela Arregui, Ricardo Durham, Shannon Lipp, David Marks, Neal McNeil, Janet Moran, and Ron Ramage; from the Office of General

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