

Annual PTC  
Progress  
Report

2015

*[Conrail Share Assets Organization]*

[FRA-2010-0064]

The Annual Positive Train Control (PTC) Progress Report is due by March 31<sup>st</sup> of each year until full PTC system implementation is complete. The Annual PTC Progress Report must cover the railroad's implementation efforts and progress from the directly previous calendar year, and must be submitted electronically to the Federal Railroad Administration (FRA) via the FRA Secure Information Repository at <https://sir.fra.dot.gov>.

Name of Railroad or Entity Subject to 49 U.S.C. § 20157(a): Conrail Shared Assets Organization

Railroad Code: CR

Annual PTC Implementation Progress Report for: 2015

PTCIP Version Number of File with FRA (basis for goals stated): Revision 5

Submission Date: 1/22/2016

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## 1. Summary

Please provide a narrative summary of overall PTC implementation progress during the preceding calendar year (January 1 to December 31):

Conrail Shared Assets has completed the installation and in-service of the PTC field equipment. All WIUs are currently reporting signal status to the WSRS. The WSRS is in service and operating. There are currently 5 operational base stations in PTC service under a temporary license through the LLC. The Conrail Shared Assets PTCIP was updated to revision 5 and submitted on January 22, 2016. CSAO is working with vendors and contractors to share a hosted BOS and ITCM.

Category	Quantity Installed During Calendar Year	PTCIP Year End Goal (If Applicable)	Cumulative Quantity Installed at End of Calendar Year	Total Quantity Required for PTC Implementation
Locomotives Fully Equipped	0	0	0	47
Installation/Track Segments Completed	All	All	All	All
Radio Towers Fully Installed and Equipped	0	5	5	5
Employees Trained	0	0	0	693
Route Miles In Testing or Revenue Service Demonstration	0	0	0	11
Route Miles in PTC Operation	0	0	0	11

2. Update on Spectrum Acquisition

Required content:

- The amount of spectrum acquired and available for use during the applicable calendar year and the cumulative amount acquired and available for use at the end of the applicable calendar year, as compared to the amount the railroad stated would be acquired and available for use by the end of that calendar year and in total for PTC implementation, in the applicable revised PTCIP, as amended
- The basis for how the railroad is determining that the acquired spectrum is available for use by PTC radios (e.g., ensuring non-interference with other radios)

Spectrum Area or Location (E.g., county)	Spectrum Acquired and Available for Use (Owned/Leased) During Calendar Year	Cumulative Amount of Spectrum Acquired and Available for Use (Owned/Leased) at End of Calendar Year	PTCIP Year End Goal for Spectrum Acquired and Available for Use	Total Spectrum Required for PTC Implementation, as Reported in PTCIP
Spectrum Coverage Area or Location†: Bergen, Essex, Union, Somerset, Middlesex County	None, previously acquired	All- complete	All - complete	All- complete

†Note: To add rows for additional spectrum areas or locations, click on the blue “+” symbol at the bottom right-hand corner. Please be sure to first click anywhere inside the table to activate this function.

If this function is unavailable for your document, please manually add additional rows.

Please provide any additional narrative for Spectrum Acquisition below:

As an associate member of the PTC220LLC, CSAO had acquired the needed spectrum in 2014. CSAO has a test license that was granted in 2015 by the FCC.

### 3. Quantity Update on Hardware Installation

Required content:

- Separated by each major hardware category and subcategory identified below, the amount of PTC hardware installed during the applicable calendar year and the cumulative quantity installed at the end of the applicable calendar year, as compared to the amount the railroad stated would be installed by the end of that calendar year and in total for PTC implementation, in the applicable revised PTCIP, as amended

#### 3.1. Locomotive Status

Category / Installation Feature	Quantity Installed During Calendar Year	PTCIP Year End Goal	Cumulative Quantity Installed at End of Calendar Year	Total Required for PTC Implementation, as Reported in PTCIP
<b>Locomotive (Apparatus)<sup>1</sup></b>				
On-board Computers (e.g., Train Management Computer)	0	0	0	47
Software For Train Management and other applications	0	0	0	47
PTC Displays	0	0	0	47
Event Recorders	0	0	0	47
Onboard Antennas and/or Transponder Readers	0	0	0	47
GPS Receivers	0	0	0	47 (2 each)
Locomotive Radios – Primary Communications (e.g., 220 MHz radios)	0	0	0	47

<sup>1</sup> Railroads may elect to add categories or subcategories if more detail is desired.

Secondary Communications (e.g., cell or Wi-Fi communications) Equipment	0	0	0	47
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Please provide any additional narrative for Locomotive Status below. If any of the information called for in Section 3.1 is unavailable to the railroad at the time it is completing and submitting this form, please insert "TBD" in the appropriate field and/or use this comment box to explain when such information will be available and when the railroad expects to submit it to FRA.

CSAO leases its entire fleet from NS and CSX. NS and CSX will schedule and install all PTC on-board equipment.

**3.2. Infrastructure/Back Office Status**

Category / Installation Feature	Completed During Calendar Year	PTCIP Year End Goal	Cumulative Quantity Complete at End of Calendar Year	Total Required for PTC Implementation, as Reported in PTCIP
<b>Infrastructure (Back Office)</b>				
<b>Dispatching Locations (installations complete)</b>	0	0	0	2 (includes DR)
<b>Physical Back Office System Equipment (installations complete)</b>	0	0	0	2 (includes DR)

Are the Back Office Location(s) fully operable?	No
Are the Dispatching Location(s) fully operable?	No

Please provide any additional narrative for Infrastructure/Back Office Status below:

CSAO is planning to use a hosted back office server/ITCM to provide connectivity to the federation.

3.3. Installation/Territory Status

Category / Installation Feature	Quantity Installed During Calendar Year	PTCIP Year End Goal	Cumulative Quantity Installed at End of Calendar Year	Total Required for PTC Implementation, as Reported in PTCIP
<b>Infrastructure – Wayside Installations by Territory (i.e., Subdivision, District, Track Segment, Etc.)<sup>2</sup></b>				
<b>Identification of the Territory (i.e., Subdivision, District, Track Segment, Etc.)†:</b> <a href="#">Click here to enter text.</a>				
<b>Wayside Interface Units†</b>	12	14	14	14
<b>Communication Towers or Poles†</b>	0	5	5	5
<b>Switch Position Monitors†</b>	0	0	0	0
<b>Wayside Radios†</b>	0	0	0	0
<b>Base Station Radios†</b>	0	5	5	5
<b>Are all necessary communication backbone utilities for this track segment (including fiber, copper, ground wiring etc.) installed and ready for operation?† No</b>				

†Note: To add rows for additional territories and associated sub-components, click on the blue “+” symbol at the bottom right-hand corner. Please be sure to first click anywhere inside the table to activate this function. If this function is unavailable for your document, please manually add additional rows.

<sup>2</sup> Each railroad should report information in a manner consistent with its PTCIP. That is, if a railroad monitors implementation of track segments by territory or subdivision, it should report that way.

Please provide any additional narrative for Installation/Territory Status below. If any of the information called for in Section 3.3 is unavailable to the railroad at the time it is completing and submitting this form, please insert "TBD" in the appropriate field and/or use this comment box to explain when such information will be available and when the railroad expects to submit it to FRA.

PTC field equipment including WIUs, Base Stations and network communications have been installed in the CSAO PTC segment of the Lehigh Line. All WIU statuses are currently being reported back to the central office WSRS in Mt Laurel. The PTC communication network is currently operating on a shared data network. The final PTC communication network will be a dedicated high capacity redundant data network, which is currently under construction.

#### 4. Quantity Update on Employees Trained

Required content:

- Separated by each employee category identified below, the number of employees trained during the applicable calendar year and the cumulative number of employees trained at the end of the applicable calendar year, as compared to the number the railroad stated would be trained by the end of that calendar year and in total, in the applicable revised PTCIP, as amended

Employee Category <sup>3</sup>	Number of Employees Trained During Calendar Year	PTCIP Year End Goal	Cumulative Number of Employees Trained at End of Calendar Year	Total Reported in PTCIP
Employees who Install, Maintain, Repair, Modify, Inspect, and Test the PTC System	0	0	0	55
Employees who Dispatch Train Operations	0	0	0	10
Train and Engine (Operations) Employees	0	0	0	395
Roadway Worker Employees	0	0	0	221
Direct Supervisors of the Above Employees	0	0	0	12

<sup>3</sup> See 49 C.F.R. § 236.1041(a).



Please provide any additional narrative for Employee Training below:

CSAO has been developing the training programs for PTC implementation. The current training programs in progress include WCM-CAN, WIU, WSRS, PTC Radio, Network and PTC Awareness.

## 5. Progress on Implementation Schedule/Milestones

Required content:

- Describe the extent to which the railroad or other entity is not complying with the implementation schedule it provided in its revised PTCIP, as amended

CSAO is in compliance with revision 5 of the PTCIP as submitted on January 22, 2016.

## 6. Summary Update of Challenges/Risks

Required content:

- Any update to the summary of remaining technical, programmatic, operational, or other challenges that the railroad or other entity provided in its revised PTCIP, as amended, including challenges with availability of public funding, interoperability, spectrum, software, permitting, and testing, demonstration, and certification
- Schedule Risk Updates (e.g., funding, technology, agreements)

Please provide Summary Update of Challenges/Risks below:

Field equipment, WIUs, Communication equipment, Radios and Network elements are progressing as originally intended. The Back Office segment is posing the biggest impediment to progress. Vender, supplier and software development of the BOS (hosted) and ITCM (hosted) represent the largest risk for timely completion. Interoperability is also a major risk factor. New Jersey Transit wayside installation testing and office verification, the installation of the onboard equipment are other impediments to completions.

### 7. Progress on Revenue Service Demonstration (RSD) or Implementation

Required content:

- The total number of route miles on which PTC has been initiated for revenue service demonstration or implemented, as compared to the total number of route miles required to have a PTC system (see Section 1 Summary Table)
- Estimated start date (month and year) for RSD

Segment Identification <sup>4</sup>	Number of Route Miles in Segment	Status at End of Calendar Year <i>Current status of installation/track segment. <b>Choose one:</b></i>	Estimated Start Date for Revenue Service Demonstration (if not already completed)
Segment (add additional rows for segments as necessary): Lehigh Line	5.5	<input type="radio"/> Not Started <input type="radio"/> Installing <input checked="" type="radio"/> Testing <input type="radio"/> Operational/Complete	Quarter 2 of 2018

Note: To add additional rows, click on the blue “+” symbol at the bottom right-hand corner. Please be sure to first click anywhere inside the table to activate this function.

If this function is unavailable for your document, please manually add additional rows.

Please provide any additional narrative for Revenue Service Demonstration or Implementation below:

Several initiatives are required to meet the RSD implementation. These include the installation, schedule and coordination of the on-board equipment, New Jersey Transit ACSES testing, and the successful completion of the Back Office server.

<sup>4</sup> Segment identification should be consistent with segments listed in Section 3.3.

8. Update for Intercity or Commuter Rail Passenger Transportation (if applicable)

If this section is not applicable to your railroad, please mark N/A.

Required content (if applicable):

- For each entity providing regularly scheduled intercity or commuter rail passenger transportation, a description of the resources identified and allocated to implement PTC

Please provide Update for Intercity or Commuter Rail Passenger Transportation below, if applicable:

This is the responsibility of NEW JERSEY TRANSIT.

9. Update on Interoperability Progress and Other Formal Agreements

Required content:

- For host railroads: provide updates to any agreements and key milestones for all tenant operations
- For tenant railroads: provide updates to any agreements and key milestones for all operations over tracks hosted by another railroad

**Host and Tenant Railroads:** Please provide a general update on interoperability in the textbox below.

The hosted ITCM is intended to provide interoperability by design.

**Host Railroads Only:** For each tenant, please provide additional tenant information below.

Tenant Identification <i>(Please add rows for additional tenants as necessary)</i>	Estimated Tenant Locomotive Fleet <i>(if the tenant does not have a separate PTCIP on file)</i>	Current Tenant Implementation Status <i>Choose one:</i>
NEW JERSEY TRANSIT CSX, NS	64 trains per day 39 trains per day	<input type="radio"/> Not Started <input checked="" type="radio"/> Installing <input type="radio"/> Testing <input type="radio"/> Operational/Complete

Note: To add additional rows, click on the blue “+” symbol at the bottom right-hand corner. Please be sure to first click anywhere inside the table to activate this function.

If this function is unavailable for your document, please manually add additional rows.

10. Estimated PTC Safety Plan (PTCSP) Submission Date (if not already submitted)

If this section is not applicable to your railroad, please mark N/A.

PTCSP Submission Date
Quarter 2 of 2018

Please provide any additional narrative for PTCSP Submission below:

CSAO is depending on support from its parents and the various groups of suppliers and vendors to access some of the data that is not available to CSAO.

11. Testing and Integration Efforts (if applicable, laboratory, integration, and revenue service demonstration)

Please provide Update on Testing and Integration efforts below:

Field equipment testing was performed in Newark NJ. Communication and lab testing in Elizabeth NJ. Systems integration is handled out of the Mt. Laurel central office. WSRS testing was handled with the supplier in conjunction with CSAO field and communication forces.

## 12. Updated Information That FRA Can Use to Maintain Its Geographic Information System (GIS) Database – Segments Complete and Operable

*In its annual progress reports, a subject railroad or entity may submit a geographic information system (GIS) shapefile to indicate where various rail segments that must have PTC are located, as long as it includes the following fields: (1) a PTC attribute field (coded with “Y” if line segment is to have PTC installed, otherwise left blank); (2) a SUBDIV attribute field (populated with subdivision name); (3) a MONTH attribute field (populated with the month in which PTC is to be installed); and (4) a YEAR attribute field (populated with the year in which PTC is to be installed). A railroad may submit this information by means other than shapefile format.*

Please provide any additional narrative for GIS Information below:

The “Track Database” has been built and compiled into an I-ETMS SubDiv file. Verification of the critical features/assets in the PTC zone have been tested using a Wabtec TMC and all assets have been found to be within the required GIS distance specification. Testing will not be completed until the WIU assets have been tested.

Public reporting burden for this information collection is estimated to average 38.41 hours per response, including the time for reviewing instructions, searching existing data sources, gathering and maintaining the data needed, and completing and reviewing the collection of information. According to the Paperwork Reduction Act of 1995, a federal agency may not conduct or sponsor, and a person is not required to respond to, nor shall a person be subject to a penalty for failure to comply with, a collection of information unless it displays a currently valid OMB control number. The valid OMB control number for this information collection is **2130-0553**. All responses to this collection of information are mandatory. Send comments regarding this burden estimate or any other aspect of this collection, including suggestions for reducing this burden to OMB’s Office of Information and Regulatory Affairs, Attn: FRA OMB Desk Officer.