

**Before the  
Federal Communications Commission  
WASHINGTON, D.C. 20554**

In the Matter of	)	
	)	
State of Louisiana	)	PS Docket 06-229
	)	WT Docket No. 96-86
Request for Waiver of the December 31, 2016	)	
700 MHz Narrowbanding Deadline	)	

**ORDER**

**Adopted: October 15, 2012**

**Released: October 15, 2012**

By the Chief, Public Safety and Homeland Security Bureau:

**I. INTRODUCTION**

1. On July 3, 2012, the State of Louisiana (Louisiana) filed a request for waiver<sup>1</sup> of the Federal Communications Commission's (Commission's) 700 MHz narrowbanding deadline, which requires licensees in the 700 MHz public safety narrowband spectrum (769-775/799-805 MHz) to operate using a channel bandwidth of no more than 6.25 kilohertz, or equivalent efficiency, by December 31, 2016.<sup>2</sup> For the reasons discussed below, we grant Louisiana's waiver request for an extension of the deadline until December 31, 2024,<sup>3</sup> as conditioned herein and subject to any action the Commission may take on this matter in future proceedings.<sup>4</sup>

**II. BACKGROUND**

2. In 2006, Louisiana created a Statewide Interoperability Executive Committee (SIEC) to establish and administer a statewide shared communication system to help protect life and property in the state, which is particularly vulnerable to potentially disastrous weather events.<sup>5</sup> The SIEC is comprised of twenty voting members, fifteen of whom are representatives of local and first responder associations.<sup>6</sup> The SIEC provides governance and oversees the development and maintenance of the Louisiana Wireless

<sup>1</sup> Petition for Waiver of the Commission's Rules, State of Louisiana, PS Docket No. 06-229 (filed July 3, 2012) (Louisiana Petition).

<sup>2</sup> 47 C.F.R. § 90.535(d)(2).

<sup>3</sup> Louisiana seeks an eight-year waiver of the deadline until December 31, 2024. *See* Louisiana Petition at 5.

<sup>4</sup> Louisiana previously filed a petition for rulemaking seeking an extension of the narrowbanding deadline for all 700 MHz licensees from December 31, 2016 to December 31, 2024. *See* Petition for Rulemaking of the State of Louisiana, RM-11577 (filed Oct. 5, 2009). In reaching the merits of Louisiana's waiver request in this Order, we do not prejudge the outcome of Louisiana's petition for rulemaking. That petition will be addressed separately, and this waiver is subject to the outcome of any broader proceeding that the Commission may undertake with respect to Louisiana's rulemaking petition.

<sup>5</sup> Louisiana Petition at 2.

<sup>6</sup> *Id.* For more information on the Louisiana SIEC, *see* <http://gohsep.la.gov/interopmembers.aspx> (last visited Sept. 12, 2012).

Information Network (LWIN), which operates on State and General Use channels in portions of the 700 MHz band designated for public safety narrowband use.<sup>7</sup>

3. LWIN, which Louisiana estimates is the largest statewide public safety radio system in the country, has 67,162 users from multiple public safety agencies within the state, which LWIN serves from 118 sites.<sup>8</sup> LWIN provides on-street portable radio coverage to approximately 95 percent of the geographic area of the state and in-building coverage to approximately 95 percent of the nine largest metropolitan areas of Louisiana.<sup>9</sup> To date, Louisiana has spent \$165 million on LWIN, including over \$80 million of state general funding, for infrastructure, subscriber units, professional services, and other costs.<sup>10</sup> In order to make LWIN available to all relevant local users and to encourage migration to LWIN from other existing systems that lack adequate interoperability, Louisiana funds 100 percent of LWIN's administration, maintenance, and operational costs, and does not charge fees to local first responder agencies for access to LWIN.<sup>11</sup>

4. In recent years, LWIN has enabled Louisiana to achieve a high level of interoperability among participating jurisdictions.<sup>12</sup> In anticipation of 2008's Hurricane Gustav, for example, Louisiana used LWIN to support evacuation of almost its entire coastline, and the LWIN system accommodated over six million separate "push to talk" communications during a ten day period.<sup>13</sup> After the BP Oil Spill in 2010, Louisiana gave the United States Coast Guard access to LWIN and also connected LWIN to other Gulf Region information networks to create a new system, GulfWIN, which provided the Coast Guard with interoperable voice communications along the Gulf Coast from Corpus Christi, Texas to Pensacola, Florida. In 2011, as part of the ten-year anniversary of the September 11 attacks, the Department of Homeland Security publicly recognized the effectiveness of Louisiana's LWIN system and lauded Louisiana in one of five case studies where entities have achieved interoperability.<sup>14</sup>

5. In support of its request for a waiver of the narrowbanding deadline until December 31, 2024, Louisiana states that it conducted an analysis of the potential cost of converting its network to the Project 25 (P25) Phase II standards developed by the Telecommunications Industry Association (TIA) to comply with the 6.25 kilohertz efficiency requirement.<sup>15</sup> Based on this analysis, Louisiana estimates a cost of \$120,087,689 to narrowband its infrastructure by the December 31, 2016 deadline, including

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<sup>7</sup> *Id.* State and General Use channels for public safety entities are specified in 47 C.F.R. § 90.531(b)(5) and (6).

<sup>8</sup> *Id.*

<sup>9</sup> *Id.*

<sup>10</sup> *Id.*

<sup>11</sup> *Id.*

<sup>12</sup> *Id.* at 3.

<sup>13</sup> *Id.*

<sup>14</sup> *Id.*

<sup>15</sup> *Id.* at 5. P25, or Project 25, is a suite of standards for digital radio communications for use by North American public safety agencies to enable interoperable communications with other agencies and mutual aid response teams during emergencies. P25 Phase I is a Frequency Division Multiple Access (FDMA) digital technology that provides one voice or data path in a 12.5 kilohertz channel. P25 Phase II is a Time Division Multiple Access (TDMA) digital technology that provides two voice or data paths in a 12.5 kilohertz channel, thus meeting the 6.25 kilohertz efficiency standard. *See* Project 25 Documents and Standards Reference, Public Safety Communications Research, U.S. Department of Commerce – Boulder Laboratories (Jan. 18, 2012) at 2 *available at* [http://www.pscr.gov/outreach/p25dsr/menu\\_top/downloads/P25dsr.pdf](http://www.pscr.gov/outreach/p25dsr/menu_top/downloads/P25dsr.pdf).

software upgrades and hardware purchases and replacements.<sup>16</sup> Louisiana further states that it would face additional costs of \$296,932,554 to conform its subscriber equipment to the Phase II standards, for a total estimated cost of \$417,020,243.<sup>17</sup>

6. Louisiana contends that the above-described substantial investment to narrowband the LWIN system will not yield commensurate spectral benefits in this case. Louisiana acknowledges the Commission's goal to promote efficient spectrum use and concedes that narrowbanding to 6.25 kilohertz bandwidth would substantially increase the number of available 700 MHz channels in Louisiana.<sup>18</sup> However, Louisiana claims that as part of the buildout of LWIN that it completed in January 2012, it expanded channel capacity at every site where it expected LWIN to experience additional growth over the next ten years.<sup>19</sup> Therefore, Louisiana states, it has no near-term need for the additional spectrum capacity that would flow from narrowbanding to 6.25 kilohertz channels.<sup>20</sup> Louisiana also does not believe that there will be demand for additional 700 MHz narrowband channels from other public safety entities in Louisiana, because LWIN has enough capacity to meet their needs as well. Louisiana notes that "[t]he overwhelming majority of [700 MHz] frequencies are licensed by the State on behalf of all the users on LWIN," and "there has not been a single public safety agency that has requested access to a 700 MHz General Use frequency outside of LWIN."<sup>21</sup>

7. Louisiana also contends that strict enforcement of the December 31, 2016 deadline could cause public safety agencies in the Greater New Orleans region to leave the LWIN system, substantially undermining LWIN's ability to support statewide interoperability. Louisiana asserts that as a result of the potential cost of complying with the narrowbanding mandate, the Greater New Orleans Region "may leave LWIN and build a separate, incompatible 800 MHz radio system."<sup>22</sup> Were the New Orleans region to convert to an 800 MHz system, Louisiana contends, interoperability would be seriously compromised within this key region because LWIN users elsewhere in the state would no longer be able to interoperate with their New Orleans-area counterparts.<sup>23</sup> As a result, Louisiana argues, "the public's best interest would not be served as ability of first responders from cross jurisdictional boundaries to communicate during times of emergencies would be severely diminished."<sup>24</sup>

8. *Comments.* On July 20, 2012, the Public Safety and Homeland Security Bureau (Bureau) issued a Public Notice seeking comment on Louisiana's Waiver Request.<sup>25</sup> Comments were submitted by Association of Public-Safety Communications Officials (APCO); the Arkansas Interoperable

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<sup>16</sup> *Id.*

<sup>17</sup> *Id.*

<sup>18</sup> *Id.* at 3.

<sup>19</sup> *Id.*

<sup>20</sup> *Id.* at 3-4. Louisiana notes that over the ninety days prior to the submission of its waiver requests, "LWIN has experienced on average 10,684,089 push to talks per month, while only experiencing an average of 555 busies which equates to a 99.9999% first time push to talk success rate" on the existing LWIN channels. *Id.* at 4.

<sup>21</sup> *Id.* at 4.

<sup>22</sup> *Id.* at 6.

<sup>23</sup> *Id.*

<sup>24</sup> *Id.*

<sup>25</sup> See Public Safety and Homeland Security Bureau Seeks Comment on Requests for Waiver of the December 31, 2016 700 MHz Narrowbanding Deadline filed by State of Louisiana, *Public Notice*, PS Docket No. 06-229, 2012 WL 2952510 (rel. July 20, 2012) (*Public Notice*).

Communications Committee (Arkansas); the Brazos Valley Wide Area Communications System (BVWACS); the State of Maryland Interoperability Program Management Office (Maryland); the Regional Wireless Cooperative (RWC); and the City of Scottsdale, Arizona (Scottsdale).

9. All commenting parties generally support Louisiana's waiver request, though some parties differ as to the scope of relief that should be granted.<sup>26</sup> RWC and Scottsdale specifically support granting Louisiana an extension of the 700 MHz narrowbanding deadline from December 31, 2016 "to a date of December 31, 2020; or a yet to be determined date based upon certain criteria set forth by the Commission."<sup>27</sup> Further, APCO encourages the Commission to amend Section 90.535 of the Commission's rules, which, if done, would "obviate the need for waiver requests from Louisiana and similarly situated 700 MHz band licensees."<sup>28</sup> Maryland limits its support to Louisiana alone, and questions whether a "blanket nationwide policy change to extend the date for spectrum efficiency of 700 MHz channels is an appropriate strategy." Instead, Maryland suggests a "localized approach to spectrum efficiency."<sup>29</sup> Maryland also urges the Commission to limit any Louisiana waiver to only 700 MHz State Use channels, noting that "the filing does not differentiate those areas internal to Louisiana and areas in the border where the State must share spectrum with neighbors."<sup>30</sup>

10. Arkansas expresses particular support for the waiver request. Arkansas notes that the two states share not only a common border, but also have comparable weather vulnerabilities and similar statewide communications networks.<sup>31</sup> Further, Arkansas says that it and Louisiana "stand ready to support one another in the event of a catastrophic event, as evidenced by the recent installation of interoperability gateway equipment near the state border."<sup>32</sup> This equipment allows LWIN and the Arkansas Wireless Information Network (AWIN) to be linked together and provide direct communications between emergency operations centers in each state.<sup>33</sup> Arkansas emphasizes that the interoperability achieved by Louisiana would be jeopardized if Louisiana is forced to comply with the narrowbanding deadline, and states that "[s]hould the Greater New Orleans Homeland Security region abandon the LWIN system for a less expensive alternative, the impact to statewide interoperability would be devastating."<sup>34</sup> Arkansas further notes that such action would be contrary to the Department of Homeland Security's goals for interoperability.<sup>35</sup>

11. Several commenters argue that the priority placed on the public safety broadband network and the delayed availability of 700 MHz spectrum has negatively impacted the 700 MHz narrowband equipment market. BVWACS, for example, submits that "[a]ssuming that the nationwide

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<sup>26</sup> See Regional Wireless Cooperative (RWC) Comments at 2; City of Scottsdale, Arizona (Scottsdale) Comments at 1; State of Maryland Interoperability Program Management Office Comments (Maryland) at 2; Brazos Valley Wide Area Communications System (BVWACS) Comments at 1; Arkansas Interoperable Communications Committee (Arkansas) Comments at 2; APCO Comments at 3 (filed *ex parte*).

<sup>27</sup> See RWC Comments at 4 and Scottsdale Comments at 1.

<sup>28</sup> APCO Comments at 2.

<sup>29</sup> Maryland Comments at 9.

<sup>30</sup> *Id.* at 3.

<sup>31</sup> Arkansas Comments at 1.

<sup>32</sup> *Id.*

<sup>33</sup> *Id.*

<sup>34</sup> *Id.* at 2.

<sup>35</sup> *Id.*

broadband network can be ready to fully incorporate mission-critical voice in ten years (2022), any 6.25 kHz narrowband voice equipment purchased in 2016 to meet the December 31, 2016 deadline would only be 6 years old, thus becoming prematurely obsolete.”<sup>36</sup> APCO agrees, submitting that because the Commission made the 700 MHz spectrum available on June 17, 2009, “under the current rule, non-compliant 6.25 kHz equipment in the 700 MHz band would have to be replaced long before the end of normal equipment life-cycles (generally at least ten years from system deployment), at considerable expense to cash-strapped state and local governments.”<sup>37</sup> APCO also notes that “[q]uestions have also been raised as to whether there will be competitive sources of standardized 6.25 kHz equipment available in time to meet the 2016 deadline.”

12. Some commenters echo Louisiana’s arguments about the high cost of replacement equipment.<sup>38</sup> RWC and Scottsdale both note that a large system such as Louisiana’s requires substantial advance planning and coordination for an overhaul like narrowbanding, and that licensees are already challenged to keep costs down in the face of reduced revenues.<sup>39</sup> Additionally, BVWACS points out that “[w]ith \$ 7 billion of federal funds now dedicated to the broadband system, it seems unlikely that any grant funding will be available to help licensees meet the 6.25 kHz narrowband deadline.”<sup>40</sup>

13. Both RWC and Arkansas commend Louisiana for its efficient and effective allocation and use of 700 MHz frequencies.<sup>41</sup> Noting that Louisiana does not seem to be experiencing channel congestion, Arkansas argues that “in areas of the nation where the spectrum is already being successfully managed and there is no channel contention, it seems pointless to require this magnitude of a change when the state and the citizens will not benefit from it.”<sup>42</sup> However, Maryland notes that “[w]hile Louisiana must be the master of its internal spectrum requirements, the inefficient use of spectrum in border areas can adversely affect neighboring state governments that may have requirements for channels necessitating the spectral efficiency for which the Commission’s rules were adopted.”<sup>43</sup>

### III. DISCUSSION

14. Section 1.925 of the Commission’s rules states that to obtain a waiver of the Commission’s rules, a petitioner must demonstrate either that: (i) the underlying purpose of the rule(s) would not be served or would be frustrated by application to the present case, and that a grant of waiver would be in the public interest;<sup>44</sup> or (ii) in view of unique or unusual factual circumstances of the instant case, application of the rule(s) would be inequitable, unduly burdensome, or contrary to the public interest, or the applicant has no reasonable alternative.<sup>45</sup> The applicant faces a high hurdle and must plead with particularity the facts and circumstances that warrant a waiver.<sup>46</sup>

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<sup>36</sup> BVWACS Comments at 2.

<sup>37</sup> APCO Comments at 2.

<sup>38</sup> See RWC Comments at 4; Scottsdale Comments at 2; Arkansas Comments at 2.

<sup>39</sup> RWC Comments at 4; Scottsdale Comments at 2.

<sup>40</sup> BVWACS Comments at 1.

<sup>41</sup> See RWC Comments at 4; Arkansas Comments at 2.

<sup>42</sup> Arkansas Comments at 2.

<sup>43</sup> Maryland Comments at 3.

<sup>44</sup> 47 C.F.R. § 1.925(b)(3)(i).

<sup>45</sup> 47 C.F.R. § 1.925(b)(3)(ii).

<sup>46</sup> *WAIT Radio v. FCC*, 418 F.2d 1153, 1157 (D.C. Cir. 1969), *aff’d*, 459 F.2d 1203 (1973), *cert. denied*, 409 U.S. (continued....)

15. Based on the record before us, we find that Louisiana warrants waiver relief because it has demonstrated that the underlying purpose of the 700 MHz narrowbanding deadline – to promote spectrum efficiency and increase available capacity – would not be served by strict application to the present case, and that a grant of the waiver would be in the public interest.<sup>47</sup> Louisiana makes a persuasive argument that it does not need additional 700 MHz capacity and that narrowbanding by the 2016 deadline would leave it “no better off than it is” because Louisiana’s recently completed expansion included added channel capacity at every site where Louisiana expects LWIN to experience additional growth.<sup>48</sup> In addition, based on the record in this proceeding, we find it unlikely that other public safety entities in Louisiana will require new 700 MHz channels created by narrowbanding in the near term. As Louisiana points out, LWIN supports over 67,000 public safety users within the state and makes LWIN channels available to all public safety agencies at no cost to the agencies. Thus, as Louisiana points out, not a single public safety agency in Louisiana has requested access to 700 MHz General Use frequencies outside of LWIN since the system was established.<sup>49</sup>

16. We also find waiver relief to be in the public interest because it will ensure continued statewide interoperability and enable the State’s largest homeland security region, Greater New Orleans, to remain in the LWIN system. We agree with Louisiana that the possible breakaway of the Greater New Orleans region from LWIN could have potentially detrimental consequences for interoperable communications in an area that is at high risk for hurricanes and other emergencies that require highly coordinated statewide and regional response. In this regard, we believe grant of the waiver is the best means to preserve Louisiana’s significant achievement in building one of the most advanced statewide interoperable systems in the nation.

17. We note that while no commenter opposed Louisiana’s request, Maryland suggested that we limit any relief in Louisiana to the 700 MHz state-licensed channels because “the filing does not differentiate those areas internal to Louisiana and areas in the border where the State must share spectrum with neighbors.”<sup>50</sup> We decline to impose this limitation. While we are mindful that allowing continued wideband operation by LWIN on all channels could give rise to issues with adjacent states, we note that Arkansas, the only state bordering Louisiana that filed comments, supports the waiver grant, and that no other state bordering Arkansas raised any objection to the waiver. However, we grant this waiver request subject to the condition that Louisiana must cure any incidents of harmful interference that its operations may cause to narrowbanded operations in neighboring jurisdictions in Arkansas, Texas, or Mississippi, and conversely, Louisiana must accept interference to its operations from narrowbanded operations in such neighboring jurisdictions. We further note that Louisiana must continue to abide by all applicable regional planning and interstate coordination requirements in the deployment and operation of the LWIN system.

18. Finally, as noted above, a number of commenting parties urge the Commission to go beyond Louisiana’s waiver request and re-evaluate the 700 MHz rules and narrowbanding deadlines as they affect 700 MHz licensees nationwide, citing significant obstacles and changes in the 700 MHz

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1027 (1972) (*citing Rio Grande Family Radio Fellowship, Inc. v. FCC*, 406 F.2d 664 (D.C. Cir. 1968)); Birach Broad. Corp., *Memorandum Opinion and Order*, 18 FCC Rcd 1414, 1415 (2003).

<sup>47</sup> See 47 C.F.R. § 1.925(b)(3)(i).

<sup>48</sup> Louisiana Petition at 3, 6.

<sup>49</sup> *Id.* at 4.

<sup>50</sup> Maryland Comments at 3.

landscape since the narrowbanding deadline was set in 2002.<sup>51</sup> However, because these comments propose relief beyond that requested by the State of Louisiana, we do not address them here.<sup>52</sup>

#### IV. ORDERING CLAUSES

19. Accordingly, IT IS ORDERED that, pursuant to Section 4(i) of the Communications Act of 1934, as amended, 47 U.S.C. § 154(i), and Section 1.925(b)(3)(i) of the Commission's rules, 47 C.F.R. § 1.925(b)(3)(i), the Request for Waiver associated with the captioned application filed by the State of Louisiana on July 3, 2012, IS GRANTED, as conditioned to the extent described herein.

20. We take this action 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

David S. Turetsky

Chief

Public Safety and Homeland Security Bureau

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<sup>51</sup> See Arkansas Comments at 2; APCO Comments at 2; Maryland Comments at 8.

<sup>52</sup> See note 4, *supra*.