



Questions Received and Answers No. 6

#	Question	Response
1	Sample Agreement, Part 1 Section 3, Insurance, 20.2.1 requires additional insureds on the referenced policies. Additional insureds are not commercially available on workers compensation policies. Only waivers of subrogation should be required on the workers compensation policy.	As per the contract language, the JPB does not require Additional Insureds to be added on the Workers' Compensation policy, since it is not referenced in Section 20.1.1.
2	With respect to pre-existing hazardous materials/hazardous waste or hazardous materials/hazardous waste not brought onto the site by the Contractor, please confirm that the JPB will be considered the "generator" of such hazardous materials/hazardous waste and sign any necessary generator manifests.	See Part 1-General Requirements, Section 3-Exhibits, Exhibit A-Sample Agreement for Services, Section 39. Hazardous and Non-Hazardous Chemicals and Waste.
3	With respect to pre-existing hazardous materials/hazardous waste or hazardous materials/hazardous waste not brought onto the site by the Contractor, please confirm the JPB will be responsible for the designation of the disposal site and the disposal for such hazardous materials/hazardous waste.	See Part 1-General Requirements, Section 3-Exhibits, Exhibit A-Sample Agreement for Services, Section 39. Hazardous and Non-Hazardous Chemicals and Waste.
4	Please define the need for Flagmen/Watchmen when work is being performed in the vicinity of the tracks: are Flagmen/Watchmen required when "Fouling" the track or when within the "Operating Envelope" (i.e. within 15 feet horizontally of the field side of each rail on any tracks on which trains operate or may potentially operate)?	The contractor is required to fully describe any Caltrain right of way proposed work in the Site Specific Work Plan (SSWP). In all cases some level of protection is required. Flagmen are required for a live railroad if there is any proposed work that will foul or potentially foul the right of way or if Caltrain deems Flagmen/Watchmen to be required based on its review of the SSWP.
5	For Electromagnetic Compatibility reasons, please define the "consideration" to be given for plans of a future 2 x 25 kV traction electrification system and its electromagnetic spectrum (Exhibit B Part 2- Section 3 21020.2.01A)	The Contractor should consider that System hardware and application design shall be developed with appropriate immunization features that are consistent with the application of similar technology in a 2 x 25 kV environment.
6	Can Caltrain make available the current versions of the "Operating Rules", "Maintenance Procedures", "Inspections Procedures"?	Yes. Refer to Addendum No. 10.

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7	Sample Agreement, Part 1 - Section 3, Insurance, 20.2.1 requires additional insureds on the referenced policy. Additional insured status on professional liability policies is not industry practice. Further, by becoming an additional insured on the professional liability insurance policy, the Peninsula Corridor Joint Powers Board et al would be excluded from making claims against the policy and thus eliminate the purpose of the coverage. Professional Liability insurance should be an exception to the Additional Insured requirement.	As per the contract language, the JPB does not require Additional Insureds to be added on the Professional Liability policy, since it is not referenced.
8	Is it Caltrains intention to own the IP rights of any software developed under this procurement?	No.
9	Would Caltrain please provide a full text copy of the DOT Grant?	Please specify the DOT Grant you are referring to?
10	Can Caltrain please confirm that the funding for the project has been secured?	JPB has already secured several federal and state grants, as well as local funding, for a portion of the project, and have a funding plan in place to secure the remaining grant or financing depending on negotiations with the selected contractor/proposer.
11	Other than drawings showing least line connections we could not idenfy drawings showing the overall network (backbone). Please advise if there is any further information available.	The existing voice or data radio sites are connected to the CCF via Commercial Lease lines as stated. There is no overall network backbone owned/operated by Caltrain and no additional information available.
12	Please advise if it is Caltrains intention for the Contractor to propose a dedicated network (backbone), especially in order to guarantee and to fulfill the RFP performance requirements and the referenced 21009 2.D.12 requirements.	Yes.

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13	Requirement - 21009, Part 2.1.5: From this requirement, it is assumed that the entire new, permanent DCS for the PTC will be on a private network other than the connectivity with the adjacent railroad PTC Back Office Systems. If so, then any of the existing Caltrain circuits leased from a service provider cannot be reused for data transfer from radio base stations and/or other locations along the right of way. And then an entire new, separate network will need to be provided for the PTC. Please confirm.	Yes, the communications backbone network designed, furnished and installed by the contractor shall be solely dedicated for the specified functions and shall not be accessible to the public or outside parties except as indicated.
14	As a potential contractor we would like the Authority to comment on the status of the funding for this project. Recent news articles and statements from Caltrain management do not paint a positive picture from an operations perspective and we would like Caltrain to explain how the project will be funded.	JPB has already secured several federal and state grants, as well as local funding, for a portion of the project, and have a funding plan in place to secure the remaining grant or financing depending on negotiations with the selected contractor/proposer.
15	The location list (from Part 2, Section 3, Exhibit B, Spec 21007, Part 1.06) between CP W. Cahill (MP46.8) and E. Cahill Case (MP47.3) does not appear to match the drawing for this area (PN46.5-48.0.CO1). As examples: College Park Interlocking is not shown in the drawing; MP for CP W Cahill does not match (46.8 vs 47.4). Please clarify these discrepancies.	<p>CP W. Cahill is approximately 47.3-47.5</p> <p>CP E. Cahill is approximately 47.6-47.9</p> <p>There is no College Park Interlocking. College Park Station is North of CP Stockton.</p>
16	Drawing PN51.0-52.5.CO1 indicates CP Lick is part of UPRR Future PTC territory. Contractor assumes signal aspects (1W and 2W) and track circuits (MT1 and MT2) must be gathered and transmitted on the Caltrain PTC system. Please confirm.	Yes. CP Lick interlocking is owned by UP. They dispatch trains through the interlocking. There is communication between UP and Caltrain signal systems at CP Lick that relates to clearing train moves in and out of Caltrain/UP territory. Communication is currently over a wire. This function should remain after PTC.
17	The location list (from Part 2, Section 3, Exhibit B, Spec 21007, Part 1.06) does not include Signal 248 & 249 at MP 48.8. Are these signals controlled from a separate case or are these part of the Whipple Ave Crossing House? Please also identify the control equipment for these signals.	Signal 248 and 249 are located at MP 24.8. There are 2 signal houses at Whipple Ave. Signal house 249 controls signal 248 and 249.

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18	There appear to be insulated joints at Broadway St. Crossing (drawing PN24.0-25.5.CO1) at MP 25.4. However, no signal track circuit equipment is shown in the location list (from Part 2, Section 3, Exhibit B, Spec 21007, Part 1.06). Please clarify if joints exist, and if so, what signal control equipment is used.	The insulated joints separate two AC circuits to the left and right of it. The crossing predictors HXP-3R2 use these AC circuits.
19	Drawing PN49.5-51.1.CO1 at Signal 505, shows two 505-2 signals. Please confirm that only 1 Signal 505-2 exists.	There is only one signal 505-2.
20	The location list (from Part 2, Section 3, Exhibit B, Spec 21007, Part 1.06) shows Signal 495 & 496 at MP 49.5. Drawing PN40.5-42.0CO1 shows these signals at approximately 49.9 and 50.2 (at Luther Jct.). Please confirm the drawing is correct.	Signals 495 & 496 are at 49.9 and 50.2 respectively. The drawing is correct.
21	Part 2, Section 3, Exh B, Spec 21005 repeatedly contains language (in 3.01.B) "standards body should as an interoperability requirement". It is unclear what is meant by "standards body." Contractor has no control over any such body, so has no way to ensure compliance with these statements, nor can Contractor ensure that such requirements are implemented within the specifications issued by such standards body. This results in a situation where Contractor may have to comply with a Caltrain requirement not supported by specifications issued by other bodies, resulting in a potential interoperability issue. Please advise Caltrain's intent in these respects.	<p>The standards body referenced in 21005 is the AAR. The standards used by developers of ITC, the PTC system used by Caltrain tenant railroads, are in some cases already available from the AAR in draft form. There is no requirement that any proposed solution be certified as compliant with any particular standard. The only requirement is that Caltrain's PTC system must meet the FRA's interoperability requirements.</p> <p>The Contractor has the following responsibilities:</p> <ol style="list-style-type: none"> 1. Provide technical support to Caltrain who will take the lead in working with the "Standards Body". 2. Propose a solution to Caltrain that will be interoperable with its tenants railroad.
22	Part 2, Section 3, Exh B, Spec 21006, 1.03.C requires contractor to update the UPS at the CCF. What type of UPS is currently installed, what is its capacity and usage today, and does it have sufficient spare space to make any updates?	<p>The existing UPS is rated at 18,000 VA. It is currently 37% loaded. The new ARINC rail operations control center maximum equipment load is 8010 watts and has not yet been added to the UPS and therefore is not reflected in the 37% load mentioned. While the ARINC equipment will eventually be added to the UPS there will be a removal of the Digicon equipment load. The UPS initially operates on battery switching to a diesel generator source as needed. There will be spare capacity for the additional PTC load.</p>

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23	Part 2, Section 3, Exh B, Spec 21008, 1.03.A.1 requires Enclosure for onboard equipment to be approximately 24x24x17. This is a very small space to house all the necessary equipment. Additionally, Spec 21014 requires onboard PTC equipment to have 500,000 MTBFF, which may require redundancy. With redundant systems, it is likely not possible to fit with the dimensions identified in this section. Please advise.	The equipment housing size quoted in the referenced provision, 21008, 1.03.A.1, is not a mandatory maximum size or shape. JPB provided an "anticipated value" that was used as the basis of conducting the installation feasibility study. The contractor shall propose solutions that provide installation of equipment that is readily maintainable and provide the required level of availability, and without significant degradation to any of the existing trainborne systems.
24	Part 2, Section 3, Exh B, Spec 21008, 1.03.A.15 Event recorder. Please advise type and capabilities of existing event recorder so that contractor may assess feasibility of using/updating this recorder.	<p>The following is the list of Event Recorder for JPB Locomotive and cab cars:</p> <ol style="list-style-type: none"> 1) GP9/MP15 Locomotives - Pulse Train Tracks 2) MP36 Locomotives - Bach Simpson Model 54300-08 3) F40 Locomotives - Bach Simpson Model 54100-XX 4) Bombardier Cab Cars - Bach Simpson - Model 53300 5) Nippon Sharyo Cab Cars - Do not have event recorders, they are trainlined to the locomotives for capturing the required data. <p>The event recoder tracks the following:</p> <ul style="list-style-type: none"> • Speed • Brake pip pressure • TLC • Brake Cylinder Pressure • Solenoid A, B, C, and D • Headlights • 100V Analog voltage • Reverse and Forward • PCS • Traction motor current • Bell • Cab acknowledge • Dynamic Brake • Horn • Door over ride
25	Part 2, Section 3, Exh B, Spec 21008, Part 3.03 Availability of Rolling Stock. Specifies limited availability of rolling stock for installation. Spec 01001, 1.06.C.5 requires Cab Installation to complete 12 months after start of activity. Please confirm that JPB will make available sufficient rolling stock to allow Contractor to complete this installation activity as specified.	At a minimum, JPB is committed to provide to the contractor one train end unit (locomotive or cab-end fitted passenger car) at a time until all units are fitted with the required modifications and installation of PTC equipment. Coordination of the delivery of vehicles will be based on the agreed upon schedule for the performance of this work.

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26	Part 2, Section 3, Exh B, Spec 21014, 3.02.A.2.c has MTBFF requirements for UPS for PTC field equipment. However, it is not apparent from the specifications that any such UPS for PTC field equipment is required. Please clarify where requirement for UPS for field equipment is stated.	PTC equipment is required to be powered via a UPS as with other signal equipment. The existing UPS should be used if it has sufficient capacity to also power the new PTC equipment. Existing signaling UPS's are not required to be improved to meet PTC MTBFF requirements and are considered adequate.
27	Part 2, Section 3, Exh B, Spec 21024 Support Services. Some of the requirements in this section appear to include hardware not provided as part of the PTC project. For example, 2.017 Illustrated Parts Catalog, Part A.5 lists Vital Microprocessor Interlocking System. All of the VMIS equipment exists today. Also, 2.08 Site Description Manuals is required to have a "comprehensive description of the equipment at each location." Please confirm that the requirements of this section apply ONLY to the equipment that is provided new as part of the PTC project.	Yes, it is confirmed.
28	Part 2, Section 2 Scope of Work, B.3) Communications, Subpart b. (Page 8 of 36). This section allows Contractor to propose the use of existing or spare Caltrain communications facilities and infrastructure, including the microwave system. Please provide information on these existing systems (spare capacity, facilities, locations, etc), including the Microwave.	Space in existing communications rooms is limited with the exception of the CCF equipment room which has rack space available. The 12 T1 microwave system that connects San Carlos, San Bruno Mountain, Monument Peak and CCF together has five (5) spare T1s available. As-built drawings for the CCF equipment room will be provided in an Addendum to be issued in two weeks.
29	Part 3, Section 2, Proposal Content, Part B.5 Project Execution (Plan) - What is Caltrain's expectation of the content of this section of the Proposal? It would seem that the other sections of the Proposal (such as Technical Questionnaire, Systems Engineering Plan, Interop Plan, etc) would sufficiently details the Contractor's understanding of and approach to the execution of the project.	Caltrain's requirements for the PTC System Project Execution Plan is described under Part 2 Section 2 Q and Part 3 Section 2 B.5. JPB expects Contractor to describe how your team will execute and deliver the system in its Project Execution Plan .

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30	Part 2 Section 3 Ex. A Section 01001 Section 1.06 Order of Work states that the Completion of Cab Installation has to be finished after 12 month from the start. In our understanding the start date has to be scheduled within the project schedule. Part 2 Section 3 Ex. H Section 7.6.5.32 provides a table showing concrete dates for the completion of the installation. Please confirm that the PTC IP from Caltrain can be adapted to the proposers project schedule.	The start cab installation date indicted in the PTCIP Rev 1 is for reference only. The scheduling requirement is to complete cab installation within a 12 month of period. Contractor shall develop its optimum installation schedule in support of system testing and integration in order to meet Initial Revenue-In-Service milestone.
31	The RFP addresses HSR. What assumptions should the proposer make in order to address HSR requirements?	Evaluation of the potential for the proposed solution to meet future HSR needs will not be part of the proposal evaluation.
32	Is it Caltrain's intention that the application software in the existing signaling equipment has to be modified by the contractor in order to accommodate required PTC + functionalities like Section 3 Ex. H CONOPS Section 10.1.1.4?	It is Caltrain's intention that the contractor be responsible to perform any and all logic changes to existing wayside equipment as needed to support interface with the new PTC system equipment and to deliver the specified functionality.
33	We have not been able to locate any station specific drawings. Can Caltrain provide drawings which indicate the location of the Station Communication Rooms in relation to the overall station layout?	Space in existing communications rooms is limited with the exception of the CCF equipment room which has rack space available. The 12 T1 microwave system that connects San Carlos, San Bruno Mountain, Monument Peak and CCF together has five (5) spare T1s available. As-built drawings for the CCF equipment room will be provided in an Addendum to be issued in two weeks.
34	Can Caltrain provide drawings for the in Part 2- Section 2.B.1.i. mentioned crew assembly points, which detail the existing communalization infrastructure?	Space in existing communications rooms is limited with the exception of the CCF equipment room which has rack space available. The 12 T1 microwave system that connects San Carlos, San Bruno Mountain, Monument Peak and CCF together has five (5) spare T1s available. As-built drawings for the CCF equipment room will be provided in an Addendum to be issued in two weeks.

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35	Can Caltrain provide drawings for the remote workstations (Part 2- Section 2.B.5.c.), which detail the existing communication infrastructure in each location. Specifically the CEMOF and the 1250 San Carlos Avenue office building.	<p>No. Remote PTC system workstations are to be designed and provided by the contractor. Workstation design shall be consistent with the functionality specified.</p> <p>Space in existing communications rooms is limited with the exception of the CCF equipment room which has rack space available. The 12 T1 microwave system that connects San Carlos, San Bruno Mountain, Monument Peak and CCF together has five (5) spare T1s available. As-built drawings for the CCF equipment room will be provided in an Addendum to be issued in two weeks.</p>
36	Can Caltrain define the method which will be used to calculate the confidence factor mentioned in 21009 Part 2.D.5?	Standard statistical methods shall be used that prove the requested minimum level of confidence regarding the latency performance of the contractor supplied system is met or exceeded. Contractor shall identify which method is used and why.
37	<p>We assume that the Interoperability Specifications (21009, Part 1.03 C) are already developed in the ITC PTC and only the additional Caltrain PTC functionality must be specified. Please confirm our assumption.</p> <p>Who would need to mutually agree to this specifications.</p>	Your assumption, as stated, is correct. Caltrain and its tenant railroads would need to mutually agree to these specifications.
38	Since the protocols are NOT currently issued what is meant by "current and supported by the issuing organization at the time of bid"?	Draft protocols are available relating to the train/WIU interface as required for basic ITC functionality. The bidder should include in the proposal any assumptions or other conditions relating to its strategy for managing implementation of interoperable PTC.
39	Since MeteorComm is designing the standards for the PTC data radio, and assuming that UP RR will manufacture the radios, would Caltrain consider to acquire the radios from UP and to provide the radios to the contractor?	Caltrain will not be procuring any equipment directly. For reference, the PTC interoperability standards (data link protocols) are being developed by the Interoperable Train Control (ITC) committee in conjunction with the AAR.
40	Did Caltrain already perform a throughput analysis and would this analysis be made available to the bidder?	Analyses and results performed by Caltrain will not be made available to bidders.
41	Did Caltrain already perform a radio coverage study and would this study be made available to the bidder?	A radio coverage study has not been performed by Caltrain.

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42	<p>RFP Part 2- Scope of Work page RFP 11 of 36 item 6 states "ROCS support contractor will provide the following work elements" item c. "manage configuration of hardware and software modifications including update of documentation required to add Caltrain PTC system related functionality to ROCS." Does this mean that the ROCS support contractor will be providing the CAD software interface to the BOS for the PTC?</p> <p>What is the schedule for the implementation of the CAD replacement (ROCS)?</p>	<p>Yes, the ROCS support contractor will be required to implement changes to the CAD software according to functional and interface requirements specifications to be developed by the contractor.</p> <p>ROCS is scheduled to be commissioned in May 2011.</p>
43	<p>Part 2- Section 3 Exhibit B CALTRAIN PTC SYSTEM SPECIFICATIONS</p> <p>Section 21001 System Overview 1.03 Caltrain Operations D. states that "the system will be required to be interoperable with the train control system selected for HSR operation throughout the California High Speed network." Since this train control system has not been identified how can the contractor ensure that their system will be interoperable by the 2015 implementation date?</p>	<p>The Caltrain PTC system must be interoperable with existing tenant railroads by Dec 2015. HSR is not an existing tenant railroad.</p>
44	<p>Part 2- Section 3 Exhibit B CALTRAIN PTC SYSTEM SPECIFICATIONS</p> <p>Page 21007-7 PART 2- PRODUCTS 2.01 MATERIAL A. states "new electronic equipment, modules and components shall be compatible with all existing devices and shall be compatible with application within the specified environment including Caltrain's planned transition to twenty five (25) kVAC railroad. How does Caltrain expect the contractor to demonstrate compatibility with a system that currently does not exist?</p>	<p>Caltrain intends to verify that the proposed application design includes features and details that are common and industry best practice at providing effective methods of immunization against electromagnetic interference in such an environment. No compatibility demonstration or testing is required.</p>

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45	<p>Part 2- Section 3 Exhibit B CALTRAIN PTC SYSTEM SPECIFICATIONS</p> <p>Page 21009-10 Data Communications Equipment Sub-System Requirements E. 10 states that the design should “provide a two hundred fifty (250)% capacity reserve design margin” in the RF Mobile Data Link Subsystem. Since the RFP requires a survey and an analysis of the system before this can be done, can Caltrain provide the contractors with an estimate of locations or an allocation to ensure level bidding? This goes for all aspects of the DCS including radios, antennas, etc.</p>	<p>The sited reference is referring to the capacity of the radio link. The contractor's capacity analysis shall determine what the capacity of the link needs to be to support the applications specified. The following formula shall be used.</p> <p>Link capacity/throughput = $C + (C \times 2.5)$ where "C" is the capacity of the radio equipment in bits per second (bps). So for example, if the contractors analysis determines that the link need to deliver a throughput of 500 kbits/second then the radio supplied shall have a minimum capacity of 1,750 kbits/second.</p>
46	<p>Part 2- Section 3 Exhibit B CALTRAIN PTC SYSTEM SPECIFICATIONS</p> <p>Page 21009-11 Data communications Equipment Sub-system Requirement I. 7. States “Where insufficient space is available in existing houses and cases, Contractor is required to supply a new house or case that shall be connected to the existing house for the interfaces between the DCS and the existing signal and grade crossing warning equipment..” Can Caltrain make this an allocation on the pricing sheets since we cannot know the extent of the new installations without a site survey?</p>	<p>The various location type drawings provided in the RFP were selected as worst case examples and are believed to be adequate for most overlay solution options. If the drawings show insufficient space for the proposed new equipment, then the bidder should include new and separate equipment enclosures in its proposal.</p> <p>There is no need to revise the pricing sheet.</p>
47	<p>How many existing site does Caltrain have? How Many sites will be considered for pricing?</p>	<p>There are 6 existing Caltrain voice and data radion sites (4th & King yard, Sign Hill, San Bruno Mountain, San Carlos admin building, Monument Peak and CCF). To the extent any of these sites can support additional antennas and equipment the contractor can consider using them. The contractor is responsible to design and determine how many sites are needed and identify the most suitable locations.</p>
48	<p>What Frequency does Caltrain system suppose to work?</p>	<p>The preferred frequency band is 220 MHz band (217-222 MHz) to facilitate interoperability with freight and other tenant railroad locomotives that operate in the Caltrain territory. Other frequency bands can be considered if interoperability requirements are met.</p>
49	<p>What are the available channels?</p>	<p>The contractor is responsible to determine which channels are available for use in the Caltrain corridor. See also response to question #141.</p>

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50	What is the time line for RF Design Deliverables?	A specific time line has not been established at this time. As part of the contractor's design schedule this item shall be addressed.
51	What is the time line for network testing? How much time gap between RF Design and Network Testing?	The contractor is required to submit project schedule that includes network RF design and testing.
52	The RFP did not mention anything about tunnel or indoor design. If we have to do indoor design, then we have to include the cost of the Indoor Planning tool into the pricing. So the only question is whether the tunnel or indoor design also needs to be carried out for this Caltrain project?	Caltrain has four tunnels that require radio performance as specified. Please refer to the scale PTC Layout drawings provided in Exhibit D for approximate portal locations and tunnel lengths. Radio coverage is only defined to be within Caltrain right of way and not within buildings outside of the right of way.
53	RFP Part 2, SOW, page 9 of 36, point B Will we need to provide Microwave Design as well?	See Spec 21009.Part 2.F (and other related sections) for specific point-to-point design requirements. If the contractor selectes microwave band equipment to implement point to point links, then microwave is part of the contractor design responsibility.
54	Is WLAN 802.11 also a part of SOW?	The deployment of IEEE 802.11 wireless LAN technology for use by Caltrain (for purposes unrelated to PTC) or the general public is outside of the specifed functions and not part of this contract. If the contractor selects 802.11 technology to deliver specified functions , then yes this technology would be part of the contract.
55	RFP does not mention about Inteference sweep using spectrum analyzer? Is it a part of SOW or Caltrain will give a free spectrum for design, installation and commissioning?	See Spec 21009 for DCS system technical requirements. Generally, the contractor is responsible to determine, acquire, design and implement suitable spectrum to deliver a complete system.
56	What would be the RF coverage reliability?	Assuming the question is refering to the mobile data radio coverage, the reliability specified is 99.00%. See 21009.Part 2.E.3.