

January 12, 2021

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

Re: Amendment of Part 90 of the Commission's Rules (4.9 GHz) [WP Docket No. 07-100; FCC 20-137]

Dear Ms. Dortch:

The American Association of State Highway and Transportation Officials (AASHTO) submits the following comments in response to the Federal Communication Commission (Commission)'s Seventh Further Notice of Proposed Rulemaking (FNPRM) in the above referenced proceeding<sup>1</sup>. 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, 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.

The Commission's subject Proposed Rulemaking together with the Sixth Report and Order (R&O) introduce sweeping changes to the 4.9 GHz band. In response, AASHTO on behalf of its members offers broad agreement with and supports the recommendations of the National Public Safety Telecommunications Council (NPSTC), of which AASHTO is a member.

### ***I. Steps for State Implementation***

- AASTHO supports the series of steps that states and their designated *State Lessor* and/or *State Band Manager* will need to take to implement the Commission's decision towards establishing a leasing framework. These include the following:

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<sup>1</sup> In the Matter of Amendment of Part 90 of the Commission's Rules, WP Docket No. 07-100, Seventh Further Notice of Proposed Rulemaking, FCC 20-137 (rel. November 30, 2020) ("FNPRM")

- Determining whether to pursue acting as a *State Lessor* and/or *State Band Manager*;
- Locking down any legal authorities required within the state;
- Deciding in which department(s) the responsibilities can best be handled;
- Assigning staff with the right expertise and/or deciding what steps must be outsourced through contracting;
- Developing a more complete database of incumbent systems that need to be protected;
- Deciding interference protection criteria, both for incumbents and for new lessees;
- Deciding on expeditious mechanisms for state-to-state coordination, and to address how the State Lessor/State Band Manager and lessees will work together to resolve any interference that occurs;
- Holding discussions with existing 4.9 GHz licensees regarding any expansions needed to meet operational needs;
- Deciding whether to provide public safety an advance filing window for lease requests, prior to opening a filing window for Critical Infrastructure Industry (CII), Business and/or commercial operations; and
- Advising incumbents and potential new lessees of the state’s planned leasing approach and process, as well as the timing to submit lease requests.

In summary, AASHTO recommends that the Commission set a reasonable timeline in implementing the requirements of the R&O and the FNPRM.

## ***II. 4.9 GHz Freeze and Provisions to Expand Incumbent Systems***

- AASHTO considers the Commission’s decision to freeze incumbent licenses in place to be severely disruptive to both state and local entities that have operational needs requiring continued access to the 4.9 GHz spectrum and prevents system expansions for months and possibly a year or more. As noted in the previous section, states will need to take a number of steps to implement the Commission’s decision to offer the option for leasing, steps that cannot happen immediately and could easily take several months to complete. Furthermore, while the Federal Register publication of the Sixth R&O sets the effective date on December 30, the effective date for adding Section 90.1217 of the rules which addresses leasing is “delayed indefinitely.”<sup>2</sup> In addition, some decisions on leasing logically would not be made until the Commission also issues decisions on the follow-up Seventh Further Notice of Proposed Rulemaking. It is not unusual for the Commission to take a year or more to consider comments and replies to an NPRM and issue a decision. The makeup of the Commission is also undergoing change, which may introduce additional time before decisions could be reached.<sup>3</sup> Accordingly, in its current form, the 4.9 GHz freeze is likely to prohibit current eligible entities from expanding incumbent systems to meet operational requirements for several months or even a year or more.
- To address this issue, AASHTO recommends that the Commission suspend the freeze for at least 180 days to provide incumbent entities the opportunity to submit applications to expand their 4.9 GHz facilities. Ideally, the Commission could provide some reasonable

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<sup>2</sup> Federal Register, Vol. 85, No 230, Monday November 30, 2020, page 76480.

<sup>3</sup> See *FCC Statement* issued on November 30, 2020 in which Chairman Pai announced his intent to depart FCC on January 20, 2021.

advance notice that such a suspension would be taking place, so agencies that need to expand their current facilities could start the development of license modification applications. Any resulting modified licenses granted by the Commission should also be grandfathered. The spectrum has been designated for public safety use, and suspension of the freeze as recommended would simply provide the opportunity for additional public safety use in the band, furthering the Commission's policy goal to ensure the band is more heavily used. In implementing the freeze, the Commission stated that the "imposition of the freeze is procedural and, therefore, not subject to the notice and comment and effective date requirements of the Administrative Procedure Act."<sup>4</sup> Therefore, it appears that a suspension of the freeze as recommended above could similarly be implemented without the need to request comments.

### ***III. Developing and Maintaining an Accurate Database of 4.9 GHz Deployments***

- AASHTO recommends that the Commission, or alternatively each state, provide a definitive period of time, e.g. 180 days, for existing local and state licenses at 4.9 GHz to provide additional information on what is deployed. Licensees also would need a specific template of the information needed. This 180 day period could run in parallel with that of at least some of the other steps required to establish leasing as addressed in item 1 above. Localities and other state organizations that use 4.9 GHz would need to provide the information to form the basis for protection of incumbent operations. AASHTO also recommends that if expanded info is collected by the states, the data ultimately should be fed into a nationwide database such as the Commission's ULS. The expanded information will be necessary for coordination among adjacent states.
- As states enter into leases with parties for use of the spectrum, the state's database should be updated expeditiously to reflect the usage authorized under each lease.

### ***IV. Minimizing Interference***

- The Seventh FNPRM asks for comments on any additional steps "...necessary to reduce the likelihood of harmful interference between shared users of the 4.9 GHz band, particularly where we anticipate new and different types of deployments generated by a robust secondary market."<sup>5</sup>
- AASHTO agrees that incumbent 4.9 GHz systems need to be protected against interference and signal degradation as states enter into lease arrangements. Whether protection is done manually or through some potential future automated frequency coordination approach, protection of public safety operations against interference and signal degradation needs to be incorporated into any state management of the 4.9 GHz band. Therefore a protection mechanism is essential to ensure reliability of 4.9 GHz operations. Furthermore, such protection should not impose additional costs on public safety agencies at risk of experiencing interference or signal degradation due to the Commission's expansion of the types of entities allowed in the band.
- AASHTO agrees that there needs to be a nationwide standard for interference protection. A system, regardless of the state in which it is located, should enjoy the same interference

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<sup>4</sup> 4.9 GHz Freeze Public Notice, September 8, 2020, third paragraph.

<sup>5</sup> FNPRM at paragraph 65.

protection from other systems, whether in-state or out-of-state. The FCC is the only authority that can impose such uniform specifications, and should do so.

#### ***V. Connecting Leasing to 911 Fee Diversion Unfairly Impacts Localities***

- The Sixth R&O prohibits a state from leasing out 4.9 GHz band spectrum if it was identified as diverting 911 fees in the Commission’s December 2019 Report. It indicates there are five states that have been identified as diverting 911 fees to other purposes in the December 2019 Report. These states are Nevada, New Jersey, New York, Rhode Island and West Virginia.
- AASHTO supports separating the fee diversion issue from the 4.9 GHz leasing framework. Linking 911 fee diversion with the ability of a state to lease 4.9 GHz spectrum does not just penalize the subject state. It also penalizes all the localities within the state. If the Commission wishes to penalize a state for diversion of the 911 funding, leasing could be prohibited to any non-public safety entity and no lease fees allowed to be collected from public safety spectrum users. This would accomplish the Commission’s goal with respect to the state and yet would avoid limiting legitimate public safety use of the band within the state.
- If the fee diversion issue cannot be separated from the 4.9 GHz proceeding or appropriately modified as recommended above, then a mechanism is needed in states on the 911 fee diversion list so localities can expand their respective 4.9 GHz systems as needed to meet operational needs. Failure to provide an alternative mechanism for localities in 911 fee diversion states is completely counter to the Commission’s stated interest in promoting additional usage of the band.

#### ***VI. Recommendations on Proposed State Band Managers***

- In the Seventh FNPRM, the Commission also proposes the use of State Band Managers. The FNPRM states the following:  
*Under this approach, a state entity would have the opportunity to oversee and coordinate use of the 4.9 GHz band by public safety entities. Specifically, we seek comment on allowing each state to select voluntarily a statewide entity, whether the State Lessor or another statewide licensee, as State Band Manager with authority to manage access to, and public safety operations within, the 4.9 GHz band. A public safety entity seeking new access to the 4.9 GHz band or a licensee seeking to expand operations beyond its grandfathered license parameters would be authorized to operate (if agreed to) under a State Band Manager’s license, tantamount to a “customer” of a Guard Band Manager in the former 700 MHz paradigm. A State Band Manager also would coordinate operations to prevent harmful interference amongst and between public safety and non-public safety entities. We seek comment on this approach, including its potential costs and benefits.<sup>6</sup>*
- AASHTO believes that taking a ‘regional-approach’ is more sustainable and minimizes conflicts than a ‘state-based’ approach to managing spectrum in the 4.9 GHz band. However, should the Commission’s decision in the R&O be sustained, AASHTO agrees that a *State Band Manager* model could replace the existing informal coordination model that is the basis for shared use of the 4.9 GHz band, while also avoiding the need for substantial regulatory oversight of licensee technical parameters. Under this model,

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<sup>6</sup> Seventh FNPRM at paragraph 54.

public safety entities (and nongovernmental organizations operating in support of public safety) that seek to deploy in the 4.9 GHz band would work with a State Band Manager to coordinate and plan this deployment based on the policies and procedures it determines are best for its situation, rather than based on individual licensing and interference resolution rules issued by the Commission.<sup>7</sup>

- AASHTO anticipates that a State Band Manager would, at a minimum, coordinate operations among grandfathered public safety licensees and 4.9 GHz lessees.<sup>8</sup> The Sixth R&O is clear that decisions regarding leasing and priority for public safety are left to each state.<sup>9</sup> Per the Commission's decision, different states ultimately may have a different mix of public safety, other critical uses, internal business use, commercial operations, etc. That decision rests with the state, not the Commission. However, the Seventh Further NPRM seeks comment on a number of issues surrounding such flexibility for proposed State Band Managers and any associated Commission oversight of the State Band Manager's decisions. AASHTO believes that as the federal agency mandated with regulated and enforcing spectrum management, the Commission needs to offer oversight of all state leasing regimes and arrangements.
- AASHTO also agrees that Regional Planning Committees (RPCs) could serve a valuable role in areas where RPCs are active in helping manage 4.9 GHz. Where RPC involvement at 4.9 GHz does exist, AASHTO believes the expertise of those bodies could be helpful to states in assessing incumbent operations and in implementing technical provisions for management of the band. The previous discussion of interference standards, especially along state borders, applies equally to this section. Band managers must protect operations in adjacent states based on national interference standards.

### ***VII. Airborne Use at 4.9 GHz***

- In the Fifth and Sixth Further NPRMs in this proceeding, the Commission sought comment on whether to authorize aeronautical mobile use in the 4.9 GHz band. It now does so again in the current Seventh FNPRM. The Commission also asks if it permits aeronautical mobile use, should it permit transmissions by unmanned aerial systems (UAS) or only manned aircraft.
- AASHTO generally supports the recommendation to enable the use of 4.9 GHz for UAS operations. UAS are being used to support state Departments of Transportation in Traffic Incident Management (TIM), roadway-crash scene reconstruction, surveying, and inspection of critical transportation infrastructure, to name a few. Therefore, AASHTO believes allowing UAS operated under the rules established by the Federal Aviation Administration (FAA) to use the 4.9 GHz spectrum would be very beneficial. Given the emerging importance of UAS operations, imposing a restriction against UAS use of the 4.9 GHz spectrum simply creates an artificial limitation that is contrary to the Commission's stated goal of increased usage in the band.

### **VIII. Conclusion**

AASHTO members, which comprise of the Departments of Transportation of all 50 states, District of Columbia and Puerto Rico are a core public safety constituency. AASHTO is a

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<sup>7</sup> Seventh FNPRM at paragraph 55.

<sup>8</sup> Seventh FNPRM at paragraph 56.

<sup>9</sup> Sixth R&O at paragraph 46.

member of the Public Safety Communications Council (PSCC), a federation of FCC-certified public safety frequency coordinators and the National Public Safety Telecommunications Council (NPSTC).

As stated in previous representations, AASHTO members have invested significant tax-payer funded resources that utilize the 4.9 GHz band providing for the flow of high-speed data to enhance the safety and protection of the users of our nation's roads and highways. Therefore, AASHTO members have remained consistently opposed to re-designation of the 4.9 GHz band to support commercial wireless use at the expense of incumbents<sup>10</sup>.

The Commission's decision places the management of the 4.9 GHz band with each state and U.S. territory, and allows states to lease out the 4.9 GHz spectrum for any category of user and for any use. This decision provides the states much latitude but details on the implementation in the R&O are scarce.

Existing 4.9 GHz facilities are grandfathered but the Commission does not address any specific interference protection. Also, incumbent system expansion must be through a lease with the state, which is pending as states establish a new leasing regime. Such incumbent system expansion also likely awaits Commission decisions that will follow-up the Seventh Further NPRM, i.e., decisions that could take a year or more. Therefore, incumbent systems are locked into place with no immediate provisions for expansion.

AASHTO believes that taking a 'regional-approach' is more sustainable and minimizes conflicts than a 'state-based' approach to managing spectrum in the 4.9 GHz band. However, should the Commission's decision in the R&O be sustained, AASHTO sees the need for a series of steps to be undertaken in order for a viable state leasing regime to be properly installed.

AASHTO also recommends the Commission provide 4.9 GHz incumbents the option to expand their current systems to meet operational needs by suspending the freeze for at least 180 days to allow incumbents the opportunity to file applications for modifications of their existing systems.

In response to questions in the Seventh FNPRM, AASHTO supports a more complete database of deployments to help minimize interference, either through Commission or state efforts.

To protect incumbent fixed systems, AASHTO agrees that there needs to be a nationwide standard for interference protection.

The prohibition against leasing for states on the 911 fee diversion list that the Commission established in its Sixth R&O, and addresses further in the Seventh FNPRM, penalizes numerous localities that have no say in whether their state diverts 911 fees.

If the Commission approves State Band Managers, their primary purpose should be to manage the spectrum effectively while minimizing interference.

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<sup>10</sup> AASHTO Comment Response to FCC 4.9 GHz Band Proposed Rule , WP Docket No. 07-100, (filed July 3, 2018);

AASHTO also recommends the Commission modify the rules to allow both manned and unmanned aeronautical operations.

If you have any questions, please contact Venkat Nallamothe, Program Manager for AASHTO's Frequency Coordination Program, at [vnallamothe@aaashto.org](mailto:vnallamothe@aaashto.org) or 202-624-5497.

Sincerely,

A handwritten signature in black ink, appearing to read "Jim Tymon". The signature is fluid and cursive, with the first name "Jim" and last name "Tymon" clearly distinguishable.

Jim Tymon  
Executive Director, American Association of State Highway and Transportation Officials