ADDENDUM 4 Q&A

DATE: April 1, 2019

PROJECT: SON Sim Lab A/V

RFP NO: 744-R1906

OWNER: The University of Texas Health Science Center at Houston

TO: Prospective Proposers

This Addendum forms part of and modifies Proposal Documents dated, March 11, 2019, with amendments and additions noted below.

1. Is there a plan to capture any additional equipment or medical devices, besides the manikin monitor?
   We would like to capture any data that comes from the manikin as well as the simulation software (monitor) At this time we have no other equipment that we expect to try and capture.
2. S&T Areas:
   o What types of simulations (SP, High Fidelity, etc.), and/or types of simulated events will run in this area?
   We would like to capture any data that comes from the manikin as well as the simulation software (monitor) At this time we have no other equipment that we expect to try and capture.
   o How many of each type?
   At this time we are unsure of the number of sessions will be captured from these locations as this is being included for future growth of the program.
   o How many reordered simultaneously?
   We will need the ability to record up to 6 sessions simultaneously
3. Patient Flex & Home Health Areas:
   o What types of simulations (SP, High Fidelity, etc.), and/or types of simulated events will run in this area?
   The hospital area/patient flex areas are dedicated primarily to high fidelity simulations. The home health apartment will be a mix of high fidelity and SP with the focus being primarily SP experiences.
   o How many of each type?
   Patient flex - Each of the 6 rooms will need to be able to capture 5 events every 120 minutes up to 10 hours each day. Home health – Will need to capture 2 events every 60 minutes up to 10 hours each day.
   o How many reordered simultaneously?
   All 7 rooms will potentially need to be able to be recorded at the same time.
4. Exam Rooms:
   o What types of simulations (SP, High Fidelity, etc.), and/or types of simulated events will run in this area?
   Exam rooms are dedicated for SP use. There are currently no plans to run any other types of events in these spaces.
   o How many of each type?
   We will need to be able to capture 3 sessions every 60 minutes.
   o How many reordered simultaneously?
   We will need to be able to capture up to 14 SP sessions simultaneously.
5. ALL SIM/Exam Rooms:

- What is the maximum (TOTAL) number of simultaneous rooms that will be recorded at once?
  The total number of simultaneous rooms to be recorded is 27

6. Which control workstations and which PCs in all rooms will control which simulation/exam areas?
   Each control station should have the capability to control any space within the lab.

7. Please confirm – are all required network switches OFCI?
   Correct

8. Is structured cabling (network drops for devices in this bid) to be included as part of the AV bid? Or is structured cabling for AV devices provided by others?
   All network structured cabling is provided by others.
   - If only certain runs are provided by others, please specify which runs must be included in this bid.

9. Please confirm:
   - Server hardware is OFCI
     Vendor may provide pre-configured hardware such as an appliance or specialty configured hardware. Owner may provide some or all of the equipment if the vendor has that requirement or option.
   - Server virtualization (VM) environment is owner-furnished & owner-installed
     UT Health maintains a VMware ESX environment as our Hypervisor with different configurations for different application requirements. UTHealth will provide the total VMware environment, including server hardware, VMware licensing and O/S licensing for most common/supported versions.
   - OS (operating system) for the VM instance is contractor-furnished (UT Health does not provide OS with VM instance)?
     Yes – see answer above

10. Is it desired to include Active Directory integration with the existing School of Nursing and/or UT Health directory?
    UT Health has 1 enterprise active directory, UTHOUSTON.EDU that should be used for Authentication.

Skills and Tasks:

11. Are video projectors and projection screens OFOI or OFCI?
    All video projectors and screens have been removed from this scope. They will be installed outside of this contract.

12. Are any of the projector mounting devices by Chief Manufacturing required in this bid? Please specify which, if any.
    None required; projectors are removed from scope.

13. Please clarify request for DMT:
    - Two (2) HDMI inputs on a single TX-302, - OR - Two (2) distinct TX-302 units?
      Please see DataCom response **#4** in the clarifications letter dated March 29, 2019.

14. Requested PSW (Crestron DMPS3-4K-150C) does not include a 70V output for loudspeakers. Please specify a 70V amplifier or change request to a different DMPS3 model.
    Please see DataCom response **#1** in the clarifications letter dated March 29, 2019.

15. LA antenna appears to be wall-mount. Please confirm if requested model is ANT024, or if another model is requested please specify.
    Please see DataCom response **#2** in the clarifications letter dated March 29, 2019.

16. LA requested (PPA 457 PRO FM) is discontinued, and replaced with FM 457 PRO, with PPA R37N receivers and EAR022 earbuds. Please confirm this is acceptable.
    Please see DataCom response **#2** in the clarifications letter dated March 29, 2019.

17. LA system includes 4 receivers and earbuds. Please specify required number of additional receivers PER S&T ROOM.
    Please see DataCom response **#2** in the clarifications letter dated March 29, 2019.

18. Please confirm quantities and locations of UA864 antennas and UA844SWB antenna splitters.
   Please see DataCom response **#5** in the clarifications letter dated March 29, 2019.
19. FPD in the Skills & Tasks areas do not appear on any Schematic or Riser Diagram. Please specify connection points for FPD in S&T areas.
   Please see DataCom response **#3** in the clarifications letter dated March 29, 2019.

Debrief Rooms:

20. CAM – Roboshot 15 is not a valid product.   Please specify RoboShot 12 or RoboShot 30.
   Please see DataCom response **#6** in the clarifications letter dated March 29, 2019.
21. AVB Network – please clarify, is AVB-compatible network switch OFCI, or should this bid include a small AVB-capable switch just for these microphones?
   Please see DataCom response **#7** in the clarifications letter dated March 29, 2019.
22. Please confirm quantities and locations of UA864 antennas and UA844SWB antenna splitters.
   Please see DataCom response **#8** in the clarifications letter dated March 29, 2019.
23. The selected displays are quite expensive. Is it permissible to substitute a Pro-Grade commercial display, rated 16/7 operation, 300 cd/m2 brightness, 3-YEAR ONSITE warranty, and equal or greater display size - for a much lower price?
   Please see DataCom response **#9** in the clarifications letter dated March 29, 2019.
24. MEDIASITE – are RL700 recorders to be purchased standalone?
   Please see DataCom response **#10** in the clarifications letter dated March 29, 2019. In addition, the proposing vendor needs to provide information to UTHealth as to whether they are providing the server/VOD software and licenses or if they are proposing some or all of the server and licensing is to be provided by UTHealth. The proposal should include an on-premise solution.
   o Does the university intend to have these RL recorders report to an existing server somewhere?
   o Does the university require this bid to provide the Server/VOD software + licenses typically associated with Mediasite RL recorders (IF YES please specify on-premises or Cloud)?

Patient/Flex:

25. Room 3 plan drawing has what appears to be a wall-mount loudspeaker or similar device (not appearing in specifications on on drawing legend). Please clarify.
   Please see DataCom response **#11** in the clarifications letter dated March 29, 2019. Should be ceiling mounted.

Home Health:

26. Specifications request a CAM(FF), but ceiling plan does not show. Please clarify if a FF cam is requested in Home Health.
   Please see DataCom response **#12** in the clarifications letter dated March 29, 2019.
27. Plan's symbol FPD(LG) is not listed in the requested equipment Specifications (2.2). Please specify model of FPD for Home Health
   Please see DataCom response **#13** in the clarifications letter dated March 29, 2019.

Control Room:

28. Please confirm – are all required network switches OFCI?
   Confirmed, OFCI

29. Control Room Schematic Riser Diagram seems to indicate that FPD in Patient/Flex (2ea. x 6), 14 x in Psy/Exam, and 5 x in Control Room – a total of 33 FPD – will be connected to video outputs on five (5) SIM PC computers at control room workstations. Please confirm that this is accurate
Please see DataCom response **#14** in the clarifications letter dated March 29, 2019.

30. Schematics indicate 5 FPD in Control Room, but plans indicate 10 – please clarify quantity and if applicable, connection points of additional 5 FPD not currently shown on schematics.
10, two for each station.

31. FPD in the Skills & Tasks areas do not appear on any Schematic or Riser Diagram. Please specify connection points for FPD in S&T areas.
Please see DataCom responses **#3** & **#20** in the clarifications letter dated March 29, 2019.

32. Device API on Audio Network Riser Diagram shows as connected to a network switch. The specified device, AtteroTech unBT2A, is not a networkable device. Please clarify.
Please see DataCom response **#15** in the clarifications letter dated March 29, 2019.

33. Device API on Audio Network Riser Diagram shows a Line Out to a "Audio Player Input Cable" – where is this Audio Player, and is it a part required in this bid?
Please see DataCom response **#16** in the clarifications letter dated March 29, 2019.

34. Audio Network Riser Diagram shows output from Bluetooth wall plate receiver (x5) as only external input into intercom ("ListenTALK") system – is the Bluetooth Receiver the only desired input to the intercom system?
Please see DataCom response **#17** in the clarifications letter dated March 29, 2019.

35. Audio Network Riser Diagram does not show any output from the intercom system into any other systems. Is there no desired output from the intercom system to the rest of the system?
Please see DataCom response **#17 & #20** in the clarifications letter dated March 29, 2019.

36. Please clarify - Schematics indicate DMT DM TRANSMITTER but do not specify Type-1 or Type-2
Please see DataCom response **#4** in the clarifications letter dated March 29, 2019.

37. Addendum 3 includes request for QTY-5 "Desktop Equipment Cabinet" for room 470K, in addition to the QTY-2 "MRK Millwork Rack" requested earlier in bid. Please clarify – are these the same item, and what is the total quantity requested?
Please see DataCom response **#18** in the clarifications letter dated March 29, 2019.

Corridor:

38. There appear to be two (2) CAM(MON) – Vaddio Roboshot type - ceiling-mounted in corridors. Please confirm, and, if applicable, indicate connection points.
    o   Are these the cameras from Add-Alt #1 (Directors office)? If so, is this the correct install position for these cameras?
        Please see DataCom response **#22** in the clarifications letter dated March 29, 2019.

Equipment Rack:

39. Crestron DM-MD8x8-RPS is not large enough to support all required inputs/outputs – please specify a larger switcher.
Please see DataCom responses **#19 & #20** in the clarifications letter dated March 29, 2019.

Sim Capture:

40. 2.3.B.2 is asking for Subscription pricing for 1, 3 and 10 years – is this asking for SOFTWARE LICENSE subscription, or HARDWARE WARRANTY (and maintenance/service)?
Please see DataCom response **#21** in the clarifications letter dated March 29, 2019.

Director's Office:

41. Please confirm: Type-1 (CP) is a RMC3 or a CP3 (2.2.F.11 and 2.2.G.6 conflict)?
Please see DataCom response **#23** in the clarifications letter dated March 29, 2019.
42. Please clarify - Schematics indicate DMT DM TRANSMITTER but do not specify Type-1 or Type-2
Please see DataCom response **#24** in the clarifications letter dated March 29, 2019.
43. Please confirm: is the desire to have both WCP (Crestron TSW760BS) and TP (Wireless TP, Apple iPad)? Drawings have both, Specifications only has iPad. Randy to respond
   o Are either or both of these WCP/TP intended to be in the Add-Alt #1, and not in the base bid?
   Please see DataCom response **#25** in the clarifications letter dated March 29, 2019.

Learning Management System:

44. What LMS software is currently in use that is in need of a 1-year or multiple-year license renewal?
Not sure of the terminology for LMS. The school uses the term "learning management system" (LMS) for grades, professor/student resources, etc. which is Canvas. There is no desire at this time to connect the SIM platform to Canvas. A video management system (VMS) is not currently in place and is to be provided by this contract.

45. If no LMS is currently in use, what LMS software is being requested as part of this bid? Please specify exact brand/model.
Contractor to provide as part of their bid.

46. Section 5.3.a of the RFP document you have specifically disqualified CentOS as an approved operating system while approving a system running on Red Hat Enterprise Linux (RHEL). We would like more clarification on this decision since CentOS is a derived from RHEL and all update patches for RHEL are available to CentOS within 24-72 hours to be applied to the CentOS operating system. The biggest difference between the two operating systems is that RHEL requires yearly license fees be paid for support.
We do not allow for community supported opensource operating systems. We understand CentOS is a derivative of RHEL. We understand there are yearly licensing fees associated with RHEL, but support and SLA's are defined in our RHEL maintenance agreement which is not available with CentOS. Our IT security policies do not allow for the deployment of unsupported operating systems.
   a. We have a team of Linux engineers in-house that fully support the servers located at customer sites. We have found no benefit to the support offered by RHEL and find having our engineers providing all of our server support in house has lowered our open ticket wait times. With over 1,000 servers deployed at over 600 customer sites in the field we find that CentOS is a reliable enterprise class operating system and would ask that you reconsider this requirement or further explain why you are not willing to do so.
   See explanation above.

   b. Would it be acceptable if a simulation solution based on CentOS was provided if as part of the support contract included timely installation of OS security patches and system updates?
   No.

47. Section 5.3.c of the RFP document requires Veritas Netbackup compatibility.
   a. Would it be acceptable to provide the simulation server as a VMWare virtual machine, and utilize Netbackup on the host server to backup the simulation server virtual

machine image?

Without the knowledge of your proposed architecture, we do not backup VMware hosts, we backup individual VM's. Our VMware environment is a clustered environment, because of this, the actual VM's are not stored on the local host storage , but rather shared storage. This makes your proposal, as we understand it, ineffective.

48. Section 5.3.f of the RFP document requires simulation data to be stored on a different server than the web server.

    We are wondering if it is acceptable for the web server and mySQL database to reside on the same server if all video data is stored on separate machines. The mySQL database is backed up off-site on a nightly basis and can be restored rapidly in the rare event that the main server was to fail.

    We prefer the database and web server be on different physical boxes or VM's in a different VMware cluster. Your proposal may be acceptable depending on the exact architecture and access requirements in relationship to our data center infrastructure design and our IT Security policies. However, your suggestion of the database being backed up up off-site nightly places questions on the design proposal of the database and web server being on the same server.

49. Section 1.1.B.3.a requires Ceiling mounted Dante-network microphone and loudspeaker.
    a. Would it be acceptable to utilize microphones and/or loudspeakers that communicate over the network using an alternative, industry standard communication protocol?

       Yes; refer to Addendum 3; Section 27 4116 pg. 21; follow AES67 protocol.

50. Drawing AVS3.2, Detail 3 indicates that five (5) workstations in the Sim Control Room are to transmit video content to flat panel displays in six (6) patient/flex rooms and fourteen (14) psy/exam rooms.

    See DataCom clarification letter dated 3/28/19 response numbers 14, 19 and 20.

    a. Is this an accurate interpretation of the desired functional behavior of detail 3?
    b. If Crestron DM transmitter / receivers are to be used for this purpose, it seems that additional equipment is required to support this many rooms with so few SIM PCs.

       Please clarify how many video output ports each SIM PC will have in order to support video to these twenty (20) rooms.
       Response number 20
    c. Please clarify if each patient/flex and psy/exam room will have independent video feeds, or if some video feeds will be mirrored across multiple rooms (in which case equipment to duplicate the video feeds may be required).
       Independent feeds

Also see attached Clarification Letter from Datacom below…..

March 29, 2019

The following clarifications and revisions to PR01 are in response to the questions from AV integrators issued on 3/28/19:

<u>Skills and Tasks:</u>

1. Power Amplifier – Crestron AMP-150-70 single channel 50watt 70volt modular amplifier; Provide RDL RU-ADA4D audio distribution amplifier for routing signals to Listening Assist system and power amplifier.
   a. APPROVED SUBSTITUTION: Crestron DMPS3-4K-250C presentation switcher with integrated 50watt amplifier and aux audio outputs. Provide rack-mounted DM receiver for second HDMI input from room.
2. Listening Assist – Williams Sound FM457 PRO is approved substitute for discontinued specified product. Provide model ANT 024 dipole antenna with coaxial antenna cable at required length.
   a. Install the transmitters in the IDF room 130 and provide balanced audio runs to AV rack room.
   b. No additional receivers are required to meet ADA.
   c. APPROVED EQUAL: Listen Technologies LS-42-072 with coaxial antenna cable at required length.
3. FPD locations – these are vital sign monitors included in the simulation capture scope of work; not associated with classroom AV presentation.
4. DM Transmitters – provide two (2) Crestron DM-TX-4K-100-C-1G-B-T transmitters installed in poke-thru floor box in each room as shown on drawings.
5. Wireless Microphone System – Quantities and location.
   a. Install the receivers in the AV rack room as shown on drawings.
   b. Provide two (2) Shure UA834 in-line amplifiers per room system.
   c. Provide two (2) Shure UA864US wideband antennae per room spaced eight feet apart with RG-8u coaxial antenna cable.
   d. Delete the Shure UA844SWB antenna distribution system.

   <u>Debrief Rooms:</u>
6. Camera – Vaddio RoboSHOT 12 HD-SDI; power remotely from AV equipment rack.
   a. APPROVED EQUAL: Provide 1080p network cameras as part of video over IP routing solution.
7. AVB Network – provide small AVB-capable switch for just these ceiling conference microphones.
8. Wireless Microphone System – Confirm quantities and location.
   a. Install the receivers in the AV rack room as shown on drawings.
   b. Provide two (2) Shure UA864US wideband antennae per room spaced eight feet apart with RG-8x coaxial antenna cable.
   c. Delete the Shure UA844SWB antenna distribution system.
9. Flat Panel Display Specification – product substitution for pro-grade commercial display rated 16/7 operation, 350 cd/m2 brightness is allowed.
10. Record/Stream Device – MediaSite recorders are connected to UTHSC servers for on-premises archive storage and remote retrieval. The software license agreement will be purchased by the Owner.
    a. APPROVED EQUAL: media storage devices compatible with Panopto live streaming software.

Patient Flex Room 3:

11. Symbol S indicated on floor plan – disregard.

Home Health:

12. Eliminate all simulation capture devices indicated in Home Health Toilet 477A. There is not a fixed-focus camera in this room.

13. The Flat Panel Display in this room is for cable television only. Disregard specification listed in Addendum 3 equipment matrix. Provide a 55" diagonal pro-grade commercial display rated 16/7 operation, 350 cd/m2 brightness with optional ATSC tuner as required.

Control Room:

14. Schematic Riser Diagram – provide 32x32 matrix switcher with HDBaseT outputs to HDMI receivers at FPD locations. Eliminate the DM transmitters.
    a. APPROVED EQUAL: Provide a 1080p video over IP routing solution to video monitors at Exam rooms utilizing Dante/AES67 audio protocols.
        i. Encoders/decoders by Visionary Solutions, SVSI (AMX) or Crestron.

15. Device API on Audio Network Riser Diagram – provide AtteroTech model unD6IO-BT networked audio wallplate.

16. Device API on Audio Network Riser Diagram – the audio player input cable indicates the source line level input from an Owner provided device. The line level output indicates the source input into the intercom transceiver.

17. Intercom Communication System – discreet two-way communication between Control Room and simulation capture event participants. An audio output from the intercom system for distribution into the system is not required.

18. Desktop Equipment Cabinets – quantity confirmed as five (5) units; one per workstation. The MRK locations indicated on the floor plans are infrastructure junction boxes for the workstations, with power/data outlets adjacent.

Equipment Rack:

19. Provide Crestron DM-MD16x16-CPU3 (instead of Crestron DM-MD8x8-RPS) with input/output cards as required for video distribution at DeBrief rooms.
    a. APPROVED EQUAL: Provide 1080p video over IP routing solution – see above.

20. Provide Crestron DM-MD32x32-CPU3 with input/output cards as required for Control Room video distribution.
    a. APPROVED EQUAL: Provide 1080p video over IP routing solution – see above.

Simulation Capture Subscription:

21. Request is for software license renewal options.

Corridor:

22. Confirmed – the cameras are for monitoring after-hours hallway activity from the Director's office (Add-Alternate #1).

Director's Office:

23. Provide Crestron RMC3 control processor for source select to flat panel display through the WCP.

24. Provide Crestron DM-TX-201-C transmitter installed at office desk or Crestron DM-TX-4K-100-C-1G-B-T wall plate transmitter installed at junction box MRK.
    a. APPROVED EQUAL: Provide 1080p video over IP routing solution – see above.

25. Wireless Tablet – provided for simulation capture control to remotely add notes to simulations.

END