

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

In the Matter of
CITY OF RICHMOND, VIRGINIA
For 900 MHz Channels to Operate a Regional
Public Safety Two-Way Paging System in
Henrico, Chesterfield, and Hanover Counties,
Virginia and Request for Waiver Pursuant to
Section 337(c) of the Communications Act of
1934, and Section 1.925 of the Commission's
Rules
File No. 0002660203

ORDER

Adopted: December 11, 2006

Released: December 12, 2006

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

I. INTRODUCTION

1. We have before us an application and associated waiver request filed by the City of Richmond, Virginia (Richmond) to operate a regional public safety two-way paging system on 900 MHz band Narrowband Personal Communications Services (Narrowband PCS, or NPCS) Channel 16 (frequencies 930.65-930.70 MHz and 901.8125-901.8250 MHz). Richmond seeks a waiver, pursuant to Section 337(c) of the Communications Act of 1934, as amended (the Act), or, in the alternative, Section 1.925 of the Commission's rules, to enable it to use currently unassigned frequencies allotted for non-public safety use. For the reasons stated herein, we grant in part and deny in part Richmond's waiver request.

II. BACKGROUND

2. The Counties of Henrico, Chesterfield, and Hanover, including the City of Richmond, cover an area of approximately 1217 square miles, and have a population of approximately 818,000. Richmond states that it needs a secure, reliable, interoperable, and cost-effective method of alerting and recall for police, fire, emergency medical services (EMS), and other government agencies charged with maintaining public safety in the region. Richmond reports that it considered other solutions, such as one-way paging, mobile data systems, digital and analog two-way voice systems, PCS technologies, and

1 See FCC File No. 0002660203 (filed June 22, 2006, amended July 12, 2006, July 20, 2006, and Nov. 21, 2006), and accompanying Request for Waiver (Waiver Request).

2 47 U.S.C. § 337(c).

3 47 C.F.R. § 1.925.

4 Waiver Request at 2.

5 Id.

broadband solutions, before deciding to deploy a two-way paging system.⁶ Among the benefits of two-way pagers are small belt-worn devices with long battery life, group alerting features, high-power simulcast coverage, off-the-shelf availability of equipment from numerous vendors, and costs comparable to traditional paging.⁷ Richmond states, however, that the devices it plans to use operate only in the 900 MHz band, and commercial paging systems cannot meet its need for immediate, secure communications with adequate back-up reliability.⁸ Richmond therefore seeks to utilize NPCS Channel 16 on an exclusive basis.⁹ It proposes the initial deployment of twenty-three base station sites to cover the City of Richmond and Henrico, Chesterfield, and Hanover Counties, but also requests authorization for the entire Richmond-Petersburg, Virginia Economic Area (EA 015), which covers thirty-eight counties, in order to provide for growth of the regional system to incorporate adjacent jurisdictions.¹⁰

3. Richmond requests waivers of Sections 24.11 and 24.103 of the Commission's rules, and any other of the Commission's rules that are necessary to grant its application.¹¹ Richmond requires a waiver of Section 24.11 because its system would be site-based.¹² Next, Richmond requires a waiver of Section 24.103 because the proposed paging system would not meet construction requirements to provide commercial service over a certain composite area or to a given percentage of the population within a certain timeframe.¹³ Richmond seeks these waivers pursuant to Section 337(c) of the Act¹⁴ or, in the alternative, Section 1.925 of the Commission's rules.¹⁵ On December 8, 2005, the Wireless Telecommunications Bureau placed Richmond's application and Waiver Request on public notice.¹⁶ We received comments from USA Mobility, Inc. (USA Mobility)¹⁷ and reply comments from the County of Monroe, New York (Monroe),¹⁸ Richmond,¹⁹ and the National Public Safety Telecommunications Council (NPSTC).²⁰

⁶ *Id.*

⁷ *Id.* at 2-3.

⁸ *Id.* at 4.

⁹ *Id.*

¹⁰ *Id.*

¹¹ 47 C.F.R. §§ 24.11, 24.103. Section 24.11(b) states that blanket licenses are granted for each market and frequency block, and applications for individual sites will not be accepted. Section 24.103 sets forth construction requirements so that a certain area or percentage of the population is served by a PCS system within a certain time after the initial license grant date.

¹² See FCC File No. 0002660203, Exhibit 1, "Site Information."

¹³ Waiver Request at 1.

¹⁴ See 47 U.S.C. § 337(c).

¹⁵ 47 C.F.R. § 1.925.

¹⁶ See Wireless Telecommunications Bureau Seeks Comment on City of Richmond, Virginia Request for Waiver to Operate Public Safety Paging System on 900 MHz Narrowband PCS Frequencies, *Public Notice*, 21 FCC Rcd 8527 (WTB PSCID 2006). Pursuant to a Commission reorganization effective September 25, 2006, the relevant duties of the Public Safety and Critical Infrastructure Division of the Wireless Telecommunication Bureau were assumed by the Policy Division of the Public Safety and Homeland Security Bureau. See Establishment of the Public Safety and Homeland Security Bureau, *Order*, 21 FCC Rcd 10867 (2006).

¹⁷ Comments of USA Mobility, Inc., filed Aug. 28, 2006 (USA Mobility Comments).

¹⁸ Reply Comments of Monroe County, New York, filed Sept. 11, 2006 (Monroe Reply Comments).

4. *Comments.* While USA Mobility does not oppose Richmond's petition, it submitted comments to emphasize the important role that commercial paging providers play in serving public safety entities and to dispel any suggestion that commercial providers cannot meet the public safety community's requirements.²¹ In this regard, USA Mobility urges the Commission to consider the many advantages of commercial services and the inefficiency of duplicating existing infrastructure in conducting the public interest inquiry required under Section 337(c) of the Act.²²

5. In reply comments, both Richmond and Monroe claim that commercial paging services are not adequate to serve public safety. Monroe argues that private systems utilizing the current ReFLEX protocol are much faster than the system portrayed by USA Mobility.²³ Monroe also states that that its private ReFLEX network is interoperable with the SkyTel network, other private ReFLEX systems, open e-mail and internet standards, and with text messaging devices on all major wireless carriers.²⁴ Monroe also states that private systems generally are much simpler and can dispatch technicians immediately to respond to calls for service and repair.²⁵

6. USA Mobility also states that the Commission should impose two requirements on waivers granted under Section 337(c) of the Act or Section 1.925(b)(3) of the Commission's rules.²⁶ First, USA Mobility seeks a requirement that applicants certify that they have exhausted commercially available means of providing communications.²⁷ Second, USA Mobility seeks a requirement that any private paging networks authorized by waiver must interconnect with national paging networks, to promote interoperability and prevent public safety agencies from being cut off from other emergency personnel.²⁸

(Continued from previous page) _____

¹⁹ Reply to Comments, filed by the City of Richmond, Virginia, filed Sept. 11, 2006 (Richmond Reply Comments).

²⁰ Reply Comments of the National Public Safety Telecommunications Council, filed Sept. 12, 2006 (NPSTC Reply Comments).

²¹ USA Mobility Comments at 2.

²² *Id.* at 2-3. USA Mobility lists several benefits of commercial paging systems, including cost effectiveness, broad coverage, interconnectivity among many communications platforms, secure message delivery within approximately one minute, high-power simulcast coverage, satellite backhaul, portable generators, mobile transmitters, and the ability to leverage an existing network and supplement it if there is a need to fill coverage holes. *Id.* at 4-8. USA Mobility states that private paging systems must be built from scratch and risk inadequate performance during emergencies due to lack of extensive infrastructure, operational track record, and experienced personnel. *Id.* at 9.

²³ Monroe Reply Comments at 2. Monroe states that while older versions of the ReFLEX protocol have latency of about one minute, the current version can deliver messages in about five seconds. *Id.* Richmond asserts that one minute latency is unacceptable, and that emergency services require messages to be delivered within five seconds or less. Richmond Reply Comments at 3.

²⁴ Monroe Reply Comments at 2-3.

²⁵ *Id.*

²⁶ USA Mobility Comments at 10.

²⁷ *Id.*

²⁸ *Id.* at 11.

7. In response to USA Mobility's first proposed requirement, NPSTC and Richmond remark that Section 337(c) of the Act does not impose any requirements for public safety agencies to certify that they have exhausted commercial paging alternatives.²⁹ With regard to USA Mobility's second proposed requirement, NPSTC observes that the Commission's Parts 24 and 90 rules make no interconnection requirements on private paging systems.³⁰ Richmond, in noting that it may be desirable for both private and commercial systems to have this capability, states that marketplace forces should be allowed to address the issue.³¹

III. DISCUSSION

8. Section 337(c) of the Act provides that the Commission must waive any rules necessary to authorize entities seeking to provide public safety services to operate on unassigned non-public safety spectrum, if the Commission makes five specific findings:

- public safety spectrum is not immediately available;
- the proposed use will not cause harmful interference to protected spectrum users;
- public safety use of the unassigned frequencies is consistent with public safety spectrum allocations in the geographic area;
- the unassigned frequencies have been allocated for non-public safety use for more than two years; and
- grant of the application is consistent with the public interest.³²

9. When considering requests under Section 337, we must first determine whether the applicant is "an entity seeking to provide public safety services."³³ The statute describes public safety services as services that are provided by state or local government entities or by non-governmental

²⁹ NPSTC Reply Comments at 4, Richmond Reply Comments at 5. NPSTC and Richmond argue that the Commission has long entitled users of radio service to license and operate their own private systems without regard to whether common carrier systems are available or arguably would serve the user's needs. NPSTC Reply Comments at 4, Richmond Reply Comments at 2-3 (citing Allocation of Frequencies in the Bands Above 890 Mc., Docket No. 11866, *Report and Order*, 27 F.C.C. 359 (1959) and Allocation of Frequencies in the Bands Above 890 Mc., Docket No. 11866, *Memorandum Opinion and Order*, 29 F.C.C. 825 (1960)). Richmond states that it examined commercial two-way paging as an alternative approach to a private system, but determined that commercial paging operations in the region would not meet the mission critical communication requirements of its public safety agencies. Waiver Request at 3.

³⁰ NPSTC Reply Comments at 4-5.

³¹ Richmond Reply Comments at 5.

³² See 47 U.S.C. § 337(c).

³³ See 47 U.S.C. § 337(f). Section 337(f) defines the term "public safety services" as "services—
(A) the sole or principal purpose of which is to protect the safety of life, health, or property;
(B) that are provided—
(i) by State or local government entities; or
(ii) by non-governmental organizations that are authorized by a governmental entity whose primary mission is the provision of such services; and
(C) that are not made commercially available to the public by the provider."

organizations that are authorized by a governmental entity whose primary mission is the provision of such services.³⁴ Richmond, a city chartered in the Commonwealth of Virginia, seeks to deploy a regional two-way paging system to enable police, fire, EMS and security agencies in the region, including 7000 first-responders serving a population of 818,000 persons, as part of its homeland security measures.³⁵ Accordingly, based on the record before us, we conclude that Richmond is an entity providing public safety services. We therefore move to whether Richmond meets the other statutory requirements supporting a waiver under Section 337(c) of the Act.

10. *Public safety spectrum is not immediately available.* Richmond contends that public safety mobile data systems and other systems available to public safety are unsuitable for two-way paging.³⁶ Richmond observes that two-way paging equipment is only manufactured for the 900 MHz bands, and there are no 900 MHz channels allocated to public safety.³⁷ We agree that no public safety spectrum is available for the requested two-way paging capability, and thus conclude that no other public safety spectrum is immediately available to satisfy the requested public safety service use.³⁸

11. *The proposed use will not cause harmful interference to protected spectrum users.* Richmond states that the requested channel frequencies are not assigned within 200 kilometers of the specified sites or anywhere else in Virginia.³⁹ We note that NPCS Channel 16 is licensed in adjacent PCS Region 1 to American Messaging Services, LLC, Call Sign KNKV216. Although we have determined that the border of PCS Region 1 is located approximately 158 kilometers from the specified sites, we found that Richmond's twenty-three base stations meet the power and antenna height limits of Sections 24.132(c) and (d) of the Commission's rules.⁴⁰ Therefore, we conclude that Richmond's operation on NPCS Channel 16 is technically feasible and will not cause harmful interference to protected spectrum users.

12. *Public safety use of the unassigned frequencies is consistent with public safety spectrum allocations in the geographic area.* Richmond states that the purpose of this criterion is to ensure that "interoperability of public safety services is not retarded."⁴¹ Richmond believes that the system will enhance interoperability as it will serve every fire, EMS, and police department within the service area and augment the region's interoperable voice communications system.⁴² Further, Richmond's proposed system, based on ReFLEX technology, has the ability to roam, and it affords a level of interoperability

³⁴ *Id.*

³⁵ Waiver Request at 12.

³⁶ Waiver Request at 7.

³⁷ *Id.*

³⁸ See Implementation of Sections 309(j) and 337 of the Communications Act of 1934 as Amended, *Report and Order and Further Notice of Proposed Rule Making*, WT Docket No. 99-87, 15 FCC Rcd 22709, 22769 ¶ 132 (2000) (the statutory requirement is satisfied if there is "no unassigned public safety spectrum, or not enough for the proposed public safety use, in any band in the geographic area in which the Section 337 applicant seeks to provide public safety services").

³⁹ Waiver Request at 7.

⁴⁰ 47 C.F.R. §§ 24.132(c), (d).

⁴¹ Waiver Request at 8 & n.5, citing H.R. Rep. No. 103-111, at 580 (1997).

⁴² *Id.* at 8.

with other two-way paging systems, such as commercial paging systems.⁴³ Section 337(c)(1)(C) requires that the spectrum sought is or will be used for other public safety operations in the geographic area.⁴⁴ Because the proposed two-way paging system would serve all fire, EMS and police department operations in the area, and augment the region's interoperable voice communications systems, we find the proposed system to be consistent with the Commission's public safety spectrum designation in the subject geographic area.⁴⁵

13. *The unassigned frequencies have been allocated for non-public safety use for more than two years.* In 1994, the Commission allocated spectrum for the operation of Narrowband PCS in three one-megahertz blocks in the 900 MHz band.⁴⁶ As Richmond notes, the regional license for channel 16 was offered in Auction 51 more than two years ago, and no bids on the license for Channel 16 were received.⁴⁷ Because Channel 16 was allocated for its present use not less than two years prior to the date on which the application will be granted, we conclude that Richmond has met this criterion.

14. *Grant of the application is consistent with the public interest.* We believe that Richmond's filings demonstrate that access to additional spectrum is needed in order to promote effective public safety communications. We agree with Richmond that grant of the application and waiver request would be in the public interest as it will allow otherwise vacant spectrum to be used by Richmond to preserve and promote critical communications that protect the safety of life, health, and property.⁴⁸ We therefore find that granting the application is consistent with the public interest.

15. Our decision to grant Richmond's waiver request, however, is limited only to those frequencies for NPCS Channel 16 at the sites specified in its application; that is, the twenty-three sites in the City of Richmond and in Henrico, Hanover, and Chesterfield Counties. Although Richmond requests authorization for the entire Richmond-Petersburg, Virginia Economic Area (EA 015), which covers thirty-eight counties beyond its initial deployment of Richmond, it neither identifies nor provides details about the specific sites or its implementation schedule. We thus lack sufficient information to evaluate Richmond's request under the applicable waiver criteria and find that a grant of the application with respect to the entire Richmond-Petersburg, Virginia Economic Area (EA 015) is not warranted. Accordingly, we grant Richmond's request for authorization only for those frequencies for NPCS Channel 16 at the twenty-three sites specified in its application and deny its request with respect to a geographic license covering the entire Richmond-Petersburg, Virginia Economic Area (EA 015). In reaching this decision, we also decline to impose any conditions on the grant of Richmond's waiver request as suggested by USA Mobility. Neither the Commission's rules nor Section 337(c) of the Act

⁴³ Richmond Reply Comments at 5. *See also* USA Mobility Comments at 3 (indicating that commercial paging services continue to play a critical role for emergency first responders), 6-7 (indicating that its commercial paging network uses the ReFLEX protocol).

⁴⁴ *Cf.* Borough of Sayreville, New Jersey, *Order*, 14 FCC Rcd 19393, 19396 ¶ 8 (WTB 1999) (dismissing waiver for failure to demonstrate the spectrum will be used for other public safety operations in the geographic area).

⁴⁵ *See* Monroe County, New York, *Order*, 17 FCC Rcd 21535, 21540-41 ¶ 12 (WTB PSPWD 2002).

⁴⁶ *See* Amendment of the Commission's Rules To Establish New Personal Communications Services, Gen Docket No. 90-314, ET Docket No. 92-100, *First Report and Order*, 8 FCC Rcd 7162 (1993).

⁴⁷ Waiver Request at 8, citing Regional Narrowband PCS Spectrum Auction, *Public Notice*, 18 FCC Rcd 18570 (2003) (announcing qualified bidders and auction start date).

⁴⁸ Waiver Request at 8-9. Section 1 of the Act defines one of the Commission's over-arching purposes as "promoting safety of life and property through the use of ... radio communication." 47 U.S.C. § 151.

requires applicants seeking to deploy a private paging network either to exhaust commercially available means of providing communications or interconnect to a national paging network.

IV. CONCLUSION

16. We conclude based on the record before us that Richmond's waiver request satisfies the criteria set forth under Section 337(c) of the Act to permit it to operate a public safety, two-way paging system on NPCS Channel 16 at twenty-three sites in the City of Richmond and the Counties of Henrico, Chesterfield, and Hanover. We also conclude, however, that an authorization for the sites associated with the Richmond-Petersburg, Virginia Economic Area (EA 015) is unwarranted. Accordingly, we grant in part and deny in part Richmond's waiver request.

V. ORDERING CLAUSES

17. Accordingly, **IT IS ORDERED** that, pursuant to Section 1.925 of the Commission's rules, 47 C.F.R. § 1.925, and Sections 4(i) and 337(c) of the Communications Act of 1934, as amended, 47 U.S.C. §§ 154(i), 337(c), the request for waiver associated with the captioned application filed by the City of Richmond on June 22, 2006, as amended, **IS GRANTED IN PART** and otherwise **DENIED IN PART**, and File No. 0002660203 **SHALL BE PROCESSED** consistent with this *Order* and the Commission's rules.

18. This action is taken under delegated authority pursuant to Sections 0.191 and 0.392 of the Commission's rules, 47 C.F.R. §§ 0.191, 0.392.

FEDERAL COMMUNICATIONS COMMISSION

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