

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

In the Matter of)
)
National Railroad Passenger Corporation (d/b/a) File Nos. 0006590008, 0006591371,
Amtrak)) 0006591407, 0006591411, 0006591789,
) 0006591792, 0006591797, 0006591802,
) 0006595882, 0006595960, 0006596057,
) 0006596073, 0006596254, 0006596258,
) 0006596264 and 0006596268
)
Request for Waiver of Certain Part 80 Automated) WT Docket No. 11-27
Maritime Telecommunications System Rules to)
Implement Positive Train Control)

ORDER

Adopted: March 4, 2015

Released: March 4, 2015

By the Deputy Chief, Mobility Division, Wireless Telecommunications Bureau:

I. INTRODUCTION

1. In this Order, we approve an assignment and lease of spectrum and grant a related request for waiver, which will enable the National Railroad Passenger Corporation (d/b/a Amtrak) to deploy a positive train control (PTC) system as required by the Rail Safety Improvement Act of 2008 (RSIA of 2008).¹ Together, the assignment and lease transactions will provide Amtrak critical spectrum coverage of an 18-mile wide corridor that runs nine miles on each side of Amtrak's rail lines from New York City to Washington, D.C., from New York City to Albany, New York, and from Philadelphia to Harrisburg, Pennsylvania.²

II. BACKGROUND

2. In December 2014, Environmental LLC and Skybridge Spectrum Foundation (collectively, the Assignors) filed the above-captioned applications seeking to assign portions,³ and lease other portions,⁴ of the geographic licenses for Automated Maritime Telecommunications System (AMTS) Stations WQCP801, WQID629, WQCP811 and WQJW652 to Amtrak. In conjunction with each

¹ Rail Safety Improvement Act of 2008, Pub. L. No. 110-432, 122 Stat. 4848 (2008).

² Amtrak previously procured spectrum for the New York City to Boston portion of the Northeast Corridor (NEC). More than 260 million passenger trips are made on the NEC each year, including more than 17 million trips by Amtrak passengers. The balance of these trips is provided by eight commuter railroads that share the NEC. See Northeast Corridor Fact Sheet, available at <http://nec.amtrak.com/node/321>, website last visited March 3, 2015.

³ FCC File Nos. 0006590008, 0006591371, 0006591407, and 0006591411 (filed Dec. 19, 2014).

⁴ FCC File Nos. 0006591789, 0006591792, 0006591797, and 0006591802 (filed Dec. 22, 2014); 0006595882, 0006595960, 0006596057, 0006596073, 0006596254, 0006596258, 0006596264, and 0006596268 (filed Dec. 26, 2014).

application, Amtrak filed an essentially identical request for waiver of certain Part 80 rules (2014 Waiver Request) to allow it to implement its PTC system, called an Advanced Civil Speed Enforcement System (ACSES). Amtrak amended the 2014 Waiver Request for all of its applications on February 25, 2015, and amended five applications on March 2, 2015 to more precisely define the geographic spectrum corridor.⁵

3. The AMTS service originally was intended to authorize specialized systems of coast stations providing integrated and interconnected marine voice and data communications.⁶ In 1997, the Commission amended its rules to permit AMTS licensees to provide commercial service to fixed and mobile units on land, under certain conditions.⁷ In 2007, the Commission amended its rules to permit AMTS licensees to provide private mobile radio service, as well as commercial service, to units on land.⁸

4. Pursuant to the RSIA of 2008,⁹ Amtrak is required, along with certain other commuter and freight railroads, to deploy interoperable PTC systems by December 31, 2015. Once implemented, PTC systems are designed to reduce the risk of rail accidents caused by human error, including train-to-train collisions, derailments caused by excessive speed, and unauthorized train movements in work zones. PTC wireless communications networks are intended to enable real-time information sharing between trains, rail wayside devices, and control centers, regarding train movement authorities, speed restrictions, train consist, position, and speed, and the state of signal and switch devices.

5. The nation's freight railroads have acquired substantial spectrum in the 220 MHz band (220 – 222 MHz) to implement PTC systems.¹⁰ Because Amtrak shares track with and operates on tracks nearby freight rail lines, it seeks spectrum as close to the 220 MHz band as possible to ensure that its own PTC system will be interoperable with the freight railroads' planned PTC systems. Amtrak, anticipating congestion in the 220 MHz band, identified Part 80 AMTS spectrum (217-218 MHz and 219-220 MHz) as the best option for its PTC system.¹¹

6. Amtrak filed the instant applications and request for waiver to implement its PTC system on its Northeast Corridor line from New York City to Washington, D.C., and other rail lines from Philadelphia to Harrisburg, Pennsylvania and from New York City to Albany, New York.¹² Amtrak seeks to use the spectrum for a private, exclusive-use, integrated communications and information system to coordinate and control train movements.

7. Amtrak's ACSES PTC system includes passive transponders buried under the tracks that connect to rail side and wayside base station controllers. These controllers, in turn, communicate vital

⁵ FCC File Nos. 0006591789, 0006591792, 0006591797, 0006591802, and 0006596258.

⁶ See Amendment of Parts 2 and 80 of the Commission's Rules Applicable to Automated Maritime Telecommunications Systems (AMTS), *First Report and Order*, RM-5712, 6 FCC Rcd 437 (1991).

⁷ See Amendment of the Commission's Rules Concerning Maritime Communications, *Second Report and Order and Second Further Notice of Proposed Rule Making*, PR Docket No. 92-257, 12 FCC Rcd 16949, 16965 ¶ 24 (1997).

⁸ See Maritel, Inc. and Mobex Network Services, LLC, *Report and Order*, WT Docket No. 04-257, 22 FCC Rcd 8971 (2007) (*Flexibility Order*), aff'd, 25 FCC Rcd 533 (2010), aff'd, 26 FCC Rcd 2491, review dismissed, 26 FCC Rcd 16579 (2011).

⁹ See *supra* note 1.

¹⁰ See Request of PTC-220, LLC for Waivers of Certain 220 MHz Rules, *Memorandum Opinion and Order*, 24 FCC Rcd 8537 (WTB 2009); Application for Consent to the Assignment of a Five-Channel 220 MHz Nationwide License to the Association of American Railroads, *Order*, 18 FCC Rcd 24711 (WTB CWD 2003).

¹¹ See 2014 Waiver Request at 2.

¹² See *id.* at 1.

information such as speed and location wirelessly to computers on locomotives and to Amtrak's central dispatch facilities. The system provides trains with status of tracks ahead and allows the rail traffic controller to manage the system by providing status of the tracks, switch positions, signal lights and location of work crews.¹³

8. To implement its PTC system, Amtrak seeks a waiver of the following rule sections:
 - Section 80.92(a), which requires Part 80 licensees to monitor a frequency prior to transmitting;
 - Section 80.105, which requires coast stations to receive calls from vessels and aircraft;
 - Section 80.106, which requires mobile stations to receive calls from ships or aircraft;
 - Section 80.123(a), which requires AMTS land stations to secure a letter authorizing the land station to communicate with the coast station;
 - Section 80.123(b), which affords priority to marine communications;
 - Section 80.123(c), which requires AMTS land stations to use the coast station call sign;
 - Section 80.123(f), which provides that AMTS land stations may communicate only with public coast stations; and
 - Section 80.385(a)(2), which divides AMTS spectrum into coast (base) station frequencies and ship (mobile) station frequencies.¹⁴

9. We note that in 2011, Amtrak filed a request for waiver of certain Part 80 rules to implement its planned PTC system in the AMTS bands.¹⁵ In WT Docket No. 11-27 the Commission sought comment solely on Amtrak's request for waiver and not on the merits of whether a specific prospective AMTS spectrum acquisition or lease would serve the public interest.¹⁶ Because Amtrak's 2014 Waiver Request supersedes its 2011 Waiver Request, we hereby dismiss the 2011 Waiver Request as moot and terminate WT Docket No. 11-27.

¹³ See, e.g., FCC File Nos. 0006590008, 0006591371, 0006591407 and 0006591411, Description of Transaction and Public Interest Statement at 2 (filed Dec. 19, 2014) (Transaction Description).

¹⁴ See 2014 Waiver Request at Attachment A. Amtrak notes that the Southern California Regional Rail Authority has requested similar waivers to implement a PTC system using AMTS spectrum in Southern California. See 2014 Waiver Request at note 10 (citing Request of the Southern California Regional Rail Authority for Waiver of Certain Part 80 Rules, FCC File No. 0004144435). Initially, the 2014 Waiver Request also requested waiver of 47 C.F.R. §§ 80.102(a), 80.123(d), 80.123(g), 80.475(c) and 80.479(c), but Amtrak withdrew the request with respect to those rules on February 25, 2015, after consultation with Commission staff.

¹⁵ See Request for Waiver (filed Jan. 3, 2011) (2011 Waiver Request).

¹⁶ The 2011 Waiver Request was placed on public notice on February 18, 2011. See Wireless Telecommunications Bureau Seeks Comment on National Railroad Passenger Corporation (Amtrak) Request for Waiver of Certain Part 80 Automated Maritime Telecommunications System (AMTS) Rules to Implement Positive Train Control (PTC), *Public Notice*, WT Docket No. 11-27, 26 FCC Rcd 1979 (WTB MD 2011). Commenters Association of American Railroads, Southern California Regional Rail Authority, Federal Railroad Administration, and PTC-220, LLC supported the request; commenters Hammett & Edison, Inc., Cohen Dippell and Everist P.C., and Skybridge Spectrum Foundation, ATLIS Wireless LLC, V2G LLC, Environmental LLC, Verde Systems LLC, Telesaurus Holdings GB LLC and Intelligent Transportation & Monitoring Wireless LLC opposed the request.

III. DISCUSSION

10. Section 1.925(b)(3) of the Commission's Rules provides that we may grant a waiver if it is shown that (a) the underlying purpose of the rule(s) would not be served or would be frustrated by application to the instant case, and grant of the requested waiver would be in the public interest; or (b) in light of unique or unusual circumstances, application of the rule(s) would be inequitable, unduly burdensome, or contrary to the public interest, or the applicant has no reasonable alternative.¹⁷ The Commission also may waive a rule, in whole or in part, on its own motion or on petition if good cause therefor is shown.¹⁸

11. Amtrak requests a waiver of the requirements to monitor before transmitting,¹⁹ to afford priority to marine communications,²⁰ and to use the coast station call sign²¹ because its PTC system is configured to transmit data, does not support voice communications, and cannot provide service to maritime communications.²² Amtrak notes that there are other public coast licensees in the area available to meet marine communications needs.²³ Amtrak also states that it has an agreement with the Assignors to ensure that the impact of its PTC operations to adjacent channel and co-channel operations is minimized.²⁴ We agree that waiver of these provisions is warranted.²⁵ Amtrak's proposed use of the AMTS frequencies will not jeopardize the maritime community's ability to meet its operational, safety, and security communications needs. Further, permitting the use of the subject frequencies for PTC operations will promote the efficient use of AMTS spectrum and serve the public interest by promoting railroad safety. We therefore waive these requirements.²⁶

¹⁷ 47 C.F.R. § 1.925(b)(3); *see also WAIT Radio v FCC*, 418 F. 2d 1153, 1159 (D.C. Cir. 1969). In addition, when the Commission amended its rules to permit AMTS stations to provide private correspondence service to units on land, it stated that the following factors would be considered in evaluating waiver requests: (a) whether the applicant will provide priority to maritime communications, (b) the distance of a proposed land mobile radio operation from the nearest navigable waterways, (c) the magnitude of divergence sought from specific Part 80 technical requirements, (d) whether alternative spectrum that could accommodate the proposed private land mobile radio (PLMR) or other land mobile radio service is unavailable or unsuitable for that purpose, and (e) whether grant of the waiver would benefit public safety or homeland security (including support of critical infrastructure). *See Flexibility Order*, 22 FCC Rcd at 8986-87 ¶ 26.

¹⁸ 47 C.F.R. § 1.3.

¹⁹ 47 C.F.R. § 80.92(a).

²⁰ 47 C.F.R. § 80.123(b).

²¹ 47 C.F.R. § 80.123(c).

²² *See Transaction Description at 2.*

²³ 2014 Waiver Request at 3.

²⁴ *Id.* at 4.

²⁵ Amtrak argues that the factors identified by the Commission support its request. *See* 2014 Waiver Request at 2-4. With respect to priority of marine-originating communications, it notes that marine traffic will still have access to other public coast stations in the area. *See also* PacifiCorp, *Order*, 27 FCC Rcd 5796, 5799 ¶ 3 (WTB MD 2009) (waiving priority requirement when sufficient other maritime spectrum was available). Amtrak also states that congestion on alternative land mobile spectrum, and the need to find spectrum in close spectral proximity to the 220 MHz Radio Service make AMTS spectrum the most effective spectrum for Amtrak's needs. Further, Amtrak's system is designed to protect both PTC operations and licensees adjacent to Amtrak from interference. Finally, Amtrak notes that the safe and efficient operation of passenger trains within the Northeast corridor is an important component of public safety.

²⁶ *See PHI Service Company, Order*, 29 FCC Rcd 8176, 8178 ¶ 7 (WTB MD 2014) (*PHI*) (waiving Sections 80.92(a) and 80.123(b) and (c) to permit use of AMTS spectrum in an electric utility's fixed system because the (continued....)

12. Amtrak seeks waiver of the requirement that AMTS land stations secure a letter authorizing the land station to communicate with the coast station,²⁷ which enables authorities to verify that a unit on land is authorized to operate on AMTS spectrum. We previously granted such a request with respect to an electric utility's fixed data system.²⁸ We conclude that precedent is applicable here, for Amtrak's system is configured to transmit only data, and railroad operations take place in limited locations where the responsible party is easily identifiable. We therefore waive this requirement.

13. Amtrak also requests waiver of the requirements that base and mobile stations accept communications from ships and aircraft²⁹ and that AMTS land stations communicate only with public coast stations,³⁰ because the requirements are incompatible with its proposed operations. Amtrak's PTC system is a private, internal-use only system operating PTC mobile units, base stations and wayside stations to facilitate passenger rail services and cannot provide marine communications services.³¹ We conclude that permitting Amtrak's stations to communicate with stations other than public coast and ship stations will promote the efficient use of AMTS spectrum and serve the public interest by improving safety in railroad operations. We therefore waive these requirements.³²

14. Amtrak requests a waiver of the rule requiring coast (base) stations to transmit in the lower half of the AMTS band and ship (mobile) stations in the upper half.³³ Amtrak is acquiring and leasing spectrum in the lower half of the AMTS band only, and proposes to operate base, mobile, and wayside transmitters using that spectrum to provide information wirelessly to locomotives and rail traffic controllers.³⁴ Amtrak will operate in accordance with the antenna height and power levels permitted for AMTS stations,³⁵ thereby providing protection against interference to maritime operations. Additionally, the proposed limited geographical area of operation³⁶ and agreements ensuring Amtrak's PTC operations do not interfere with operations of co-channel or adjacent licensees will protect the parties from

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system was configured to transmit only data and could not support voice communications, and the proposed operations did not jeopardize the maritime community's ability to meet its communications needs); *see also* Chesapeake Operating Inc., *Order*, 29 FCC Rcd 9272, 9276 ¶ 13 (WTB MD 2014) (*Chesapeake*) (similarly waiving Section 80.92(a) to permit use of AMTS spectrum in a PLMR system); Vermont Transco LLC, *Order*, 26 FCC Rcd 8820, 8821-22 ¶ 6 (WTB MD 2011) (*Transco*) (same).

²⁷ 47 C.F.R. § 80.123(a).

²⁸ See *PHI*, 29 FCC Rcd at 8179 ¶ 9. But cf. *Transco*, 26 FCC Rcd at 8822 ¶ 8 (denying such a request with respect to the mobile units in an electric utility's private land mobile radio system, because the applicant had not demonstrated that the requirement was burdensome).

²⁹ See 47 C.F.R. §§ 80.105, 80.106.

³⁰ See 47 C.F.R. § 80.123(f).

³¹ See Transaction Description at 2.

³² See, e.g., County of Silverbow, Montana, *Order*, 24 FCC Rcd 12547, 12565 ¶ 41 (PSHSB PD 2009) (waiving Sections 80.105 and 80.106 to permit use of VHF Public Coast station frequencies in a Public Safety PLMR system); *Transco*, 26 FCC Rcd at 8822 ¶ 7 (waiving Section 80.123(f) to permit use of AMTS frequencies in an electric utility PLMR system, because the mobile units needed to communicate with stations other than public coast stations to support power utility operations).

³³ See 47 C.F.R. § 80.385(a)(2).

³⁴ See 2014 Waiver Request at 3.

³⁵ See 47 C.F.R. §§ 80.123(e), 80.215(e)(2), (h)(5)(i), (i).

³⁶ See 2014 Waiver Request at 2.

interference.³⁷ Because the proposed configuration will not affect other licensees any more than compliant base and mobile stations, we conclude that a waiver of this requirement is warranted.³⁸

15. Finally, Amtrak states that because it will observe the interference protection criteria for Channels 10 and 13 specified in the Commission's rules (including preparation of a plan to limit any interference to viewers near its rail lines), approval of the spectrum transactions and grant of the rule waivers will not harm operations on Channels 10 and 13.³⁹ We remind Amtrak that AMTS operations are authorized on the condition that no harmful interference will be caused to reception of existing television stations, and that particular requirements apply to base stations within 169 kilometers (105 miles) of a Channel 13 television station, or within 129 kilometers (80 miles) of a Channel 10 television station.⁴⁰

IV. CONCLUSION AND ORDERING CLAUSES

16. For the reasons stated above we find good cause to grant the rule waivers requested by Amtrak. Our finding of good cause to grant the requested rule waivers is inseparably tied to Congress' directive that Amtrak, as well as certain freight and commuter railroads, implement PTC safety systems and the substantial public interest benefits that will accrue from a nationwide interoperable rail safety network.⁴¹

17. Further, we find that the underlying purpose of the rule sections we waive above would not be served by application to the instant case, and that grant of the requested rule waivers would serve the public interest of all Americans in rail safety, including the safety of life and property.⁴² We also find that Congress' national rail safety mandate constitutes a unique and unusual circumstance, such that strict application of the rule sections we waive above would be contrary to the public interest.⁴³

18. Accordingly, IT IS ORDERED, pursuant to Sections 1, 4(i) and 309(a) of the Communications Act of 1934, as amended, 47 U.S.C. §§ 151, 154(i), 309(a), and Sections 1.3 and 1.925 of the Commission's Rules, 47 C.F.R. §§ 1.3, 1.925, that FCC File Nos. 0006590008, 0006591371, 0006591407, 0006591411, filed December 19, 2014, 0006591789, 0006591792, 0006591797, 0006591802, filed December 22, 2014, 0006595882, 0006595960, 0006596057, 0006596073, 0006596254, 0006596258, 0006596264, 0006596268, filed December 26, 2014, and the related Request for Waiver filed with each application and amended on February 25, 2015 by the National Railroad Passenger Corporation ARE GRANTED consistent with this *Order* and the Commission's Rules.

19. IT IS FURTHER ORDERED that the Request for Waiver filed by the National Railroad Passenger Corporation on January 3, 2011, WT Docket 11-27, IS DISMISSED AS MOOT, and WT Docket No. 11-27 IS TERMINATED.

³⁷ *Id.* at 4.

³⁸ See *Chesapeake*, 29 FCC Rcd at 9276 ¶ 12; *PHI*, 29 FCC Rcd at 8177 ¶ 8.

³⁹ 2014 Waiver Request at 4.

⁴⁰ See 47 C.F.R. §§ 80.215(h)-(h)(4), 80.475(a); see also, e.g., Avista Corporation, *Order on Reconsideration*, 27 FCC Rcd 5258, 5259-60 ¶ 5 (WTB MD 2013), review pending.

⁴¹ The Commission was formed “for the purpose of promoting safety of life and property through the use of wire and radio communication . . .” 47 U.S.C. § 151.

⁴² 47 C.F.R. § 1.925(b)(3)(i).

⁴³ 47 C.F.R. § 1.925(b)(3)(ii).

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

FEDERAL COMMUNICATIONS COMMISSION

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