NPSTC

NATIONAL PUBLIC SAFETY TELECOMMUNICATIONS COUNCIL

April 28, 2014

Marlene H. Dortch
Secretary
Federal Communications Commission
445 12th Street, S.W.
Washington, DC 20554

Re: WP Docket No. 07-100, PS Docket No. 06-229 and WT Docket No. 06-150

Dear Ms. Dortch:

The National Public Safety Telecommunications Council (NPSTC) is a federation of public safety organizations whose mission is to improve public safety communications and interoperability through collaborative leadership. NPSTC pursues the role of resource and advocate for public safety organizations in the United States on matters relating to public safety telecommunications. Accordingly, NPSTC provides guidance on issues that can either negatively impact or benefit the operation of public safety communications.

On October 24, 2013, NPSTC submitted its 4.9 GHz National Plan Recommendations to the Commission in this proceeding. This plan was the result of approximately 7 months of deliberations in a working group of more than 90 volunteers from across the U.S. who answered NPSTC's open invitation to participate in this initiative. NPSTC and these volunteers from across multiple public safety agencies, jurisdictions, critical infrastructure industries (CII) and the communications industry dedicated their time and expertise to develop recommendations and information to assist the Commission in addressing issues raised in the above-captioned proceeding regarding the 4.9 GHz spectrum.[1]

[1] Fourth Report and Order and Fifth Further Notice of Proposed Rulemaking, WP Docket No. 07-100, PS Docket No. 06-229 and WT Docket No. 06-150, released June 13, 2012.

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NPSTC's 4.9 GHz National Plan Recommendation encompasses frequency coordination to help minimize interference, bandwidth limits to increase spectral efficiency, provisions for new airborne and robotic applications to enhance incident response and managed opportunities for spectrum access by critical infrastructure industries. The Commission placed the NPSTC National Plan Recommendations on Public Notice for comment.[2] This ex parte filing addresses some of the comments the Commission received.

1. Comments/Replies to the NPSTC National Plan Recommendations

In response to the Public Notice, the City of New York, Regional Planning Committee 8 (RPC8) of which the City of New York is a part, and King County, Washington/the City of Seattle expressed concerns that the NPSTC 4.9 GHz National Plan Recommendations would negatively impact extensive 4.9 GHz operations already in place or in the planning stages in their areas.[3] Region 8, the City of New York and King County/the City of Seattle oppose the NPSTC 4.9 GHz National Plan Recommendations. In contrast, comments submitted by the County of Los Angeles requested only a minor change to the NPSTC 4.9 GHz National Plan Recommendations.[4]

Regional Planning Committee 8 comments indicate that all 50 MHz of spectrum in the 4.9 GHz band is already in use throughout the region and provides a map showing the 4.9 GHz fixed sites in the region. Region 8 Comments also characterize FCC rule changes related to 800 MHz and UHF narrowbanding as unfunded mandates and extend that characterization to concerns about any changes to the 4.9 GHz rules:

> The Region's experience over past decades, related to 800 MHz and UHF narrowbanding, is that changes to existing FCC rules in any shape or form, whether it is band plan changes or frequency modulation, force an immediate mandate on Regions to comply with. These mandates are unfunded which in turn place a significant financial and technical burden on State and Local governments who must plan capital programs, designs and construction roll-out in multiyear planning processes. Anything that is introduced outside of these programs happens at the expense of impacting other programs. Any changes to the current plan or a redefinition of eligibility to this spectrum will compromise all current 4.9 GHz networks and systems in place throughout the New York City (NYC) Metropolitan Area which today supports the protection of

[2] Public Safety and Homeland Security Bureau Seeks Comment on National Public Safety Telecommunications Council's 4.9 GHz National Plan Recommendations Final Report, WP Docket No. 07-100, PS Docket No. 06-229, WT Docket No. 06-150, Public Notice DA 13-2096, released Oct. 30, 2013.
[3] See Reply Comments of the City of New York dated December 13, 2013, Comments on Behalf of Regional Planning Committee 8, and joint Comments submitted by King County, Washington and The City of Seattle.
[4] Comments of the County of Los Angeles dated November 21, 2013.

life and property on a day to day basis.[5]

Region 8 also references the proposed NPSTC bandplan which designates a portion of the spectrum for critical infrastructure use. Region 8 indicates that "No changes to the current eligibility requirements to access this spectrum should be mandated."[6] The City of New York Reply Comments support the Region 8 Comments and assert that the NPSTC National Plan Recommendations will 1) undermine local control; 2) undermine spectrum efficiency; 3) be disruptive to existing public safety operations: 4) impose an undue financial burden on public safety; and 5) be inconsistent with current wireless technological trends.[7]

The joint Comments of King County and the City of Seattle point out the extensive 4.9 GHz network in the process of being implemented in the area:

> The King County 4.9 GHz network is among the most extensive and sophisticated such networks deployed in the nation, integrating communications for several Intelligent Transportation Systems with an architecture supporting eight or more systems across fifty transportation corridors. An estimated 1,500 vehicles and 1,000 fixed devices connected to the wired and wireless network by 2014. The integrated systems include transit security video, signal priority, vehicle location, passenger information, fare payment and on-board system management. The network also includes a wireless LAN dedicated for Public Safety and emergency operations.
>
> The City of Seattle is currently deploying a 4.9GHz mesh network in downtown Seattle and along its shoreline in support of security video and public safety operations. King County and the City have agreed to enter into an agreement to make these two networks interoperable. This will dramatically increase the 4.9GHz wireless coverage area in the region providing multiple interoperable networks for public safety and transportation operations.[8]

The joint Comments of King County and the City of Seattle do recognize that the 4.9GHz spectrum may not be as utilized nationwide as it could be, however, distinguish Seattle and King County as an area with significant reliance on the 4.9 GHz spectrum. King County and the City of Seattle are particularly concerned about NPSTC proposals regarding the use of 10 MHz channels and state that 20 MHz channels as currently allowed in the rules are necessary for use in that region. King County and Seattle

[5] Comments on Behalf of Regional Planning Committee 8 at page 4.
[6] Comments on Behalf of Regional Planning Committee 8 at page 6.
[7] Reply Comments of the City of New York, pages 3-8.
[8] Joint Comments submitted by King County, Washington and The City of Seattle, at page 3 and 4.

recommend that the NPSTC National Plan Recommendations not be adopted, or as an alternative that "…the Plan be modified to allow for local coordination of this band through the RPCs, including the prioritization of use for public safety purposes, including their configuration and allocation."[9]

Comments submitted by the County of Los Angeles implicitly support the NPSTC National Plan Recommendations. The County's comments recommend only a minor change to the plan regarding the topic of public safety airborne use. The County notes its extensive experience in deploying airborne video operations to support public safety operations. Based on that experience, the County recommends the use of directional antennas by airborne platforms to transmit video images on 4.9 GHz spectrum.[10]

2. NPSTC Response

In its Fifth NPRM to which the NPSTC plan responds, the Commission stated "…we believe that the development of the 4.9 GHz band, to date, has fallen short of its potential..." [11] Despite opposition to many aspects of the NPSTC National Plan Recommendations, NPSTC believes the input from Region 8, the City of New York, King County, Seattle and the County of Los Angeles all document there is extensive use of the 4.9 GHz band for public safety operations in those respective areas.

Local control and regional planning appear to be at the root of the concerns expressed by the City of New York, Region 8, King County and the City of Seattle. For example, the City of New York states:

> The Commission established Regional Planning Committees to allow local control and Flexibility. Establishing nationwide rules that do not address local needs is counterproductive and undermines the RPCs. New York City recognizes that each region is unique and that each RPC is best qualified to efficiently manage the spectrum under its control in the best interest of the region…. Additionally, the limited range propagation characteristics of the 4.9 GHz band lends the band to local rather than national control, as the potential interference between regions is minimal. It is unnecessary to adapt more restrictive nationwide regulations that may appeal to certain regions but limit flexibility in other regions.[12]

[9] Joint Comments submitted by King County, Washington and The City of Seattle, at page 7.
[10] Comments of the County of Los Angeles at page 1.
[11] Fourth Report and Order and Fifth Notice of Proposed Rulemaking, WP Docket No. 07-100, PS Docket No. 06-229 and WT Docket No. 06-150, released June 13, 2012, at para. 17.
[12] Comments of the City of New York, page 3.

Region 8 notes that different areas of the country have different needs and challenges when it comes to providing spectrum to governmental entities, and recommends "that regions should be allowed to file amendments to their regional plans specific to 4.9 GHz that address all aspects of spectrum allocations in the region on 4.9 GHz."[13]

Based on the responses from those entities, there appears to be active participation in 4.9 GHz regional planning in those areas and adherence to the respective plans. Unfortunately, that is the exception rather than the rule across the U.S. Unlike the 700 MHz and 800 MHz bands, the Commission's service rules for 4.9 GHz made regional planning optional rather than required. Those rules allowed regions what appears to be a one-time chance to file a 4.9 GHz band plan within one year of the effective date of the original rules for the band. As those rules were adopted in 2003, that time period expired long ago.[14]

Also the current licensing process generally ignores the regional plan as any eligible agency may apply for a license directly on ULS for the entire 50 MHz of spectrum for their geographical area of operation. There is no requirement that the Region be notified and no one but the agency that obtained the license knows if they are following any plan requirements until a problem or conflict arises. Therefore, in contrast to the New York, Seattle and Los Angeles areas where regional planning appears to be strong, much of the country does not benefit from regional planning at 4.9 GHz.

Section 10 of the NPSTC National Plan Recommendation recognizes this concern and was specifically inserted to strengthen RPC involvement. That section recommends all regions have an opportunity to file amended plans to account for local needs. For example, one of the specific concerns expressed in the comments is that the NPSTC plan recommended moving to a maximum aggregation of 10 MHz as opposed to the 20 MHz currently allowed and used by some systems deployed or already planned. While that recommendation was included to help increase spectrum efficiency, Section 10 of the NPSTC plan incorporates provisions for a Region to allow greater aggregation.[15]

[13] Comments of Region 8 at page 9.
[14] See §90.1211(a) of the rules adopted in the Memorandum Opinion and Order and Third Report and Order, WT Docket No. 00-32, released May 2, 2003.
[15] NPSTC 4.9 GHz National Plan Recommendations at page 13.

Whether aggregation or other issues, NPSTC does not intend for its National Plan Recommendation to undermine local control and/or regional planning of 4.9 GHz where a strong RPC has developed a valid regional plan which is being adhered to by jurisdictions in the region. NPSTC did intend to offer its 4.9 GHz National Plan Recommendations for use in the many regions devoid of such a plan.

Accordingly, in adopting rules in this proceeding, the Commission could offer a renewed opportunity for regions to submit a regional plan, which should include a description on how jurisdictions in the region are being, or will be, held accountable to comply with the regional plan. Following some reasonable time period for submission of such plans, the Commission could then allow the 4.9 GHz band to be regulated under a strong approved regional plan. In cases where a valid regional plan does not exist or is not forthcoming from this new window, the Commission could apply the National Plan Recommendations.

In situations where 4.9 GHz deployments have occurred based on a strong regional plan, this approach should resolve concerns expressed in the responses asserting that the NPSTC National Plan Recommendation would be disruptive to current or already planned 4.9 GHz operations. We believe the NPSTC National Plan Recommendations which reflect the involvement of over 90 volunteers from across the country can help inform both renewed regional planning efforts and any national default plan for those regions where no valid regional plan exists or is forthcoming.

In its Fifth NPRM, the Commission had posed the possibility of opening the band to commercial use:

> We seek comment on whether the Commission should extend eligibility to use the band to non-public safety users, subject to protections to maintain the integrity of public safety operations. While we believe that all primary uses of the 4.9 GHz band should remain limited to operations in support of public safety consistent with Section 90.1203(b), we tentatively conclude that expanding eligibility for commercial use on a secondary basis would benefit and reduce regulatory burdens on non-public safety entities by removing a barrier to entry to use the 4.9 GHz band. In particular, we note the spectral proximity of the 4.9 GHz band to the 5 GHz band widely used by unlicensed Wi-Fi networks.[16]

NPSTC previously raised significant concerns about opening the band to commercial use.[17] As an alternative to commercial use, NPSTC developed recommendations that would provide coordinated access to a portion of the band by critical infrastructure entities such as utility and petroleum

[16] Fourth Report and Order and Fifth Further Notice of Proposed Rulemaking, WP Docket No. 07-100, PS Docket No. 06-229 and WT Docket No. 06-150, released June 13, 2012, at para. 43.
[17] NPSTC Comments in response to the Fifth Further NPRM, submitted November 1, 2012 at pages 8 and 9.

operations. This access would help support their internal operations and may also enhance information sharing between CII entities and public safety during disasters. The NPSTC recommendation did not go as far in allowing CII users access as some of the participants in the planning preferred. In contrast, Region 8 prefers no change in eligibility. NPSTC therefore recognizes its 4.9 GHz National Plan Recommendation is a compromise of different viewpoints on the eligibility issue.

In summary, NPSTC certainly does not intend for its 4.9 GHz National Plan Recommendations to undermine local control or disrupt existing operations, as asserted in some of the comments submitted in this proceeding. There are several areas of the country which have strong regional plans for 4.9 GHz, however, much of the country is devoid of 4.9 GHz regional plans. In developing any rule revisions, NPSTC recommends the Commission consider valid and strong regional plans where they exist, and provide a reasonable renewed opportunity for additional regional plans. Further, NPSTC believes its 4.9 GHz National Plan Recommendations can inform the development of additional plans and form the foundation for rules to be applied when a strong regional plan does not exist.

Respectfully submitted,

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