

Annual PTC  
Progress  
Report

2016

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*South Florida Regional Transportation  
Authority*

*FRA-2010-0039*

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): South Florida Regional Transportation Authority

Railroad Code: SFRV

Annual PTC Implementation Progress Report for: 2016

PTCIP Version Number of File with FRA (basis for goals stated): 5.0

Submission Date: 3/31/2016

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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):

SFRTA is still in the Procurement Phase for PTC. SFRTA is actively working with FDOT and CSX in order to resolve the indemnification issues associated with PTC 220, LLC and MeteorComm (see additional details below under Spectrum). Once these issues are resolved, SFRTA will advertise and begin the procurement process. As per SFRTA's PTC Programming Schedule, a PTC Contractor should be under contract by late 2016.

\* SFRTA's PTC Contractor will develop Track Segmentation plan following Notice to Proceed.

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	0	0	0	1*
Radio Towers Fully Installed and Equipped	0	0	0	7
Employees Trained	0	0	0	184
Route Miles In Testing or Revenue Service Demonstration	0	0	0	72.6
Route Miles in PTC Operation	0	0	0	72.6

## 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†: Miami-Dade, Broward, and Palm Beach Counties	None acquired	Plan to lease up to seven (7) channels by the end of 2016	Seven (7) channels	Seven (7) channels

†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:

SFRTA, FDOT, and CSXT have had joint discussions pertaining to resolution of issues associated with the acquisition of spectrum and Meteorcomm radios. The issues are as follows:

- A. PTC Spectrum – Florida Law prohibits governmental entities like SFRTA and FDOT from indemnifying a private entity, like PTC 220, LLC. SFRTA and FDOT have had preliminary discussions with CSXT regarding subleasing spectrum from CSXT. As a last resort, SFRTA has also explored the secondary market for purchasing or leasing spectrum. Spectrum was identified, along with quotes, however, SFRTA cannot acquire the “Common Channel” from any other entity except PTC 220, LLC.
  
  - B. Meteorcomm radios - Florida Law prohibits governmental entities like SFRTA and FDOT from indemnifying a private entity, like Meteorcomm. SFRTA and FDOT have had preliminary discussions with CSXT about this issue. Discussions continue.
- The PTCIP will be updated, via RFA, to reflect updated spectrum needs.

**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
Locomotive (Apparatus) <sup>1</sup>				
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

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

Event Recorders	0	0	0	26
Onboard Antennas and/or Transponder Readers	0	0	0	47
GPS Receivers	0	0	0	47
Locomotive Radios – Primary Communications (e.g., 220 MHz radios)	0	0	0	47
Secondary Communications (e.g., cell or Wi-Fi communications) Equipment	0	0	0	47

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.

Installation quantities and progress are provided above.

**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
Infrastructure (Back Office)				
Dispatching Locations (installations complete)	0	0	0	2
Physical Back Office System Equipment (installations complete)	0	0	0	2

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

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

Click here to enter text.

**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
Infrastructure – Wayside Installations by Territory (i.e., Subdivision, District, Track Segment, Etc.) <sup>2</sup>				
Identification of the Territory (i.e., Subdivision, District, Track Segment, Etc.)†: PTC Contractor shall break out by Track Segment				
Wayside Interface Units†	0	0	0	45
Communication Towers or Polest	0	0	0	7
Switch Position Monitors†	0	0	0	0
Wayside Radiost	0	0	0	0
Base Station Radiost	0	0	0	7

<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.



Are all necessary communication backbone utilities for this track segment (including fiber, copper, ground wiring etc.) installed and ready for operation?† No

†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.

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.

Quantities for Switch Position Monitors and Wayside Radios will be modified in the PTCIP, via RFA.

#### 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	184

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

Employees who Dispatch Train Operations	0	0	0	10
Train and Engine (Operations) Employees	0	0	0	76
Roadway Worker Employees	0	0	0	73
Direct Supervisors of the Above Employees	0	0	0	10

Please provide any additional narrative for Employee Training below:

The employee categories, progress of training, and totals are provided above.

### 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

Refer to the indemnification issue presented under Spectrum Acquisition.

### 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:

Technical – Low risk. SFRTA is updating Technical Specifications, following internal technical review. SFRTA is evaluating a Hosted BOS solution as well as and other recommendations. The Technical Specifications will be complete prior to advertisement.

Programmatic – Low risk. SFRTA’s PTC programming schedule will be replaced by the PTC Contractor’s schedule following award.

Operational – Low risk. SFRTA is beginning the process of re-procuring services for Maintenance of Equipment, Dispatching, and Train Operations. Accommodations for PTC readiness will be included in these procurements. Maintenance responsibilities for the PTC system are being evaluated by SFRTA.

Availability of Public Funding – Low risk. Project will be funded by FDOT, in addition, per earlier agreement, CSX will pay for 50% of the wayside segment costs. Funding may need to be revisited following PTC Contractor price proposal.

Interoperability – I-ETMS has been chosen as the PTC solution for the South Florida Rail Corridor (SFRC), which has already been adopted by CSX and accepted by Amtrak (dual equipped). No risk anticipated.

Spectrum – Refer to indemnification issue above. High risk anticipated.

Software – Minimal risk anticipated.

Permitting – Minimal risk anticipated.

Testing – Low risk anticipated as programmed. This item will be revisited following PTC Contractor Notice to Proceed.

Demonstration – Low risk anticipated as programmed. This item will be revisited following PTC Contractor Notice to Proceed.

Certification - Low risk anticipated as programmed. This item will be revisited following PTC Contractor Notice to Proceed.

### 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. Choose one:</i>	Estimated Start Date for Revenue Service Demonstration (if not already completed)
Segment <i>(add additional rows for segments as necessary)</i> : 1	72.6	<input checked="" type="radio"/> Not Started <input type="radio"/> Installing <input type="radio"/> Testing <input type="radio"/> Operational/Complete	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:

SFRTA intends to accommodate all track into one SubDiv file. This will be verified with the PTC Contractor.

<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:

Amtrak currently provides intercity passenger service along the South Florida Rail Corridor. Amtrak supports SFRTA’s plans for PTC implementation. As SFRTA understands, Amtrak trains will be dual equipped to accommodate I-ETMS. Refer to Amtrak’s PTCIP for allocated PTC resources.

### 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.

SFRTA has the full cooperation of both Amtrak and CSX, as outlined in SFRTA’s PTCIP. Agreements will be revisited with Amtrak and CSX to accommodate SFRTA’s implementation schedule and key milestones established with the PTC Contractor.

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>
CSXT	Refer to CSXT’s PTCIP	<input type="radio"/> Not Started <input checked="" type="radio"/> Installing <input type="radio"/> Testing <input type="radio"/> Operational/Complete

Amtrak	Refer to Amtrak's PTCIP	<input type="radio"/> Not Started <input checked="" type="radio"/> Installing <input type="radio"/> Testing <input type="radio"/> Operational/Complete
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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
May 3, 2017

Please provide any additional narrative for PTCSP Submission below:

The PTCSP will be developed by the PTC Contractor. Date provided here reflects SFRTA's PTC Programming Schedule, which will be superseded once the PTC Contractor is on board and submits their schedule for SFRTA approval.

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

Please provide Update on Testing and Integration efforts below:

These efforts are anticipated in 2018 based on SFRTA's PTC Programming Schedule.

## 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:

Nothing to report.

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.