July 16, 2021

Dear Sir/Madam:

Attached is Addendum No. 8 to SEPTA’s *Two-Step Procurement Solicitation 20-00554-ATMM - Computer Aided Radio Dispatch System*

The deadline for receipt of technical proposals remains unchanged as **Tuesday, August 24, 2021, at 1:00 P.M.** Additional questions must be submitted in writing to tmoiani@septa.org no later than 1:00 P.M. on July 23, 2021, **to guarantee an answer.** This is the final date to submit a question to guarantee an answer. Questions submitted after 1:00 P.M., July 23, 2021, will be answered at the sole discretion of SEPTA.

Any inquiries regarding this opportunity must be directed to Thomas Moiani of the Procurement, Supply Chain & DBE at tmoiani@septa.org.

Sincerely,

[Signature]

Thomas Moiani  
Contract Administrator  
Procurement, Supply Chain & DBE
Two-Step Procurement 20-00554-ATMM: Computer Aided Radio Dispatch System

To All Bidders:

The following constitutes Addendum No. 8 to SEPTA Solicitation 20-00554-ATMM, Computer Aided Radio Dispatch System.

This Addendum must be acknowledged by inserting the date of this Addendum next to “No. 8” in the Response Form entitled “Addenda”. Failure to do so may render your bid as non-responsive.

Questions, Answers, and Clarifications issued with this Addendum are hereby incorporated by reference and made part of the Terms and Conditions of this project.

A. General
1. Step Two Instructions to Bidders and Contract Addendum 6 is replaced with Step Two Instructions to Bidders and Contract Addendum 8.
   a. The following changes have been made to Schedule A Part A,
      i. Item 26 is changed.
         From: Division 13708 700 MHz Radio System Dispatch Requirements– Dispatch Consoles – Remote
         To: Division 13708 700 MHz Radio System Dispatch Requirements Dispatch Consoles – Mobile Laptops
      ii. The quantity of Item 26 is changed from LOT to 18.
      iii. Item 39 is changed.
         From: Division 16750 Network Management Administration Systems
         To: Division 16750 Network Management and System Administration Workstations
   2. Answers to questions submitted are hereby incorporated by reference and are made part of the requirements of this bid. Questions submitted which are not included will be answered in a future addendum.

B. Specifications
1. Volume 3, Page 13703-11 has been replaced with Volume 3, Page 13703-11 Rev 1
2. Volume 3 Page 13708-12 has been replaced with Volume 3, Page 13708-12 Rev 1.

C. Drawings
1. None
1. **Question**
   13700-4, 1.2.F.10: "The SEPTA Police radios shall operate on the new P25 Phase II 700 MHz system with all features currently in use and shall comply with APCO P25 common air interface."

   Q1: Are any Police Radios being replaced?

   Q2: Are there any features currently in use that are not part of the APCO P25 common air interface but still required on the new radios or new P25 700 MHz system?

   **Response**
   Q1: No
   Q2: No.

2. **Question**
   13700-6, 1.2.F.23 and 13702-12, 1.6.C: "Provision and integration of existing Motorola control stations (Consoles) at 2nd & Wyoming and 1234 Market St into the new dispatch system." 13702-12, 1.6.C: “The Contractor shall provision interfaces for up to 24 outside agencies via wireline or over-the-air (OTA) pickup”

   Q1: How many existing Motorola control stations does SEPTA require the vendor to interface to?

   Q2: Are these in addition to the 24 interfaces required in Section 13702, 1.6.C?

   **Response**
   Q1: Refer to 13700-6, 1.2.F.30.a;
   Q2: Yes.

3. **Question**
   13700-6, 1.2.F.26: "As part of the Revenue vehicle radio installations, the contractor shall program the mobile radios to operate on both the existing UHF system and the replacement 700 MHz system. The 700 MHz Radio System cutover shall not require a physical touch of the revenue vehicle mobile radio for 700 MHz operation."

   Q1: While the vendors can provide dual band radios for UHF and 700 MHz, can SEPTA clarify how the vendor should operate on the existing uhf system which is proprietary and therefore only allows for Motorola radios to operate it?

   Q2: Will SEPTA accept installing the new 700MHz radio alongside the existing UHF radio to avoid the revenue vehicles being taken out of service multiple times?

   **Response**
   Q1: See the answer to Q2;
   Q2: Yes, however it is the responsibility of the bidder to develop a plan acceptable to SEPTA for installation and cutover to the new 700 MHz Radio System with minimum impact to the revenue vehicles.

4. **Question**
   13700-16, 1.3.G.7: "Alarm System - The Astro 25 Network Architecture shall incorporate an Alarm System which shall support all the Radio System equipment using SNMP traps and be capable of a
minimum of 32 binary external alarms and/or analog points to monitor other SEPTA site equipment."
13700-17, 1.3.G.8: "External Alarms - SEPTA requires the monitoring of external alarms (digital and analog) at each Prime/Remote Site and Main/Back-up Master. The Contractor shall connect all existing external alarms at each Remote Site and the Master to the local alarm system for transmission to the Main/Back-up Master Network Manager terminals. A typical example of existing Remote Site alarms and analog points to be connected to the new P25 alarm system shall include, but not be limited to the following:"

Q1: Can SEPTA clarify whether they want 32 alarms in addition to the existing alarms referenced in 13700, 1.3.G.8?

Q2: Can SEPTA provide a complete list of existing alarms that will need to be monitored by the new system as well as where they are located?

Response
Q1: SEPTA requires a minimum of thirty two (32) binary external alarms and/or analog points to monitor other SEPTA site equipment in addition to the alarms internal to the 700 MHz radio system.

Q2: Refer to 13700-22 1.3.J.1 and 13700, 1.3.H.8.b. Final alarm list to be finalized with the successful bidder.

5. **Question**
13700-18, 1.3.G.8.a: "The Contractor shall develop a list of recommended monitored alarms to SEPTA for review and final approval."

Q: Can vendor provide this after contract or is this required as part of the proposal submission?

Response
Yes, provided no change orders are required to develop the list and incorporate the alarms on the list.

6. **Question**
13702-3, 1.3.A: “The Radio System shall be equipped with the features and functions listed in Table 13702-1 hereunder. The Contractor shall provide information on these features in their proposal.”

<table>
<thead>
<tr>
<th>Table 13702-1: Radio System Feature Set</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>12000 Bits per Second Control Channel</strong></td>
</tr>
<tr>
<td><strong>Automatic Access Retry</strong></td>
</tr>
<tr>
<td><strong>Busy Queuing with Callback</strong></td>
</tr>
<tr>
<td><strong>CAD Interface</strong></td>
</tr>
<tr>
<td><strong>Call Interrupt (System)</strong></td>
</tr>
<tr>
<td><strong>Call Interrupt (User)</strong></td>
</tr>
<tr>
<td><strong>Call Validation by Group and Individual</strong></td>
</tr>
<tr>
<td><strong>Console Priority Interface</strong></td>
</tr>
<tr>
<td><strong>Continuous Trunk Updating</strong></td>
</tr>
<tr>
<td><strong>Group Priority Levels</strong></td>
</tr>
<tr>
<td><strong>Remote Enable &quot;Hot&quot; Microphone</strong></td>
</tr>
<tr>
<td><strong>Misdirected User Protection</strong></td>
</tr>
</tbody>
</table>
Q: Because many of these features listed in Table 13702-1 have a vendor-specific name or are potentially proprietary, can SEPTA provide a description of each of these features so that the vendor can determine if they are able to meet the intent of each feature?

Response
No. Many of these features and functions are common to the P25 SoR and APCO TIA 102 standards. SEPTA expects bidders to have knowledge of the competitive market they offer products in.

7. Question
13702-9, 1.2.I.2.b: "The User Terminals shall have access to the following functions as a minimum: Pre-canned or custom text messaging."

Q: Can SEPTA clarify whether either pre-canned or custom text messages are acceptable or are both formats required for the Network management workstations?

Response
Both formats are required.

8. Question
13702-10, 1.2.K.2: "In addition, Two (2) GPS receivers, Two (2) GPS antenna, and transmission line shall be furnished and installed by the Contractor at each simulcast Remote Site and at the Network Controller location. The GPS receivers, antenna, and antenna mount shall be of modern high sensitivity, low noise, and ultra-stable frequency standard units. The GPS receiver system shall include Rubidium Standard backup. GPS shall be used as the backup timing system to synchronize the Radio System simulcast delays and provide a Network Clock."

Q: Can SEPTA clarify if the Rubidium Standard backup is required in addition to the redundant GPS backup at each site?

Response
Yes, the Rubidum Standard backup is required in addition to the redundant GPS backup at each site.

9. Question
13703-2, 1.2.C.1.l: "Each repeater base station at each site shall be equipped with an automatic station identifier to transmit the FCC call sign in Morse code at intervals of not more than 30 minutes, in accordance with FCC rules. Radio System users shall not hear the identifier signal. The identifier shall be "polite," such that it begins during an interruption in radio traffic and, if interrupted, resets and attempts to send again, until such time that the complete message has been sent."

Q: Will SEPTA please consider removing this requirement as it is not applicable to P25 stations?

Response
Refer to the portion of the requirement 13703-2, 1.2.C.1. that says: "in accordance with FCC rules". (§ 90.425 Station identification.) Bidder's offering is to comply with all applicable FCC rules.

10. Question
13703-6, 1.3.A.1.mm: "Contractor shall program each Mini Base as per project manager direction and turnover to the SEPTA Radio Shop."
Q: Can SEPTA clarify if these means that SEPTA will be responsible for installing the 224 mini-base stations/control stations after the vendor has programmed them?

Response
See answer to addendum 4, question 79.

11. Question
13703-7, 1.4.A.9: "Controls shall be provided to allow manual override of receiver selection and the disabling of any receiver line at the comparator."

Q: Does SEPTA require this feature for testing purposes only?

Response
Yes

12. Question
13703-11, 1.9.A.2.o: "The output(s) of the APD unit shall be integrated by the Contractor into the new alarm monitoring system. See Section 2.5 for additional information."

Q: Can SEPTA clarify where to find Section 2.5 for the additional information?

Response
The reference should be changed to "See Section 16750, 2.03 Alarm Monitoring Application for additional information." Volume 3, Page 13703-11 has been replaced with Volume 3, Page 13703-11 Rev 1.

13. Question
13703-24, 1.11.B.1.o: "Radios shall be capable of supporting batch simultaneous firmware updates over the P25 system and not require one firmware update to be conducted in a sequential manner." 13703-24, 1.11.B.1.p: "Firmware updates conducted over the P25 network shall be seamless to the user until the session is complete. Not requiring interruption of user transmit or receive calls until updates have been completed is mandatory."

Q: Can SEPTA clarify if firmware updates over Wi-Fi/LTE is acceptable instead of the P25 system, which is narrowband?

Response
Firmware updates over Wi-Fi/LTE are permitted in addition to, but not instead of, the requirement to perform them over the P25 system.

14. Question
13703-27, 1.11.C.1.f: "Meet IP56 standards."

Q: Does SEPTA actually require IP54 rather than IP56 for the non-revenue mobile equipment?

Response
No

15. Question
13708-5, 1.3.C.2.w: “The console shall support one (1) select audio speaker and one (1) unselect audio speakers.” 13708-12, 1.3.1.5: “The console shall permit the operator to monitor call activity using up to
four separate speakers, one with select audio and the others with unselect audio.”

Q: Can SEPTA clarify whether each console needs two speakers or four speakers?

Response
Each console requires 2 speakers with one supporting the monitoring of select audio and another of which supports monitoring of unselect audio. Volume 3 Page 13708-12 has been replaced with Volume 3, Page 13708-12 Rev 1.

16. Question
13708-12, 1.3.J.2: “Each console shall be able to support up to five patches with up to 15 entities (groups and/or channels) each.” 13708-13, 1.3.L.2: “Each console shall be able to support up to two Simulselects with up to 15 entities each.”

Q: In other parts of volume 3, the requirements for patches and simulcast contradict the ones listed above. Can SEPTA confirm that both patches and simulselect require up to 15 entities for each patch or simulselect?

Response
Volume 3 Page 13708-12 has been replaced with Volume 3, Page 13708-12 Rev 1 and Volume 3, Page 13708-13 has been replaced with Volume 3, Page 13708-13 Rev 1.

17. Question
16750-3, 2.02.B.3: "The SNMP Manager shall provide an auto-discovery mechanism to facilitate NMS administration."

Q: Can SEPTA clarify whether auto-discovery is sufficient for network gear and equipment that already has a known address?

Response
The SNMP Manager shall provide an auto discovery mechanism to facilitate NMS administration as stated in Section 16750, Subsection 2.02, item 8.3

18. Question
16750-3, 2.02.D: "Non-Standard Protocol - Each NMS shall be equipped to create customized interfaces for devices, which may not support a standard protocol. In general, this should be applied to devices that are transmitted over a TCP/IP socket interface."

Q1: Can SEPTA clarify if this requirement refers to creating a customized interface for how the alarms are displayed on the GUI?

Q2: Can SEPTA provide a list of the customized interfaces required?

Response
Q1: Alarms from a device using a non-standard protocol shall be displayed as all other SNMP alarms. The customized interface requirement is intended for the protocol, not the GUI.

Q2: SEPTA will discuss in the design phase after selecting the winning bidder.

19. Question
Drawings.PDF: The drawings package shows existing consoles and existing backup radios.
Q1: Are the vendors required to replace only the existing consoles?

Q2: Can SEPTA please clarify how many new consoles (including any replacements) are required at the 1234 Mkt, 2&W, and FTC ACC?

Response
Q1 and Q2: See Drawing ES-1000-1 Sheet 3 in Drawings.pdf for the quantity of Radio consoles required, Drawing ES-1000-2 Sheet 4 for the quantity of CAD/AVL consoles required, and See Addendum 5 with a revised ES-1000 sheet 5 Rev 1 (Table 5) for the quantities of radios required.

20. Question
13700-20 Section 1.3.H.12: Console Sub System Interface (CSSI) - The Astro 25 Core Network Architecture shall support a CSSI interface in accordance with the P25 standards developed and approved to date. The Radio System shall be equipped with a CSSI Server, Router and Firewall. The CSSI shall support at a minimum the functions as described in Section 13700 1.3 G #10 ISSI above.

Q: Other than the vendor’s dispatch consoles, there is no other requirement for other 3rd-party consoles, so how many 3rd party console interfaces does SEPTA require?

Response
As stated in 13700-20 Section 1.3.H.12, SEPTA requires the bidder to equip the Radio System with a CSSI Server, Router, and Firewall. Bidders shall refer to Section 13700-12 item p.

21. Question
13345-16 1.16.B: “At a minimum, the on-board vehicle devices to be provided for each set of equipment shall include a MDT, SEPTA- provided mobile radio…”

Q: There should be 21 Bus-in-a-Box’s (BIB) per the price sheet. Are the 21 radios included in the price sheet’s radio quantities, or should the vendor supply an additional 21 radios and include that price in the BIB price line?

Response
Vendor shall supply an additional 21 radios and include that price in the BIB price line.

22. Question
13345-17 1.16.F: “A dedicated CAD/AVL System training workstation shall be provided to allow SEPTA training personnel to interact with the vehicle Operators, over-the-air, in the same manner as actual operation.”

Q: Is the (single) dedicated System Training Workstation over and above the 21 Bus-in-a-Box quantity?

Response
The training workstation is for SEPTA training personnel to interact with the vehicle operators using BIBs as stated in Section 13345, subsection 1.16. It is not a Bus-in-a-Box.

23. Question
13345-17, 1.17: “The Contractor shall provide remote dual screen dispatch laptops…”

Q: The above RFP section does not list the number of dispatch laptops are required, but the following items are in the RFP:
- The Pricing Page item 9 “Division 13345 Hardware Requirements - Remote Dispatch Laptops” states there are 10 laptops.

- The Diagrams.PDF Sheet 8, Table 4, states there are 18 Remote Mobile Dispatch Laptops with Motorola MCC7500e P25 software.

- The Diagrams.PDF Sheet 8, Table 4 states there are 10 Remote Mobile Dispatch Laptop with CAD/AVL software. Please clarify if these are the same things, and what is the correct quantity.

**Response**

18 Remote Mobile Dispatch Laptops with Motorola MCC7500e P25 software and 10 Remote Mobile Dispatch Laptop with CAD/AVL software are required as stated in Diagrams.PDF Sheet 8, Table 4. The Schedule A Part A Item 26 has been changed in Step Two Instructions to Bidders and Contract Addendum 8 for clarification.

24. **Question**

13704-5 1.4.A.4 – “The digital test patterns for BER coverage testing shall be based on the latest version ITU-T pseudo-random sequence and the pass/fail criteria for each test tile shall be a Bit Error Rate (BER) that less than or equal to the specified Channel Performance Criteria (CPC).”

Q: Per TIA-102.CCAA, for P25 Phase II a 1031 Hz Test Pattern is used as the digital test pattern for BER coverage testing. Can this requirement be updated to reflect that?

**Response**

The digital test patterns for BER coverage testing shall be based on the latest version ITU-T pseudo-random sequence, or any of the test patterns referred to in TSB-88.3-D, paragraph 5.7.1.3., and the pass/fail criteria for each test tile shall be a Bit Error Rate (BER) that is less than or equal to the specified Channel Performance Criteria (CPC).

25. **Question**

13704-2 1.2.C.10 – “Delay line calculations of SEPTA’s Underground DCS as well as engineering drawings and reference documentation are available to the Contractor upon request.”

Q: Please supply the vendors the DCS delay line calculations, engineering drawings and reference documentation.

**Response**

The maximum delay from the DAS headend to a remote underground site is 120 microseconds. All underground sites have been optimized with this launch delay. All measurement data and documentation will be made available to the successful bidder.

26. **Question**

13703-2 1.2.D.1, 13704-3 1.3.A.1.a and 13704-5 1.4.A.5 – All of these requirements reference a high noise environment.

Q1: Can typical 7/800 MHz noise floor numbers be used in the initial design until the vendor is able to take their own noise floor measurements?

Q2: Can SEPTA provide any existing noise floor measurements at 700 MHz or can SEPTA provide what dB level of noise should be used in the design?
Response
Q1: Typical numbers are acceptable for the proposal however measurements are needed as part of final design with any changes being the responsibility of the Contractor.

Q2: No.

27. Question
16770-2, 1.08.B: “Enabling and use of any disabled port shall be under the direct control of AAA functionality of the RADIUS server.
Q: Enabling and disabling ports is implemented via both AAA functionality of the RADIUS server AND Active Directory Group Policies, depending on the device. Is the use of Active Directory Group Policies to enable and disable ports acceptable?

Response
SEPTA will discuss in the design phase after selecting the winning bidder.

28. Question
16770-2, 1.08.C: “…an Intrusion Prevention System (IPS) shall be supplied that provides intrusion detection and takes preventive measures without direct human intervention.”

Q: Intrusion Prevention Systems that pro-actively inhibit traffic perceived to be non-normal have a potential of disrupting life safety communications if a false positive condition arises. In the interest of communication system availability, can the requirement to implement techniques that automatically drop traffic without human intervention be dropped? Intrusion Detection Systems, already a CARD system requirement, will generate an alert when an equivalent condition is encountered, which it can then be triaged and managed by security operations personnel without the risk of impacting life safety communications.

Response
SEPTA will discuss in the design phase after selecting the winning bidder.

29. Question
13700-1, 1.2.D: “The 700 MHz system shall be configured to receive incoming and outgoing telephone lines for display uses on the dispatcher consoles. The lines shall be POTS lines or traditional dial tone. The quantity of POTS line interfaces shall be no fewer than 200.”

Q1: Can SEPTA provide the quantity, brand, model, and location of each PBX?
Q2: Can SEPTA provide how many POTS lines go to each PBX?

Response
Provide as specified.

30. Question
Section 13342, Item 1.12.B Interlining is a feature that allows the scheduling system to build blocks with trips that have different routes in sequence. This is part of the scheduling optimization algorithm. To achieve this in the CAD/AVL system would require the dispatcher to cancel the block and create multiple blocks to eliminate interlining. Is this what SEPTA desires?

a. If not, can SEPTA clarify what is required by "enable and disable the interlining function" in the CAD
system?
b. Or will SEPTA consider removing this requirement?

Response
SEPTA will discuss in the design phase after selecting the winning bidder.

31. Question
Section 13342, Item 1.15.B Trapeze does not provide an interface that allows the CAD/AVL system to validate assignments.
a. Will SEPTA work with Trapeze to meet the vendor's standard interface?
b. Will SEPTA handle all software licenses and services required by Trapeze to support a bidirectional interface?

Response
SEPTA will discuss in the design phase after selecting the winning bidder.

32. Question
Section 13342, Item 1.26.H.1 This item references "passenger information software systems vendors." Can SEPTA please identify the passenger information system vendor or vendors, so that we may contact them to verify if they have an available interface or any software license and services required?
a. If not, will SEPTA take responsibility for the passenger information system vendor's software licenses and services for interfacing to the Contractor provided interface?

Response
SEPTA requires that the CAD/AVL System utilize the standard GTFS and GTFS-RT interface protocol and format and RESTful APIs to interface with the passenger information software systems.

33. Question
Section 13343, Item 1.3.C.4.b This requires displaying the roster number. Can SEPTA clarify what is meant by the roster number and what the data source for the roster number is?

Response
SEPTA will discuss in the design phase after selecting the winning bidder.

34. Question
Section 13342, Item 1.26.L Please confirm that the RouteMatch cellular data functions are exempt from the secondary data mode.

Response
RouteMatch cellular data functions are exempt from the secondary data mode.

35. Question
Section 13345, Item 1.17 requires the contractor to provide dual screen dispatch laptops for remote dispatchers. Yet, Addendum 4, Question 27 states that SEPTA will provide the laptops. Please confirm that Item 1.17 is no longer applicable. If Item 1.17 does apply, where are these remote dispatch laptops to be used?

Response
Addendum 4, question 27 answers a question about the supervisor solution which shall be installed on existing Supervisor laptops.
Section 13345, subsection 1.17 requires remote dispatch laptops and is applicable. Remote dispatch laptop locations will be discussed during the design phase with the winning bidder.

36. **Question**
   Can SEPTA elaborate on the target audience overlaps vs. independence for each transit mode requiring the CAD/AVL solution? We are defining the transit modes as Buses, Elmwood Trolleys, NHSL, MSHL, PCC Trolleys and CCT.
   a. Will delivery of the CAD/AVL solution for each be the same or different SEPTA project managers, IT Staff, SMEs?
   b. Who are the target audiences for each of the departments to be trained (for each transit mode)?

   **Response**
   a. Delivery will be one CAD/AVL solution.
   b. Training quantities are listed in the drawing package, page ES-1000-7.

37. **Question**
   Can SEPTA define any interoperability requirements between any of the transit modes?
   a. For example, which end users can communicate voice and data to/from which transit modes?
   b. Is there any service-related data that is shared between the transit modes and for what purpose?

   **Response**
   a. Communication is between the dispatcher and the vehicles in their accepted work assignments. The dispatcher also has the ability to manually select a vehicle outside of their work assignment to communicate with operator or to assist another dispatcher. This communication can encompass both voice and data as specified in Section 13342.
   SEPTA will discuss in the design phase after selecting the winning bidder.
   b. Yes, when there is bus substitution on light rail (either planned or due to emergency) the light rail controllers can write up incidents, assign detours, and answer radio calls for buses that being used for substitution.
   There is, also, data that is shared with other systems like VMIS, which looks for equipment subcodes created in CARD to generate repair bills for the depots. SEPTA will discuss in the design phase after selecting the winning bidder.

38. **Question**
   Drawing ES-1000-5 Sheet 5 CARD Radio and CAD/AVL Quantities Please specify how many unique prototype installations are required for mobiles, control stations and BUS-IN-A-BOX.

   **Response**
   Minifleet (MFT) shall be conducted using ten fixed-route vehicles, one Supervisor vehicle, and one maintenance vehicle from the SEPTA fleet. The MFT vehicles shall be equipped with all the vehicle equipment to be installed on each vehicle type, including all the SEPTA-selected optional equipment as stated in Section 13348, subsection 1.7.

39. **Question**
   SECTION 13703 - 1.2.C.mm Intercom to Comm. Controller console (on voice channel only)
   As this function is typically seen in analog conventional base stations, can SEPTA remove this requirement?

   **Response**
   No, the requirement for an intercom to the Comm. Controller console (on voice channel only) at a site
remains. The bidder may propose alternate means in place of a metering package and microphone common to all base stations to fulfill this requirement.

40. **Question**  
Page 13705-1, 1.2.A.2 "The UPS shall power 700 MHz and VHF Radio System Racks."

Q: Please provide the load for any existing VHF racks in TX/RX or RX-only sites in the RFP. Also, is it correct to assume the vendor is only responsible for sites where the new 700 MHz system is co-located with the existing VHF system?

**Response**  
Refer to Exhibit 3 of Addendum 6. Yes, where co-located includes equipment in adjacent spaces currently supplied by the same UPS.

41. **Question**  
Page 01010-7, 1.06 "1.06 EQUIPMENT AND MATERIALS  A. Where items of equipment and/or material is defined by using a trade name or the name and catalog number of a particular manufacturer or vendor, or a limited description, the term "OR EQUAL" if not written thereafter shall be implied. Any reference to a particular manufacturer's product either by trade name or limited description is only for purposes of setting a standard of performance, quality, composition, construction, operation or size.  B. The term "OR EQUAL" means any other manufactured product or article which is equivalent in material, workmanship and service and is as efficient and economical in operation in the opinion of SEPTA.  C. Certain aspects of the work cannot be substituted by the Contractor. This is to include: 1. Wide Area Network (WAN) switches supplied by Extreme Networks. 2. Firewalls supplied by Barracuda.  D. Contractor requirements for submission of substituted materials and equipment are defined within Section 01600, "Materials and Equipment"."

Q1: Does Letter C indicate that SEPTA requires new switches by Extreme Networks and new firewalls by Barracuda or can the vendor propose equivalent products for switches and firewalls associated with the 700 MHz system?

Q2: Are the Extreme Networks switches and Barracuda firewalls part of the SEPTA-provided network that will remain SEPTA's responsibility?

**Response**  
Question 1: Letter C indicate that SEPTA requires new switches by Extreme Networks and new firewalls by Barracuda.  
Question 2: Refer to Volume 3, Section 13345, Section 1.8 System LAN and Volume 3, Section 13704, Section 1.10 Security.

42. **Question**  
Page 13708-8, 1.3.F.8: "The console shall support up to 40 simultaneous talk paths." Can SEPTA please clarify that the console subsystem, rather than the individual console, is required to support up to 40 simultaneous talkpaths?

**Response**  
The requirement stands as stated.

43. **Question**
Page 13700-10 1.3 D & 13700-21 1.3 I The first requirement states: "All the existing simulcast UHF SMARTNET Trunked equipment at each RF simulcast remote site and receiver site shall be replaced with new 700 MHz P25 Phase II simulcast radio system infrastructure equipment. All P25 transmit remote sites shall operate in the linear simulcast mode." While the second requirement states: "Table 1 (below) is a summary of the existing UHF System sites. Due to tower loading issues, Lowes is NOT to be considered for future RF coverage design. The coordinates were extracted from FCC licenses and are not field verified. The Contractor shall utilize the existing sites to the maximum extent as possible in order to meet the requirements. Where required, the Contractor shall select new remote RF Transmit/Receive sites to achieve the required coverage requirements identified in Division 13."

Q: These requirements contradict each other in terms of which sites should be used. Please confirm that the latter requirement is the correct one to follow. Receive only sites are not needed as much in the 700 MHz band so the existing receive only sites may not be needed going forward.

Response
The purpose of the first requirement is to assure that all UHF SMARTNET trunked equipment at any TX/RX or RX only site used in the design of the SEPTA 700 MHz be replaced with new 700 MHz P25 Phase II simulcast radio system infrastructure equipment. It does not conflict with the second requirement. Contractor's design is required to meet the coverage requirements in the specification.

44. Question
Page 16750-9 2.19.B BRFI21-5 "One NMS shall be installed at the Primary Control Center, the second shall be installed at the Backup Control center."

Q: Is the Primary Control Center at 1234 Market St and the Backup Control Center at 2nd & Wyoming?

Response
Yes. Clarification that the BCC is not at 2nd and Wyoming but the backup NMS is required at 2nd and Wyoming. The BCC is referred to as the ACC (Auxiliary Control Center) located at 5127 Griscom Street Philadelphia PA

45. Question
Page 13703-01, 1.2 B "Tower Top Pre-Amplifiers (TTA) shall not be utilized by the Contractor. All active electronics equipment shall be located in the Radio Equipment shelter/room/hut/house etc."

Q: Please consider allowing the use of TTAs for the 700 MHz solution. The use of TTAs allows better coverage from individual sites (which could reduce the overall number of sites) and are a standard part of 700 MHz antenna systems in public safety. In the UHF and VHF bands, TTAs are not commonly used due to the higher noise floor and interference potential as that noise and interference would also be amplified along with the actual signal, but in the 700 MHz band there is a lower noise floor and interference potential so TTAs can significantly improve the receive performance of a site, which reduces the need for auxiliary receive sites.

Response
Receive subsystem designs incorporating Tower Top Amplifiers will be considered provided the bidder:
1. Includes the tower top amplifiers in their warranty and assumes full responsibility for any and all tower work required for their maintenance and/or replacement through the warranty and maintenance periods,
2. Includes two complete Tower Top Amplifier replacement units with all mounting hardware in addition to the spare parts requirement of the specification.
3. Confirms the overall radio system availability requirements in the specification will be met.

46. **Question**  
SEPTA Technicians will be performing first-level maintenance during the maintenance period. What is their role during warranty? Will L3Harris be providing all labor during warranty?

**Response**  
SEPTA technicians will be present on-site but all labor during the warranty period is the responsibility of the successful bidder.

47. **Question**  
Does SEPTA require the same services during warranty as specified during the maintenance period?

**Response**  
Yes

48. **Question**  
Volume 2, 1.11.B.3, Warranty Period, states the warranty period for staging material shall commence when staging components are accepted and successfully operating in revenue service. What is defined as staging material/staging components?

**Response**  
All new system equipment.

**** End Addendum ****