

WTB Presentation for January 2021 Agenda Meeting

Wireless Telecommunications Bureau Presentation to Commissioners January 2021 Open Meeting Donald Stockdale, Bureau Chief

Good morning Mr. Chairman and Commissioners.

I'm proud today to briefly summarize some of the Wireless Telecommunications Bureau's key accomplishments over the last four years.

I must start, however, by thanking the hardworking Bureau staff and by acknowledging the contributions to our work by all of the other Bureaus and Offices, particularly the Office of Engineering and Technology, the Office of Economics and Analytics, the Office of General Counsel, and the International Bureau. We are grateful for their input and collegiality.

Slide 2: Making Spectrum Available

Four years ago, 5G was little more than a buzzword to most consumers. But as of today, one U.S. carrier reports deployment of 5G service to areas where over 80% of our nation's population lives, and all nationwide providers as well as U.S. Cellular are rapidly expanding their 5G deployments.

5G requires a diversity of spectrum to support a wide variety of applications. So over the past four years, the Commission has made significant strides in pushing more spectrum across the entire frequency range into the marketplace, one of the core prongs of Chairman Pai's 5G FAST Plan.

In low band spectrum, the Bureau supported the work of the Incentive Auction Task Force in transitioning the 600 MHz band from broadcast television to flexible use, including 5G. We also promoted more efficient use of low band spectrum in the 800 and 900 MHz bands.

At the high end, the Commission has made available through three auctions nearly 5 gigahertz of 5G spectrum in the 24, 28, 37, 39, and 47 GHz bands. This is more spectrum than had been used for terrestrial mobile broadband by all wireless service providers in the United States combined.

The Commission also has made more than 500 megahertz of mid-band spectrum available for 5G deployments across the 2.5, 3.5, and 3.7-4.2 GHz bands. For example, in the 3.5 GHz band, the Wireless Bureau and the Office of Engineering and Technology authorized first-of-their-kind automated frequency coordinators to allow for full commercial deployment in this 150 megahertz. The Commission also revised the rules for the Priority Access Licenses in this band to promote 5G deployment, which led to last summer's successful 3.5 GHz auction. We also continue to take critical steps toward new spectrum access opportunities, such as our recent work on the 3.45 GHz band.

Slide 3: Making the 3.7-4.2 GHz Band Available

One of the Commission's most important efforts to make more spectrum available for 5G occurred in the C-band, which involved repurposing part of the 3.7-4.2 GHz band from satellite to terrestrial use. This was an unprecedented challenge, as it marked the first attempt by the Commission to repurpose satellite spectrum jointly controlled by several satellite operators. By overcoming a number of obstacles, the

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Commission made a large amount of valuable mid-band spectrum—specifically, 280 megahertz—available for 5G use. At the same time, the Commission protected the continuity of satellite services by relocating incumbent operators to the upper part of the band, thereby preserving uninterrupted video services for Americans during and after the transition. And thanks to OEA’s Auction Division, the ongoing auction of this band has generated gross proceeds of more than \$80 billion – by far the FCC’s most lucrative spectrum auction ever.

Slide 4: Removing Barriers to Infrastructure Deployment

The Wireless Bureau has also advanced the Commission’s initiatives to remove regulatory barriers to wireless infrastructure deployment, including through actions that:

- Streamlined the process for state, local, and Tribal review of wireless siting applications, including small wireless facilities;
- Limited state, local, and tribal fees for such reviews; and
- Simplified the FCC’s historic preservation and environmental review processes.

As a result of the Commission’s infrastructure initiatives, particularly significant streamlining of federal, state, and local review in 2018, the wireless industry built more new cell sites in 2019 than in the previous three years combined. Indeed, according to data from CTIA, industry has deployed ten times as many new cell sites over the past four years as in the four years before that.

Slide 5: Closing the Digital Divide

Wireless connectivity is essential to closing the digital divide, particularly in rural communities, and the Wireless Bureau has advanced this key Commission priority in several ways.

For example, the Commission transformed the 2.5 GHz band in 2019 by increasing flexibility for existing licensees and by creating new opportunities for rural Tribal Nations and other entities to access the band. The Bureau, working with the Office of Native Affairs and Policy, conducted extensive outreach to all 574 federally recognized Tribes. We received over 400 Tribal applications, and to date, the Bureau has granted 182 licenses to Tribal entities across the nation, enabling connectivity solutions in unserved and underserved rural Tribal areas.

I’m especially proud of the work Bureau staff has done to ensure that Americans have access to critical wireless and broadband services during the COVID-19 pandemic. During these challenging months, the Bureau staff has acted swiftly to address COVID-related requests, including:

- Granting more than 270 emergency STA requests to wireless providers, enabling access to additional spectrum to support telehealth, distance learning, and telework;
- Issuing emergency authorizations for over 300 critical infrastructure projects; and
- Reviewing and approving requests for rule waivers and extensions of deadlines necessitated by the pandemic.

The Wireless Bureau also joined with Bureaus and Offices across the agency to standardize and improve our broadband mapping through the Digital Opportunity Data Collection. This effort should facilitate future solutions targeted at deployment gaps.

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The Bureau also contributed to other Commission initiatives addressing the digital divide, such as approving the T-Mobile-Sprint merger, which included enforceable conditions requiring deployment of 5G network coverage to 99% of all Americans within six years.

Slide 6: Protecting Consumers, the Public, and the Nation

As part of Commission-wide efforts to protect consumers and the public in general, the Wireless Bureau's initiatives also included:

- Ensuring that Americans are safe on the ground and in the air through deployment of Positive Train Control technology and modernization of the Aviation Radio Service;
- Promoting assistive technologies for tens of millions of Americans with hearing loss by updating our hearing aid compatibility rules; and
- Assisting the Chairman in promoting open-source, virtual radio access networks to spur American innovation in secure 5G networks.

Slide 7: Modernizing FCC Systems and Licensing

In addition to these broad-based policy matters, the Bureau, working with Office of Managing Director, advanced the Commission's plan to modernize IT systems, including initiating a new, multi-year project to transition to a modern, configurable, and secure Universal Licensing System.

The Bureau also is implementing the Commission's move to "E-licensing," which will eliminate unnecessary paper licensing processes. In addition, the Bureau made important enhancements to a number of its IT systems, from providing interactive mapping tools for Rural Tribal Priority Window participants to upgrading the Commission's Tower Construction Notification System and E-106 systems.

At the same time, the Bureau has maintained its daily focus on efficiently processing incoming licensing applications – disposing of, on average, more than 400,000 license filings each year.

Slide 8: Closing slide

In conclusion, I want to thank the entire Wireless Bureau staff for their extraordinary commitment to public service. None of these accomplishments would have been possible without their hard work, professionalism, and willingness to go the extra mile.

Thank you, Chairman Pai and Commissioners.