

Before the
Federal Communications Commission
Washington, D.C. 20554

In the Matter of
KING COUNTY, WASHINGTON
Request for Waiver of Sections 90.613 and
90.623(a) of the Commission's Rules
File No. 0007497312

ORDER

Adopted: November 30, 2017

Released: November 30, 2017

By the Chief, Policy and Licensing Division, Public Safety and Homeland Security Bureau:

I. INTRODUCTION

1. In this Order we grant King County, Washington (King County) a waiver of Sections 90.613 and 90.623(a) of the Commission's rules to operate on eleven 800 MHz frequencies for mobile-only, on-scene, mutual aid communications in the conventional mode.

II. BACKGROUND

2. King County operates a wide-area public safety 800 MHz trunked radio system serving the county's population of over two million people. On October 11, 2016, it filed an application seeking to license eleven 800 MHz frequencies for mobile-only communications. King County states that a "significant majority" of the county's public safety radio communications occur over the trunked radio system but that it seeks to license the eleven 800 MHz frequencies listed in its application for "on-scene, mobile-only simplex" radio communications.

3. In particular, King County states it intends to use the mobile-only channels for "critical on-scene tactical public safety communications by fire, emergency medical service (EMS), and law enforcement users" at locations where service from its 800 MHz trunked radio system is "inadequate or unavailable, such as inside of buildings or in underground parking structures."

4. Section 90.613 of the Commission's rules assigns 800 MHz channels in pairs with mobile and control stations transmitting in the 806-824 MHz band segment and base stations transmitting in the

1 ULS application file no. 0007497312 (King County Application). See also attachment to King County Application labeled "Waiver of 90.613 & 90.623 per STA" (Feb. 14, 2017) (Waiver Request).

2 Waiver Request at 2. King County holds a number of Private Land Mobile Radio (PLMR) licenses under FCC Registration Number (FRN) 0001577949.

3 King County's application was originally filed on Oct. 11, 2016. It was returned for more information on Nov. 24, 2016 and Jan. 4, 2017. It was amended on Dec. 13, 2016 and Feb. 15, 2017. See King County Application.

4 Waiver Request at 2.

5 Id. at 1.

851-869 MHz band segment.⁶ Therefore, King County needs a waiver of Section 90.613 to allow mobile stations to transmit on base station frequencies in the 800 MHz band for unpaired mobile-only communications.

5. Furthermore, Section 90.623(a) of the Commission's rules limits to five, the number of 800 MHz frequency pairs that may be assigned to a licensee for conventional mode operation.⁷ Consequently, King County also needs a waiver of Section 90.623(a) to license the eleven frequencies listed in its application and operate them in conventional mode for mobile-only transmissions rather than in trunked mode.⁸

6. In support of its request for a waiver of Section 90.613, King County notes that most of the eleven frequencies it seeks to license fall on spectrum which is designated as primary to Canada by the agreement between the U.S. and Canada covering the 800 MHz band.⁹ Thus, King County argues the frequencies it seeks to license for mobile-only simplex communications are of limited value for base station operations due to the county's proximity to the border with Canada.¹⁰ For instance, it notes that base stations on the channels would be subject to "significant limitations on effective radiated power (ERP) levels and power-flux density (PFD)" at "many locations" within the county.¹¹

7. In support of its request for waiver of Section 90.623(a), King County notes that trunking operation is not possible in its case because, according to King County, trunking "requires base stations and some type of system controller, neither of which are used for the requested type of transient, on-scene simplex communications."¹²

8. Finally, King County explains that it previously received temporary authorization to operate on the frequencies listed in its application for mobile-only communications during the reconfiguration of its 800 MHz trunked system and now seeks to convert that temporary authorization into a permanent license.¹³ Therefore, it argues that its waiver request is in the public interest because it will allow "critical tactical communications to continue in the most efficient manner for the affected public safety users, which, in the end, serve the public at large."¹⁴

III. DISCUSSION

9. To obtain a waiver of the Commission's Rules, a petitioner must demonstrate either that (i) the underlying purpose of the rule(s) would not be served or would be frustrated by application to the

⁶ Base stations are assigned transmit frequencies 45 MHz higher than mobile transmit frequencies. 47 CFR § 90.613. King County seeks to license the eleven frequencies listed in its application from the base transmit side of the channel pair. *See* King County Application.

⁷ 47 CFR § 90.623(a).

⁸ In a conventional radio system, the user manually selects which channel in a system to use for a communication. In a trunked radio system, the system automatically searches for channels and assigns the user to an open channel within that system. *See* 47 CFR § 90.7.

⁹ Waiver Request at 1. *See also* Sharing Arrangement Between the Department of Industry of Canada and the Federal Communications Commission of the United States of America Concerning the Use of the Frequency Bands 806-824 MHz, and 851-869 MHz by the Land Mobile Service Along the Canada-United States Border at para. 3.2 (July 2011) (Arrangement F).

¹⁰ Waiver Request at 1.

¹¹ *Id.*

¹² *Id.* at 2.

¹³ *Id.* at 1-2.

¹⁴ *Id.* at 2.

present case, and that a grant of the waiver would be in the public interest;¹⁵ or (ii) in view of unique or unusual factual circumstances of the instant case, application of the rule(s) would be inequitable, unduly burdensome, or contrary to the public interest, or the applicant has no reasonable alternative.¹⁶ We find King County has satisfied the first prong of the waiver standard with regard to its request for waiver of Section 90.613 and satisfied the second prong of the waiver standard with regard to its request for waiver of Section 90.623(a).

10. *Section 90.613.* The underlying purpose of Section 90.613 is to promote spectrum efficiency by assigning frequencies in pairs for base/mobile communications.¹⁷ In this instance, however, King County seeks to license its mobile-only communications on frequencies which are reserved, within the U.S.-Canada sharing zone, for primary use by licensees in Canada.¹⁸ As King County notes, U.S. licensees that seek to operate within the sharing zone on channels primary to Canada are subject to strict power limits which restrict the ability of licensees to operate base stations on those frequencies.¹⁹ Consequently, we find King County's proposal to license Canada primary channels for mobile-only communications would not frustrate the underlying purpose of Section 90.613 since these frequencies are of limited value for base station operations within the portion of the county covered by the U.S.-Canada sharing zone.

11. We note that one frequency King County seeks to license falls on spectrum which, in the U.S.-Canada sharing zone, is primary to licensees in the U.S. This U.S. primary frequency, however, is included in the National Public Safety Planning Advisory Committee (NPSPAC) portion of the band.²⁰ King County includes a letter of support from its Regional Planning Committee (RPC) to use the frequency for mobile-only communications throughout the county.²¹ Consequently, we find King County's proposal to use the NPSPAC frequency listed in its application for mobile-only communications would not frustrate the underlying purpose of Section 90.613 because the RPC is responsible for allocating NPSPAC frequencies among the various eligible entities in its region²² and it approves King County's use of the frequency for mobile-only communications within the county.²³

¹⁵ 47 CFR § 1.925(b)(3)(i).

¹⁶ 47 CFR § 1.925(b)(3)(ii).

¹⁷ See *Inquiry Relative to the Future Use of the Frequency Band 806-960 MHz and Amendment of Parts 2, 18, 21, 73, 74, 89, 91, and 93 of the Rules Relative to Operations in the Land Mobile Service Between 806 and 960 MHz*, Docket No. 18262, Second Report and Order, 46 FCC 2d 752, 769 paras. 60-61 (1974).

¹⁸ King County is located in Canada Border Region (CBR) 5. In CBR 5, frequencies in the 809.75 MHz to 817.25 MHz and 854.75 MHz to 862.25 MHz range are primary to licensees in Canada. See 47 CFR § 90.619(c)(1). See also Arrangement F at para. 3.2.1.

¹⁹ Waiver Request at 1. The sharing zone extends 140 kilometers from the U.S.-Canada border in CBR 5 and covers the northwest portion of King County, Washington.

²⁰ King County seeks to license frequency 852.6875 MHz from the NPSPAC portion of the band for mobile-only communications. See King County Application. In CBR 5, frequencies in the 806.00 MHz to 809.75 MHz and 851.00 MHz to 854.75 MHz range are primary to licensees in the U.S. See 47 CFR § 90.619(c)(1). See also Arrangement F at para. 3.2.2.

²¹ See Letter from Debra L. Davis, Chair - Region 43, 800 MHz NPSPAC Regional Planning Committee to Anthony Minor, Radio Communication Manager, King County Radio Communication Services (Jun. 15, 2016) (attached to King County Application) (Region 43 - RPC Letter).

²² See *Development and Implementation of a Public Safety National Plan and Amendment of Part 90 to Establish Service Rules and Technical Standards for Use of the 821-824/866-869 MHz Bands by the Public Safety Services*, General Docket No. 87-112, Report and Order, 3 FCC Rcd 905, 918 para. 51 (1987).

²³ Region 43 - RPC Letter at 1.

12. *Section 90.623(a)*. We agree with King County that it has no reasonable alternative to operating in the conventional mode when using frequencies for on-scene, mobile-only simplex radio communications. We are not aware of any technology which performs trunking without use of a base station transmitting on a control channel.²⁴ Consequently, we find it contrary to the public interest to prohibit King County from using the eleven frequencies listed in its application for mobile-only communications solely because it is unable to do so in trunking mode.

13. *Public Interest*. We find the public interest is served by granting King County a waiver of Sections 90.613 and 90.623(a) so that first responders who use its network can communicate mobile-unit to mobile-unit at locations within the county where service from the 800 MHz trunked radio system is “inadequate or unavailable.”²⁵ We note that it currently uses the frequencies listed in its application for mobile-only communications via temporary authority. Therefore, we find it in the public interest to allow King County to convert that temporary authorization into a license so it can continue using those frequencies for “critical tactical communications.”²⁶

IV. ORDERING CLAUSES

14. Accordingly, IT IS ORDERED, pursuant to Sections 4(i) and 303(c) of the Communications Act of 1934, as amended, 47 U.S.C. §§ 154(i), 303(c), and Section 1.925 of the Commission’s rules, 47 CFR § 1.925, that the waiver requests associated with ULS File No. 0007497312 filed by King County, Washington IS GRANTED and the associated application SHALL BE PROCESSED accordingly.

15. This action is taken under delegated authority pursuant to Section 155(c) of the Communications Act of 1934, as amended, 47 U.S.C. § 155(c) and Sections 0.191 and 0.392 of the Commission’s rules, 47 CFR §§ 0.191, 0.392.

FEDERAL COMMUNICATIONS COMMISSION

Michael J. Wilhelm
Chief, Policy and Licensing Division
Public Safety and Homeland Security Bureau

²⁴ In a trunked radio system, a user’s radio operating on a dedicated frequency sends data to a base station – a control channel – to request assignment to an open channel in the system.

²⁵ Waiver Request at 1.

²⁶ *Id.* at 2.