

**Before the
Federal Communications Commission
Washington, DC 20554**

In the Matter of)
)
Spectrum Needs for the Implementation of the) WT Docket No. 11-79
Positive Train Control Provisions of the Rail)
Safety Improvement Act of 2008)
)

COMMENTS OF ASSOCIATION OF AMERICAN RAILROADS

The Association of American Railroads (“AAR”) hereby submits these comments in response to the *Public Notice* issued in the above-captioned proceeding on May 5, 2011.¹ AAR is a trade association whose membership includes freight railroads that operate 68 percent of the line-haul mileage, employ 89 percent of the workers, and account for 93 percent of the freight revenues of all railroads in the United States; and passenger railroads that operate intercity passenger trains and provide commuter rail service. The Commission has certified AAR as the exclusive frequency coordinator for the land mobile frequencies used by the railroad industry for dispatcher-to-train links, onboard communications, train-to-train communications, various types of train control systems, and other industry specific uses of spectrum.²

¹ See *Wireless Telecommunications Bureau Seeks Comment on Spectrum Needs for the Implementation of the Positive Train Control Provisions of the Rail Safety Improvement Act of 2008*, Public Notice, DA 11-838 (rel. May 5, 2011) (“*Public Notice*”).

² See *Frequency Coordination in the Private Land Mobile Radio Services*, Report & Order, 103 FCC 2d 1093 ¶ 94 (1986); *Replacement of Part 90 by Part 88 to Revise the Private Land Mobile Services and Modify the Policies Governing Them and Examination of Exclusivity and Frequency Assignment Policies of the Private Land Mobile Services*, Second Report and Order, 12 FCC Rcd 14307, 14324, 14330 (1997) and Second Memorandum Opinion and Order, 14 FCC Rcd 8642, 8646-47 (1999); *Waiver of the Commission’s Rules to License Use of Six Conventional 900 MHz Frequency Pairs for Advanced Train Control System*, Order, 3 FCC Rcd 427 (1988); *Modification of Licenses for Use in Positive Train Control Systems*, Order, 16 FCC Rcd 3078 (2001).

AAR appreciates the opportunity to comment on spectrum issues related to the implementation of positive train control (“PTC”), and AAR applauds the Commission for seeking input on means to “facilitate an effective, efficient, and timely process for railroads to acquire spectrum to comply with the PTC implementation requirements”³ under the Rail Safety Improvement Act of 2008 (“RSIA”)⁴ and the Federal Railroad Administration regulations,⁵ which require the railroad industry to deploy a PTC system by December 31, 2015. Below, AAR comments on key issues raised in the *Public Notice* and proposes options the Commission may consider for facilitating the acquisition of spectrum by railroads.

I. Spectrum Between 217 and 222 MHz Is Needed for the Successful Implementation of PTC.

The effective, efficient, and timely implementation of a PTC system requires an interoperable communications network spanning railway tracks across the nation that are used by freight and passenger railroad companies. Working through PTC-220, LLC (“PTC-220”), the major freight railroads are already well underway in designing a PTC network in the 220-222 MHz band, relying on a collection of nationwide and regional 220 MHz licenses. But that spectrum will not be sufficient to support all PTC operations in certain congested areas. Meteorcomm LLC (“Meteorcomm”), the radio design vendor for PTC-220, is developing a data radio that can operate from 217.6 – 222 MHz using channels of 25 kHz each. Given the frequency range of the radio, spectrum in the Automated Maritime Telecommunications System (“AMTS”) band (217-218 / 219-220 MHz) and the Interactive Video and Data Service (“IVDS”) band (218-219 MHz) is a suitable supplement to existing PTC-220 spectrum, assuming the

³ *Public Notice* at 1.

⁴ See Rail Safety Improvement Act of 2008, Pub. L. No. 110-432, 122 Stat. 4848 (2008).

⁵ See Positive Train Control Systems, Docket No. FRA-2008-1032, 75 Fed. Reg. 2598 (Jan. 15, 2010).

appropriate service rule waivers are obtained. Individual railroads generally will not have the financial resources to design their own radios. Given the need for interoperability and the economies of scale that will be possible with the Meteorcomm-designed radio, AAR expects that the AMTS, IVDS and 220 MHz bands will serve as the core bands to meet additional PTC spectrum needs for all railroads.

II. The Commission Should Adopt an Expedited Waiver Process to Facilitate the Acquisition of Spectrum by Railroads for PTC Implementation.

As discussed above, spectrum in the 220 MHz, AMTS, and IVDS bands is ideally suited for an interoperable PTC system, provided that railroads are able to obtain the necessary service rule waivers for PTC operations in those bands. To facilitate the acquisition of spectrum in these bands for PTC implementation, the Commission should adopt an expedited review and approval mechanism for standard waiver requests.

While the Commission in 2009 granted PTC-220's request for waiver of several 220 MHz rules to make it suitable for PTC operations,⁶ at least three PTC-related waiver requests – two for AMTS and one for 220 MHz – currently remain pending.⁷ In particular, the request from the Southeastern Pennsylvania Transportation Authority (“SEPTA”) seeks waiver of the same rules waived for PTC-220, yet this request has been pending for over nine months. The Commission should expedite its review and approval of these pending waiver requests. Moreover, the Commission should adopt a streamlined procedure by which railroads could expeditiously obtain similar PTC-related waivers in the 220 MHz, AMTS, or IVDS bands.

⁶ See *Request of PTC-220, LLC for Waivers of Certain 220 MHz Rules*, 24 FCC Rcd 8537 (2009).

⁷ See *National Railroad Passenger Co. Request for Waiver of Certain Part 80 Technical Rules to Allow Construction of an Advanced Civil Speed Enforcement System in the Automated Maritime Telecommunications System Band*, WT 11-27 (filed Jan. 3, 2011); *Application of Southern California Regional Rail Authority*, FCC File No. 0004144435 (filed Mar. 11, 2010); *Application of Southeastern Pennsylvania Transportation Authority*, FCC File No. 0004374234 (filed Sept. 2, 2010).

A streamlined waiver mechanism could take several forms. One option would be for the Commission to adopt a waiver process whereby railroads seeking to use the 220 MHz, AMTS, or IVDS bands for PTC operations could receive an automatic or expedited waiver if they make the same showings and commitments as previous recipients of PTC-related waivers. For example, a railroad seeking a waiver of the necessary service rules in the 220 MHz band could file a request consistent with PTC-220's previously granted petition and receive its waiver on an expedited basis. Precedent exists for an expedited waiver process. For example, the Wireless Bureau issued expedited waivers of Section 22.925 of the Commission's rules for cellular carriers that made the same showings and commitments as the initial licensees that joined AirCell, Inc. in its petition for a waiver of that section.⁸ More recently, the Wireless Bureau has created an expedited process for tower owners using certain monitoring systems to request and obtain waivers of their obligation to perform quarterly inspections under Section 17.47(b).⁹

Alternatively, the Commission could issue a blanket waiver of the appropriate service rules for any railroads seeking to use the 220 MHz, AMTS, or IVDS bands for PTC operations.

⁸ See *In re Aircell, Inc. Pine Belt Cellular, Inc. et al., Petitions for Waiver of the Airborne Cellular Rule*, 14 FCC Rcd 13151 (Wireless Tel. Bur. 1999); see also *In re AirCell, Inc., Petition, Pursuant to Section 7 of the Act, for a Waiver of the Airborne Cellular Rule, or, in the Alternative, for a Declaratory Ruling*, 14 FCC Rcd 806 (Wireless Tel. Bur. 1998); *In re AirCell, Inc., Petition, Pursuant to Section 7 of the Act, for a Waiver of the Airborne Cellular Rule, or, in the Alternative, for a Declaratory Ruling*, Memorandum Opinion and Order, 15 FCC Rcd 9622 (2000); *In re AirCell, Inc., Petition, Pursuant to Section 7 of the Act, for a Waiver of the Airborne Cellular Rule, or, in the Alternative, for a Declaratory Ruling*, Order on Remand, 18 FCC Rcd 1926 (2003).

⁹ See, e.g., *In re Request of Mobilitie, LLC for Waiver of 47 C.F.R. § 17.47(b)*, Memorandum Opinion and Order, 24 FCC Rcd 11949, 11952 ¶ 9 (Wireless Tel. Bur. 2009) (providing an expedited waiver if tower owner submits a streamlined petition containing certifications that (1) its towers are monitored using the approved monitoring system and (2) it maintains a facility to receive notifications of failures from the monitoring system); *In re TowerSentry LLC Request for Waiver of 47 C.F.R. § 17.47(b) and Joint Petition of Diamond Communications LLC and Diamond Towers LLC for Waiver of 47 C.F.R. § 17.47(b)*, Memorandum Opinion and Order, 24 FCC Rcd 10274 (Wireless Tel. Bur. 2009) (same).

Under this approach, the Commission could permit railroads to deploy PTC operations in those bands as long as they satisfy conditions set by the Commission in its blanket waiver. The Commission has granted similar waivers in the past, including a blanket waiver of Section 101.31(b)(vii) to allow conditional authority for operations on certain channel pairs in the 23 GHz band which were not permitted at that time.¹⁰ The Commission permitted operations on those channel pairs so long as applicants complied with the other applicable provisions of Section 101.31.¹¹ Adopting an expedited or blanket waiver process would provide substantial benefits for the railroad industry and would facilitate its efforts to satisfy the requirements of the RSIA by December 31, 2015.

III. The Commission Should Take Additional Steps to Identify Spectrum for PTC Operations.

In addition to adopting an expedited waiver mechanism, the Commission should assess its inventory of spectrum in the 217.6 – 222 MHz range and consider approaches to making any unused spectrum available for PTC operations. To best position this spectrum for PTC operations, the Commission should adopt an approach that provides for contiguous 25 kHz channels.

AAR would also support licensing additional spectrum that is made available for PTC operations on a “ribbon” basis, similar to the license it currently holds for its Advanced Train Control System (“ATCS”). That license gives AAR a 140-mile wide swath of 900 MHz

¹⁰ See *Amendment of Part 101 of the Commission’s Rules to Provide for Conditional Authorization on Additional Channels in the 21.8-22.0 GHz and 23.0-23.2 GHz Band*, Notice of Proposed Rulemaking and Order, 24 FCC Rcd 9620, 9629-30 (2009) (“*Part 101 Waiver*”); see also *Revision of Part 15 of the Commission’s Rules Regarding Ultra-Wideband Transmission Systems*, Order, 17 FCC Rcd 13522 (2002) (granting a blanket waiver of the Part 15 regulations for existing ground penetrating radar and wall imaging systems operating between 960 MHz and 3100 MHz, provided they timely registered their equipment with the Commission).

¹¹ See *Part 101 Waiver*.

spectrum that covers all of the railroad rights-of-way in the United States.¹² A similar “ribbon” approach to licensing PTC spectrum in the 217.6 – 222 MHz range would provide additional spectrum for PTC operations that is tailored to the geographic areas where railroads need spectrum. Furthermore, to address any concerns the Commission may have relating to coordination between railroad and non-railroad use of a ribbon license, the AAR could perform a coordination role by maintaining a publicly accessible database identifying all points in the United States that are inside and outside the ribbon-licensed areas, similar to the system AAR developed for its ATCS license.¹³

¹² See *Petition of Association of American Railroads (AAR) for Modification of Licenses for Use in Advanced Train Control Systems and Positive Train Control Systems*, Order, 16 FCC Rcd 3078, 3082 ¶ 10 (Wireless Tel. Bur. 2001).

¹³ See *id.* ¶ 9 (finding that coordination concerns related to AAR’s ATCS ribbon license were “addressed by AAR’s plan to make available to the Commission and the frequency coordinators a computer software program” that would “identify all points in the United States that are inside and outside of the area of the geographic license”).

IV. Conclusion.

AAR commends the Commission for initiating action on this matter and welcomes the opportunity to work with the Commission and other interested parties to effectively, efficiently, and timely implement PTC.

Respectfully Submitted,

ASSOCIATION OF AMERICAN RAILROADS

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