

FLORIDA DEPARTMENT OF TRANSPORTATION

ADDENDUM NO. 5

DATE: 3/31/17

RE: RFP-DOT-16/17-9010-GH
POSITIVE TRAIN CONTROL SYSTEM FOR THE (CFRC)

Notice is hereby given of the following changes to the above-referenced RFP:

CHANGES:

- Questions and Answers are enclosed below
-

Proposers must acknowledge receipt of this Addendum by completing and including in your bid submittal, by no later than the time and date of the bid/proposal opening. **Failure to do so may subject the bidder/proposer to disqualification.**

_____ Bidder/Proposer

_____ Address

_____ Submitted by (Signature)

Failure to file a protest within the time prescribed in Section 120.57(3), Florida Statutes, or failure to post the bond or other security required by law within the time allowed for filing a bond shall constitute a waiver of proceedings under Chapter 120, Florida Statutes.

SunRail PTC Key Questions					
Document	Section	Title	Reference	Questions (Questions already sent to FDOT)	Responses
PTC STS	16	Dispatcher User Interface System (CAD System)	The OCC is an operational facility that is currently utilizing an Ansaldo system. A. The Vendor shall develop a Project Schedule using Primavera Project Planner (P6) version 8.4 Latest version for Microsoft Windows 7 (or higher environment) or the Department approved alternative software. The schedule must be consistent with payment milestones set forth in Exhibit B, Method of Compensation.	Contractor requests that FDOT provide the original SunRail CAD Specifications document to better understand existing Ansaldo CAD system. Wabtec currently uses Primavera Project Planner (P6) version 7.0.3. Please confirm if this version would be an acceptable option.	FDOT will provide.
PTC STS	4.3	Project Schedule	B. Within 21 days of the Contract Notice to Proceed, the Vendor shall host a meeting and provide a comprehensive review of the philosophy and strategy for development of the Baseline Contract Schedule (BCS) with the intent of enabling the parties to reach agreement on an accepted BCS. Within 60 Calendar Days following the Contract Notice to Proceed, the Vendor shall submit a detailed BCS and Basis of Schedule Report for review and acceptance. The Department shall have 30 calendar days to review and respond to the Project Schedule.	Please indicate the difference between the Baseline Contract Schedule (BCS), and the Baseline Schedule. Also, please clarify number of calendar days for preparing and presenting Schedules for review.	The Baseline Contract Schedule is the same as the Baseline Schedule. The sentence: "The initial schedule shall be submitted 30 days after Award" will be deleted. An Addendum will be issued. The BCS meeting shall occur 21 calendar days after Notice to Proceed. The detailed schedule shall be submitted 60 calendar days after NTP.
PTC STS	4.3.2.1	Baseline Contract Schedule	A. The Baseline Schedule submittal shall contain the following: 5. The Vendor shall submit the initial Baseline schedule within 30 calendar days of Contract Award. The Department shall have 30 calendar days to review and respond to the initial Baseline Schedule.		
PTC STS	4.3.1	Master Schedule	C. The following definitions and provisions regarding the critical path and float shall apply for this contract: 1. The schedule will have at least one chain of activities, linked by logic, that constitute a critical path from the current data date to the completion of the project. Critical Path is defined as activities on the longest path through the network. The critical path shall be noted on the baseline schedule and each update in red.	Please confirm critical path to be used is the longest path in the schedule rather than zero float activities.	Confirmed. Critical Path is defined as activities on the longest path through the network.
PTC STS	4.3.2	Baseline Contract Schedule	A. The Vendor shall submit a comprehensive Baseline Contract Schedule (also referred to as Baseline Schedule) using the critical path method (CPM) listing start/end dates, activities and key milestones for the configuration, training, system installation, testing, final acceptance, and project closeout. The BCS shall include all configuration and construction activities necessary to clearly establish the Critical Path and to demonstrate complete and accurate planning and sequencing of the Contract work and to permit monitoring and evaluation of progress and time impacts. The Baseline Schedule shall show: 13. Schedule shall be cost and resource loaded for Vendor activities.	Please confirm concurrence on high level resourcing. Since payments are based on completion of contractual milestones, corresponding activities may be attached to appropriate payment milestones instead of resourcing at the lowest level of detail. This would also prevent having out of sequence activities due to payment status and not real progress of work done.	Confirmed.
PTC STS	4.3.2	Baseline Contract Schedule	A. The Vendor shall submit a comprehensive Baseline Contract Schedule (also referred to as Baseline Schedule) using the critical path method (CPM) listing start/end dates, activities and key milestones for the configuration, training, system installation, testing, final acceptance, and project closeout. The BCS shall include all configuration and construction activities necessary to clearly establish the Critical Path and to demonstrate complete and accurate planning and sequencing of the Contract work and to permit monitoring and evaluation of progress and time impacts. The Baseline Schedule shall show: 14. Schedule shall be resource loaded for the Department activities.	Please indicate purpose of this request. Who would provide this information to the Vendor, and who would be responsible of the resource assignment for the Department?	The Vendor shall identify activities and durations related to the Department. The Department will assign resources as necessary to meet the anticipated schedule.
PTC STS	4.3.2	Baseline Contract Schedule	E. The Schedule activities shall be defined in the Baseline Schedule with the following information: 4. Duration of not less than 1 working day and not more than 20 working days unless otherwise approved by the Department.	Duration of some of the activities may go beyond the 20 day limit. Please provide guidance on how to get those cases approved.	This item will be discussed at the Baseline Schedule Meeting. The Vendor should be prepared to provide compelling reasons for durations in excess of those specified, but due consideration will be provided.
PTC STS	4.3.2	Baseline Contract Schedule	E. The Schedule activities shall be defined in the Baseline Schedule with the following information: 7. Codes for responsibility, location, and scope.	Please provide guidance to develop corresponding code lists.	The Vendor shall provide codes.
PTC STS	4.3.2	Baseline Contract Schedule	F. The Baseline Schedule shall: 4. Have a data date of the first business day of the contract. The Vendor shall submit software generated tabular report. The tabular reports shall be 8 1/2" x 11" in size and shall include at a minimum, the following information: b. Activity number and description. c. Activity ID numbers.	Please clarify difference between activity number, and activity ID. P6 currently provides Activity ID, and Activity Name.	Redundant specification citation. Utilize Activity ID and Activity Name.
PTC STS	4.3.2	Baseline Contract Schedule	F. The Baseline Schedule shall: 4. Have a data date of the first business day of the contract. The Vendor shall submit software generated tabular report. The tabular reports shall be 8 1/2" x 11" in size and shall include at a minimum, the following information: b. Calendar.	Please indicate if calendar relates to calendar type assigned to activities.	Yes
PTC STS	4.3.2	Baseline Contract Schedule	F. The Baseline Schedule shall: 4. Have a data date of the first business day of the contract. The Vendor shall submit software generated tabular report. The tabular reports shall be 8 1/2" x 11" in size and shall include at a minimum, the following information: i. Manpower activity manpower (resource) j. Cost Activity (resources).	Please indicate if resource relates to a resource indicator or to an actual resource name. Some activities may not have a resource name assigned at this point but just a role designation. Would that suffice?	Yes. Role would be the preference throughout.
PTC STS	4.3.2.1	Baseline Schedule Submittal	A. The Baseline Schedule submittal shall contain the following: 4. Narrative report that describes the critical path. The description shall include the labor resources required for each activity and the reason for the predecessor and successor activities.	Please confirm if predecessor, and successor activities of critical activities should be constrained to being critical activities as well or if any activity should be included.	The predecessor and successor activities of critical activities should be constrained to critical activities.
PTC STS	4.3.2.1	Baseline Schedule Submittal	B. Once the Baseline Schedule is accepted by the Department, the Baseline Schedule shall be updated monthly by the Vendor. Progress Schedule Update submittals are due the first business day of every month with progress payment request. The Progress Schedule Update Submittal has the same transmittal letter, tabular report and narrative requirements as the Master Schedule submittal. In addition, the Progress Schedule Update submittals shall include the following: 8. Any activities which are behind schedule.	Please confirm if this relates only to critical activities or both critical and non-critical activities.	This relates only to critical activities.
PTC STS	4.3.2.1	Baseline Schedule Submittal	B. Once the Baseline Schedule is accepted by the Department, the Baseline Schedule shall be updated monthly by the Vendor. Progress Schedule Update submittals are due the first business day of every month with progress payment request. The Progress Schedule Update Submittal has the same transmittal letter, tabular report and narrative requirements as the Master Schedule submittal. In addition, the Progress Schedule Update submittals shall include the following: 9. Look-ahead Schedule Updates.	Please indicate time from to be used for Look-Ahead schedule updates.	Technical Specification - Section 4.3.2.1 (D). The Vendor shall submit 3 week look-ahead schedule updates in conjunction with the Site Specific Work Plan process, as required in the System Implementation Plan. The look-ahead schedules shall be generated from the current approved Schedule Update, showing 3 weeks ahead and 1 week back.
Exhibit B	Table 1	Positive Train Control for the Central Florida Rail Corridor Milestone Schedule of Payment Values	3. Completion of Preliminary Design Review and Acceptance FDOT approval of Preliminary Design - Subsystem Functional Description for each subsystem completed and approved; Preliminary design review packages (Architecture, software, hardware and equipment) completed including Spectrum Usage Preparedness Plan, Electromagnetic Compatibility (EMC) Control Plan, Fire Safety Analysis and Test Plan, Traceability and Serialization Plan, GPS Track Survey	Please confirm assignment of a PDR completion milestone by subsystem (Track Data Services, Comms, Wayside, Back Office, etc.)	Confirmed.

Exhibit B	Table 1	Positive Train Control for the Central Florida Rail Corridor Milestone Schedule of Payment Values	<p>4. Completion of Hardware and Software Final Design Review and Acceptance. <i>FDOT approval of Final Design review for hardware and software design</i> including RTM, mapping updates, documentation, Database Design Document, Software Configuration Items List, Line Replacement Units Test Documentation, System Design Implementation, Software Documentation including requirements Specification, Traceability matrix, design descriptions, and Verification and Validation Report, Reliability, Accessibility maintainability and System Safety, Testing (Qualification Testing, Production Testing, Field Testing, Integrated System and Commissioning Testing), Design Requirements and traceability Report, Actions CDRLs and Correspondence.</p>	Please confirm assignment of a FDR completion milestone by subsystem (Track Data Services, Comms, Wayside, Back Office, etc.)	Confirmed
Exhibit B	Table 1	Positive Train Control for the Central Florida Rail Corridor Milestone Schedule of Payment Values	<p>5. Completion of Hardware and Software Critical Design Review and Acceptance. <i>FDOT approval of Hardware and Software Critical Design</i> – All action items, issues and concerns identified during the Final Design Review phase have been satisfactorily resolved and revised design documentation and drawings have been received.</p>	Please confirm assignment of a CDR completion milestone by subsystem (Track Data Services, Comms, Wayside, Back Office, etc.)	Confirmed

SunRail PTC Key Questions					
Document	Section	Title	Reference	Questions	Responses
Introduction Section	2	Timeline	Proposals Due On Or Before	Contractor requests an extension to proposal due date of at least two weeks.	The Department does not intend to extend the due date at this time.
Special Conditions	5.0	Diversity Achievement	Proposers are requested to indicate their intention regarding DBE participation on the Anticipated DBE Participation Statement and to submit that Statement with their Price Proposal Sheet.	Where in the RFP is the DBE goal stated?	The DBE goal is not stated. However FDOT encourages DBE firms to compete for Department contractual services projects.
Special Conditions	5.0	Diversity Achievement		In the Mandatory Pre-Proposal Meeting, it was noted the EEO/DBE Goal is 9.91% for this project. What is FDOT's absolute minimum % for this goal?	The DBE availability for this project is 9.91%.
Special Conditions	11.0	Performance Bond		Should we anticipate the bond rate will increase if the bond duration is over 4 years as shown on the 2nd performance and warranty period being pushed out to 12/31/2021?	Bond amount should be equal to the full amount of the proposal.
Special Conditions	11.0	Performance Bond	The intended award proposer shall provide the Department with a Performance Bond in the full amount of the contract.	Will the Performance Bond amount reduce as milestones are completed and verified by FDOT?	No.
Special Conditions	14.0	Review of Proposer's Facilities and Qualifications		Does FDOT have "Railroad In-House Qualified staff", or will the review and confirmation be performed by outside SMEs (consultants)?	FDOT has qualified staff
Special Conditions	19.0	Additional Terms & Conditions		Since additional T&Cs cannot be submitted as a condition of the proposal, how will scope creep/change orders be addressed?	Via amendment
Special Conditions	21.2	Technical Proposal (Part I)		As part of the Technical Proposal submittal, do the electronic copies have to be on a submitted on a CD, or can they be submitted on a jump/thumb drive?	CD is preferred, but jump/thumb drive is acceptable.
Special Conditions	21.2.2b	Proposer's Management Plan		The list of Key Personnel differs between the list found under Special Conditions, Proposer's Management Plan, 21.2.2b and Exhibit "A", Scope of Services, Key Personnel, 6.3. Which section has the complete key personnel listing for key personnel for technical proposal?	Special Conditions 21.2.2b contains the correct key personnel. Ex. "A", SOS; Section 6.3: DELETE Envir. Compliance Mngr. ADD Signal, Onboard, Communication, & Configuration Mngmnt. Engineers. To be addressed in Addendum 4.
Special Conditions	21.2.2b	Proposer's Management Plan		Can FDOT confirm that hours of service employees' work history-profile will not be required?	Please provide the information as requested in the RFP.
Special Conditions	28a	Proposal Evaluation	A Technical Review team will be established to review and evaluate each proposal submitted in response to this Request for Proposal (RFP). The Technical Review team will be comprised of at least three persons with background, experience, and/or professional credentials in relative service areas.	Will the Technical Review Team be made from In-house personnel or consultants? If consultants, will firms presently contracted to FDOT be excluded from Technical Review team if their firm bids on RFP?	In-house personnel
Special Conditions	28a	Proposal Evaluation		Can FDOT confirm that no member of the Technical Review Team is employed by an existing contracted firm?	FDOT confirms
Special Conditions	28d.a.	Criteria for Evaluation	<u>Technical Proposal (100 Points)</u> Technical evaluation is the process of reviewing the Proposer's response to evaluate the experience, qualifications, and capabilities of the proposers to provide the desired services and assure a quality product. The following point system is established for scoring the technical proposals: (See table in this Section)	Under Criteria for Evaluation, for the technical proposal, where is the point value range/total stated, as it concerns the DBE goal for this project?	The DBE goal is not part of the scoring criteria

SunRail PTC Key Questions					
Document	Section	Title	Reference	Questions	Responses
Introduction Section	2	Timeline	Proposals Due On Or Before	Contractor requests an extension to proposal due date of at least two weeks.	The Department does not intend to extend the due date at this time.
Special Conditions	5.0	Diversity Achievement	Proposers are requested to indicate their intention regarding DBE participation on the Anticipated DBE Participation Statement and to submit that Statement with their Price Proposal Sheet.	Where in the RFP is the DBE goal stated?	The DBE goal is not stated. However FDOT encourages DBE firms to compete for Department contractual services projects.
Special Conditions	5.0	Diversity Achievement		In the Mandatory Pre-Proposal Meeting, it was noted the EEO/DBE Goal is 9.91% for this project. What is FDOT's absolute minimum % for this goal?	The DBE availability for this project is 9.91%.
Special Conditions	11.0	Performance Bond		Should we anticipate the bond rate will increase if the bond duration is over 4 years as shown on the 2nd performance and warranty period being pushed out to 12/31/2021?	Bond amount should be equal to the full amount of the proposal.
Special Conditions	11.0	Performance Bond	The intended award proposer shall provide the Department with a Performance Bond in the full amount of the contract.	Will the Performance Bond amount reduce as milestones are completed and verified by FDOT?	No.
Special Conditions	14.0	Review of Proposer's Facilities and Qualifications		Does FDOT have "Railroad In-House Qualified staff", or will the review and confirmation be performed by outside SMEs (consultants)?	FDOT has qualified staff
Special Conditions	19.0	Additional Terms & Conditions		Since additional T&Cs cannot be submitted as a condition of the proposal, how will scope creep/change orders be addressed?	Via amendment
Special Conditions	21.2	Technical Proposal (Part I)		As part of the Technical Proposal submittal, do the electronic copies have to be on a submitted on a CD, or can they be submitted on a jump/thumb drive?	CD is preferred, but jump/thumb drive is acceptable.
Special Conditions	21.2.2b	Proposer's Management Plan		The list of Key Personnel differs between the list found under Special Conditions, Proposer's Management Plan, 21.2.2b and Exhibit "A", Scope of Services, Key Personnel, 6.3. Which section has the complete key personnel listing for key personnel for technical proposal?	Special Conditions 21.2.2b contains the correct key personnel. Ex. "A", SOS; Section 6.3: DELETE Envir. Compliance Mngr. ADD Signal, Onboard, Communication, & Configuration Mngmnt. Engineers. To be addressed in Addendum 4.
Special Conditions	21.2.2b	Proposer's Management Plan		Can FDOT confirm that hours of service employees' work history-profile will not be required?	Please provide the information as requested in the RFP.
Special Conditions	28a	Proposal Evaluation	A Technical Review team will be established to review and evaluate each proposal submitted in response to this Request for Proposal (RFP). The Technical Review team will be comprised of at least three persons with background, experience, and/or professional credentials in relative service areas.	Will the Technical Review Team be made from In-house personnel or consultants? If consultants, will firms presently contracted to FDOT be excluded from Technical Review team if their firm bids on RFP?	In-house personnel
Special Conditions	28a	Proposal Evaluation		Can FDOT confirm that no member of the Technical Review Team is employed by an existing contracted firm?	FDOT confirms
Special Conditions	28d.a.	Criteria for Evaluation	<u>Technical Proposal (100 Points)</u> Technical evaluation is the process of reviewing the Proposer's response to evaluate the experience, qualifications, and capabilities of the proposers to provide the desired services and assure a quality product. The following point system is established for scoring the technical proposals: (See table in this Section)	Under Criteria for Evaluation, for the technical proposal, where is the point value range/total stated, as it concerns the DBE goal for this project?	The DBE goal is not part of the scoring criteria

SunRail PTC Key Questions					
Document	Section	Title	Reference	Questions	Responses
PTC STS	13.9	Implementation	C. It is emphasized that any and all train movements required for installation and/or testing shall utilize a train operating crew from the Department's O&M Contractor. Scheduling of any train operating crew shall be handled through the department and the department O&M contractor. Any costs associated with the scheduling and use of all train operating crews shall be borne by and shall be the responsibility of the Vendor.	Can FDOT define their O&M contractor's anticipated cost to deliver a unit to the onboard site for installation and also to remove it post installation?	Minimum 8 hour rate is required. 8 hour rate = \$6,613.00 total cost includes crew, train and fuel.
Exhibit A	4.1	Existing Wayside System	"Phase 2 North is an existing relay-coded track section	Is our proposed PTC system expected to include upgrading the wayside system to a microprocessor based system?	The Vendor shall submit final design for Department Approval.
Exhibit A	4.2	Wayside Communication Infrastructure		Will any 220 MHz Peer-to-Peer waysides be present?	No.
Exhibit A	4.2	Wayside Communication Infrastructure		Who will own the 220MHz towers?	FDOT (The Department).
Exhibit A	4.2	Wayside Communication Infrastructure		Is it expected to have customer trains connect to tenant base station radio's and connect to back office via federated network?	The Vendor shall submit final design for Department Approval .
Exhibit A	4.4	Existing Dispatch System	The existing Dispatch System is the Ansaldo Next Generation Dispatch (NDG) system installed in 2013	Will the existing dispatch system be replaced by STMS TMDS as part of the hosted back office segment or is the hosted back office system envisioned to only cover the BOS segment, which has to collaborate with the existing NDG CAD system?	The Vendor shall submit final design for Department Approval.
Exhibit A	4.4	Existing Dispatch System	The Vendor shall facilitate and coordinate the build out this infrastructure and interface. The Vendor shall be responsible to procure, install, and test all hardware infrastructure required to interface with the Dispatch System and the Communications Segment	If the existing NDG CAD system is to be integrated with the STMS BOS, will the vendor be expected to partner with Ansaldo to integrate their CAD with STMS BOS ?	Yes.
Exhibit A	7.4	The Communication Segment		Since the railroad is planned to have all wayside devices connected to back office via Fiber Optic network, will it need Peer-to-peer connectivity over 220Mhz between onboard systems and wayside segment to obtain signal status, or is the onboard expected to obtain all signal status information from WSRS at the back office ?	Part 1 - No Part 2 - Yes
Exhibit A	7.6	Interoperability		Will the SunRail PTC system be sharing 220MHz base stations with CSX, or is each railroad expected to provide its own base stations?	FDOT owns the base stations in the CFRC territory.
Exhibit A	8.4	Data Security and Redundancy Require	All data in the possession of the Vendor shall be locally and enterprise-wide secured. File transfer security shall be demonstrated and approved by the Department and must adhere to State statutes, Department policy, and Information Technology directives governing data security.	Does this requirement mean the vendor is responsible for acquisition, implementation and transfer to the customer of a configuration management system to track all documentation? Or is the vendor expected to demonstrate its internal data storage complies with these requirements?	Part 1 - Yes Part 2 - Yes
Standard Written agreement	1D		All final plans, documents, reports, studies, and other data prepared by the Vendor shall bear the professional's seal/signature ...	Does this mean all submitted documents need to be signed by a PE Engineer?	Adhere to the requirements in the Standard Written Agreement.
PTC STS	General			What operating rules does the customer railroad use and the tenant railroads (GCOR ?)	CFRC adopted CSX Seaboard Operating Rules except for Grade Crossing activation failures (now warning device malfunction) and Restricted Speed (Now maximum 20 mph)
PTC STS	4.1.1 A	Key Project Personnel	The Vendor's Key Personnel, as appropriate, shall attend all Progress Review Meetings and participate as required to support the Contract activities.	Will Key personnel have to attend all meetings in person or is teleconferencing allowed?	Attendance at meetings is preferred but teleconferencing is acceptable.
PTC STS	4.1.1 A	Key Project Personnel		Will Key personnel be required to work on the customer premises and if so to what degree? (only for meetings, multiple days per month or week, or permanent, ...)	As necessary to successfully deliver the project.
PTC STS	4.1.1 A	Key Project Personnel		Can Key personnel work on this project from remote (e.g. from a different state) ?	As necessary to successfully deliver the project.
PTC STS	4.1.1.B	Key Project Personnel	Unless otherwise specified, positions need not be full-time dedicated. Unless otherwise specified, and only after approval by the Department, multiple roles, as identified below, may be performed by the same individual.	Will the Department have counterparts for each vendor personnel role (Department PTC project manager, PTC System Engineer, ...) ?	The Department will assign personnel as necessary.
PTC STS	4.1.1.B	Key Project Personnel		Will the department retain external consultants to help them supervise the technical aspects of the project (e.g. LTK, NTSB, ...)	Yes.
PTC STS	4.1.3	Project Management Tools		Will the customer require transfer of ownership of the tools (FRACAS, SCMS) ?	Data provided by the Vendor is owned by the Department. Any tool that is required to read the data must be transferred to the Department except for commercial software.
PTC STS	4.1.3	Project Management Tools		Can the vendor use the tools used internally, with the understanding that the ownership of the tools remain with the vendor?	No.
PTC STS	4.1.3	Project Management Tools		Other than the deliverable documentation and software, will the customer require transfer of project data as populated in the various PM productivity tools (e.g. requirements traceability, issue tracking, FRACAS, ...) at the end of the project in a mutually agreed data format?	Yes.
PTC STS	4.1.3	Project Management Tools		Will the customer maintain their own Configuration Management System, into which the vendor must submit its deliverables ?	No.
PTC STS	4.1.3	Project Management Tools		Will the customer require access to the vendor's configuration management system to access project deliverables?	Yes.
PTC STS	4.1.3 D1	Project Management Tools	The Vendor shall establish, install, and manage all tools necessary to generate and install all PTC data (inclusive of databases and parameters) and manage all software components and versions	Does the customer refer to the MDM tools for transferring files between back office and onboard systems?	Yes.
PTC STS	4.2	Project Support Facilities	B. The Vendor shall provide project office facilities, field office facilities, warehousing and training facilities as needed to manage the services being provided.	Is the Vendor expected to rent dedicated warehouse facility for storage of all project related materials, or can Vendor use an existing warehouse from its inventory, which could be shared with other projects?	No requirement for dedicated space.
PTC STS	4.2	Project Support Facilities		Does the customer expect to have their own personnel to be housed in the same facility to be collocated with the vendor project team ?	No.

PTC STS	4.2	Project Support Facilities		Do the vendor offices need to be within a certain distance from the customer facilities where their key PTC personnel is located ?	Adhere to Section 4.2.
PTC STS	4.6.3	Milestone Configuration Review Packages and Meetings		For submittal of PCR and FCR packages, can all the individual CDRL's be packaged together in a single monolithic submittal package, Or does the customer expect piecemeal submittals as they become available. The advantage of the latter is to allow spreading out the review of each document but the downside is that it becomes confusing after a while to maintain an overview of the whole system and updates to documents do not always trickle through to the right people.	To be discussed with successful vendor after NTP.
PTC STS	4.7.1 C	Submittals		Does the customer have a particular procedure and or tools for work flow in mind, concerning document submittals, review and exchange of comments and responses (e.g. annotating PDF documents, separate comment/response spreadsheets, ...). Or can the vendor propose a uniform procedure in this contract?	To be discussed with successful vendor after NTP.
PTC STS	4.8.3	Engineering Change Reports		Does customer expect to have Engineering changes applied on subsystem and component level to be reported (e.g. changes to the EBI card)	Yes.
PTC STS	5.1	Software System Configuration	The Vendor and its suppliers shall use the current versions of all software and of all operating systems available at the time of Final Configuration Review (FCR).	Some software (I-ETMS onboard software, BOS software) will most likely still be updated after the FCR. Wabtec can not guarantee that the software versions at the time of the FCR will be the same as those that will be used during FIT, E2E, RSD and production. Instead, before switching to a new version, the changes in the new software will be analyzed for necessity and a regression testing activity (either lab or field) will be performed to verify continuity of system development and operations). Will the Department consider waiving this requirement?	An addendum will be issued.
PTC STS	5.2	Software Testing	All software testing shall be automated and modular in order to facilitate regression testing.	Not all tests can be automated. Low-level unit testing at the subsystem testing are automated. System level lab integration testing is usually performed manually. Will the Department consider waiving this requirement?	An addendum will be issued.
PTC STS	7.3.4.3.2	Field Test Position Determination Onboard PTC System Performance	7. Verification of reliable operations in GPS degraded mode	Please clarify the type of testing the customer has in mind and how do they want GPS signal being degraded.	The successful Vendor shall provide appropriate procedures and submit for Department approval.
PTC STS	7.4	Final System Acceptance Period	A. Following successful transition of all control operations to the new PTC System and with all remaining variances corrected and signed off by the Department, an Availability and Reliability Demonstration Test (ARDT) shall be conducted by the Vendor to verify PTC System ability to meet the specified availability requirements over a contiguous 6 month period....	Will the 6 months continuous test be performed on a single train, multiple trains, or the entire fleet?	The successful Vendor shall provide appropriate Availability and Reliability procedures and submit for Department approval.
PTC STS	7.4	Final System Acceptance Period		Is it expected that vendor representatives ride along the train during these tests or does it suffice for logs to be analyzed in post processing ?	Part 1: Yes Part 2: No
PTC STS	7.4	Final System Acceptance Period		Will the Final System Acceptance Test include submitting anomalous stimuli (as in integration testing) to the system, or will it strictly use production environment stimuli?	The Vendor shall use production environment stimuli.
PTC STS	7.13.4 A	Maintenance Tools and Equipment Requirements	".... The maintenance tools and equipment shall include Portable Interface Units (PIU) and Bench Test Equipment (BTE), and software...."	Please clarify what is envisioned with PIU and BTE ?	Please refer to the Technical Specification.
PTC STS	8.3.4	System Response Timing Analysis	A. The Vendor shall prepare and submit for approval a System Response Timing Analysis which fully and completely analyzes and describes the system response to numerous operating conditions and user activities for each PTC Subsystem as follows: 1. Wayside System Response Timing Analysis; 2. On Board System Response Timing Analysis; 3. Communications System Response Timing Analysis; 4. PTC Hosted Back Office System Response Timing Analysis; 5. DU System Response Timing Analysis.	Can the vendor perform this System Response Timing analysis based on post-analysis of timestamps in sample data logs? Does the customer expect independent timing equipment or can the analysis be based on the timestamps found in the event logs?	Please use timestamps.
PTC STS	8.5.3	Software Requirements Specification (SRS)	A. The Vendor shall allocate all system requirements from the RTM to the software components defined by the System Functional Description (SSFD). A Software Requirement Specification (SRS) for each subsystem shall be provided that documents the software requirements such that each can be objectively verified and validated.	Does the customer expect Wabtec to submit the L2 requirements for the onboard system, WIU and other systems?	Please provide the requirements that apply for successful approval of the PTCSP.
PTC STS	8.5.5	Database Documentation	A. Database Configuration Documents (DBCD) shall be furnished for each PTC Subsystem describing the structure of the PTC System database both textually and graphically.	Which databases does the customer have in mind (BOS, Track database, ...)?	TBD
PTC STS	10.1.4	Availability and Reliability Demonstration Test	A. A continuous Availability and Reliability Demonstration Test (ARDT) shall be conducted by the Vendor to verify that each PTC Subsystem and the PTC System meet or exceed the specified availability and reliability requirements.	How many instances of a system down occurrence does the customer expect in this test?	Please refer Exhibit B Method of Compensation, Section 5 Payment Schedule - Addendum #4 for percentage.
PTC STS	10.1.4	Availability and Reliability Demonstration Test		On which subsystems does the customer expect a to conduct this test? (onboard TMC, onboard radio, onboard navigation, wayside radio, wayside base station, WIU, network equipment, ...)	Yes, all subsystems required for Availability and Reliability Demonstration.
PTC STS	10.1.5	Maintainability Demonstration test	A. A Maintainability Demonstration Test shall be performed to show compliance with the specified maintainability requirements for each PTC Subsystem and the Complete PTC System.	On which subsystems does the customer expect a to conduct this test? (onboard TMC, onboard radio, onboard navigation, wayside radio, wayside base station, WIU, network equipment, ...)	Yes, all subsystems required for Maintainability Demonstration.
PTC STS	10.1.5	Maintainability Demonstration test	B. The Vendor shall submit a Maintainability Demonstration Test Plan that defines the test methodology, schedule, responsibilities, reporting, and criteria to be applied for measuring test success.	Does the customer expect real faults to be applied to actual equipment?	Vendor shall provide Test Plan for Department Approval.
PTC STS	11	Site Survey		Does the customer already employ a GIS contractor to develop and maintain its track charts?	No.

PTC STS	11	Site Survey		Does customer expect the vendor to use the same GIS consultant as used by the agency, or can the vendor either provide the GIS services themselves or retain another GIS consultant as a subcontractor?	N/A
PTC STS	11	Site Survey		If customer expects vendor to work with the specific GIS consultant, should the vendor obtain the services of this GIS consultant as a subcontractor?	N/A
PTC STS	11	Site Survey		Or will the preferred GIS consultant provide services to the PTC project through the customer agency?	N/A
PTC STS	13.2	Description of Rolling Stock		Will the customer agency be able to dedicate 1 PTC equipped Bombardier Cab car for static yard testing for the duration of the project?	No
PTC STS	14 B4	PTC Communication System	802.11ac WLAN Wi-Fi or other means of uploading train initiation data at yards, terminals and other train run origination locations.	Will the customer provide track charts of the areas that need to be covered by Wi-Fi, and indicate the desired coverage area?	The successful Vendor shall provide design for Department approval.
PTC STS	14. B5	Backup data communication	Backup data communications services as required to meet reliability and availability requirements.	Does the customer accept a solution based on two cell modems, each of a different cell carrier?	The successful Vendor shall provide design for Department approval.
PTC STS	14. B5	Backup data communication		If so, does the customer have a preference for any particular cell carriers, or are specific cell carriers explicitly barred from being allowed to use? (from a preferred vendor perspective)	No preference. The successful Vendor shall provide design for Department approval.
PTC STS	14.3.7	Simulation Calibration	A. The Vendor shall perform Continuous Wave (CW) testing as necessary to calibrate the coverage model.	Please provide some more details on what is expected from this testing and what acceptance criteria will be applied.	Radio frequency propagation prediction and analysis requires confirming the morphology and clutter dataset. The results are programed with an accurate representation of path loss surrounding anticipated transmitter locations.
				After performing a market assessment, this proposer has determined that certain critical sub-systems of the PTC System to be delivered can only be sourced from a single vendor. So as to promote competitive overall pricing, would FDOT consider securing and publishing the pricing for these sub-systems for use by all proposers? A more detailed list of these critical sub-systems can be provided to FDOT upon request.	No.