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June 1, 2018

## VIA ELECTRONIC FILING

Marlene H. Dortch, Secretary Federal Communications Commission 445 Twelfth Street, S.W. Washington, D.C. 20554

Re: GN Docket No. 17-183

Ex Parte Letter

Dear Ms. Dortch:

The Enterprise Wireless Alliance ("EWA") is compelled to add its voice to those of the many parties that have expressed grave concerns about including the 6 GHz microwave bands in the Commission's relentless quest to identify spectrum that might be used to support 5G operations. Entities and organizations representing first responders, utilities, railroads, carriers and numerous other wireless licensees have detailed the myriad applications supported in these mission-critical, highly congested bands. These microwave networks are essential to the day-to-day life we enjoy in this country and must not be disrupted to satisfy a seemingly insatiable desire for more 5G spectrum. On behalf of its many business enterprises, including critical infrastructure, and commercial dispatch members, EWA urges the FCC not to proceed with any band sharing proposal unless and until it has empirical evidence that unlicensed U-NII-type usage can be controlled sufficiently to avoid causing destructive interference.

EWA appreciates and supports efforts to make intensive use of all spectrum. It agrees that the silo-focused regulatory approach, whereby distinct categories of users and uses have their own dedicated allocations, may not be practical or necessary in all instances. Technological advances are creating the opportunity for increased shared use of bands. But theoretical sharing solutions must prove out in the real world before they are unleashed in bands such as 6 GHz that are heavily populated by systems with very limited interference tolerance.<sup>2</sup>

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<sup>&</sup>lt;sup>1</sup> See, e.g., Comments of Association of American Railroads; Association of Public-Safety Communications Officials-International, Inc.; Utilities Telecom Council/Edison Electric Institute; Fixed Wireless Communications Coalition; Verizon; T-Mobile USA, Inc.; AT&T Services, Inc.; and United States Cellular Corporation ("USCC").

<sup>&</sup>lt;sup>2</sup> Several parties have described the cascading effect of interference to a single link in what are primarily multipath networks.

USCC has made the eminently sensible suggestion that the FCC refrain from action at least until it has had an opportunity to assess the impact of the waiver issued to Higher Ground LLC ("Higher Ground"), allowing it to deploy up to 50,000 unlicensed devices in the 6 GHz band, devices whose interference potential is to be managed via a remotely and automatically controlled database lookup system.<sup>3</sup> This process is conceptually similar to the Spectrum Access System ("SAS") management concept on which the FCC increasingly proposes to rely when introducing dynamic sharing among different system types and technologies in a band.<sup>4</sup> EWA and other parties raised serious questions about Higher Ground's ability to ensure non-interference even from this limited number of wireless devices that, as described by the company, are expected to operate primarily in more rural areas. Since the Commission nonetheless granted the waiver request, it should at least evaluate how it is working in the real world before introducing an unlimited number of unlicensed devices into this same band.

EWA agrees that spectrum management through SAS-like approaches has promise and must be explored. It hopes these spectrum management systems prove as effective as the Commission expects, but it is very risky spectrum policy to rely exclusively on an automated spectrum access controlling mechanism that is still evolving with potential responsibilities and liabilities unknown and interference mitigation capabilities undetermined. In fact, these systems have not yet been validated in any meaningful way in an allocation like 6 GHz, where spectrum sharing will be challenging – and perhaps not possible. As stated by Verizon:

The burden of demonstrating that unlicensed services will not interfere with current or future incumbent use of the 6 GHz band must rest solely on the unlicensed industry, be assessed in an open and transparent process, and permit the full participation of incumbents.<sup>5</sup>

The FCC's focus on accommodating the data-centric desires of consumers cannot be allowed to override more essential public interest considerations. Consumers may want to stream movies and play games on their wireless devices, but they also want their electricity to stay on, water to flow to their homes, police, fire and emergency responders to protect their safety, and trains to run on time and on their tracks. Until the FCC has assured itself through empirical, not just theoretical data, it should not permit additional unlicensed sharing in the 6 GHz band.

This letter is being filed electronically, in accordance with Section 1.1206(b) of the Commission's Rules, 47 C.F.R. § 1.1206(b), for inclusion in the record in this proceeding.

2

<sup>&</sup>lt;sup>3</sup> USCC Comments at 6-7 (filed Oct 2, 2017); *Higher Ground LLC, Application for Blanket Earth Station License*, IBFS File No. SES-LIC-20150616-00357, Order and Authorization, 32 FCC Rcd 728 (2017) (Applications for Review remain pending).

<sup>&</sup>lt;sup>4</sup> SAS is the term used in the 3.5 GHz band. Entities authorized to perform similar functions in TV White Space are referred to as database administrators.

<sup>&</sup>lt;sup>5</sup> Verizon Reply Comments at 13 (filed Nov. 15, 2017).

Kindly refer any questions or correspondence regarding this matter to the undersigned.

Sincerely,

Mark E. Crosby