

VOLKSWAGEN

GROUP OF AMERICA

Marlene H. Dortch
Secretary
Federal Communications Commission
445 12th Street SW,
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Re: *GN Docket No. 18-295; Unlicensed Use of the 6 GHz band: Support of Comments by 5GAA for protecting 5.9 GHz ITS band*

Dear Ms. Dortch:

The Volkswagen Group of America encompasses five automotive brands operating in the North American market, led by Volkswagen and Audi. Together, our businesses have been at the forefront of research and development efforts for V2X communications. Our goal for this work is rooted in a desire to advance road safety while minimizing the impact of congestion and future emissions in the communities we serve.

The Intelligent Transportation Systems Radio Service (ITS-RS) in the 5.850-5.925 GHz band ("5.9 GHz band") has been allocated by the FCC in the 1990s. The foresight of the FCC has truly placed the U.S. as a global leader in the ITS mobility revolutions at hand. With the proposed rulemaking in GN Docket No. 18-295, the FCC is opening up 5.925 MHz – 7.125 MHz ("6 GHz band") for unlicensed use by Wireless LAN ("Wi-Fi"). This is a substantial new opportunity for consumer devices, and while we welcome this proposal, we ask for the commission to take all necessary precautions to protect the adjacent ITS Spectrum from interference. Interference reduces the reception probability of ITS packet data in an unforeseeable manner and hence prohibits many of the intended use cases.

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In their comments on Docket 18-295, 5G Automotive Alliance (5GAA) requests proper safeguards to avoid out-of-band emissions in the 5.9 GHz band. We share the opinion that safeguards are required. Two methods for avoiding interference in the 5.9 GHz band are proposed: a first method, by limiting the center frequency of the transmission in the 6 GHz band, depending on the signal bandwidth, and a second method, by putting constraints on the transmission if the access point is a mobile hotspot or outdoor device. We see significant benefits from one or both of the two proposals. Each one is a promising approach, and if appropriate evaluation and testing are conducted to find appropriate parameters, we expect that interference on the 5.9 GHz band can be reduced. Further, the two methods are not mutually exclusive and hence we expect them to work well in combination.

Summarizing, we endorse these and other equivalent methods for protecting the ITS spectrum from interference. Thank you for considering our comments.

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