



Federal Communications Commission  
Washington, D.C. 20554

December 7, 2016

DA 16-1359

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RE: Application File No. 0007464712

Dear Mr. Weimer:

The Mobility Division of the Wireless Telecommunications Bureau (Bureau) hereby grants the above-captioned application for an assignment of Automated Maritime Telecommunications Service (AMTS) spectrum from Intelligent Transportation & Monitoring Wireless LLC (ITMW)<sup>1</sup> to PTC-220, LLC (PTC-220), and PTC-220's related request for a waiver of certain AMTS rules.<sup>2</sup> Grant of the spectrum assignment and related waiver request as described below will facilitate the positive train control (PTC) deployments of the Massachusetts Bay Transportation Authority (MBTA), the National Railroad Passenger Corporation (Amtrak), and PTC-220 member freight railroads in areas of Connecticut, Massachusetts, New Hampshire, and Rhode Island. We also grant a request to modify the regulatory status of the AMTS spectrum for private PTC use.

*Background.* Pursuant to the Rail Safety Improvement Act of 2008,<sup>3</sup> as amended by the Positive Train Control Enforcement and Implementation Act of 2015,<sup>4</sup> all trains providing passenger service and freight trains operating on lines carrying toxic and poisonous-by-inhalation hazardous materials are required to implement interoperable<sup>5</sup> PTC systems by December 31, 2018.<sup>6</sup> PTC systems are designed to

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<sup>1</sup> On November 16, 2015, the Superior Court of Alameda County, California, appointed a receiver, Susan L. Uecker, to take control and possession of ITMW and certain related entities, including their FCC licenses. *See Arnold Leong v. Warren Havens et al.*, Case No. 2002-070640, Order Appointing Receiver After Hearing and Preliminary Injunction (Nov. 16, 2015) (*Receivership Order*). On February 6, 2016, the Bureau accepted an involuntary transfer of control application filed by the receiver on behalf of ITMW seeking transfer of ITMW's licenses to Susan L. Uecker, Receiver. *See* ULS File No. 0007060862 (filed Dec. 17, 2015). A petition for reconsideration of the transfer of control to Ms. Uecker was filed by Mr. Havens and remains pending. *See* Petition for Reconsideration, to Deny, and for Other Relief, ULS File No. 0007061847 (filed Mar. 11, 2016) (attached to the involuntary transfer of control application filed by the receiver on behalf of Skybridge Spectrum Foundation, an entity related to ITMW).

<sup>2</sup> PTC-220 is a joint venture of the following seven Class I freight railroads: BNSF Railway Company, Canadian National, Canadian Pacific, CSX Corporation, Kansas City Southern, Norfolk Southern Corporation, and Union Pacific Corporation. Description of the Transaction and Public Interest Statement, ULS File No. 0007464712 at 1 n.3 (filed Sept. 30, 2016) (Public Interest Statement).

<sup>3</sup> Pub. L. No. 110-432, § 104, 122 Stat. 4848, 4857 (2008).

<sup>4</sup> Pub. L. No. 114-73, § 1302, 129 Stat. 568, 576 (2015).

<sup>5</sup> Interoperability is defined as "the ability to control locomotives of the host railroad and tenant railroad to communicate with and respond to the positive train control system, including uninterrupted movements over property boundaries." 49 U.S.C. § 20157(i)(3).

reduce the risk of human-error rail accidents, by “prevent[ing] train-to-train collisions, over-speed derailments, incursions into established work zone limits, and the movement of a train through a switch left in the wrong position.”<sup>7</sup>

The U.S. rail industry has chosen to implement PTC using radio spectrum that creates wireless networks with the capacity to enable real-time information sharing between trains, rail wayside devices, and “back office” applications, regarding train movement authorities, speed restrictions, train position and speed, and the state of signal and switch devices. A number of railroads have chosen to acquire spectrum in the 220-222 MHz band to deploy their PTC systems. PTC-220’s members are implementing Interoperable Electronic Train Management System (I-ETMS) as their PTC radio technology, while Amtrak and MBTA are deploying Advanced Civil Speed Enforcement System (ACSES).<sup>8</sup> When in close geographic proximity, these PTC radio technologies will experience intersystem interference absent adequate spectral separation and filtering.<sup>9</sup> Several of PTC-220’s members intend to deploy I-ETMS using 220-222 MHz band spectrum over, or nearby, track where MBTA will deploy ACSES and in certain areas where Amtrak has already deployed ACSES using 220-222 MHz band spectrum.<sup>10</sup>

*Assignment Application.* ITMW is the licensee of call sign WQGF310, the A Block AMTS license in this market area, which spans several northeastern states. On September 30, 2016, ITMW filed the Assignment Application for approval to partition, disaggregate, and assign portions of WQGF310 to PTC-220.<sup>11</sup> The assignment would result in a new license with 250 kHz of spectrum (217.5-217.75 MHz) in Middlesex, Norfolk, and Suffolk counties, Massachusetts, and 100 kHz of spectrum (217.5-217.6 MHz) in counties in Connecticut, Massachusetts, New Hampshire, and Rhode Island.<sup>12</sup> PTC-220 requests a related waiver of certain Part 80 rules to enable use of the AMTS spectrum for PTC implementation<sup>13</sup> and requests modification of the spectrum’s regulatory status for private PTC use.<sup>14</sup> On October 12, 2016, the Bureau placed the Assignment Application on public notice;<sup>15</sup> no party filed in support of or opposition to the application.

PTC-220 states that approval of the spectrum assignment will enable Amtrak, MBTA, and the freight railroads to manage potential interference between their respective PTC operations.<sup>16</sup> PTC-220 notes that an FRA-funded Transportation Technology Center, Inc. study (TTCI Study) finds that ACSES and I-ETMS systems will cause harmful interference to one another when operating in close proximity if

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<sup>6</sup> 49 U.S.C. § 20157(a)(1). In October 2015, Congress extended the PTC implementation deadline from December 31, 2015, to December 31, 2018. Pub. L. No. 114-73, § 1302, 129 Stat. 568, 576 (2015).

<sup>7</sup> 49 U.S.C. § 20157(i)(5).

<sup>8</sup> See Public Interest Statement at 2.

<sup>9</sup> See *infra* text accompanying notes 17-18.

<sup>10</sup> See Public Interest Statement at 2.

<sup>11</sup> Description of the Transaction and Public Interest Statement, ULS File No. 0007464712 (filed Sept. 30, 2016) (Assignment Application). The Superior Court of Alameda County, California, has granted the receiver’s motion seeking approval of the sale of this spectrum to PTC-220. *Arnold Leong v. Warren Havens et al.*, Case No. 2002-070640, Order Approving Sale of Wireless Spectrum to PTC-220 LLC (Oct. 27, 2016).

<sup>12</sup> Public Interest Statement at 1.

<sup>13</sup> Request for Rule Waivers, ULS File No. 0007464712 (Sept. 30, 2016) (Waiver Request).

<sup>14</sup> Section 20.9(b) Certification, ULS File No. 0007464712 (Sept. 30, 2016) (Section 20.9(b) Certification).

<sup>15</sup> *Wireless Telecommunications Bureau Assignment of License Authorization Applications, Transfer of Control of Licensee Applications, and De Facto Transfer Lease Applications, and Designated Entity Reportable Eligibility Event Applications Accepted for Filing*, Public Notice (WTB Oct. 12, 2016), 2016 WL 5940392.

<sup>16</sup> Public Interest Statement at 2-3.

they are not spectrally separated by a minimum of one megahertz.<sup>17</sup> PTC-220 states that this potential for interference is acute where freight and commuter railroads operate on the same or adjacent tracks, as is the case in much of the proposed new license area.<sup>18</sup>

Following consummation of the Assignment Application, PTC-220 has committed to provide spectrum under the new license by lease or assignment to Amtrak and MBTA, which would provide their ACSES PTC operations more than one megahertz of separation from the freights' I-ETMS operations in the 220-222 MHz band.<sup>19</sup> We have carefully reviewed the record before us and find that consistent with the congressional PTC mandate and our obligation under the Communications Act to “promot[e] safety of life and property,”<sup>20</sup> the proposed assignment of AMTS spectrum to PTC-220 will serve the public interest, convenience, and necessity by enabling the freights, Amtrak, and MBTA to manage interference that could arise from their deployment of different PTC technologies. We therefore grant the Assignment Application.

*Waiver Request.* PTC-220 requests that eight rule waivers, nearly identical to those granted by the Bureau in the *Amtrak Order*<sup>21</sup> and in the *SCRRA Order*,<sup>22</sup> be granted here to enable use of the AMTS spectrum for the ACSES PTC deployments of Amtrak and MBTA.<sup>23</sup> PTC-220 states that these AMTS rules—Sections 80.92(a), 80.105, 80.106, 80.123(a), 80.123(b), 80.123(c), 80.123(f), and 80.385(a)(2)<sup>24</sup>—are designed to accommodate the unique requirements of a shared, public maritime communications system and as such, are neither applicable to or compatible with a PTC system, which is an exclusive use, private land mobile radio system.<sup>25</sup> PTC-220 further states that it has sought alternative spectrum, but has been unable to locate another source in the relevant counties that would permit its members, Amtrak, and MBTA to implement and operate their PTC systems—with sufficient spectral separation to avoid intersystem interference—by the PTC implementation deadline, December 31, 2018.<sup>26</sup>

The Commission may grant a request for a waiver when: (i) the underlying purpose of the rules(s) would not be served or would be frustrated by application to the instant case, and a grant of the requested waiver would be in the public interest; or (ii) in view of the unique or unusual factual circumstances of the instant case, application of the rule(s) would be inequitable, unduly burdensome, or

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<sup>17</sup> *Id.* at 2, citing TFCI Study at 12.

<sup>18</sup> *Id.* at 2.

<sup>19</sup> *Id.* at 2-3.

<sup>20</sup> 47 U.S.C. § 151.

<sup>21</sup> *National Rail Road Passenger Corporation (d/b/a Amtrak) Request for Waiver of Certain Part 80 Automated Maritime Telecommunications System Rules to Implement Positive Train Control*, Order, 30 FCC Rcd 2038 (WTB Mobility Div. 2015) (*Amtrak Order*).

<sup>22</sup> *Maritime Communications/Land Mobile, LLC and Southern California Regional Rail Authority File Applications to Modify License and Assign Spectrum for Positive Train Control Use, and Request Part 80 Waivers*, WT Docket No. 10-83, Order, DA 16-1040 (WTB Mobility Div. Sept. 14, 2016), 2016 WL 4923291 (*SCRRA Order*).

<sup>23</sup> Waiver Request at 1.

<sup>24</sup> 47 CFR §§ 80.92(a) (requires Part 80 licensees to monitor a frequency prior to transmitting), 80.105 (requires coast stations to receive calls from ship and aircraft stations), 80.106 (requires AMTS public coast stations to receive communications from mobile stations), 80.123(a) (requires AMTS land stations to secure a letter authorizing the land station to communicate with the coast station), 80.123(b) (requires coast stations to afford priority to marine-originating communications), 80.123(c) (requires AMTS land stations to use the associated coast station's call sign, followed by a unique numeric or alphabetic unit identifier), 80.123(f) (provides that AMTS land stations may only communicate with public coast stations), and 80.385(a)(2) (divides AMTS spectrum into coast (base) station frequencies and ship (mobile) station frequencies).

<sup>25</sup> Waiver Request at 2 & Attachment A.

<sup>26</sup> *Id.* at 3.

contrary to the public interest, or the applicant has no reasonable alternative.<sup>27</sup> The Commission also may waive a rule, in whole or in part, on its own motion or on petition for good cause.<sup>28</sup>

The Bureau has previously determined that the nearly identical waiver relief requested here was warranted to enable Amtrak's ACSES PTC deployment from New York City to Washington, D.C., on AMTS spectrum.<sup>29</sup> The record shows that Amtrak's and MBTA's proposed use of the AMTS spectrum here will promote railway safety without adversely affecting adjacent or co-channel licensees; nor will it jeopardize the maritime community's ability to meet its own operational and safety needs.<sup>30</sup> The record also shows that the requested waivers will advance the Commission's goal of maximizing spectrum efficiency and encouraging flexible use of spectrum in the AMTS band.<sup>31</sup>

In view of the foregoing, we find that waiver of the above rules—with the exception of Section 80.123(c), which does not require a waiver following the Commission's forbearance from this requirement in 2000<sup>32</sup>—will serve the public interest in rail safety by facilitating PTC operations and we find that the underlying purpose of these rules would not be served by strict application here.<sup>33</sup> We also find good cause to grant the waiver relief requested here for the reasons stated above.<sup>34</sup>

*Reclassification of AMTS Spectrum.* In addition to its Waiver Request, PTC-220 filed a Section 20.9(b) Certification,<sup>35</sup> stating that the AMTS spectrum will be operated to provide PTC on a non-common carrier, private internal basis, consistent with the definition of PMRS.<sup>36</sup> Although AMTS stations are presumptively regulated as a commercial mobile radio service (CMRS),<sup>37</sup> Section 20.9(b) of the Commission's rules provides that an AMTS applicant or licensee that wishes to provide service on a private mobile radio service (PMRS)<sup>38</sup> basis can overcome this presumption by certifying that it will offer

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<sup>27</sup> 47 CFR § 1.925(b)(3).

<sup>28</sup> 47 CFR § 1.3.

<sup>29</sup> See *Amtrak Order*, 30 FCC Rcd at 2041-43, paras. 10-15.

<sup>30</sup> See *id.* at 2041-43, paras. 11-14 (underlying purposes of these same rules were not served by application to Amtrak's proposed PTC operations and waiver of these rules served the public interest in rail safety); see also *SCRRRA Order* at 11-15, paras. 30-39 (granting the Southern California Regional Rail Authority's request for similar relief).

<sup>31</sup> See *Maritel, Inc. and Mobex Network Services, LLC, Report and Order*, 22 FCC Rcd 8971, 8971, para.1 (2007), *aff'd*, 25 FCC Rcd 533 (2010), *aff'd*, 26 FCC Rcd 2491 (2011), *review dismissed*, 26 FCC Rcd 16579 (2011).

<sup>32</sup> *Regionet Wireless License, LLC, Order*, 15 FCC Rcd 16119, 16119, para. 1 (2000).

<sup>33</sup> 47 CFR § 1.925(b)(3)(i).

<sup>34</sup> 47 CFR § 1.3. Again, we decline to grant relief from 47 CFR § 80.123(c) where the Commission has already exercised forbearance. *Supra* note 32.

<sup>35</sup> Section 20.9(b) Certification. The Bureau placed the Assignment Application on public notice on October 12, 2016. *Supra* note 15.

<sup>36</sup> Section 20.9(b) Certification; 47 CFR § 20.3 (definition of PMRS). PTC-220 also certifies that this spectrum will not be used to provide interconnected voice or data services for a profit, and that it will not be available to the public or such classes of eligible users so as to be effectively available to a substantial portion of the public; additionally, PTC-220 affirms that PTC will not be the functional equivalent of services made available in such manner. Section 20.9(b) Certification.

<sup>37</sup> 47 CFR § 20.9(a)(5). CMRS is defined as a mobile service that is (1) provided for profit, (2) interconnected to the public switched network, and (3) either publically available or effectively available to a substantial portion of the public. 47 CFR § 20.3.

<sup>38</sup> PMRS is defined as a mobile service that is neither a CMRS nor the functional equivalent of a service that meets the definition of CMRS. 47 CFR § 20.3.

service on a PMRS basis.<sup>39</sup> The record demonstrates that this spectrum will be used for PTC deployment on a non-commercial, private mobile radio basis. We therefore find that PTC-220 has overcome the CMRS regulatory classification presumption.<sup>40</sup>

We emphasize that today's grant of relief from Sections 80.92(a), 80.105, 80.106, 80.123(a), 80.123(b), 80.123(f), and 80.385(a)(2) of our rules will only apply to use of the AMTS spectrum to deploy PTC in defined rail corridors, thereby limiting the area of potential interference. Upon any future assignment or lease of spectrum to Amtrak, MBTA, or a third party, these waivers would only apply if that spectrum is used for PTC.

For the reasons stated above and specifically to support Amtrak and MBTA's implementation and operation of positive train control rail safety systems as required by Congress, we hereby grant the Assignment Application, ULS File No. 0007464712 (WQGF310), and related Waiver Request to the extent provided above.

Action taken pursuant to Sections 1, 4(i), and 309 of the Communications Act of 1934, as amended, 47 U.S.C. §§ 151, 154(i), and 309, and Sections 0.331, 1.3, and 1.925(b)(3) of the Commission's rules, 47 C.F.R. §§ 0.331, 1.3, and 1.925(b)(3).

Sincerely,

Roger S. Noel  
Chief, Mobility Division  
Wireless Telecommunications Bureau

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<sup>39</sup> 47 CFR § 20.9(b)(1). The certification must describe the proposed service sufficiently to demonstrate that it is not within the definition of CMRS under Section 20.3 of the Commission's rules. *Id.* See also 47 CFR § 20.3 (CMRS definition).

<sup>40</sup> 47 CFR § 20.9(b)(1).