

Before the  
FEDERAL COMMUNICATIONS COMMISSION  
Washington, D.C. 20554

In the Matter of )  
 )  
Amendment of Part 90 of the Commission's Rules ) WP Docket No. 07-100  
Rules )

**REPLY COMMENTS  
OF  
LOS ANGELES COUNTY, CALIFORNIA**

Los Angeles County, California (“County”), through counsel and pursuant to Section 1.405 of the Commission’s Rules, 47 C.F.R. §1.405, hereby respectfully submits its Reply Comments in the above-captioned matter.

Los Angeles County has a significant interest in this matter. The County has invested in 4.9 GHz technologies and has implemented systems which create unique communications links in areas where traditional links are either not available, or for unique reasons are just not feasible. These communications needs span different agencies, as well as functions, but are critical in each solution. The links are used for critical Law Enforcement information processing, lifesaving operations and redundant data links to provide necessary information flow during times of disaster or emergency. The 4.9 GHz band is critical to the County in providing the solutions necessary for each of these operations.

The following represents examples of Los Angeles County’s use of 4.9 GHz spectrum:

- Los Angeles County Sheriff Department utilizes the 4.9 GHz spectrum to provide a communications downlink between Air Support units and dispatch (as well as ground units). The 4.9 GHz link allows the live video stream captured by the air units to be relayed to dispatch and ground units for real-time information sharing during many differing Law Enforcement activities such as suspect/vehicle pursuits.

- Los Angeles County Fire Department utilizes the 4.9 GHz spectrum to create a mesh communications link between Life Guard Tower units and dispatch. The Los Angeles County Life Guard towers are movable structures and as such have had many issues with hardline wiring to provide communications links. The wireless (4.9 GHz) links allow the towers to be physically moved and still have the critical communications link between the towers and dispatch for life saving operations.
- Los Angeles County ISD (Internal Services Department) utilizes the 4.9 GHz spectrum to create a WiMAX mesh data communications link to provide critical data links during wired infrastructure outages. These links connect data systems that are critical to the County and are necessary for COOP (continuity of operations) and GOG (continuity of Government) programs to ensure that the County of Los Angeles can provide critical services to the population at large in any emergency or disaster.

ALL of these services are critical for Los Angeles County --- whether they are to support Law Enforcement in the pursuit of protecting and serving our community (life and property) or to provide other critical services to the community, 4.9 GHz technologies play a major role in the County's duties to its citizens.

Los Angeles County is also a licensee of a microwave system in the 6 GHz band. The Los Angeles Countywide microwave network (LANET), consists of thirty-four primary (formula) tower sites and an additional fifty-six Fire Department and Sheriff's Department stations which are provided connectivity by these primary sites.

The microwave links in service across LANET is comprised of U6/L6 GHz, 10 GHz, 11 GHz, 18 GHz and the 23 GHz band. In addition to providing service to the Fire and Sheriff's Departments, LANET also provides transport services to the Countywide Interoperable Radio System ("CWIRS"), a 800 MHz simulcast trunked radio system designed for disaster recovery, as well as servicing the County's day-to-day operation for all the other public service agencies such as Department of Public Works, Department of Social Services, Parks and Recreation, Libraries, Animal Controllers, *etc.* This system does not have the capacity, flexibility, or capabilities of the 4.9 GHz band for the County's services.

Los Angeles County has significant concerns regarding the Commission's analysis in the Sixth Further Notice of Proposed Rule Making of the public safety usage of the 4.9 GHz band. The County urges the Commission to closely review the Comments submitted by the National Public Safety Telecommunications Council ("NPSTC") in this proceeding. As noted by NPSTC, the Commission's raw counting of licenses in the band does little to illuminate the extent of usage. By mixing different types of licenses in the band, in terms of geography (site specific and geographic), bandwidth (where an entity may license the entire available 50 MHz, or something less), and licensing (which can take place at the state, county or local level), the Commission is not able to discern actual usage merely by reviewing its Universal Licensing System ("ULS") database.

Los Angeles County does not object to the Commission objective review of usage in the band. To the contrary, the County wants to make more use of the band in the future. However, the Commission's review did not take into account the confusing beginnings of public safety use of the band (as mentioned by NPSTC). Rather, usage is only now taking hold from the chaotic start. The County believes that usage will continue to grow, particularly in light of the new types of sensors that are now becoming available in the marketplace.

The use of the 4.9 GHz band is even more critical to Los Angeles (and other similarly situated licensees) because of the eventual loss of the 470-512 MHz band (the "T-Band"). The country is at a stage when public safety access to spectrum should be increased, not decreased. While some may wish to point to the implementation of FirstNet as improving public safety spectrum availability, NSPTC eloquently points out how FirstNet is not a substitute for use of the 4.9 GHz band. As one of the "early adopters" of Band 14 usage, Los Angeles can attest to the fact

that the LA-RICS system is not a substitute for the County's use of the 4.9 GHz band. Combined with the loss of the T-Band,<sup>1</sup> loss of the 4.9 GHz band would be devastating to the County.

Spectrum is not fungible. Differences in propagation, service rules and licensing rules mean that different spectrum allocations are useful for different services. Los Angeles County appreciates that the Commission is not proposing that public safety "lose" access to the 4.9 GHz band. However, the spectrum sharing techniques, yet unproven in the marketplace, are not a substitute for the priority needs of public safety communications. The County recognizes the hue and cry of those interested in making more and more spectrum for consumer consumption of wireless services, the reality is that such services cannot compromise public safety.

The reality of sharing the 4.9 GHz band was recognized recently in the Ex Parte filing by the Wi-Fi Alliance.<sup>2</sup> As stated by the Alliance on page 2 of its filing, "[t]he limited bandwidth and in-band and adjacent band incumbent operations at 4.9 GHz appear to preclude the suitability of this band as a candidate for Wi-Fi operations." Los Angeles County agrees with this assessment. The Commission should continue its review of potential sharing in other bands, and refrain from imposing additional restraints and restrictions on public safety licensees.

---

<sup>1</sup> Los Angeles County's extensive T-Band system is described in the Appendix to these Comments.

<sup>2</sup> *Ex Parte Notification*, filed by the Wi-Fi Alliance in WP Docket No. 07-100, submitted July 12, 2018.

WHEREFORE, the premises considered, it is respectfully requested that the Commission act in accordance with the views expressed herein.

Respectfully submitted,

LOS ANGELES COUNTY, CALIFORNIA

By: Alan S. Tilles, Esquire

It's Attorney

Shulman Rogers Gandal Pordy & Ecker, P.A.  
12505 Park Potomac Ave., Sixth Floor  
Potomac, MD 20854  
(301) 230-5200

Date: August 6, 2018

## APPENDIX

### **The Los Angeles County 470-512 MHz “T-Band” Radio System**

The LA County 470-512 MHz system consists of three sub-systems:

#### **A. LA County Sheriff’s Department System**

This system was constructed in the late 1980s using GE MASTR II stations in wide-band (25 kHz) analog mode. The voice system operates on TV Channel 16 spectrum (fifty-five contiguous 25 kHz channels from 482.8125 to 484.0375 MHz) and an associated data system which operates on TV Channel 14 spectrum (ten non-contiguous channels). This system has been in continuous operation since its initial construction, however the system is obsolete and needs replacement. While the system was originally slated to be narrowbanded, with the adoption by Congress of the Middle Class Tax Relief and Job Creation Act of 2012, and the Commission’s subsequent waiver of the T-Band narrowband requirement, the system continues to operate in wideband mode for now.<sup>3</sup>

#### **B. LA-RICS TV Channel 15 System**

In 2008, the Public Safety and Homeland Security Bureau (Bureau) granted LA County a waiver pursuant to Section 337 of the Communications Act of 1934, as amended, to use UHF-TV channel 15 to construct a “standards-based, single platform, UHF voice radio system” to be used by all public safety agencies in the County. The County also requested extended implementation (slow growth) authority under Section 90.629 of the Commission’s Rules.

In 2014, the County informed the Commission that the Channel 15 frequencies “will be constructed as part of the LA-RICS systems, which would be operated by a Joint Authority formed by the County, the City of Los Angeles, and more than 80 other municipalities and public sector

---

<sup>3</sup> Implementation of Sections 309(j) and 337 of the Communications Act of 1934 as Amended, *Order*, WT Docket No. 99-87, DA 12-642, released April 26, 2012.

entities. One of the driving forces behind this change was the adoption by Congress in 2012 of the Middle Class Tax Relief and Job Creation Act (the “Act”). Specifically, Section 6103 of the Act requires public safety users to vacate spectrum in the 470-512 MHz band by early in the next decade.<sup>4</sup>

LA-RICS is developing a new interoperable, digital trunked radio network that will tie together the public safety communications operations of the County of Los Angeles (the Sheriff’s Department is also the designated law enforcement mutual aid coordinator for Region 1, which includes Los Angeles and Orange Counties), the City of Los Angeles, and over 80 independent cities, providing a modern, integrated wireless voice and data communications system that will support more than 34,000 first responders and local mission-critical personnel.<sup>5</sup> When completed, the LA-RICS system will operate a broadband data system in the 700 MHz band (utilizing “D Block” frequencies) and voice communications in both the 700 MHz (utilizing public narrowband frequencies) and 470-512 MHz bands.

One of the greatest challenges facing public safety communications in the region is the unusually large number of independent cities and public safety departments serving the area. There are 50 local law enforcement agencies and 31 local fire departments, many of which cover relatively small, but densely populated, geographic areas. LA-RICS was created with the vision of establishing a single communications platform that will provide instantaneous interoperability

---

<sup>4</sup> See Middle Class Tax Relief and Job Creation Act of 2012 Pub. L. No. 112-96, 126 Stat. 156.

<sup>5</sup> While it has been reported in the press that some original members of the JPA have withdrawn from the project, existing users on the system have not been lost. Further, additional subscribers continue to be added, including federal agencies.

across agencies when responding to diverse emergencies, and eliminate the duplication of costs and effort involved in maintaining separate radio systems for each agency.<sup>6</sup>

The LA-RICS LMR communications platform will operate in portions of the 470-512 MHz band, which has long been the principal frequency band for Los Angeles area public safety agencies.<sup>7</sup> The spectrum at 482-488 MHz (TV channel 16) is allocated exclusively for public safety in Los Angeles<sup>8</sup> and provides the core spectrum for the Los Angeles County Sheriff's Department and other agencies' communications systems. Portions of 470-476 MHz (TV channel 14) and 506-512 MHz (TV channel 20) are also assigned to public safety agencies in the region.

Funding for LA-RICS is from participating agencies and federal grants. LA-RICS has received approval and future commitments of funding from the Los Angeles/Long Beach region UASI Approval Board in order to complete the LA-RICS LMR system.

### **C. TV Channel 14/15 Narrowband System**

This system consists of narrowband channel (12.5 kHz) licenses of all existing wideband (25 kHz) channels the County of Los Angeles operates on for the Fire Department and Sheriff Department and the newly created interstitial channels. This system creates additional capacity in the County.

---

<sup>6</sup> Apart from the narrowband voice system in 470-512 MHz, LA-RICS has also received authority and federal funding for a 700 MHz broadband network that will provide high-speed mobile video and data throughout the region.

<sup>7</sup> See South Bay Regional Public Safety Communications Authority, *Memorandum Opinion and Order*, 13 FCC Rcd 23781, 23797 (1998), at ¶ 37.

<sup>8</sup> 47 C.F.R. §90.311.