

**Before the  
FEDERAL COMMUNICATIONS COMMISSION  
WASHINGTON, D.C. 20554**

In the Matter of	)	
	)	
STATE OF MAINE –	)	
MSCOMMNET PROJECT	)	
	)	File Nos. Listed in Attached Appendix
Request For Waiver of Section 90.35(a) of the	)	
Commission’s Rules	)	
	)	
	)	

**ORDER**

**Adopted: February 5, 2013**

**Released: February 5, 2013**

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

**I. INTRODUCTION**

1. The State of Maine – MSCommNet Project (Maine) has filed multiple applications for a trunked statewide private land mobile radio (PLMR) system using frequencies in the VHF band.<sup>1</sup> For a subset of these applications, Maine seeks a waiver of Section 90.35(a) of the Commission's rules<sup>2</sup> to operate on certain Industrial/Business Pool frequencies that are designated for use by railroads.<sup>3</sup> For the reasons detailed below, we grant Maine’s waiver request for the applications listed in the attached appendix.

**II. BACKGROUND**

2. Maine is upgrading its existing state-wide public safety radio communications network. According to Maine, its current two-way mobile radio systems are “outdated, difficult to maintain, and no longer adequate to serve respective departments’ critical needs.”<sup>4</sup> Consequently, Maine plans to consolidate all of its agency radio systems into a new narrowband (12.5 kHz channel bandwidth) VHF trunked Project 25 radio system.<sup>5</sup>

3. Maine contends that the VHF band (150-170 MHz) is the only viable frequency band for its statewide radio network because of signal propagation, geography, cost and interoperability considerations.<sup>6</sup> Furthermore, Maine notes that most local public safety agencies in the state rely primarily on VHF band radio communications, calling it the “*de facto* public safety band in Maine.”<sup>7</sup>

<sup>1</sup> Since October 2011, Maine has filed over 100 applications under FCC Registration Number (FRN) 0019538925.

<sup>2</sup> 47 C.F.R. § 90.35(a).

<sup>3</sup> See waiver request included with the applications listed in the attached appendix (I/B Waiver Request).

<sup>4</sup> Maine Waiver Request at 2.

<sup>5</sup> *Id.* at 3.

<sup>6</sup> *Id.* at 4.

<sup>7</sup> Maine Reply Comments at 7.

4. Maine claims its new consolidated radio system will require 342 VHF frequencies distributed across 40 sites, including 151 trunked pairs (302 frequencies) and 40 simplex channels.<sup>8</sup> Maine states it sought to use Public Safety Pool frequencies to meet its requirements, but that, even taking extensive frequency reuse into account, sufficient Public Safety Pool frequencies are not available. Thus, Maine claims it must use non-public safety frequencies, including frequencies designated for railroad use to fulfill its system requirements.<sup>9</sup>

5. Consequently, Maine filed several applications for trunked private land mobile radio facilities on certain 160 MHz frequencies,<sup>10</sup> which are exclusively coordinated by the Association of American Railroads (AAR).<sup>11</sup> Because Maine is ineligible to use Industrial/Business Pool frequencies in connection with its MSCommNet Project, it requires a waiver of the eligibility requirements in Section 90.35(a) of the Commission's rules in order to incorporate these railroad-specific frequencies into its statewide network.<sup>12</sup> Maine contends that its proposed use of railroad frequencies would not unduly limit the availability of railroad frequencies in or near Maine because the state currently has "very limited railroad service within its borders and none of the large (Class I) railroads currently operate track within the State."<sup>13</sup>

6. On January 23, 2012, the Public Safety and Homeland Security Bureau (Bureau) issued a public notice seeking comment on Maine's waiver request.<sup>14</sup> In particular, the Bureau sought comment from parties who would be affected by Maine's use of railroad frequencies. It asked about the extent to which these frequencies are used by railroads within or near the State of Maine, and whether there are railroad lines within the state that may require these frequencies in the future.

7. *Comments.* Fourteen commenters support Maine's waiver request, including the Maine legislature, the Office of the Governor, and nine other Maine government agencies.<sup>15</sup> Several such agencies contend that Maine "presently operates a communications system that is deficient in providing effective communications."<sup>16</sup>

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<sup>8</sup> Maine Waiver Request at 6.

<sup>9</sup> *Id.* at 6-7.

<sup>10</sup> The file numbers for these applications are listed in the attached Appendix.

<sup>11</sup> *Id.* The frequencies subject to exclusive coordination by the American Association of Railroads (AAR) are denoted with an "LR" in the Coordinator Column of the Industrial/Business Pool Frequency Table. *See* 47 C.F.R. §§ 90.35(b)(2)(iv) and 90.35(b)(3).

<sup>12</sup> 47 C.F.R. § 90.35(a).

<sup>13</sup> Maine Waiver Request at 8.

<sup>14</sup> Public Safety & Homeland Security. Bureau Seeks Comment on Applications & Waiver Request Filed by the State of Maine for 150 MHz Industrial/Business Frequencies, *Public Notice*, 27 FCC Rcd 2521 (2012) (*Public Notice*).

<sup>15</sup> *See* Comments of State of Maine, Office of the Governor; the Maine State Legislature; Maine's Department of Inland Fisheries; Department of Marine Resources; Department of Public Safety; Department of Corrections; Office of the State Fire Marshal; Maine Emergency Management Agency (MEMA); Emergency Management County Directors Council; Office of Information Technology (OIT); Commissioner of Maine, Department of Defense, Veterans and Emergency Management; United States Coast Guard; American Association of State Highway and Transportation Officials (AASHTO); and Enterprise Wireless Alliance (EWA).

<sup>16</sup> Maine Department of Inland Fisheries and Wildlife Comments at 1; Maine Department of Marine Resources Comments at 1; Maine Department of Public Safety Comments at 1; Maine Department of Corrections Comments at (continued....)

8. A few commenting parties, however, oppose Maine's waiver request. The American Association of Railroads (AAR) states that it "would oppose any request to coordinate these frequencies for public safety use."<sup>17</sup> The Railway Association of Canada (RAC) also states that it will "vigorously oppose the use of spectrum in the [160.17 MHz – 161.58 MHz band] by the State of Maine in the Canada-US coordination zone."<sup>18</sup>

9. *Memorandum of Understanding.* On October 26, 2012, AAR and Maine (collectively, the Parties) concluded a Memorandum of Understanding (MOU) which resulted in AAR withdrawing its opposition.<sup>19</sup> In the MOU, Maine agrees to modify its pending applications in order to seek a lesser number of railroad frequencies.<sup>20</sup> In addition, the Parties agree to cooperate in the elimination or mitigation of interference which affects either party.<sup>21</sup> In response, the RAC voiced its support for the MOU and indicated it no longer has concerns with Maine's proposed use of railroad frequencies.<sup>22</sup> Subsequently, Maine amended its pending applications consistent with the MOU. Because Maine and AAR have agreed on the affected frequencies, and because RAC no longer objects, we focus solely on Maine's request for a waiver of the eligibility requirements of Section 90.35(a).

### III. DISCUSSION

10. Section 1.925 of the Commission's Rules states that in order 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 the waiver would be in the public interest;<sup>23</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>24</sup>

11. Applying the second prong of our waiver standard, we find Maine has justified its request for a waiver of the eligibility standards in Section 90.35(a) of the Commission's rules. As we stated in a previous *Order*,<sup>25</sup> we agree that there are insufficient Public Safety Pool frequencies available in the VHF

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1; Maine Office of the State Fire Marshal Comments at 1; MEMA Comments at 1; Maine Emergency Management County Directors Council Comments at 1.

<sup>17</sup> Opposition to Request for Waiver, filed Feb. 13, 2012, by AAR, *re* File Nos. 0004980650 *et al.* (AAR Opposition).

<sup>18</sup> RAC Opposition at 4.

<sup>19</sup> See Memorandum of Understanding between American Association of Railroads and the State of Maine, Office of Information Technology (MOU) attached to applications listed in the attached appendix on Oct. 26, 2012. See also Letter from Michele C. Farquhar, Counsel to AAR, to Marlene Dortch, Secretary, Federal Communications Commission (Nov. 2, 2012).

<sup>20</sup> MOU at Appendix A.

<sup>21</sup> AAR will test for interference on the frequencies that Maine selects for use on MSCommNet, and the Parties will cooperate to eliminate interference to other LR-frequency users and to facilitate migration to another frequency if necessary. MOU at ¶ 2.b.

<sup>22</sup> Email from Barry Isherwood, Manager, Terrestrial Coordination, Industry Canada, to Brian Marengo, Federal Communications Commission (dated Dec. 6, 2012).

<sup>23</sup> 47 C.F.R. § 1.925(b)(3)(i).

<sup>24</sup> 47 C.F.R. § 1.925(b)(3)(ii).

<sup>25</sup> In the Matter of State of Maine - MSCommNet Project, *Order*, 27 FCC Rcd 8891, 8894 (PSHSB WTB 2012).

band for Maine's statewide radio system.<sup>26</sup> We acknowledge that Maine's terrain, with its heavily forested areas, is difficult to penetrate for adequate radio coverage using frequencies above the VHF band.<sup>27</sup> We therefore find it unduly burdensome to require Maine to build a statewide radio system on higher frequencies—where adequate radio coverage is difficult to achieve—solely to use frequencies from the Public Safety Pool (*i.e.*, frequencies for which it is typically eligible). Furthermore, we find it in the public interest for Maine to expand MSCommNet and, thereby, to facilitate interoperability with federal, state and local public safety officials using predominantly VHF communications systems.<sup>28</sup>

12. The conclusion of the MOU between Maine and AAR and RAC's withdrawal of its objection to the waiver request factored significantly in our decision to approve the waiver and we commend Maine and AAR for their cooperation in reaching consensus. In doing so, they have facilitated successful coordination of the affected frequencies along the Canada border, and reduced the size of Maine's footprint on railroad frequencies

#### IV. ORDERING CLAUSES

13. Accordingly, IT IS ORDERED pursuant to Section 1.925 of the Commission's rules, 47 C.F.R. § 1.925, that the waiver request filed by the State of Maine – MSCommNet Project IS GRANTED.

14. IT IS FURTHER ORDERED that the license applications listed in the attached appendix filed by State of Maine – MSCommNet Project, SHALL BE GRANTED with the following condition: Operation on LR frequencies from the Industrial/Business Pool will be in accordance with the provisions detailed in paragraph 2.b of the Memorandum of Understanding between the licensee and the American Association of Railroads.

15. This action is taken under delegated authority pursuant to Sections 0.131, 0.191, 0.331 and 0.392 of the Commission's rules, 47 C.F.R. §§ 0.131, 0.191, 0.331, 0.392.

#### FEDERAL COMMUNICATIONS COMMISSION

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

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<sup>26</sup> See Maine Frequency Studies.

<sup>27</sup> Foliage loss can be calculated using the following formula:  $L = 1.33 (f^{0.284} d^{0.588})$ , where L is the foliage loss in decibels along a path blocked by dense, dry, in-leaf temperate-climate trees, f is the frequency in GHz, and d is the path length in meters. See Weissberger, M. A., "An Initial Critical Summary of Models for Predicting the Attenuation of Radio Waves by Trees," ESD-TR-81- 101, Electromagnetic Compatibility Analysis Center, Annapolis, MD, August 1981.

<sup>28</sup> I/B Waiver Request at 5 (noting that all federal, state and local agencies operate in the VHF band except for the City of Portland).

**Appendix**

State of Maine Applications Seeking Frequencies Coordinated by Railroad Coordinator (LR)<sup>29</sup>

ULS Application Numbers

0004980650	0004980661
0004980651	0004980663
0004980653	0004980664
0004980654	0004980665
0004980655	0004980666
0004980657	0004980667
0004980658	0004980673
0004980659	0004981067
0004980660*	0004981069

\* This application will be granted under this order if all objections from Industry Canada are resolved.

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<sup>29</sup> 47 C.F.R. § 90.35(b)(2)(iv).