



August 11, 2016

Accepted / Filed

SEP 21 2016

Federal Communications Commission  
Office of the Secretary

Via Universal Licensing System

Marlene Dortch, Secretary  
Federal Communications Commission  
445 12<sup>th</sup> Street, SW  
Washington, DC 20554

**Re: Request for Waiver to Permit 800 MHz Wideband Operations in Portions of Arizona Prior to Completion of 800 MHz Band Reconfiguration in the Entire NPSPAC Region**

Dear Sir or Madam:

Sprint Corporation (“Sprint”) hereby files this request for a waiver for its 800 MHz Economic Area (“EA”) call signs WPOH379 (BEA158 - Phoenix, AZ); WPOH373 (BEA156 - Albuquerque, NM); WPOH368 (BEA154 - Flagstaff, AZ); and WPOH366 (BEA153 - Las Vegas, NV) to permit accelerated deployment of commercial broadband wireless facilities in Arizona while causing no increased risk of interference to the handful of 800 MHz public safety incumbents that have yet to complete band reconfiguration in the U.S. – Mexico Border Region.

Sprint is nearly complete with 800 MHz public safety band reconfiguration across the entire United States<sup>1</sup>, with the exception of the five National Public Safety Planning Advisory Committee (NPSPAC) Regions along the U.S. – Mexico Border of Southern California (Region 5), Arizona (Region 3), New Mexico (Region 29), Texas – El Paso (Region 50) and Texas – San Antonio (Region 53). Over the past few years, Sprint has been granted waivers in Florida<sup>2</sup>,

---

<sup>1</sup> See Sprint’s 800 MHz Monthly Report in WT – Docket 02-55, dated August 1, 2016.

<sup>2</sup> See Letter from Roger S. Noel, Chief, Mobility Division to James B. Goldstein, Sprint Corporation, dated November 25, 2013 (DA 12-2262).

Northern California<sup>3</sup>, Nevada<sup>4</sup>, New Mexico<sup>5</sup>, Texas – El Paso, <sup>6</sup> Texas – San Antonio<sup>7</sup> and Washington<sup>8</sup> before 800 MHz band reconfiguration was complete in those Regions. In Washington, New Mexico and both Texas Regions, Sprint demonstrated that 800 MHz band reconfiguration was complete in the non-border portions of these Regions and that Sprint’s non-border area deployments could occur without risk to ongoing Border-Area rebanding efforts and that Sprint’s deployment in these areas would improve the customer-experience through increased coverage, capacity and data speeds. In the instant waiver, Sprint seeks the same relief in certain non-border portions of Arizona in order that it can deploy 800 MHz LTE at over 500 sites in the Phoenix Metropolitan Area and northern Arizona while Border Area rebanding continues.

Sprint has made significant progress on the 800 MHz band reconfiguration initiative in the Arizona NPSPAC Region. First, Sprint has signed Frequency Reconfiguration Agreements (“FRAs”) with all 800 MHz incumbents (both public safety and non-public safety) throughout both Arizona and the entire U.S. – Mexico Border Region. Second, numerous 800 MHz incumbents, both commercial and public safety have completed their retunes in Arizona, and many others are well underway. The remaining retunes in the U.S. – Mexico Border Area are predominantly delayed by the need for Mexican-side 800 MHz incumbents to start and complete their retunes in order that the former Mexican channels can be made available for U.S. public safety licensees. Sprint, along with the FCC, and the U.S. State Department are working diligently with Mexican officials to facilitate these actions.

Working with various Arizona NPSPAC licensees, public safety licensees have cleared all of their 866 – 869 MHz (paired with 821 – 824 MHz) operations in all or portions of eight counties

---

<sup>3</sup> See Letter from Roger S. Noel, Chief, Mobility Division, Wireless Telecommunications Bureau to James B. Goldstein, Esq., Sprint Corporation, DA 14-866 (June 23, 2014).

<sup>4</sup> See Letter from Roger S. Noel, Chief, Mobility Division, Wireless Telecommunications Bureau to James B. Goldstein, Esq., Sprint Corporation, DA 14-866 (June 23, 2014). See also Letter from Roger S. Noel, Chief, Mobility Division, Wireless Telecommunications Bureau to James B. Goldstein, Esq., Sprint Corporation, FCC File No. 0007254003 (July 6, 2016) modifying June 23, 2014 waiver.

<sup>5</sup> See Letter from Roger S. Noel, Chief, Mobility Division to James B. Goldstein, Sprint Corporation, WT Docket 14-133, dated November 21, 2014 (DA 14-1687).

<sup>6</sup> See Letter from Roger S. Noel, Chief, Mobility Division to James B. Goldstein, Sprint Corporation, WT Docket 14-133, dated November 21, 2014 (DA 14-1687).

<sup>7</sup> See Letter from Roger S. Noel, Chief, Mobility Division to James B. Goldstein, Sprint Corporation, WT Docket 14-133, dated November 18, 2014 (DA 14-1663).

<sup>8</sup> See Letter from Roger S. Noel, Chief, Mobility Division to James B. Goldstein, Sprint Corporation, WT Docket 15-156, dated August 24, 2015 (DA 15-954).

in Arizona.<sup>9</sup> Attachment A is a map showing the areas where Sprint seeks a full or partial waiver along with the protected area along the U.S. – Border zone where Sprint will not operate facilities.

In the Arizona NPSPAC Region, all but four of the public safety licensees required to be retuned from the “old NPSPAC band” at 821-824/866-869 MHz have successfully completed their retunes.<sup>10</sup> These four remaining Arizona public safety licensees are working to retune their systems and complete their retunes as soon as possible. Maricopa County is expected to complete its retune this summer or early fall, while the State of Arizona is expected to complete rebanding in Navajo and Apache Counties this summer, leaving only its Border Area facilities to be completed over the next few months, assuming Mexican-side incumbents complete rebanding. San Bernardino County (“SBC”) and Pima County are the other current public safety licensees left to retune in Arizona.

Until all Arizona retunes are certified by the licensees as complete, however, Section 90.209(b)(7) of the Commission’s Rules does not permit broadband operations at 821-824/866-869 MHz anywhere in the Arizona NPSPAC Region. As a result, Sprint is currently prevented from deploying broadband LTE in the old NPSPAC band in those areas of Arizona which are or will be fully cleared of public safety communications operations, including the Phoenix Metropolitan Area and Flagstaff. With careful engineering and planning, however, Sprint can integrate the 821-824/866-869 MHz spectrum into its broadband network in Phoenix and other parts of Arizona without posing any risk of interference to the remaining un-retuned licensees in the U.S. – Mexico Border Area, once Maricopa County completes its retune.

Accordingly, Sprint requests a waiver of Section 90.209(b)(7) so that it can launch LTE in portions of the eight Arizona counties as shown in Attachment A. Sprint’s planned sites in these eight counties are all located more than 70 miles away from the Arizona public safety sites still operational in the old NPSPAC band, as shown in Attachments A (showing the entire Arizona NPSPAC Region). These separation distances go beyond the Part 90 co-channel separation requirements in Section 90.621(b) of the Commission’s Rules which permits 800 MHz co-channel usage at sites as close as 55 miles depending on the technical parameters of the proposed facilities. Sprint proposes herein, however, more than 70 miles between co-channel operations to provide an additional buffer of protection to the remaining public safety operations.<sup>11</sup>

---

<sup>9</sup> Sprint requests a waiver to operate 800 MHz LTE in Mohave County, Coconino County, Yavapai County, Navajo County, Apache County, Gila County, Maricopa County and Pinal County. Sprint does not request a waiver in Cochise County, Pima County, Santa Cruz County, Yuma County, Graham County, Greenlee County or La Paz County. *See* Attachment A.

<sup>10</sup> The remaining four NPSPAC public safety licensees in the Arizona NPSPAC Region are: The State of Arizona, Maricopa County, Pima County and San Bernardino County (“SBC”). SBC is located in the adjacent California NPSPAC Region, but it operates wireless facilities in Mohave County, AZ and La Paz County, AZ.

<sup>11</sup> Sprint’s operations in these eight counties will be designed to protect co-channel operations to ongoing public safety operations in Arizona and adjacent NPSPAC operations in California and Nevada as well.

Sprint has contacted the three public safety licensees (the State of Arizona, Pima County and SBC) who will be operating closest to Sprint's proposed facilities once Maricopa County completes its retune and Sprint has requested that each provide written confirmation of consent or no objection to the request. The State of Arizona, Pima County and SBC are being sent a copy of this filed request and Sprint will contact them to continue address any questions they may have.<sup>12</sup>

Sprint's instant waiver request meets both prongs of the Commission's waiver standard and is entirely consistent with similar waivers granted to Sprint in referenced above. The purpose of the *800 MHz Broadband Order*<sup>13</sup> was to permit increased flexibility and broadband competition opportunities for 800 MHz ESMR band licensees while ensuring the protection of public safety licensees who had yet to complete 800 MHz band reconfiguration. The requirement that an entire NPSPAC Region be completed prior to initiation of broadband technology on 866-869 MHz in a Region was intended to ensure that an ESMR-band licensee not operate wideband technology on the same spectrum and in the same geography as yet-to-retune public safety licensees.<sup>14</sup> The Commission's rule did not take into account the significant size of some NPSPAC Regions or terrain factors in establishing its restriction. Sprint's proposed broadband operations pursuant to this waiver would provide more than adequate distance separation from existing public safety operations and Sprint's proposed operations therefore pose no increased risk of interference to them.<sup>15</sup> The proposed waiver serves the public interest by permitting Sprint to operate 800 MHz

---

<sup>12</sup> Pursuant to the FCC's rules, all public safety licensees in the State of Arizona, in addition to 800 MHz public safety licensees in neighboring NPSPAC Regions will be provided advance notice of Sprint's deployment and planned initiation date of operations.

<sup>13</sup> See *Improving Spectrum Efficiency Through Flexible Channel Spacing and Bandwidth Utilization for Economic Area-based 800 MHz Specialized Mobile Radio Licensees, Report and Order*, WT Docket 12-64, DA 12-55, 27 FCC Rcd 6489 (2012) ("*800 MHz Broadband Order*").

<sup>14</sup> Sprint's prospective wideband operations pose no risk of the intermittent CMRS-public safety interference. CMRS-public safety interference typically can occur when low-site, low-power commercial systems operate in the same or interleaved spectrum *and* in the same geography as high-site, high-power public safety communications systems. That set of circumstances cannot occur under the proposed waivers because Sprint's base station sites and service area will not overlap with or be anywhere near the subject un-reconfigured public safety systems or users; thus the circumstances that underlie CMRS-public safety interference will not exist.

<sup>15</sup> Moreover, if any public safety communications operator believes that its 800 MHz public safety radio system is experiencing CMRS-public safety interference at any time, a well-developed process exists to address interference via the industry-developed and maintained interference notification website at <http://www.publicsafety800mhzinterference.com>. This website immediately notifies Sprint as well as the other cellular carriers operating in a given area to commence interference investigation and mitigation procedures in accordance with the FCC's mandated 24 hour interference response timelines and the requirements specified in Section 90.674 and 22.974 of the FCC's rules.

LTE at sites in Metropolitan Phoenix, where Sprint's customers are demanding improved network capacity, speed and reliability for both 3G/4G voice and data communications. Absent this waiver, 800 MHz spectrum fully capable of providing LTE 4G service to thousands of Sprint's customers would remain fallow in the Arizona NPSPAC Region until 800 MHz band reconfiguration is complete in Arizona area in conjunction with individual U.S. – Mexico Border Area NPSPAC retune schedules and rebanding in Mexico.

Sprint's waiver also meets the Commission's second prong of its waiver standard given the unique factual circumstances of the instant case. Sprint has performed all of its obligations to complete 800 MHz band reconfiguration in the entire Arizona NPSPAC Region. Sprint has provided millions of dollars in funding and 800 MHz replacement spectrum for all public safety incumbents. Completion of 800 MHz band reconfiguration in the entire Arizona NPSPAC Region, however, is wholly outside of Sprint's control. It would be inequitable and unduly burdensome for Sprint and its wireless customers were Sprint not able to deploy broadband LTE in Arizona so long as it fully protects ongoing public safety operations. Continuing application of the Commission's restriction would prevent LTE operations, limit consumer choice and be contrary to the public interest.

For the foregoing reasons, Sprint requests this waiver to accelerate its broadband deployment in the Phoenix metropolitan area to better serve its customers, consistent with the Commission's goals of expanded competitive wireless broadband availability, while fully protecting ongoing public safety operations in the 866-869 MHz portion of the 800 MHz band until they are fully retuned.

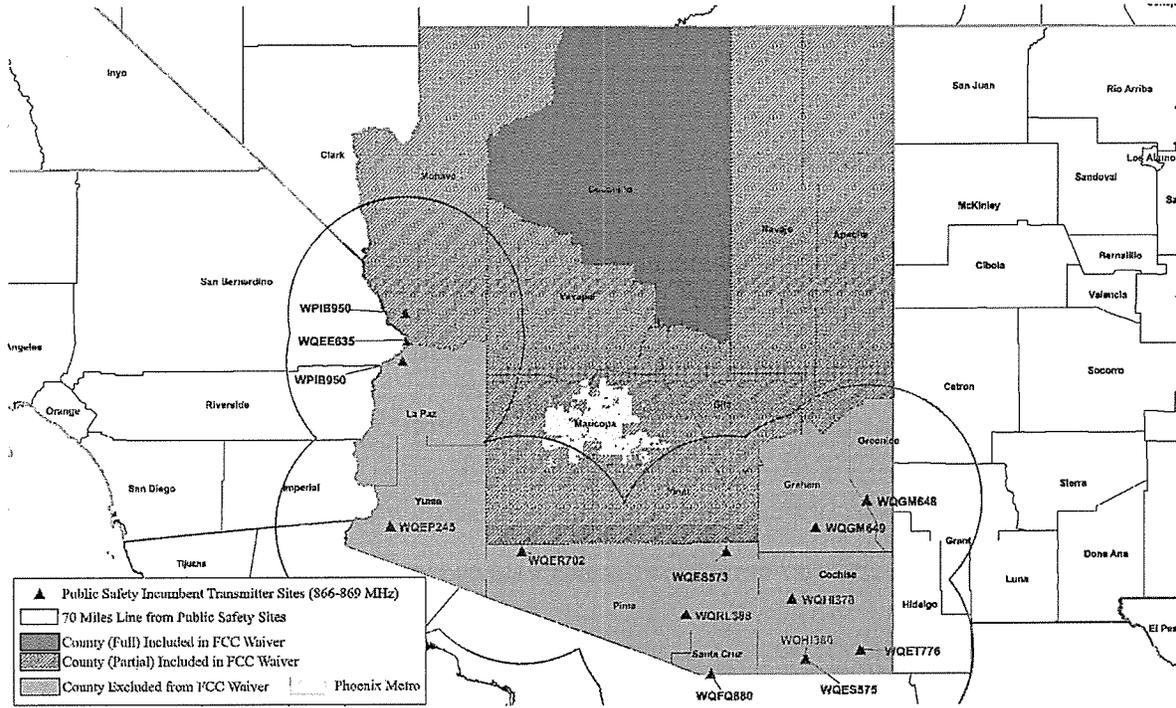
Should there be any questions, please contact the undersigned.

Sincerely,

/s/ James B. Goldstein  
James B. Goldstein, Senior Counsel  
Sprint Corporation  
900 7<sup>th</sup> Street, NW  
Suite 700  
Washington, DC 20001  
(703) 433-4212  
James.Goldstein@Sprint.com

## Attachment A

### Map Showing Requested Waiver Counties in Arizona NPSPAC Region 3 and Locations of Current Public Safety Licenses in Arizona Once Maricopa County Has Completed its Retune



### Close-Up of Phoenix Metropolitan Area within Maricopa County

