

DESCRIPTION OF FILING AND REQUEST FOR WAIVER

I. Executive Summary

The State of Missouri is the one of the most populous states in the Midwest, with approximately six million residents in 114 counties encompassing an area over 69,000 square miles with a highly varied geography. The northern part of the State lies in plains while the southern part lies in the Ozark Mountains, with the Missouri River dividing the two. The confluence of the Mississippi and Missouri Rivers is located near the independent city of St. Louis.

By this and three related applications, the State seeks Federal Communications Commission (“FCC”) authorization to operate on five VHF high band channel pairs to be incorporated into a trunked radio communications system that will be used to meet its obligations and responsibilities to safeguard the safety and security of its residents and visitors.¹ Its departments and agencies support, among other activities: law enforcement operations; fire and emergency services; and the provision of health and human services.²

Specifically, the State has filed a set of four applications that request:

- (1) consent to the assignment of three 150 MHz channel pairs derived from the Part 22 Paging and Radiotelephone Service currently licensed to Warner Communications Corp. in Basic Economic Area (“BEA”) No. 96–St Louis, MO-IL;
- (2) consent to the assignment of two additional Part 22 channel pairs licensed to Communications Equipment Holdings, Inc., in BEA No. 96;
- (3) consent to the partial assignment of a Part 22 co-channel pair licensed to Scott MacIntyre in the adjacent BEA No. 95 – Jonesboro, AR-MO; and
- (4) a waiver of the FCC’s rules to operate a location in BEA No. 96 under one of the licenses to be acquired from Warner Communications, but with an interference contour that extends slightly into BEA No. 95, which is currently unassigned by the FCC.³

¹ Over 25 million visitors travel to Missouri each year and even more pass through the State to other destinations. See *generally* “Missouri Division of Tourism Fiscal Year 2010 Top Originating Visitor Locations: By State and by DMA” (dated Feb 10, 2011).

² The State provides public safety services within the meaning of Section 337(f)(1) of the Communications Act of 1934, as amended, *i.e.*, services the sole or principal purpose of which is to protect the safety of life, health, or property, that are provided by state or local government entities or by non-governmental organizations that are authorized by a governmental entity whose primary mission is the provision of such services, and that are not made commercially available to the public.² 47 U.S.C. §337(f)(1); 47 C.F.R. § 90.20 (2010).

³ The Universal Licensing System (“ULS”) file numbers of these four applications are, respectively: 0004961767, 0005019389, 0004963364 and 0005160243. See *also* Section III(C) below.

As discussed in further detail below, grant of these applications is in the public interest and would further long-standing agency objectives. Briefly, such action would, among other things:

- Allow the State to update its existing facilities with a state-of-the-art narrowband, trunked radio system that would support innovative voice and data capabilities needed to meet its expanding communications needs;
- Ensure that government personnel have effective and interoperable communications services that benefit public safety and enhance homeland security; and
- Promote the efficient and flexible use of VHF spectrum that might otherwise remain underutilized or unused.

II. FCC Approval Will Allow The State To Update Its Existing System To Meet Its Increased Communications Needs and Responsibilities

Like many other states, Missouri depends on VHF radio facilities to support its public safety and homeland security activities. It has a number of concerns, however, about its ability to continue to satisfy its communications requirements with its existing radio system. First, its current facilities are nearing the end of their useful life and are becoming increasingly difficult, if not impossible, to maintain and repair because of their age and because of the lack of available replacement parts. Certain manufacturers of the system's components are no longer in business or have discontinued supporting the equipment. Repairs often require retrofitting failed units or installing equipment with different model replacement parts, which are not as reliable as original components. In some cases, suitable replacement parts are simply not available, which has forced the State at times to purchase used radios merely to cannibalize them for needed components.

Second, system congestion, failures and other communications problems are becoming increasingly common. Users often lose connections or are unable to establish a communications path at all in certain coverage "holes" to receive dispatches and other messages. The system upgrade that would occur upon FCC approval of the State's applications would reduce such failures and fill in gaps in coverage.

Third, the technology underlying the State's existing facilities is relatively obsolete, which hinders or precludes the implementation of enhancements that could accommodate the State's increasing requirement for advanced features, flexibility, and reliability afforded by newer radio communication systems. This obsolescence also affects the State's ability to incorporate spectrum efficiencies and interference immunities available with new digital, trunked narrowband systems.

Finally, operational and technical disparities in the radio facilities currently deployed by the State's various agencies make it difficult—and sometimes impossible—for personnel with complementary public safety responsibilities to communicate with one another. Such complications are particularly pronounced during emergency situations when first responders must rely on coordinated communications when acting to protect the safety of life and property. The more dire the crisis or consequences, the more important the need for an efficient and immediate response. Because emergencies do not respect geographic boundaries or political jurisdictions, interoperable communications are essential to the effective performance of public safety personnel at every level of service—state, local and federal.

Indeed, the requirement for interoperability was highlighted in the Final Report released by the National Commission on Terrorist Attacks Upon the United States (the “9/11 Commission”).⁴ The Report acknowledged that during the emergency “[a]lmost all aspects of communications [were] problematic, from initial notification to tactical operations. Cellular telephones were of little value . . . Radio channels were initially oversaturated . . . Pagers seemed to be the most reliable means of notification when available and used, but most firefighters are not issued pagers.”⁵ The Report added that “[t]he occurrence of this problem . . . is strong evidence that compatible and adequate communications among public safety organizations at the local, state, and federal levels remains an important problem.” *Id.*

The demand for interoperability has expanded significantly over the past few years and clearly cannot be met by the capabilities of the State's existing facilities. Enhancing the State's capability to communicate across jurisdictional and discipline lines is one of the top priorities of Missouri's homeland security program.

III. Description of The State's Spectrum Requirements and Proposed System

In light of these circumstances, the State directed its consultants to evaluate the capabilities and deficiencies of its existing facilities, analyze its current and anticipated communications requirements, and research available technologies that could achieve its objectives. These efforts entailed an exhaustive evaluation of available spectrum in the VHF, UHF, 700 MHz, and 800 MHz bands and concluded that a trunked 150 MHz VHF high-band radio system would best meet the State's requirements. Based on these findings, the State decided to construct a statewide public safety interoperable communications system, known as the Missouri Statewide Interoperability Network or “MOSWIN,” in the 150-174 MHz band.

The MOSWIN project will involve the installation of an infrastructure with approximately 70 base station sites that will initially support 5,000 mobile units to

⁴ The 9/11 Commission Report, Final Report of the National Commission on Terrorist Attacks Upon the United States (rel. July 22, 2004).

⁵ *Id.* at 397 (citing Arlington County, Virginia, Report, Titan Systems Corp. “Arlington County: After-Action Report on the Response to the September 11 Terrorist Attack on the Pentagon,” 2002, pp. 12-13).

provide interoperable communications capabilities to both state public safety agencies and any local jurisdictions that wish to use the system. In sum, the new system will provide internal communications capabilities for state agencies, including the Missouri State Highway Patrol, Department of Natural Resources and State Emergency Management Agency, that will:

- Enhance geographic coverage and reliability
- Increase capacity and expandability
- Improve interoperability among government entities

FCC approval of the State's pending applications is integral to the implementation of the proposed system. As explained in this in this narrative, needed spectrum is either unavailable or unsuitable to fulfill the State's spectrum requirements. Grant of the applications and associated waiver requested herein to deploy a number of channels allocated under Parts 22 of the FCC's rules will afford the State access to spectrum needed for the MOSWIN project.

A. VHF 150 MHz Spectrum Ideally Complements The State's Requirements

The State's decision to deploy 150 MHz channels was based in large part on the advantages of using the VHF band, as recognized by the industry and Commission alike.⁶ First, 150 MHz channels are particularly well-suited for providing coverage in unique geographic areas such as Missouri's. As noted above, Missouri is comprised of over 69,000 square miles of territory with a variety of terrain. The propagation characteristics of VHF frequencies permit effective coverage in such diverse geographic areas, primarily because such frequencies are less susceptible to attenuation from trees and foliage and have the ability to diffract over hills and around other obstacles to minimize the existence of "dead" spots within a service footprint. VHF high-band frequencies are also less susceptible than VHF low-band frequencies to "skip" and manmade and natural interference.

Second, use of the VHF band will allow the State to preserve the existing legacy VHF user base. As noted above, the State currently operates a VHF high band network that represents a significant investment in transmitters and mobile equipment. Use of the VHF band will allow the State to avoid material lapses in communications capabilities during system migration as well as accommodate the individual transition schedules and funding requirements of participating agencies.

Third, a VHF option reduces construction costs, which is particularly welcome during this time of limited financial resources and increased demand for public safety communications capabilities. Again, because of their unique propagation characteristics, VHF frequencies are ideal for operations that must be limited to a single

⁶ The Commission has acknowledged repeatedly that VHF "high band" frequencies (100 to 300 MHz) are ideal for meeting the public safety community's requirements. See, e.g., *Alternative Frequencies for Use by Public Safety Systems, Response to Title XVII, Section 1705 of the National Defense Authorization Act for FY2001*, Report to Congress on Alternative Frequencies Available for Public Safety Systems (Jan. 23, 2002) ("2002 Report to Congress").

station or only a few stations to cover a large geographic area, which is the case here. *Id.* If Missouri were required to use channels in another band, its consultants estimated that it would need 3 to 4 times the number of sites to provide comparable coverage. Such a requirement would result in increased expenditures for land, equipment buildings, antennas, and new sites, including certain sites that would be located in remote locations. It would also present the State with substantially more design and development problems as well as the possible delays in completing the construction of the system. As one of many examples, the State would be required to resolve additional issues related to the environmental impact associated with the construction of any new antenna structures that would be required, as many areas within Missouri are subject to environmental restrictions and regulations.⁷ For some sites, such as any needed in the Mark Twain National Forest, these issues might be insurmountable and, therefore, could adversely affect coverage if it were required to use another band.

Fourth, a VHF solution would reduce the State's operating expenditures associated with leasing land, equipment buildings, and antenna structures. The State already owns some of the physical sites that will be deployed in the system as presently designed. Using another band would require access to new sites that would present substantial additional cost burdens on taxpayers.

Last, the proposed use of 150 MHz channels is compatible with the operations on 162-174 MHz spectrum used by federal and state government agencies and, thus, helps enhance the State's continuing relationship with other government entities to meet the public safety and emergency needs of its citizens and visitors.⁸ The Commission has found that the partnering of FCC-licensed state or local government entities with

⁷ The FCC has recognized the need to consider the environmental benefits of collocating facilities on existing antenna structures rather than constructing new structures. For example, in a *Notice of Proposed Rulemaking* regarding migratory bird collisions with communications towers, the agency stated that the increased collocation of new communications antennas on existing towers might mitigate such collisions. See *generally Effects of Communications Towers on Migratory Birds*, Notice of Proposed Rulemaking, 21 FCC Rcd. 13241 (2006).

⁸ Many Federal homeland security and public safety agencies currently operate in the VHF band. For example, the 162-174 MHz band is "the primary band for many Federal fixed and land mobile operations in support of safety in the air and at sea [and] protection of life, property, and natural resources." See *Amendment of Parts 2 and 90 of the Commission's Rules to Provide for Narrowband Private Land Mobile Radio Channels in the 150.05-150.8 MHz, 162-174 MHz, and 406.1-420 MHz Bands that are Allocated for Federal Government Use*, 20 FCC Rcd. 5793 (2005). The Federal Bureau of Investigation, the Federal Aviation Administration, and the Coast Guard all use VHF spectrum. *Id.* n.16. In addition, the Department of Justice, Department of Homeland Security, and the Treasury Department have announced plans to build a new nationwide network that will operate on narrowband VHF frequencies (to capitalize on existing equipment and frequency resources) and is designed to be a single gateway for interoperability among federal, state and local law enforcement. Washington Technology, *Hurricanes a boost for Integrated Wireless Network* (Dec. 12, 2005), available at http://www.washingtontechnology.com/news/20_24/federal/27577-1.html; Integrated Wireless Network web site at <http://www.usdoj.gov/jmd/iwn/overview.html>.

Federal entities is in the public interest.⁹ It underscored this benefit in the report published by the Spectrum Policy Task Force, where the agency noted commenters' claims that:

changes in spectrum policy could encourage greater efficiency on the part of public safety providers. For example, some public safety agencies indicated that they are becoming more innovative through creative licensing schemes, such as forming partnerships between state and local agencies and utilities and federal agencies. By sharing costs and spectrum with others, public safety entities have the potential to obtain more technologically advanced wide-area systems than they could afford on their own.¹⁰

The benefits of the MOSWIN project have already been directly confirmed by the State during a pilot test conducted with the Sikeston Department of Public Safety ("DPS") involving two sites located at Bloomfield and Sikeston. In August of 2011, when severe weather approached the site of Sikeston's annual Bootheel Rodeo, with about 10,000 people in the stands, the Sikeston DPS and users from nine other local agencies successfully used test equipment to communicate directly with the Missouri State Highway Patrol, which provided real-time weather radar updates to crews in the field.

Later, in September, law enforcement personnel in southeast Missouri and northeast Arkansas participated in "Operation Clean Sweep," a multi-jurisdictional drug trafficking roundup. Tests of the MOSWIN interconnected network demonstrated that Sikeston officers in the field could communicate directly with officers from other agencies, including those from Arkansas law enforcement.

B. Description of The State's Applications

During the design and planning process for MOSWIN, the State's engineering consultants determined that system would require the installation of approximately 70 base station transmitter sites with at least five channel pairs at each site to provide coverage to an initial and immediate need for 5,000 mobiles units. Importantly, the base station channels would be required to operate as protected, centralized trunked relay channels (station class "FB8") so that they could serve as control channels at each

⁹ *State of Alaska, Request for Waiver of Sections 2.102(c), 2.103(a), 90.20, and 90.173(c) of the Commission's Rules*, 18 FCC Rcd. 16315 ¶ 13 (2003). *The 4.9 GHz Band Transferred from Government Use*, 18 FCC Rcd. 9152, 9163 ¶ 25 (2003) ("Third 4.9 GHz Order") (allowing Federal Government entities to enter into sharing agreements with public safety licensees to use 4.9 GHz spectrum).

¹⁰ Spectrum Policy Task Force Report, ET Dkt. No. 02-135 (Nov. 2002) ("Spectrum Report"). This sentiment was also echoed by the Government Accountability Office when it recommended in its Interoperability Report that Federal agencies be included in state and local planning. See *Report to Congressional Requesters, Homeland Security: Federal Leadership and Intergovernmental Cooperation required to Achieve First Responder Interoperable Communications*, General Accounting Office, GAO-04-740 at 34-35 (July 2004) ("GAO Interoperability Report").

location as well as emergency channels assigned to priority talk-groups when needed during disasters or similar events.

Given these spectrum needs, the State's consultants conducted a comprehensive review on a site-by-site basis of available VHF public safety channels allocated under Part 90 of the FCC's rules that could be deployed in the system. They researched available channels using government and third-party spectrum databases (e.g., the FCC's Universal Licensing System and databases supplied by Washington Radio Reports and PerCon Corporation) and several propagation and interference analysis software tools. The State's consultants also retained the services of the Spectrum Research and Solutions, Inc., to seek available channels.

The State's consultants found a number of channels in the Public Safety pool that could be deployed in the MOSWIN system and retained the Association of Public-Safety Communications Officials – International ("APCO") to complete the frequency coordination process and submit a series of applications to the FCC to request licenses for those channels. Some of these applications have now been granted,¹¹ but others remain pending.¹²

Unfortunately, the State's consultants were unable to obtain a sufficient number of channels from the Part 90 public safety pool to fulfill completely its need for protected channels at each site.¹³ The remaining channels in that pool were either already

¹¹ See, e.g., ULS File Nos. 0004665618 (Sikeston), 0004775443 (Doniphan), 0004776180 (Bendavis), 0004801446 (Eminence), 0004822140 (Nevada), 0004822143 (Arcola), 0004874287 (Elkton), and 0004894462 (Princeton).

¹² See, e.g., ULS File Nos. 0004620247 (Bloomfield), 0004665618 (Sikeston), 0004775443 (Doniphan), 0004776180 (Bendavis), 0004776431 (Poplar Bluff), 0004801446 (Eminence), 0004822140 (Nevada), 0004822143 (Arcola), 0004874287 (Elkton), 0004935537 (Avalon), 0004950060 (Cassville), 0004973949 (Fredricktown), 0004982531 (Milan), and 0004992225 (Alton).

¹³ The State's findings were consistent with the studies conducted for similar systems proposed by other entities. See generally *Wireless Telecommunications Bureau Assignment of Authorization and Transfer of Control Applications Action*, FCC File No. 0001132016, Public Notice, Report No. 1411 (rel. Feb. 5, 2003) (consenting to assignment from MariTEL to the State of South Dakota); *Wireless Telecommunications Bureau Assignment of License Authorization Applications, Transfer of Control of Licensee Applications Action*, FCC File Nos. 0001662537 and 0001662656, Public Notice, Report No. 1852 (rel. June 9, 2004) (consenting to assignment from Warren C. Havens to the State of Montana); *Commonwealth of Virginia, Request for Waiver of Part 80 Rules to Permit Use of Maritime Frequencies for Private Land Mobile Radio Communications, Applications for Assignment of 150 MHz Marine Channels to the Commonwealth of Virginia*, Order, 19 FCC Rcd. 15454 (WTB PSCI Div. 2004) ("Virginia Order"); and *County of Placer, California, Warren C. Havens, and MariTEL Southern Pacific, Inc., Request for Waiver of Part 80 Rules to Permit Use of Maritime Frequencies for Private Land Mobile Communications, Requests for Waivers of Section 80.773 of Rules Regarding Signal Strength*, Order, 20 FCC Rcd. 3657 (2005) ("Placer County Order"); *State of Wyoming, Order*, 23 FCC Rcd. 10310 (2008) ("WyoLink Order"); see also *State of Wyoming*, ULS File No. 0002947551 (granted July 2, 2008).

licensed in the relevant area or were subject to interference from adjacent channel or nearby co-channel operators. The use of such channels in a centralized, trunked system to support critical communications would pose operational problems as discussed in Section V(E)(i), however. Thus, the Part 90 public safety channels should be deemed exhausted for purposes of the agency's analysis in this matter.

The State's consultants then sought to identify frequencies outside the Part 90 public safety pool that might be suitable for use in the system. This effort included a review of channels allocated in the VHF Paging and Radiotelephone Service band under Part 22 as well as in the VHF Public Coast Service band under Part 80. The State's engineering consultants concluded that five Part 22 channel pairs could meet its channel requirements. Accordingly, the State has filed the four instant applications in this proceeding to seek FCC consent to acquire or use these channels for the MOSWIN system.

Specifically, in an application on FCC Form 603 pending under ULS File No. 0004961767, the State requests FCC consent to acquire three Part 22 channel pairs licensed under call signs WPVF241, WPVF244 and WPVF245 to Warner Communications Corporation ("Warner"). The licenses for these stations authorize Warner to operate on the Channel Blocks FM (152.645-152.675 / 158.905-158.935 MHz), FQ (152.765-152.795 / 158.025-158.055 MHz), and FR (152.795-152.825 / 158.055-158.085 MHz) in Basic Economic Area ("BEA") No. 96 - St. Louis, Missouri-Illinois.

In another application on FCC Form 603, pending under ULS File No. 0005019389, the State seeks FCC consent to acquire two additional Part 22 channel pairs licensed under call signs WPVM814 and WQAH684 to Communications Equipment Holdings, Inc. ("CEH"). The licenses for these stations authorize CEH to operate on Channel Blocks FH (152.510-152.530 / 157.770-157.790 MHz) and FI (152.525-152.555 / 157.785-157.815 MHz), also in BEA No/ 96.

A third application on FCC Form 603, pending under ULS File No. 0004963364, seeks FCC consent for the State to acquire a partition (designated by the coordinates listed in Schedule C of the application) of the license issued under call sign WQMT585 to Scott C. MacIntyre. That license authorizes Mr. MacIntyre to operate on Channel Block FQ (152.765-152.795 / 158.025-158.055 MHz) in adjacent BEA No. 95 - Jonesboro, AR-MO, which encompasses an area to south of BEA No. 96.¹⁴

¹⁴ As discussed further in Section IV(C), the State respectfully requests that the Commission combine or aggregate the area it will acquire through a partition of the license held by Mr. MacIntyre to operate on Channel Block FQ in BEA No. 95 with the area it will acquire from Warner to operate on Channel Block FQ in BEA No. 96. Such relief is sought so that the State will not be required to meet the construction requirement associated with the partitioned area independently from the construction requirement associated with the area it will acquire in BEA No. 96 from Warner. If deemed necessary, the State respectfully requests a waiver of Sections 22.503 the FCC's rules for such purpose. 47 C.F.R. § 22.503 (2010).

Last, the State filed an application on FCC Form 601, pending under ULS File No. 0005160243, seeking permission to operate facilities at Bloomfield, Missouri, on one of the channel blocks in the geographic area it proposes to acquire from Warner: Channel Block FI (152.525-152.555 / 157.785-157.815 MHz) in BEA No. 96. As discussed in greater detail in Section V(E) below, FCC permission is required because the interference contour of the Bloomfield site extends slightly into adjacent BEA No. 95; the FCC's rules require licensees to ensure that the interference contours of their operations fall within their licensed geographic areas unless they obtain the consent of the adjacent co-channel licensee. *Id.* at 22.567(d). In this case, however, the channel is not currently assigned by the FCC to another licensee.

Although the State's consultants were able to find two Part 90 protected FB8/MO8 channel pairs for operation at the Bloomfield site, it was not able to find the requisite five it needs to ensure adequate coverage at that location. Accordingly, by this fourth application, the State seeks appropriate authority to operate on Channel Block FI at Bloomfield, Missouri.

For convenience and reference, the table below summarizes the channel blocks, licensees, call signs, and application file numbers associated with its acquisition of five Part 22 channel pairs in BEA No. 96. The table also identifies the FCC applications or letters of concurrence ("LoCs") required so that the interference contour of the State's proposed operations at Bloomfield, Missouri, on Channel Blocks FI and FQ may overlap into the adjacent geographic areas BEA No. 073 and BEA No. 95.¹⁵

CHANNEL BLOCKS / LICENSEES / CALL SIGNS / APPLICATION FILE NUMBERS				
CHANNEL	BEA No. 96	BEA No. 95	BEA No. 73	NOTES
FH	CEH WPVM814 ULS: 0005019389	N/A	N/A	The State proposes to operate on this Channel Block in BEA No. 96 only
FI	CEH WQAH684 ULS: 0005019389	FCC ULS: 0005160243	KTI (LoC)	The State proposes to operate on this Channel Block in BEA No. 96 with an overlap into BEA Nos. 73 and 95.
FM	Warner WPVF241 ULS: 0004961767	N/A	N/A	The State proposes to operate on this Channel Block in BEA96 only
FQ	Warner WPVF244 ULS: 0004961767	MacIntyre WQMT585 ULS: 0004963364	Integrated (LoC)	The State proposes to operate on this Channel Block in BEA No. 96 with an overlap into BEA Nos. 73 and 95.
FR	Warner WPVF245 ULS: 0004961767	N/A	N/A	The State proposes to operate on this Channel Block in BEA96 only

¹⁵ As illustrated by the graphic under Exhibit A, the interference contour of the Bloomfield site also extends on Channel Blocks FI and FQ into BEA No. 73 and on Channel Block FQ into BEA No. 95. The State does not need authority with respect to the overlap on these channels in these BEAs, however. It has obtained concurrences for the overlap from the licensee on Channel Block FI in BEA No. 73—KTI, Inc.— and from the licensee on Channel Block FQ in BEA No. 73—Integrated Communications, Inc. See Letter from Stephen T. Devine, Missouri DPS, to Kent Hunt, KTI, Inc. (executed Oct. 14, 2011; Letter from Stephen T. Devine, Missouri DPS, to Clay Golday, Integrated Communications, Inc. (executed Nov. 1, 2011)(attached under Exhibit B). Moreover, grant of the application pending under File No. 0004963364 to partition Channel Block FQ from Scott MacIntyre would provide the State with authority to overlap on that channel into BEA No. 95.

IV. FCC Rules Subject to the State's Request for Waiver

Based upon the showing provided in Section V below, the State submits that a waiver of the following rule provisions is justified so that it may incorporate the requested Part 22 channel pairs into the MOSWIN system.

A. Section 20.9: Provision of Private Land Mobile Radio Communications

The State seeks a waiver of Section 20.9(a)(6) of the Commission's rules which classifies certain operations as "commercial mobile radio services" or "CMRS." That Section states:

The following mobile services shall be treated as common carriage services and regulated as commercial mobile radio services . . . pursuant to Section 332 of the Communications Act, 47 U.S.C. § 332 . . . (6) Paging and Radiotelephone Service (part 22, Subpart E of this chapter).¹⁶

As explained in Section I, the State proposes to deploy the Part 22 channels at issue in its applications to support critical infrastructure communications that are not offered on a common carrier basis. It therefore respectfully seeks a waiver of this rule based on the justification provided in Section V.

B. Section 22.567(a)(1): Overlap of Interference Contour in BEA No. 95

The State also seeks a waiver of Section 22.567(a)(1) of the Commission's rules, which states:

The FCC may grant an application requesting assignment of a channel to a proposed base, fixed or central office station transmitter only if: (1) The interfering contour of the proposed transmitter does not overlap [the geographic area of a co-channel licensee] unless that [licensee] has agreed in writing to accept any interference that may result from operation of the proposed transmitter . . .¹⁷

As explained above, the State has requested authorization to use a Part 22 channel (Channel Block FI: 152.530-152.550 / 157.790-157.810 MHz) at a single site located in Bloomfield, Missouri under one of the licenses it proposes to acquire from Warner. As shown in the graphic under Exhibit A, the service contour of the Bloomfield site will fall within the geographic area of the license it proposes to acquire, but the interference contour overlaps the adjacent geographic areas of BEA Nos. 73 and 95.

¹⁶ 47 C.F.R. § 20.9(a)(6)(2010).

¹⁷ *Id.* at § 22.567(a)(1).

The State has obtained requisite authority or concurrences to overlap on Channel Blocks FI and FQ in BEA No. 73 and on Channel Block FQ in BEA No. 95.¹⁸ It is not able to obtain such authority or concurrence to overlap on Channel Block FI into BEA No. 95, however, as a license for that channel has not been assigned by the FCC. Accordingly, based on the justification provided in Section V, the State seeks a waiver of Section 22.567(a)(1) so that it may operate at the Bloomfield site on Channel Block FQ with an interference contour that extends into BEA No. 95.

C. Section 22.503: Construction Obligation for Partitioned Area

The purpose of the application pending under File No. 0004963364 to partition Channel Block FQ from Scott MacIntyre is to provide the State with authority to operate on that channel at Bloomfield, Missouri, as discussed above, with an interference contour that overlaps into BEA No. 95. Given the limited purpose of this particular acquisition, the State respectfully requests that the FCC combine or aggregate the area it will acquire through the partition of the license held by Mr. MacIntyre to operate on Channel Block FQ in BEA No. 95 with the area it will acquire from Warner to operate on Channel Block FQ in BEA No. 96.

Such relief is sought so that the State will not be required to meet the construction requirement associated with the partitioned area independently from the construction requirement associated with the area it will acquire in BEA No. 96 from Warner. If deemed necessary, however, the State alternatively requests a waiver of the construction obligations in Section 22.503 the FCC's rules as applied to the area it proposes to acquire from Mr. MacIntyre. Such action is in the public interest for the reasons provided below in Section V.¹⁹

V. Grant of a Waiver is in the Public Interest and Promote FCC Goals

A. The Waiver Standard Under Sections 1.3 and 1.925

Section 1.3 of the Commission's regulations allows the agency to waive its rules "for good cause shown."²⁰ Under that Section, a waiver may be granted if "special circumstances warrant a deviation from the general rule and such deviation will serve the public interest" better than adherence to the general rule.²¹ Alternatively, Section 1.925 provides the agency with authority to waive its rules if a petitioner establishes that the "underlying purpose of the rule would not be served or would be frustrated by application to the instant case, and that grant of the waiver would be in the public interest."²²

¹⁸ See generally note 15, *supra*.

¹⁹ 47 C.F.R. § 22.503 (2010).

²⁰ *Id.* at § 1.3; see also *WAIT Radio v. FCC*, 418 F.2d 1153, 1159 (D.C. Cir. 1969) ("*WAIT Radio*").

²¹ *Northeast Cellular Telephone Co. v. FCC*, 897 F.2d 1164, 1166 (D.C. Cir. 1990).

²² 47 C.F.R. § 1.925 (2010).

Section 1.925 also permits a waiver to be granted if unique or unusual factual circumstances exist causing the application of the rule to be inequitable, unduly burdensome, or contrary to the public interest, or the applicant has no reasonable alternative.

As explained by the Court of Appeals for the DC Circuit, the waiver process allows the Commission to “maintain the fundamentals of principled regulation without sacrifice of administrative flexibility and feasibility.”²³ In deciding whether or not to grant specific waiver requests, the Commission must “take into account considerations of hardship, equity, or more effective implementation of overall policy” in its broader quest for regulation in the “public interest.”²⁴ In fact, the Wireless Telecommunications Bureau has applied this authority to grant a number of requests similar to Missouri’s to “ensure that public safety agencies have sufficient spectrum.”²⁵

As shown below, grant of Missouri’s request would serve long-standing policy objectives of the Commission, in particular: (1) the deployment of spectrum to meet public safety needs, and (2) the efficient utilization of scarce spectrum. Additionally, the grant of Missouri’s request would not frustrate the underlying purpose of the Commission’s licensing scheme governing the use of Part 90 public safety land mobile radio channels and Part 22 channels.

The State has clearly demonstrated in accordance with these rules that grant of a waiver is justified and would serve long-standing Commission policy objectives.

B. A Waiver Would Benefit Providers of Public Safety Services
By Granting Access To Needed Spectrum and By Enhancing Interoperability

The Commission has stated on numerous occasions that two of its primary goals are to provide for the communications needs of the public safety community and to promote interoperability among public safety entities.²⁶ Indeed, Section 1 of the Communications Act lists as one of the core purposes of the FCC to “promot[e] safety of life and property through the use of wire and radio communication.”²⁷

²³ *WAIT Radio*, 418 F.2d at 1159.

²⁴ *Id.*

²⁵ *See, e.g., Application of the State of New Hampshire and McCormick & Jacobson*, Memorandum Opinion and Order, 14 FCC Rcd 3607 (1999) (“*New Hampshire Waiver Order*”).

²⁶ *See generally State of Florida, Request for Waiver of the Commission’s Rules to Permit Licensing of Stations in 800 MHz General Category on Non-standard Channel Centers*, Memorandum Opinion and Order, 16 FCC Rcd. 2174 ¶ 13 (2001) (“*Florida Waiver Order*”).

²⁷ 47 U.S.C. § 151. Further, the Commission has stated that the events of September 11, 2001 “reinforce the critical nature of the public safety community’s responsibilities to our Nation’s safety and well being. Access to modern wireless communications is essential to ensuring that the public safety community can effectively fulfill these responsibilities. *The 4.9 GHz Band Transferred from Federal Government Use*, Second Report and Order and Further

Consistent with these objectives, the Commission has acknowledged the need to obtain additional spectrum for the public safety community.²⁸ In its report to Congress in 2005, the agency stated that “Public safety commenters generally agree that emergency response providers need access to additional spectrum.”²⁹ This concern was echoed by the 9/11 Commission later that year when it reported that “[n]ew spectrum is needed to facilitate interoperable communications between responder agencies; to allow effective radio communications during large-scale responses to major disasters; and to allow emergency response agencies to deploy next-generation communication technologies,” and that only “minimal progress” had been made to address these issues.³⁰

Additionally, the FCC has placed “great importance on facilitating public safety interoperability,”³¹ specifically through its recognition that the “inability to communicate hinders cooperation and coordination among public safety agencies on a day-to-day basis.”³² In testimony before Congress, then-Chairman Martin stated “[f]irst responders

Notice of Proposed Rule Making, 7 FCC Rcd. 3955, 3967 ¶ 23 (2002) (“Second 4.9 GHz Order”).

²⁸ See Federal Communications Commission, Report to Congress on the Study to Assess Short-Term and Long-Term Needs for Allocations of Additional Portions of the Electromagnetic Spectrum for Federal, State and Local Emergency Response Providers, Submitted Pursuant to Public Law No. 108-458 (2005) (“December 2005 Report to Congress”). The Commission also reiterated that one of its strategic goals for homeland security is “ensuring that essential public health and safety personnel have effective communications services available to them at all times, and particularly in the event of an emergency.” *Id.* ¶ 98.

²⁹ *Id.* at ¶ 98.

³⁰ 9/11 Public Discourse Project, Report on the Status of 9/11 Commission Recommendations, Part I: Homeland Security, Emergency Preparedness and Response (Sept. 14, 2005) at 3.

³¹ *Southwest Central Dispatch, Request for Waiver of Section 101.81 of the Commission’s Rules*, Order on Reconsideration, 17 FCC Rcd. 15633, n.43 (2002). See, e.g., *The Development of Operational, Technical and Spectrum Requirements For Meeting Federal, State and Local Public Safety Agency Communication Requirements Through the Year 2010*, Fourth Memorandum Opinion and Order, 17 FCC Rcd. 4736, 4746 ¶ 24 (2002); *Application of City of Santa Monica, California (For a Public Safety License Pursuant to Section 337 of the Communications Act of 1934, As Amended)*, Order, 15 FCC Rcd. 24938, 24942 (2000); *Application of County of Sacramento, California, Request for Waiver to Obtain a License for a Frequency Allocated for Exclusive Paging Operations (929.0125 MHz)*, Order on Reconsideration, 15 FCC Rcd. 12600 ¶ 18 (2000); *The 4.9 GHz Band Transferred from Government Use*, 18 FCC Rcd. 9152, 9153, 9158-59 ¶¶ 2, 16 (2003) (“Third 4.9 GHz Order”).

³² *The Development of Operational, Technical and Spectrum Requirements for Meeting Federal, State and Local Public Safety Agency Communication Requirements Through the Year 2010, Establishment of Rules and Requirements For Priority Access Services*, Third Memorandum Opinion and Order and Third Report and Order, 15 FCC Rcd. 19844, 19880 ¶ 82 (2002) (“Third Interoperability Report and Order”).

need an interoperable, mobile wireless communications system that . . . must allow different organizations from different jurisdictions to communicate with each other immediately, through both voice and data transmissions.”³³ Similarly, the report of the Independent Panel Reviewing the Impact of Hurricane Katrina on Communications Networks noted that “increased ability to interoperate with other agencies would have provided greater redundant communications paths and a more coordinated response” after Hurricane Katrina.³⁴ The Independent Panel recommended that the Commission take steps to further encourage first responder interoperability.³⁵

These statements are also consistent with the Final Report released by the National Commission on Terrorist Attacks Upon the United States (the “9/11 Commission”). Evaluating, among other things, the nation’s emergency preparedness, the 9/11 Commission found “strong evidence that compatible and adequate communications among public safety or homeland security organizations at the local, state, and federal levels remains an important problem.” Thus, it is unsurprising that 90 percent of public safety agencies stress that interoperability will be a prominent concern in upgrading their communications systems.³⁶

In addition, the Commission has repeatedly acknowledged that the development of statewide public safety systems is in the public interest, and that waivers are an appropriate means to enable such systems.³⁷ In one of many examples, the FCC granted a waiver of the 800 MHz General Category freeze to allow the State of Ohio to

³³ See Hearing on Public Safety Communications from 9/11 to Katrina: Critical Public Policy Lessons Before the Subcommittee on Telecommunications and the Internet, H. Comm. on Energy and Commerce, 109th Cong. 7 (Sept. 29, 2005) (written Statement of Kevin J. Martin, Chairman, Federal Communications Commission).

³⁴ See *Recommendations of the Independent Panel Reviewing the Impact of Hurricane Katrina on Communications Networks*, Notice of Proposed Rulemaking, 21 FCC Rcd. 7320, Appendix B, p. 26 (2006).

³⁵ *Id.* at pp. 38-39.

³⁶ See PSWN Program Information Brief, “A Priority Investment for America’s Future Safety” at 9, <http://www.safecomprogram.gov/admin/librarydocs6/priorityinvestment.pdf> (“Priority Investment Brief”). The need for improved and interoperable communications systems has been reinforced repeatedly by a number of other emergencies that have occurred since 9/11: the 2002 sniper incidents in the Washington metropolitan area, the 2003 blackout in New York City, and the periodic evacuations of the White House and the Capitol. Hurricanes Katrina and Rita also demonstrated the importance for wireless communications capabilities in particular to plan the preparation, evacuation, emergency response, and relief efforts associated with natural disasters.

³⁷ See, e.g., *Florida Waiver Order*, *supra* note 45 (finding a waiver to be in public interest where it would allow Florida to expand and improve the coverage of its statewide public safety communications system and allow public safety entities in Florida to communicate with each other); *Alaska Waiver Order*, *supra* note 50; *New Hampshire Waiver Order*, *supra* note 44.

implement a new statewide communications network.³⁸ The Commission found in that case that grant of a waiver would be in the public interest because: (a) Ohio had demonstrated that its then-current system did not meet its needs; (b) the proposed system would lead to major improvements in public safety communications in Ohio; and (c) access to the channels at issue was integral to the construction of its system. Similarly here, Missouri proposes to implement much-needed improvements to an aging public safety radio system that no longer meets communications needs, and its acquisition of additional channels is essential to the completion of the new system.

Furthermore, in the *Ohio Waiver Order*, the agency found that a waiver was in the public interest even though the spectrum at issue in that proceeding had been auctioned to third parties.³⁹ A waiver is even more clearly in the public interest here where: (1) no licensee has been licensed on the requested spectrum, (2) no parties bid on the channels, and (3) the spectrum is currently lying fallow.

C. FCC Approval is Consistent with the FCC's Goals
To Promote Licensee Flexibility and Spectrum Efficiency

Grant of the State's applications will further the Commission's goals to permit flexible use of spectrum as well as to encourage efficient use of spectrum. The FCC has repeatedly emphasized that affording flexibility to licensees enables them "to make fundamental choices about how they will use the spectrum (including whether to use it or transfer their usage rights to others) . . . [and] tends to lead to efficient and highly-valued spectrum uses."⁴⁰

To that end, the FCC has initiated or completed a number of proceedings designed to provide licensees with additional authority to decide on their own how to manage their spectrum. For example, in 2003, the FCC adopted rules that afford licensees the flexibility to lease their spectrum to third party entities, provided there is no change in *de jure* control.⁴¹ The Commission explained that this action "will help

³⁸ *Applications of State of Ohio for 800 MHz General Category Channels and Request for Waiver Pursuant to Section 337(c) of the Communications Act of 1934, and Section 1.925 of the Commission's Rules*, 17 FCC Rcd 439 (2002) ("*Ohio Waiver Order*").

³⁹ *Id.* at 451 ¶ 22. The Commission has also granted a waiver under Section 337 to allow public safety use of paging spectrum for which no bids were received at auction. See *Motorola, Inc., Application for Consent to Partition and Disaggregate Licenses and Requests for Waiver of Part 80 Rules to Permit Use of Maritime Frequencies for Private Land Mobile Radio Communications*, File Nos. 0002438737 *et seq.*, Order, DA 07-116 (rel. Jan. 19, 2007) ("*MariTEL Motorola Order*"); *Monroe County, New York, for a Public Safety License Pursuant to Section 337 of the Communications Act of 1934, As Amended*, 17 FCC Rcd 21535 (2002).

⁴⁰ Spectrum Report at 16.

⁴¹ *Promoting Efficient Use of Spectrum Through Elimination of Barriers to the Development of Secondary Markets*, Report and Order, 18 FCC Rcd. 20604, 20608 ¶ 2 (2003) ("*Secondary Markets Order*"). Similarly, the FCC took a number of steps to greatly increase the flexibility afforded to Broadband Radio Service and Educational Broadband Service licensees, so as to encourage the highest and best use of spectrum domestically and internationally and enable

maximize the efficient use of spectrum among public safety entities by providing incentives to lease any excess spectrum capacity, thus diminishing the likelihood that public safety entities will warehouse spectrum.”⁴²

Grant of Missouri’s waiver request will further the Commission’s goal to promote spectrum efficiency. This goal was emphasized by the FCC’s Spectrum Policy Task Force statement that the flexible use of spectrum enables users “to make fundamental choices about how they will use the spectrum . . . [and] tends to lead to efficient and highly-valued spectrum uses.”⁴³

Allowing Missouri to utilize Part 22 channels would clearly promote efficiency by facilitating the full utilization of those channels as well as by maximizing the use of the VHF spectrum currently licensed to Missouri public safety agencies. In fact, VHF spectrum is particularly well suited for Missouri public safety use, as described in Section III(A).

D. Grant of a Waiver Would Help Achieve FCC Objectives

Grant of Missouri’s request for waiver would be consistent with the FCC’s own internal objectives, which include its interest in “promot[ing] access to effective communications services by public safety, public health, homeland security, and other emergency and defense personnel in emergency situations” so that the agency may “fully and effectively carry out its role in promoting homeland security, network protection, interoperability, redundancy, and reliability.”⁴⁴ As described above, Missouri must secure the Part 22 spectrum in order to establish an effective statewide public safety communications system.

A waiver would also supplement the FCC decision relating to the Part 22 channels. The Commission recently deleted the common carrier limitation in Section 22.7 of its

licensees to migrate to more technologically and economically efficient uses of the spectrum. See *Amendment of Parts 1, 21, 73, 74 and 101 of the Commission’s Rules to Facilitate the Provision of Fixed and Mobile Broadband Access, Educational and Other Advanced Services in the 2150-2162 and 2500-2690 MHz Bands*, Report and Order, 19 FCC Rcd. 14165, 14167 ¶¶ 1-2 (2004) (reconfiguring the 2500-2690 MHz band, permitting spectrum leasing for BRS and EBS, and providing licensees with the flexibility to employ the technologies of their choice, among other things). The FCC also has moved consistently towards flexible service rules, permitting auction winners to determine the most highly valued use for their spectrum. See, e.g., *Service Rules for Advanced Wireless Services In the 1.7 GHz and 2.1 GHz Bands*, Order on Reconsideration, WT 20 FCC Rcd. 14058, 14058-59 ¶ 1 (2005) (modifying the band plan and service rules for the 1.7 and 2.1 GHz Bands in part to “enhance flexibility for potential licensees”).

⁴² *Secondary Markets Order* ¶ 55.

⁴³ Spectrum Policy Task Force Report, ET Dkt. No. 02-135, at 16 (Nov. 2002).

⁴⁴ See FCC Strategic Plan FY 2003-FY 2008, available at <http://www.fcc.gov/omd/strategicplan/strategicplan2003-2008.pdf>, p. 18.

rules.⁴⁵ The FCC acknowledged that its decision would “bring Part 22 licensing policies into conformance with wireless regulatory parity policies and in light of the significant competition among PMS providers.”⁴⁶ The agency explained further that this change is consistent with its Congressional mandate to establish regulatory symmetry among similar mobile services, because it does not limit license-holder eligibility to common carriers in other services (e.g., Part 24 Personal Communications Services).⁴⁷

Missouri submits that the need to upgrade its communications system for public safety purposes constitutes a compelling factual case that would cause application of the agency’s existing requirements to be unduly burdensome or otherwise contrary to the public interest. Given the benefits associated with the new system described in this request, Missouri has demonstrated that its situation represents “special circumstances [that] warrant a deviation from the general rule[s],” and that a waiver would serve the public interest better than adherence to the rules. As such, Missouri meets the statutory and regulatory criteria for the requested relief.

E. The State Also Satisfies the Waiver Requirements of Section 337(c)

Section 337(c) of the Communications Act provides in pertinent part that “upon application by an entity seeking to provide public safety services, the Commission shall waive any requirement of this Act or its regulations implementing this Act (other than its regulations regarding harmful interference) to the extent necessary to permit the use of unassigned frequencies for the provision of public safety services by such entity.”⁴⁸ Grant of such a Section 337(c) waiver is justified if the Commission finds that:

(A) no other spectrum allocated to public safety services is immediately available to satisfy the requested public safety service use; (B) the requested use is technically feasible without causing harmful interference to other spectrum users entitled to protection from such interference under the Commission’s regulations; (C) the use of the unassigned frequency for the provision of public safety services is consistent with other allocations for the provision of such services in the geographic area for which the application is made; (D) the unassigned frequency was allocated for its present use not less than 2 years prior to the date on which the application is granted; and (E) granting such application is consistent with the public interest.⁴⁹

⁴⁵ See *Amendment of Part 22 of the Commission's Rules to Benefit the Consumers of Air-Ground Telecommunications Services, Biennial Regulatory Review - Amendment of Parts 1, 22, and 90 of the Commission's Rules*, 20 FCC Rcd 4403 (2005).

⁴⁶ *Amendment of Part 22 of the Commission's Rules to Benefit the Consumers of Air-Ground Telecommunications Services; Biennial Regulatory Review – Amendment of Parts 1, 22, and 90 of the Commission's Rules*, Notice of Proposed Rule Making, 18 FCC Rcd 8380, 8392, 8382 ¶ 28 and n. 73 (2003).

⁴⁷ *Id.*

⁴⁸ 47 U.S.C. § 337(c).

⁴⁹ *Id.*

As shown below, Missouri clearly satisfies these criteria to justify the relief it has requested not only with respect to the use of Part 22 channels generally, but also with respect to its proposed use of Channel Block FI at Bloomfield, Missouri.

(i) *No Other Spectrum Allocated to Public Safety Services Is Immediately Available To Satisfy the Requested Public Safety Service Use*

As described in Section III, Missouri requires a significant number of channels to upgrade its facilities to support 5,000 mobile units. Beginning over two years ago, Missouri initiated discussions with the Association of Public-Safety Communications Officials – International, Inc. (“APCO”) to assess available spectrum resources to fulfill these channel requirements. Based on that effort, the State concluded that the VHF band would be the most practicable spectrum to deploy because, among other reasons: (a) it is the only band with channels available state-wide in the quantity needed by Missouri, (b) the propagation characteristics of the band provide wider coverage and better signal penetration, and (3) use of this band would reduce the cost of, and facilitate the migration to, the new system for Missouri agencies already operating on 150 MHz frequencies.

Missouri thoroughly researched the availability of usable VHF channels allocated to the Part 90 Public Safety Radio pool within its jurisdiction. Most of these channels have now been licensed—or are in the process of being frequency coordinated—by Missouri for deployment into the proposed system. Because of interference concerns, however, Missouri is not able to coordinate a sufficient quantity of Part 90.20 channels to construct an adequate public safety system. Additionally, budget limitations prevent Missouri from meeting its spectrum needs through the acquisition of VHF spectrum from third party licensees.

Accordingly, Missouri evaluated other VHF spectrum resources available under the FCC’s rules. It concluded that channels allocated under the Part 22 VHF Paging and Radiotelephone Service band could meet its channel requirements. As discussed earlier, these channels are ideal for Missouri’s purposes because of their spectral proximity to Missouri’s existing Part 90 public safety licenses in the 150 MHz band.

Because Missouri has demonstrated that “no other spectrum allocated to public safety services is immediately available to satisfy the requested public safety use,” the Commission would be justified in granting Missouri licenses for its proposed use of alternative Part 22 channels.

(ii) *The Requested Use Is Technically Feasible Without Causing Harmful Interference to Other Spectrum Users Entitled to Protection from Such Interference Under the Commission’s Regulations*

Missouri’s use of the requested channels, including in particular Channel Block FI at Bloomfield, Missouri, should not cause harmful interference to other spectrum users. As discussed in Section III(B), the service contour of the Bloomfield site will fall within the geographic area of the license it proposes to acquire from Warner Communications, but the interference contour will overlap an area in the adjacent geographic area of BEA No. 95.

Attached under Exhibit A is an engineering study of the relevant contours. The exhibit was prepared by the State's consultants using RadioSoft Comstudy 2.2 software. The theoretical service contour of the Bloomfield site is shown in green and the theoretical interference contour is shown in red.⁵⁰ Basic Economic Area ("BEA") boundaries are shown in pink and each BEA is identified by number. The state and county borders are shown in grey. The contours of an incumbent site-based licensee is shown in blue (service) and brown (interference).

Channel Block FI is not currently authorized to a geographic area licensee in BEA No. 95, however. Nor are there any incumbent or grandfathered licensees near the State's proposed site at Bloomfield, Missouri. The closest licensee is Shawnee Telephone Company, authorized under call sign KUC894 to operate on 152.54 MHz with an effective radiated power of 121 Watts and an antenna height above ground level of 51.8 meters at a location in Herod (Pope), Illinois, which is over 144 kilometers to the northeast of Bloomfield. As shown in Exhibit A, the edge of the interference contour that would be created by the State's proposed operations at Bloomfield would be more than 75 kilometers from the incumbent licensee and does not overlap either its service contour or its interference contour.

Last, the State's proposed use of Channel Block FI at Bloomfield would not affect future operations on (or the value of) a license for BEA No. 95 if it is auctioned or assigned at a later date. As an initial matter, the proposed overlap encompasses only approximately 200 square miles in a part of Dunklin County, Missouri, which is a fraction of the geographic area of the nine counties in Missouri and Arkansas encompassed within BEA No. 95. Moreover, as depicted in Exhibit A, the area of overlap proposed by the State is surrounded by the geographic area in BEA No. 96, which would become licensed to the State upon consummation of its transaction with Warner; thus, a future licensee of BEA No. 95 would likely not be able to provide service in the proposed overlap area in any event without obtaining concurrence from the State.

(iii) *The Use of the Unassigned Frequency for the Provision of Public Safety Services Is Consistent with Other Allocations for the Provision of Such Services in the Geographic Area for Which the Application Is Made*

This provision of Section 337 is intended to ensure that "interoperability of public safety services is not retarded."⁵¹ In fact, the proposed system is being implemented specifically to enhance interoperability among state, local, and federal public safety agencies within Missouri. Moreover, Missouri is seeking to acquire and utilize a channel

⁵⁰ 47 C.F.R. § 22.567(d)(2010). Specifically, the study demonstrates that the proposed Bloomfield site's interference contour, as calculated under Section 22.567(d) of the FCC's rules, overlaps into the geographic areas of BEA No. 73 and BEA No. 95.

⁵¹ See H.R. Rep. No. 111, 103rd Cong., 1st Sess. at 580 (1997).

that coincides and is compatible with its current channel configuration and use. Thus, grant of its waiver request is fully consistent with the purpose of Section 337.

(iv) *The Unassigned Frequency Was Allocated for Its Present Use Not Less Than 2 Years Prior to the Date on Which the Application Is Granted.*

The Part 22 channel associated with this Section 337 waiver request was allocated for paging and radiotelephone services over two years ago. Furthermore, the Commission attempted to auction these frequencies in 2001, 2003 and again in 2010. No entity bid on the channel in BEA No. 95, and a license was not awarded. As such, Section 337(c)(1)(D) is satisfied with respect to the channel.

(v) *Granting Such Relief Is Consistent with the Public Interest*

Grant of Missouri's applications would be in the public interest, as it will allow otherwise vacant spectrum to be used by the State to support essential communications needed to protect the safety of life, health, and property. As described above, the channel requested by the State is integral to the implementation of the MOSWIN system. Failure to construct such a system would result in continued communications inefficiencies and could jeopardize public safety in Missouri. Furthermore, the requested channel is not currently being used or sought by other applicants. Indeed, as noted in Section V(E)(iv), the Part 22 channel requested by Missouri did not receive a single bid in the FCC's auctions for the channel in its latest auction (Auction No 87). Under these circumstances, it clearly would be in the public interest to allow the use of otherwise fallow spectrum in the State's proposed system.

In the event the Commission determines that Section 337(c) of the Communications Act cannot be applied in his case, however, the agency may nevertheless grant Missouri relief pursuant to Sections 1.3 and 1.925 of its rules. The State demonstrated in Section V(A-D) above that a waiver is justified.

VI. Conclusion

For the foregoing reasons, the State respectfully requests that the Commission grant the applications pending under ULS File Nos. 0004961767, 0005019389, 0004963364 and 0005160243. the State seeks to use selected Part 22 channel pairs to upgrade and improve its existing facilities to support the operation of innovative equipment and functionalities that will be deployed to meet the communications needs of public safety service providers and first responders. FCC grant of the State's applications and waiver request is justified under Section 337(c) of the Communications Act and Sections 1.3 and 1.925 of the FCC's rules, as such action would promote long-standing policy objectives of Congress and the Commission to meet public safety needs and promote the efficient utilization of spectrum.

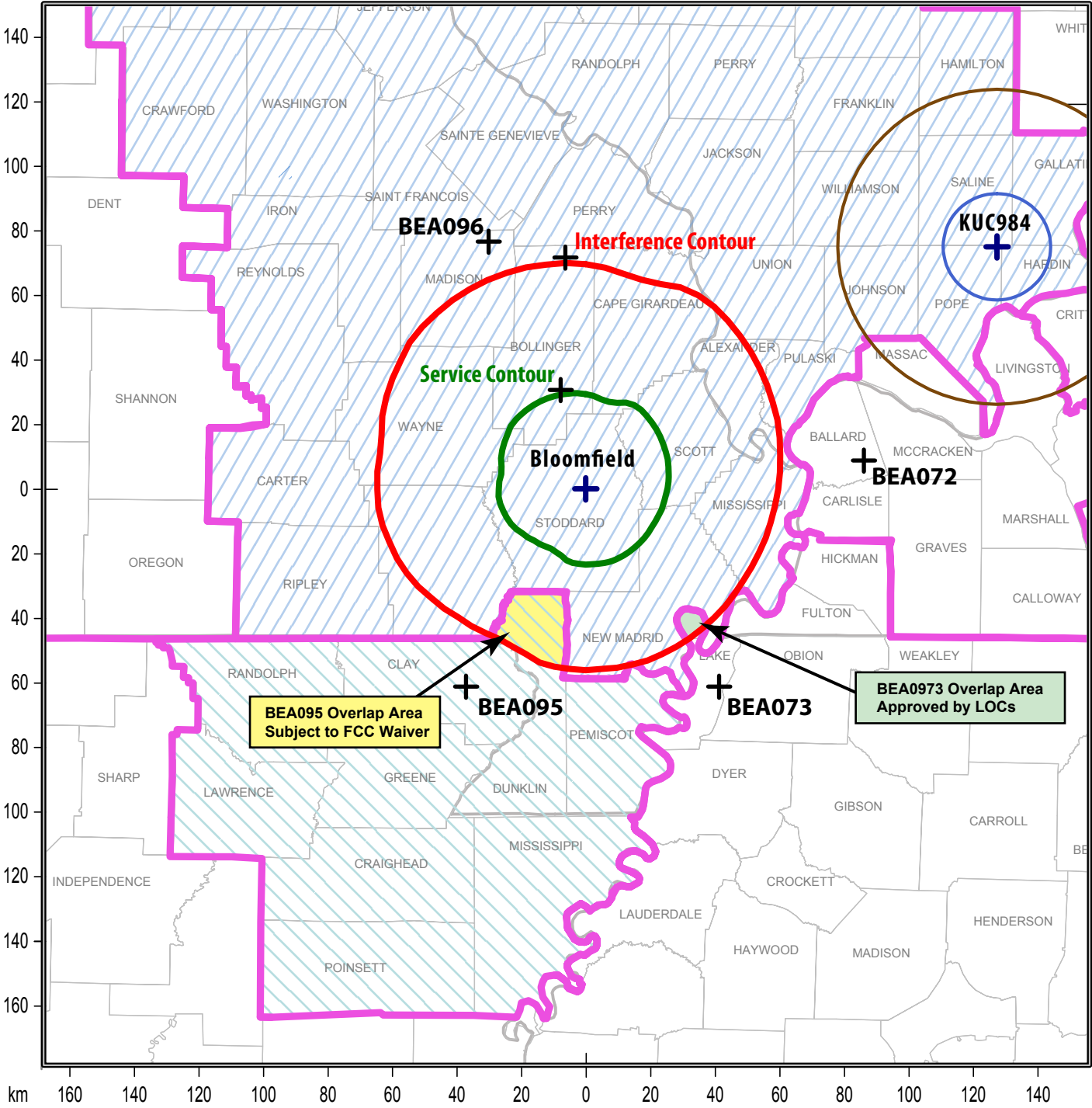
Alternatively, the State has demonstrated that its situation represents "special circumstances [that] warrant a deviation from the general rule[s]," and that a waiver would serve the public interest better than adherence to the rules. As discussed

above, a waiver would not frustrate the underlying purpose of the Commission's licensing scheme governing the use of land mobile radio channels. The State therefore submits that it has presented a compelling factual case that would cause application of the agency's rules to be unduly burdensome or otherwise contrary to the public interest and that it has met the statutory and regulatory criteria for the relief it has requested. At a minimum, the State has shown "good cause" for the relief it has requested.

13406017.3

Exhibit A

Contour Study of Proposed and Existing Operations Near Bloomfield, MO



- County Borders
- State Borders
- BEA Borders

Exhibit B

**Letters of Concurrence from KTI, Inc. and Integrated Communications, Inc.,
For operations on Channel Blocks FI and FQ, respectively, in BEA No. 73**

JEREMIAH W. (JAY) NIXON
Governor

JOHN M. BRITT
Director



Truman Building, Room 870
Mailing Address: P.O. Box 749
Jefferson City, MO 65102-0749
Telephone: 573-751-4905
FAX: 573-751-5399
Internet Address:
<http://www.dps.mo.gov>

STATE OF MISSOURI
DEPARTMENT OF PUBLIC SAFETY
OFFICE OF THE DIRECTOR

October __, 2011

Ken Hunt
KTI, Inc.
1246 Sycamore View Road
Memphis, TN 38134

Mr. Hunt:

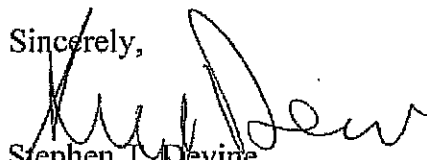
The State of Missouri in cooperation with the Missouri Department of Public Safety is planning to construct a Statewide Interoperable VHF trunked radio system utilizing tower sites in Southeastern Missouri.

In accordance with FCC regulations (47 C.F.R. Section 22.561 *et seq.*), the State of Missouri is seeking letters of concurrence from all affected licensees. Specifically, the State of Missouri seeks to operate on Channel Block FI at Bloomfield, Missouri, as described in the attachment to this letter. The affected call sign and frequency pair are WPZN567 and 152.525-152.555/157.785-157.815 MHz, respectively.

The final parameters for the proposed radio system are being determined. Nevertheless, all effort will be made to avoid interference to incumbent licensed systems. If objectionable interference occurs, the State of Missouri will immediately correct the problem to the satisfaction of incumbent licensees. If no immediate remedy is found, the State of Missouri will discontinue operations on the interfering frequency until such remedy is found.

Please take the time to complete and return the following form in the enclosed pre-paid envelope. If you have any questions or comments regarding the planned State of Missouri Statewide Interoperability Network (MOSWIN), please do not hesitate to contact me at (573) 522-2382 or by email stephen.devine@dps.mo.gov.

Sincerely,


Stephen T. Devine
Interoperability Program Manager

100

CONCURRENCE APPROVAL

We have received the notification letter concerning the construction of the State of Missouri Statewide Interoperability Network (MOSWIN) trunked radio system and the request to concur with the planned coordination of the affected call sign and frequency pair.

We concur with the use of Channel FI on 152.525-152.555/157.785-157.815 MHz at the Bloomfield, MO location as proposed in the attachment.

I fully concur with the planned operation and expect that the State of Missouri will honor its commitment to ensure "...all effort will be made to avoid interference to incumbent licensed systems. If objectionable interference occurs, the State of Missouri will immediately correct the problem to the satisfaction of incumbent licensees. If no immediate remedy is found, the State of Missouri will discontinue operations on the interfering frequency until such remedy is found."

KTI, Inc.
1246 Sycamore View Road
Memphis, TN 38134

Call Sign WPZN567 (BEA073 - Memphis, TN-AR-MS-KY)
Channel Block FI: 152.525-152.555/157.785-157.815 MHz

Print Name: KEN HUNT

Signature: Ken Hunt

Date: 10/14/11

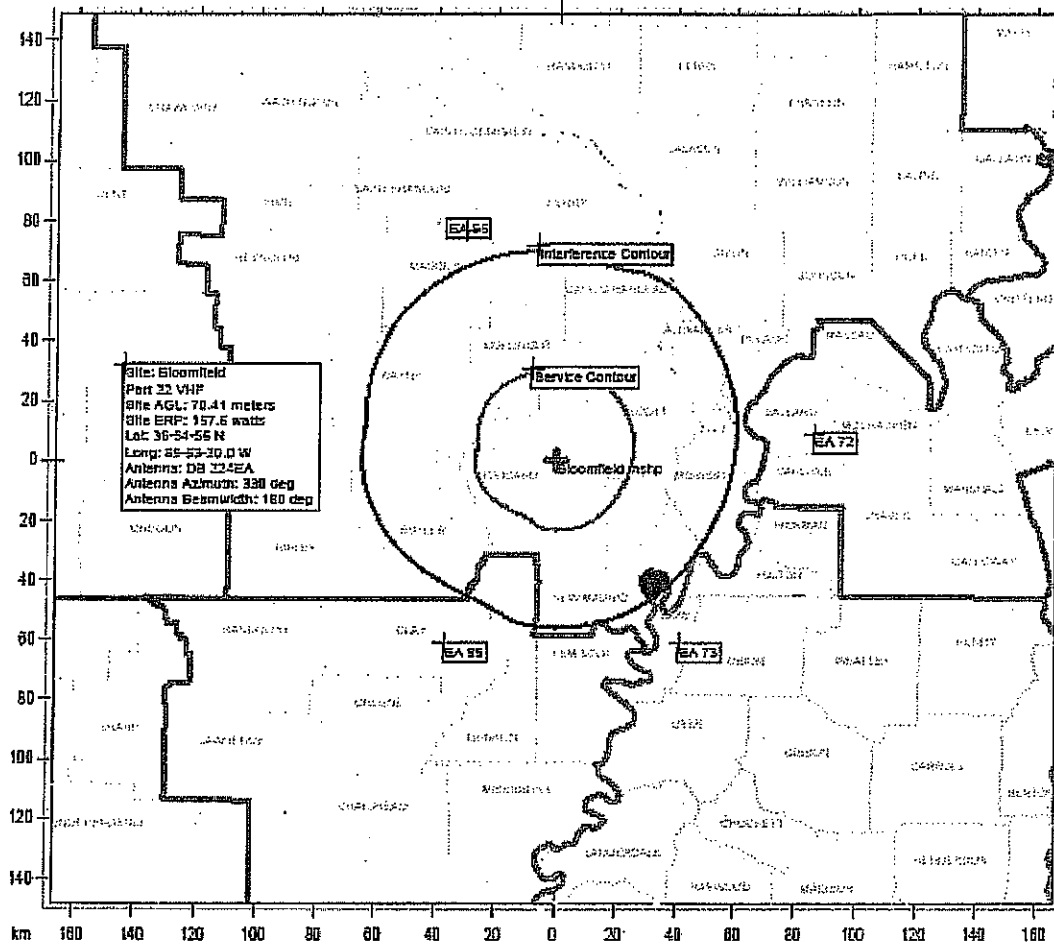
1602

Attachment

The State of Missouri proposes to operate on Channel Block FI in BEA096 - St. Louis, MO-IL with the technical specifications listed in the table below, or as permitted under FCC's rules and regulations, which will establish an interference contour that overlaps into BEA073 - Memphis, TN-AR-MS-KY as shown in the attached contour study. The area shaded in red illustrates the expected overlap of the interference contour beyond the border of BEA096 into BEA073.

Site Name	Latitude (N) Longitude (W) (WGS84)	Antenna Model	ERP (Watts)	Antenna Height (ft)	Antenna Gain (dB)	Azimuth (deg)
Bloomfield	36.91555556 -89.89166667	Sinclair\dssc229	210	210	6.1	0

Bloomfield Part 22 VHF



County Border State Border Streets

Map Scale: 1:1817823 1 cm = 18.18 km V/H Size: 298.37 x 333.00 km

Motorola Solutions, Inc.

400

JEREMIAH W. (JAY) NIXON
Governor

JOHN M. BRITT
Director



Truman Building, Room 870
Mailing Address: P.O. Box 749
Jefferson City, MO 65102-0749
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FAX: 573-751-5399
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<http://www.dps.mo.gov>

STATE OF MISSOURI
DEPARTMENT OF PUBLIC SAFETY
OFFICE OF THE DIRECTOR

October 12, 2011

Mr. Clay Golday
Vice President
Integrated Communications Inc.
6630 Reese Road
Memphis TN. 38133

The State of Missouri in cooperation with the Missouri Department of Public Safety is planning to construct a Statewide Interoperable VHF trunked radio system utilizing tower sites in Southeastern Missouri.

In accordance with FCC regulations (47 C.F.R. Section 22.561 *et seq.*), the State of Missouri is seeking letters of concurrence from all affected licensees. Specifically, the State of Missouri seeks to operate on Channel Block FQ at Bloomfield, Missouri, as described in the attachment to this letter. The affected call sign and frequency pair are WPZM271 and 152.765-152.795/158.025-158.055 MHz , respectively.

The final parameters for the proposed radio system are being determined. Nevertheless, all effort will be made to avoid interference to incumbent licensed systems. If objectionable interference occurs, the State of Missouri will immediately correct the problem to the satisfaction of incumbent licensees. If no immediate remedy is found, the State of Missouri will discontinue operations on the interfering frequency until such remedy is found.

Please take the time to complete and return the following form in the enclosed pre-paid envelope. If you have any questions or comments regarding the planned State of Missouri Statewide Interoperability Network (MOSWIN), please do not hesitate to contact me at (573) 522-2382 or by email stephen.devine@dps.mo.gov.

Sincerely,

Stephen T. Devine
Interoperability Program Manager

CONCURRENCE APPROVAL

We have received the notification letter concerning the construction of the State of Missouri Statewide Interoperability Network (MOSWIN) trunked radio system and the request to concur with the planned coordination of the affected call sign and frequency pair.

We concur with the use of Channel FQ on 152.765-152.795/158.025-158.055 MHz at the Bloomfield, MO location as proposed in the attachment.

I fully concur with the planned operation and expect that the State of Missouri will honor its commitment to ensure "...all effort will be made to avoid interference to incumbent licensed systems. If objectionable interference occurs, the State of Missouri will immediately correct the problem to the satisfaction of incumbent licensees. If no immediate remedy is found, the State of Missouri will discontinue operations on the interfering frequency until such remedy is found."

Mr. Clay Golday
Vice President
Integrated Communications Inc.
6630 Reese Road
Memphis TN. 38133

Call Sign WPZM271 (BEA073 - Memphis, TN-AR-MS-KY)
Channel Block FQ: 152.765-152.795/158.025-158.055 MHz

Print Name: _____

Signature: _____

Date: _____

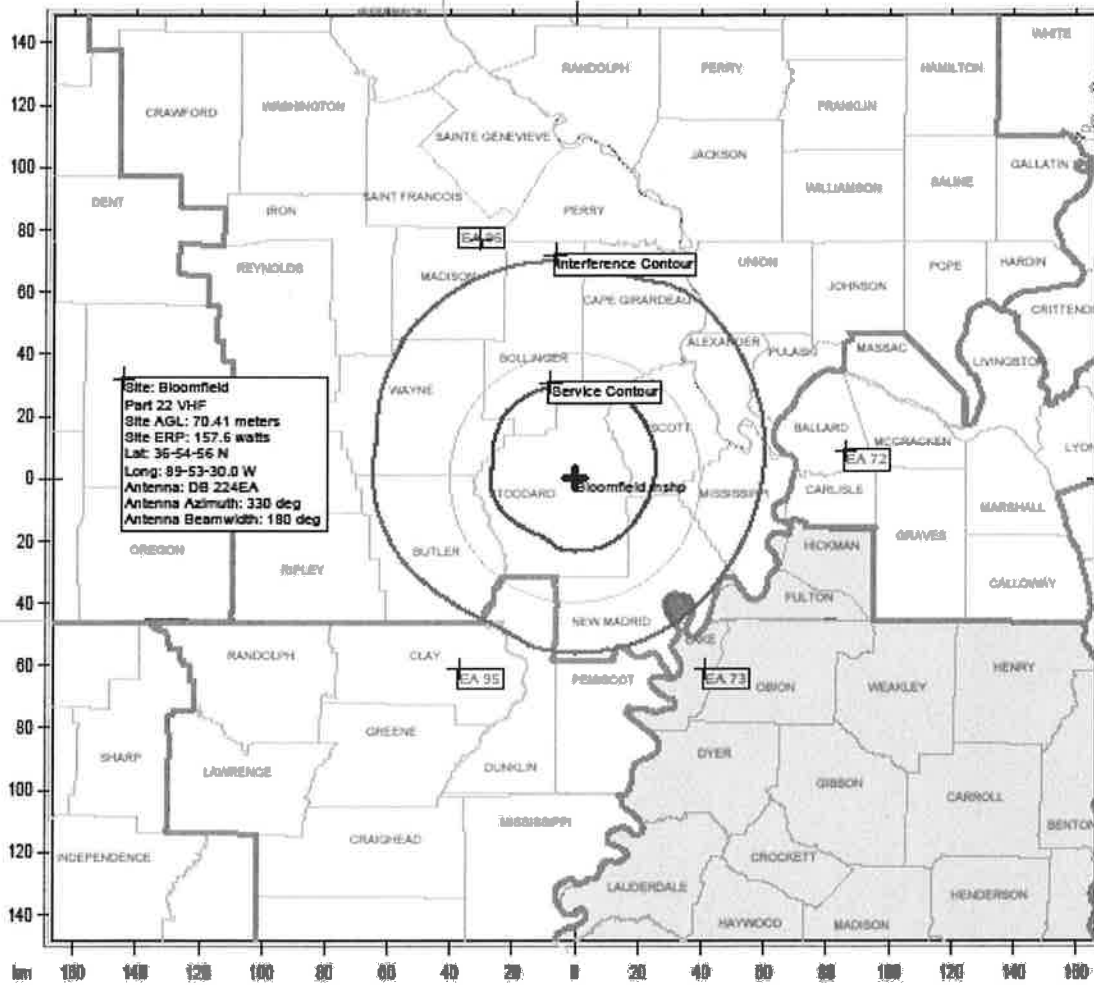
CLAY Golday
Clay Golday
Nov 11 / 2011

Attachment

The State of Missouri proposes to operate on Channel Block FQ in BEA096 - St. Louis, MO-IL with the technical specifications listed in the table below, or as permitted under FCC's rules and regulations, which will establish an interference contour that overlaps into BEA073 - Memphis, TN-AR-MS-KY as shown in the attached contour study. The area shaded in red illustrates the expected overlap of the interference contour beyond the border of BEA096 into BEA073.

Site Name	Latitude (N) Longitude (W) (WGS84)	Antenna Model	ERP (Watts)	Antenna Height (ft)	Antenna Gain (dB)	Azimuth (deg)
Bloomfield	36.91555556 -89.89166667	Sinclair\dssc229	210	210	6.1	0

Bloomfield Part 22 VHF



County Borders State Borders Streets

Map Scale: 1:1617823 1 cm = 16.18 km VP Size: 296.37 x 333.00 km

Motorola Solutions, Inc.