May 7, 2014

Ms. Marlene Dortch  
Secretary  
Federal Communications Commission  
445 12th Street, S.W.  
Washington, D.C. 20554

Re: GN Docket No. 12-268 (Expanding the Economic and Innovation Opportunities of Spectrum Through Incentive Auctions)

Dear Ms. Dortch:

The Dynamic Spectrum Alliance1 supports the Commission’s efforts to address consumers’ growing use of wireless connections to access voice, video, and data services by making more radio spectrum, across a range of frequencies, available on a licensed and unlicensed basis. As the Dynamic Spectrum Alliance and many others in this docket have explained, spectrum policy that balances licensed and unlicensed approaches will maximize innovation and investment and deliver higher quality, more ubiquitous, and lower-cost wireless bandwidth to consumers.2 It is critical, therefore, that when allocating available spectrum at the end of the broadcast incentive process, the Commission meaningfully advance both exclusive-use licensed access and non-exclusive, open, unlicensed access. Congress made clear in the spectrum provisions of the Middle Class Tax Relief and Job Creation Act (the “Spectrum Act”) that it intended such balancing.3

The Dynamic Spectrum Alliance agrees with the Wi-Fi Alliance that the minimum allocation needed to support the unlicensed broadband services contemplated by Congress is an aggregate of 24 MHz of usable unlicensed spectrum nationwide below 700 MHz, which may be supplemented in some locations by conventional TV white space access to unassigned broadcast frequencies. The spectrum for the four nationwide 6 MHz channels could come from the following sources: (1) The guard band(s) needed to separate broadcast transmissions from mobile broadband reception; (2) The duplex gap between the bands to be licensed for mobile wireless use; (3) Channel 37 in areas where unlicensed devices can coexist with medical telemetry and radio astronomy devices; and (4) Any channels currently reserved for wireless microphones when licensed users are not making use of them. On a market-specific basis, unlicensed devices should be permitted to continue using unassigned channels in the repacked

1 A list of the Dynamic Spectrum Alliance’s members is located at http://www.dynamicspectrumalliance.org/members.html.
2 See, e.g., Letter from Paul Garnett, the Dynamic Spectrum Alliance, to Marlene Dortch, the Federal Communications Commission, GN Docket No. 12-268 (filed March 17, 2014).
UHF spectrum under the FCC’s TV white spaces rules.\(^4\) The Dynamic Spectrum Alliance opposes expanded eligibility for licensed Part 74 wireless microphones or permitting licensed wireless microphones to reserve the 600 MHz guard band or duplex gap for their own exclusive use.

To ensure that guard bands and duplex gaps are usable for unlicensed devices on a non-interfering basis, the Commission should apply current TVWS in-band power and out-of-band emission rules for personal/portable devices. Likewise, the duplex gap between uplink and downlink licensed operations must be 11 or 12 MHz at an absolute bare minimum to create one usable 6 MHz unlicensed channel and ensure that licensed devices are protected from harmful interference. The guard band between uplink licensed operations and broadcast television should be 10 or 11 MHz at a minimum to accommodate a usable unlicensed channel in that gap. These recommendations are consistent with the Spectrum Act’s “technically reasonable” standard, which empowers the Commission to determine the appropriate amount of spectrum needed to prevent harmful interference between licensed services outside the guard bands. The record before the Commission reflects that both a duplex gap of 11 to 12 MHz (or more) and a guard band of 10 to 11 MHz (or more) are warranted based solely on cost-effective avoidance of LTE-to-LTE and LTE/broadcast interference.

The Dynamic Spectrum Alliance prefers a 600 MHz band plan that limits market variability and instead provides access to uniform, nationwide spectrum for unlicensed and licensed uses. Regardless of the band plan that the Commission ultimately adopts, the Commission should impose “use it or share it” obligations on 600 MHz licensee, enabling unlicensed spectrum access in geographic areas where the licensee has yet to build out a network or has ceased operations. The Commission should also make available for unlicensed TVWS use any unassigned spectrum remaining after the auction of the LTE uplink and downlink channels. By allowing unlicensed use in areas where spectrum remains unauctioned or where new licensees have yet to deploy, the Commission will ensure that otherwise fallow spectrum is being put to valuable use.

The Dynamic Spectrum Alliance is eager to work with the Commission to ensure the most efficient and effective use of spectrum across a range of complementary frequencies. The Dynamic Spectrum Alliance therefore urges the Commission to ensure that there is at least the equivalent of 24 MHz of usable unlicensed spectrum nationwide below 698 MHz, supplemented by conventional TV white space access. Should you have any questions about this submission, please do hesitate to contact the undersigned.

Sincerely,

H Nwana, Executive Director
The Dynamic Spectrum Alliance

\(^4\) 47 C.F.R. Part 15, Subpart H.