AMERICAN ASSOCIATION OF STATE HIGHWAY AND TRANSPORTATION OFFICIALS
AASHTO

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July 3, 2018

Ms. Marlene H. Dortch
Secretary
Office of the Secretary
Federal Communications Commission
445 12th Street SW
Washington, DC 20554

SUBJECT: 4.9 GHz Band Proposed Rule (47 CFR Parts 0, 2, 90); [WP Docket No. 07–100; FCC 18–33]

Dear Ms. Dortch:

The American Association of State Highway and Transportation Officials (AASHTO) appreciates the opportunity to provide comments to the Federal Communications Commission (FCC or Commission) on the 4.9 GHz band to help promote a more efficient and effective use of this band while fully ensuring the safety of travelers in our nation's transportation system, which remains the highest priority of our Association. AASHTO members, while broadly agreeing to the various recommendations within the Proposed Rulemaking that support enhanced utilization of this spectrum, are categorically opposed to potential commercialization and to the sharing of this spectrum with non-public safety and non-Critical Infrastructure Industry (CII) entities.

AASHTO is a nonprofit, nonpartisan association representing highway and transportation departments in the 50 states, the District of Columbia, and Puerto Rico. We represent all five transportation modes: air, highways, public transportation, rail, and water, and our primary goal is to foster the development, operation, and maintenance of an integrated national transportation system.

AASHTO is recognized by the FCC as one of four Frequency Coordinators (Coordinator) certified to administer specifically the radio spectrum assigned to Highway Maintenance; and, to recommend frequencies for licensing by local government and other entities authorized under the provisions of Title 47, United States Code Section 90.20. Within AASHTO's Council on Highways and Streets, the Committee on Transportation System Operations (CTSO) is tasked with keeping the Association's membership apprised of changes which could affect the use and access to radio spectrum. CTSO is the underlying frequency advisory committee certified by the Commission to manage the spectrum assigned to Highway Maintenance, and provide frequency coordination services to entities eligible for licensing under Section 90.20 of the Commission's rules and regulations.

One of the key goals of CTSO is ensuring that existing communication technologies remain available for transportation departments and capture the benefits of new and emerging communication technologies. AASHTO faces the dual challenge of keeping land mobile radio frequencies, personnel, and technologies available while at the same time capitalizing on emerging communications technologies such as dedicated short-range communications (DSRC) and the First Responder Network Authority (FirstNet). Therefore, it is CTSO's ongoing mission to assist AASHTO members with spanning and integrating the critical and proven technologies of land mobile radio with the rapidly emerging new technologies.

In April 2009, the Commission released a Report and Order and Further Notice of Proposed Rulemaking permitting the licensing of permanent, fixed links supporting broadband communications on a primary basis. Following this order, many state departments of transportation constructed links within this frequency allocation providing for the flow of high-speed data to enhance the safety and protection of the people using our nation's roads and highways. In a workshop organized by the Commission titled "4.9 GHz band: Spectrum Dedicated to Public Safety for Broadband Use" (February 25, 2011), AASHTO and its members were represented by Mr. William Brown, Radio of Wireless Manager with Virginia Department of Transportation (VDOT). In his representation, Mr. Brown presented use cases of the 4.9 GHz band by seven different state DOTs for travel information, Intelligent Transportation Systems (ITS) communications and emergency/first response backhaul purposes. More recently, AASHTO's Special Committee on Wireless Communications Technology (SCOWCT, and CTSO's predecessor) conducted a survey of member organizations which revealed that **more than 50 percent** o**f state DOTs** utilize FCC Part-90 regulated wireless services (including 4.9 GHz band) for **last-mile ITS device communications**. The degree of utilization was higher especially in rural areas. These instances continue to demonstrate the ongoing utilization of the 4.9 GHz band for establishing vital communications links to critical transportation infrastructure.

The Commission's subject Proposed Rulemaking regarding the 4.9 GHz addresses virtually all aspects of the licensing and usage rules of the band. In response, AASHTO members offer broad agreement with and support the recommendations of the Public Safety Communications Council (PSCC), a federation of FCC-certified public safety frequency coordinators, of which AASHTO is a member. Specifically:

- AASHTO supports the band plan presented by the National Public Safety Telecommunications Council (NPSTC). AASHTO also supports the arrangement where a portion of the band is set aside for point-to-point systems only with a channel aggregation of up to 20 MHz maximum. AASHTO agrees with grandfathering of incumbent licensees contingent upon such licensees updating the Commission's Universal Licensing System (ULS) database to reflect current operations.

- AASHTO supports NPSTC's suggestion to utilize channels 1 – 5 for aeronautical and robotic use as part of the national plan. AASHTO recommends that certified frequency coordinators should have the authority to coordinate other services, such as point-to-point on these channels consistent with known uses in a region. Deviations from the national plan by either a region or a frequency coordinator would not require a waiver of the Commission's Rules and Regulations, but would be permitted by the rule. AASHTO agrees with the

Commission's proposal to allow use up to 1500 feet above ground, including for unmanned aerial systems (UAS).

- AASHTO supports frequency coordination of the 4.9 GHz band by the current FCC-certified public safety coordinators. The public safety coordinators already have direct relationships with the public safety community and are in a much better position than any other coordination body to assure that the needs of the public safety community are met.

- AASHTO concurs with using the Commission's ULS as the official database for 4.9 GHz. The ULS will need some modifications to support more data fields, primarily dealing with antenna parameters and paths. AASHTO concurs with the one year timeframe to collect the data in the ULS. However, during this one year period, we urge the Commission to impose a freeze on new applications to prevent coordination over incumbent stations not in the database. After one year, any licensee who failed to enter the information in the ULS would be deemed as non-compliant and thus not protected.

- AASHTO agrees that regions desiring to become involved with 4.9 GHz should be provided an opportunity to update their regional plans in a manner consistent with the items listed in paragraph 42 of the Sixth Notice. Any region not adopting a new plan would be deemed to have agreed to the national plan.

- AASHTO supports a system in which all point-to-point and point-to-multipoint links are individually coordinated and licensed. New links should be routinely authorized on channels 1 – 5 and current link licensees in those channels should be encouraged to relocate to another portion of the band, unless the specific regional plan does not support aeronautical and robotic use of channels. Short-term link operation should be permitted on other channels under an area license, but such duration should be limited to 30 days and coordinators should be notified of such operations prior to commencement of service. Any operation over 30 days should be by Special Temporary Authority or by permanent licensing.

- AASHTO fully concurs with allowing Critical Infrastructure Industry entities into the band consistent with the NPSTC proposal. All shared use should be coordinated only by the FCC-certified public safety coordinators. These coordinators have an internal process that allows each coordinator to review each other coordinator's work before applications are submitted to the Commission. Business/Industrial and independent coordinators are not privy to this process. The process has been highly successful in land mobile coordination and helps assure that potential interference issues are addressed and resolved, and that mutually exclusive applications do not reach the Commission.

- AASHTO joins the Public Safety Communications Council (PSCC) in disagreeing with the Enterprise Wireless Alliance and the Alarm Industry Communications Committee's request that non-public safety and non-CII entities should be given access to the band.

Critically, AASHTO members express **categorical opposition** to redesignation of the 4.9GHz band to support commercial wireless use. As stated earlier, more than half of the state DOTs utilize FCC Part-90 regulated wireless services (including 4.9 GHz band) for last-mile ITS device communications. Examples of critical ITS devices include Variable Message Signs, Closed Circuit Television cameras, Road Weather Information Systems, Highway Advisory Radios, Traffic Signal Control, and Variable Speed Limit Signs, among others, all of which are a critical part of traveler information and traffic incident management systems. Further, as Connected and Autonomous Vehicles (CAVs) become more prevalent, the bandwidth requirements to support safety-critical Vehicle-to-Infrastructure (V2I) communications increases. AASHTO members thus see a great need to preserve the 4.9 GHz band for public safety purposes.

If you have any questions, please contact Venkat Nallamothu, Program Manager for AASHTO's Frequency Coordination Program, at vnallamothu@aashto.org or 202-624-5497.

Sincerely,

Bud Wright
Executive Director
American Association of State Highway and Transportation Officials