

Patrick Welsh  
Assistant Vice President  
Federal Regulatory Affairs



March 24, 2015

**Ex Parte**

Ms. Marlene H. Dortch  
Secretary  
Federal Communications Commission  
445 12<sup>th</sup> Street, SW  
Washington, DC 20554

**Re: Amendment of the Commission's Rules with Regard to Commercial Operations in the 3550-3650 MHz Band, GN Docket No. 12-354**

Dear Ms. Dortch:

On March 20, 2015, Sanyogita Shamsunder, Max Solondz, Naseem Khan, Chris Oatway, and Patrick Welsh of Verizon spoke by telephone with John Leibovitz, Chris Helzer, and Kamran Etemad of the Wireless Telecommunications Bureau regarding the above-referenced proceeding.

During the call, we described Verizon's interest in using the 3550-3700 MHz band (the "3.5 GHz band") as a Priority Access License ("PAL") licensee and as a General Authorized Access ("GAA") user, as well as the need for flexibility in developing a robust ecosystem under the proposed spectrum-sharing regime.

Our discussion focused on a variety of issues. *First*, we expressed support for the Federal Communications Commission's (the "Commission" or "FCC") proposal to require all Citizens Broadband Radio Service Devices ("CBRDs") to be tunable across the entire 3.5 GHz band. In addition, we stressed the need for Spectrum Access System ("SAS") interfaces to be standardized and non-proprietary to allow channel allocation and management. We noted that Verizon is a member of the Wireless Innovation Forum ("WinnForum") and is actively participating in the WinnForum's multi-stakeholder Spectrum Sharing Committee, which was set up, in part, to establish SAS interface standards.

*Second*, Verizon urged the Commission to refrain from specifying the spectrum-sensing solution for determining whether an incumbent system occupies any given channel. The FCC should allow for both Dedicated Listening Device ("DLD") networks and carrier-based network sensing—or some combination of the two—so long as the sensing solution can be certified to identify and protect incumbent operations.

*Third*, Verizon endorsed the Commission's long-standing policy of adopting technology-agnostic rules with minimal technical and operational requirements. We encouraged the FCC to maintain this policy for the 3.5 GHz band and reject calls to proscribe air interfaces or use cases. We also reiterated our full support for a band plan based on Time Division Duplexing ("TDD"). While Verizon plans to deploy equipment and devices capable of bidirectional operation in the 3.5 GHz band, the Commission should avoid any statutory mandate that would limit how the spectrum is used. Instead, the Commission should make clear that both bidirectional and unidirectional services are allowed to operate in the band.

*Fourth*, Verizon urged the Commission to define the basic functional requirements of a SAS as a registry of authorized users and open channels that synchronize and share this information with other SAS providers. Setting minimal requirements and allowing SAS operators to differentiate services and offerings will enable SAS functionality to evolve over time and accommodate a variety of needs and business models. In addition, the Commission should not preclude PAL licensees from becoming a SAS operator, provided they comply with the basic functional requirements.

*Fifth*, Verizon expressed support for a "use-it-or-share-it" approach for accessing spectrum in the 3.5 GHz band. Because of the propagation characteristics of this spectrum and the limitations for commercial use to low-power, small cells on a secondary or tertiary basis, the Commission should make unused PAL spectrum available for GAA use. Specifically, if a PAL licensee has not both deployed services and registered its use with a SAS, that spectrum should be made available for GAA use. Once a PAL licensee deploys services on this spectrum, however, all GAA operations must cease in that geographic area when the PAL licensee registers those services with a SAS.

This letter is being filed pursuant to Section 1.1206 of the Commission's Rules. Should you have any questions, please contact the undersigned.

Sincerely,

A handwritten signature in blue ink, appearing to read "John Leibovitz", is written over a light blue circular stamp.

cc: (via email)  
John Leibovitz  
Chris Helzer  
Kamran Etemad