

**UNITED STATES DISTRICT COURT
EASTERN DISTRICT OF VIRGINIA**

FERNANDO GALINDO
CLERK OF COURT

HONORABLE MARK DAVIS
CHIEF JUDGE

COVER LETTER

Solicitation Number: **VAED 2022-001A**

January 10, 2022

The United States District Court for the Eastern District of Virginia is requesting proposals with pricing for the design, engineering, installation, and configuration of a complete, fully functional, digital courtroom video evidence presentation system for one (1) courtroom, Courtroom 801, located at the Albert V. Bryan United States Courthouse, 401 Courthouse Square, Alexandria, Virginia 22314. There are an additional four courtrooms at the same location. The Court may choose to fund the upgrade of one or more courtrooms this fiscal year, with the balance of the courtroom upgrades funded in subsequent years, pending available funds.

Open Market firm fixed pricing will be for this base year, fiscal year 2022, as well as for future fiscal years 2023 and 2024 pursuant to Clause 2-90B, Option for Increased Quantity - see Attachment A.

All contractors submitting a proposal for this task are required to develop and provide a technical proposal and a pricing proposal based on the requirements and specifications listed in the Statement of Work. The technical proposal shall consist of all the submittals required to be provided at the time proposals are due. Price proposals are required in accordance with the pricing schedule set forth in Attachment A and shall consist of the firm fixed prices offered for each individual item of equipment, labor, maintenance, travel and optional items subject to the availability of Court funds, if applicable.

Please include any recommended optional items that are required to be included in the overall evaluation, which may be exercised if funding is available. An Open Market firm fixed price award from this RFP will be made based on the lowest priced, technically acceptable offer. Use the attached quote sheet for an Open Market firm fixed price submittal.

If deemed necessary, a site survey will be scheduled at the discretion of the Court.

PROPOSAL DUE BY 5:00 PM, FEBRUARY 14, 2022.

Submit Proposals to: Deborah Wheeler, Contracting Officer (CO)
Albert V Bryan U.S. Courthouse
401 Courthouse Square
Alexandria, VA 22314
E-mail: deborah_wheeler@vaed.uscourts.gov
Phone: 703-299-2176 Fax: 703-299-2185

Direct Technical Questions To: Lance Bachman, Contracting Officer's Technical Representative (COTR)
Albert V Bryan U.S. Courthouse
401 Courthouse Square
Alexandria, VA 22314
E-mail: lance_bachman@vaed.uscourts.gov Phone: 703-299-2148

STATEMENT OF WORK

I. NEEDS ASSESSMENT

The United States District Court for the Eastern District of Virginia is requesting proposals with pricing for the design, engineering, installation, and configuration of a complete, fully functional, digital courtroom video evidence presentation system for one (1) courtroom, Courtroom 801, located at the Albert V. Bryan United States Courthouse, 401 Courthouse Square, Alexandria, Virginia 22314, which will meet the following requirements:

1. The evidence presentation system will be a presentation cart. There is no requirement to integrate the evidence presentation system with the existing courtroom audio system.
2. New AMX Netlinx digital control system with AMX MT-702 touch panel.
3. New Extron DTP digital video distribution system with an Extron Annotator 300 digital annotation system.
4. All existing CAT5e video evidence presentation system wiring must be tested. Any damaged and or nonfunctional CAT5e wiring must be removed and replaced. The contractor will remove all existing unused and/or damaged AV wiring at the direction of the court. The contractor will purchase, install, and terminate all the new required AV wiring. If CAT6 wiring is required for the new system, then the contractor will need to remove old CAT5e wiring and install new CAT6 wiring.

CR801 Existing CAT5e wiring at Evidence Cart location:



5. Existing floor boxes, penetrations, wire trays, and conduit must be used, and the contractor is responsible for all necessary additional floor and wall AV box plates, covers and connectors.
6. Existing audio XLR microphone jacks located in the floor boxes will be removed and replaced with XLR "Pig Tail" connectors. All replaced XLR jacks will be tested and must be completely functional with the existing audio system.
7. The contractor will use a certified AMX technician and programmer for the design, programming and installation of the new digital AV control and user interface system. The Evidence presentation system controls must include, **but not limited to**, the following:

- A.** AV Cart all video mute and Jury video mute.
 - B.** AV Cart video source switching between document camera, computer inputs at the back Defense and Plaintiff counsel tables.
 - C.** AV Cart video evidence volume control and mute.
 - D.** AV Cart annotation system reset, control and erase.
 - E.** System power on off button.
 - F.** Video source auto adjust.
- 10.** All control and user interface panel layouts must be approved by the Court prior to installation and programming. A copy of the control and user interface system source code along with AV system schematics and as built must be given to the Court prior to the Court accepting the final product.
 - 11.** The digital evidence presentation system must be able to accept and present high resolution video signals equal to and greater than 1024 X 768 and be backward compatible with VGA.
 - 12.** Provide digital HDMI and RGB VGA connections at each computer interface location: Defense and Plaintiff counsel tables.
 - 13.** Replace all existing AV evidence presentation system control, distribution, switching, annotation, amplification, and scaling equipment with new equipment to meet requirements for a fully digital system.
 - 14.** A new Mid Atlantic cart with the required AV evidence presentation system control, distribution, switching, annotation, amplification, scaling equipment, a low profile 24 inch wide screen LED/LCD touch screen monitor with annotation capability for video evidence, Wolfvision VZ-3neo digital document camera, a AMX MT-702 touch panel that will control video source switching and publishing for the counsel tables and cart; a high quality powered speaker with volume control for computer AV sources from the Defense and Plaintiff counsel tables.
 - 15.** Install and or replace all existing displays with new 24 inch wide screen LED/LCD monitors and touch screen LCD monitors, except where noted.
 - 16.** Extron and AMX equipment should be used for control; distribution; switching; scaling; twisted pair transmitting and receiving to maintain consistency with our other courtroom systems.
 - 17.** Install a mobile Cisco WebEx Room Kit video conference system with one year service contract with a 65 inch LED/LCD TV, 25 foot network patch cable and mobile cart to maintain consistency with our other courtroom and video conference systems.
 - 18.** All AV system equipment, connections, cables, and face plates located within the courtroom will have black finish. Where black finish is not available, Court authorization must be attained prior to purchase of equipment
 - 19.** The contractor will remove and dispose of all equipment deemed obsolete, damaged and/or unnecessary by the Court.

20. Contractor is responsible for providing a complete Schedule B line item list of pricing for all necessary design, engineering, equipment, shipping, handling, storage, installation, configuration, labor, programming, travel, warranties, and any additional options.
21. If deemed necessary, the court will have the authority to amend the Statement of Work at any time prior to award.
22. The contractor engineers, programmers and supervising integrators must have direct and specific experience with US District Court courtroom AV systems and submit at least three references of successfully completed US District Court courtroom AV system installations in the past three years. A name, phone number, and email of the technical point of contact at each of the three different US District Court courthouses where the courtroom AV system installations were successfully completed must be provided to the Court Technical POC.
23. The use of subcontractors for any of the required work within this SOW is not authorized.
24. Submitted proposal and quote must be good for 90 days starting from proposal submittal due date specified within this solicitation.
25. The contractor must meet the following installation schedule requirements:
 - A. Installation will commence and be completed during 2022 at the direction of the Court. Additional courtrooms will be scheduled for 2023 and 2024 if funding permits.
 - B. The contractor must submit a proposed installation date in 2022 for the Courtroom 801 evidence presentation system. The Court will determine the schedule for the installation and notify the contractor as to when installation can begin. Installation schedule will be determined by the Court's docket.
 - C. Once an installation start date is determined by the Court, installation, configuration, and testing will be completed within **10 business days** for each courtroom. Installation will commence during business hours from 8:30am - 5:00 PM each day at the discretion of the court.
 - D. The Court is not responsible for any storage costs for AV equipment purchased in advance by the contractor.

The contractor will purchase and install the following equipment for each courtroom:

1. **JUDGE** - a low profile 24 inch wide screen LED/LCD monitor for video evidence.
4. **DEPUTY** - a low profile 24 inch wide screen LED/LCD monitor for video evidence.
5. **COURT REPORTER** - a low profile 24 inch wide screen LED/LCD monitor for video evidence.
6. **LAW CLERK** - a low profile 24 inch wide screen LED/LCD monitor for video evidence.
7. **(2) FRONT COUNSEL TABLES** - a low profile 24 inch wide screen LED/LCD monitor for video evidence for each table.

8. **(2) BACK COUNSEL TABLES** - a low profile 24 inch wide screen LED/LCD monitor for video evidence and VGA and HDMI computer video and audio input cable connections for each table.
9. **EVIDENCE PRESENTATION CART** - One Middle Atlantic AV cart with a low profile 24 inch wide screen LED/LCD touch screen monitor with annotation capability for video evidence; a Wolfvision VZ-3neo digital document camera; VGA and HDMI computer video and audio input cable connections; a AMX MT-702 control panel that will control video source switching and publishing for the counsel tables and cart; a high quality powered speaker with volume control for computer AV sources from the Defense and Plaintiff counsel tables; rack mounted UPS.

Middle Atlantic AV cart that is required:



10. **WITNESS BOX** - a low profile 24 inch wide screen LED/LCD touch screen monitor with annotation capability for video evidence.

CR801 Witness box:



Updated witness box:



11. **JURY BOX** – (5) FIVE 24 inch wide screen LED/LCD monitors for video evidence mounted on the front row wall at the direction of the Court.

CR801 Jury Box:



Updated Jury Box:



12. **Extron Annotator** annotation system to maintain consistency with our other courtroom systems.
13. **Extron DTP** video distribution, scaling, converting, routing, and switching equipment to maintain consistency with our other courtroom systems.
14. **JURY/GALLERY** - a 65 inch LCD TV with mobile cart.
15. **Cisco WebEx Room Kit** video conference system with one year service contract mounted, connected, and configured with the Jury/Gallery 65 inch LCD monitor with mobile cart with 25 foot network patch cable.

II. SUMMARY

- A. The Contractor shall comply with all Contract Documents, including specifications, line itemized list of parts and costs, drawings, wiring study and project installation schedule.
- B. Statement of Work includes, but is not necessarily limited to, the following:
 1. The Contractor shall provide a complete solution that meets the Courts requirements as stated above in the **Needs Assessment** section.
 2. The Contractor shall test all configured equipment prior to installation to insure proper programming, operation, and compatibility. The work shall include everything necessary or incidental to complete the installation including power supplies, accessories, mounting devices, receptacle plates, wire, electrical boxes, racks, etc. The Government will provide conduit and AC power circuits with grounds. The Contractor shall furnish all necessary information to ensure a proper video conference system will be operational after installation. The Contractor shall notify and coordinate any work in the Court, including, drilling, cutting, or other work that may impact the existing Court and condition. Where an omission, discrepancy or conflict may occur in the Contract Documents, including specifications, line itemized list of parts and costs, drawings, conduit/wiring study and project installation schedule; the most stringent, higher quantity or design intent shall be implied. The Contractor shall restore finish hardware to original condition including painting, walls, millwork, ceilings, and attachments.
 3. The Contractor shall provide comprehensive training of system operation.
 4. The Contractor shall provide equipment that, where required, shall conform to the applicable requirements of the Underwriter's Laboratories, Inc., local codes, the National Electrical Code, and any other governing codes. Such items shall bear a label or mark indicating their conformance to the above requirements.
 5. The Contractor shall provide a one-year warranty on all repairs, equipment, and labor.
 6. The Contractor shall provide a courtroom control, audio and evidence presentation system configured and installed for operation simplicity and low maintenance, with user-friendly controls.
 7. The Contractor shall integrate all equipment with the Government's infrastructure and existing equipment.

8. The Contractor shall provide a price list of the required equipment, materials, and labor if outside the SOW prior to purchase.
9. Provide and install all required connectors, cables, and hardware for floor/wall box receptacles plates to match Government supplied floor/wall boxes. All exposed cables shall be covered in black wire loom. Coordinate conduit, pull strings, access, and dimension requirements with Government. Verify exact requirements in field and submit shop drawings for approval to Government. Verify and inspect all necessary conduits and outlets. Verify any wall, millwork or cabinet modifications that are required. Submit Shop drawings to Government and get written approval from Government prior to fabrication. Show location and type of all special receptacle boxes to be supplied and/or modified by the Contractor in submittals. Provide connection cables for user and Government provided equipment. Test all connections and provide certified report (signed by Project Engineer).
10. Provide and install all coordination, information, programming, engineering, equipment, wire, parts, and miscellaneous connectors etc., to provide a complete and operational system. All exposed wire shall be plenum rated, where required. Fasten and route wires for concealed appearance. Coordinate appearance, routing, and terminations with the Government.

III. SCHEDULING

- A. It shall be the responsibility of the Contractor to coordinate the installation of the system to be compatible with the Government, the work of Government's Representatives, and the overall construction completion schedule. The Contractor shall attend progress meetings and provide a conduit/wiring analysis at the time of submittals with all additional requirements.
- B. The Contractor shall assemble and test all equipment racks with associated equipment to verify proper operation before shipping to the courthouse. Test and shipping shall be coordinated with the Government.
- C. The Contractor shall provide prepared and certified operating personnel with adequate training on the completed system, including two training sessions.
- D. The Contractor shall provide prepared and certified technical personnel with adequate training on maintenance, trouble shooting, and support of users with the completed system, including at least two training sessions.

IV. DESIGN CONSIDERATIONS

- A. All equipment shall be professional grade and rated for continuous duty. Basic guidelines have been prepared with minimum performance requirements. These must be satisfied unless a variance (separate document) is submitted and approved by the Government.
- B. All equipment must be self-supporting. Provide all necessary support hardware.
- C. Operating and Maintenance (O & M) manuals: Provide two bound O & M manuals and two CD's to the Government. Each shall contain printed operating instructions for all system functions whose format has been compiled specifically for each system. Providing standard factory equipment operating instructions alone is not acceptable. O & M manuals shall contain "as built" schematic wiring diagrams of all systems, internal wiring diagrams of the central rack cabinet and control panels, parts lists, preventative maintenance notes, troubleshooting procedures, gain charts, impedance charts, plots of each equalizer setting measured at the

equalizer output, numerical values for all control settings, and copies of "System Performance Tests and Adjustments" report. All information must be accurate as per written acceptance. These O & M manuals must be delivered no later than ten (10) days before acceptance.

- D. Software, control codes, system configurations, settings and other software shall be provided on CD ROM to the Government. Providing the factory software is not sufficient. ALL settings, codes and programming for the system shall be provided. During Technical Training, provide instruction on use and set up of software.

V. PRODUCTS

MANUFACTURERS

- A. Equipment component models must have been commercially available for at least one (1) year prior to bid.
- B. All equipment and materials shall be new if replacement equipment is required.

CURRENT SYSTEM DESCRIPTION:

Courtroom 801

No existing evidence presentation system and video conference system.

Power at each courtroom location.

Conduit in the concrete floor with small floor boxes that have power, CAT5e and microphone wiring.

Existing microphone wire and CAT5e wire in conduit with power.

No raised floor.

No poke throughs.

VI. PROPOSED SUBSTITUTIONS

- A. Where specific equipment is described, it is not the intention to discriminate against the products of other manufacturers, but rather to establish a standard of quality. All proposed substitutions shall be submitted as alternates with complete data.
- B. Government requires manufacturer's original specification tests. The Government will evaluate and approve the substitutions.

VII. EXECUTION

HARDWARE INSTALLATION

- A. Wire all systems in accordance with Standard Broadcast Practices and the National Electrical Code, NFPA, SMPTE, NAB, UL, EIA, FCC, NTSC, Design, and Installation (SAMS) and any other authority having jurisdiction. When a conflict occurs, follow the most stringent requirements. Provide the government with information as required or requested.
- B. Build out or terminate all circuits containing passive components to provide matching impedances. Record values of all pads.
- C. Run all microphone level lines and line level circuits (up to +30 dbm) in separate conduits dedicated to these purposes. Use electrical ducts within racks.

- D. All lines in conduits must be insulated and shielded from each other and from the conduit the entire length and must not be spliced. Ground all line shields at the amplifier end of the respective circuits only. Use "wedge on" connectors or heat-shrink tubing to insulate the other end.
- E. Ground all grounds effectively at one earth connection. Water pipes do not suffice as grounds. Use earth ground or approved equal. Use rosin core solder or standard mechanical connections and terminal strips for all joints and terminations.
- F. The installation of all work must be in accordance with commonly accepted industry standards and practice. A qualified Engineer shall exercise engineering supervision over the entire installation and inspect the installation at least twice prior to Acceptance Testing. It is the responsibility of the Contractor to cooperate with other trades to achieve well-coordinated progress and satisfactory results. The Contractor must watch for conflicts with work of other contractors on the job and execute moderate moves or changes as are necessary to accommodate other equipment or preserve symmetry and pleasing appearance.
- G. All cable and wire ends shall be clearly tagged with destination and function markings in accordance with the wiring diagram.
- H. Rack shall have power on one side and low voltage on the other side and shall be harnessed for clean appearance.

VIII. FIELD QUALITY CONTROL AFTER REPAIRS AND/OR REPLACEMENT (ACCEPTANCE TESTING)

- A. System Performance, Tests, and Adjustments:
 - 1. Report:
 - a. Upon completion of the tests and necessary adjustment, submit two (2) copies of a written report presenting test results, including numerical values for all measurements, for review by the Government prior to demonstration and "Acceptance Testing."
 - b. With the above report, submit written certification that the installation conforms to specifications, is complete, and is ready for inspection and testing by the Government.
 - 2. Video:

Picture shall be evaluated for brightness, convergence, sharpness, and color. System shall conform to NTSC, FCC, TASL specifications, and RS-170A. Provide waveform generator and vector scope tests. All video signals shall be 1-volt peak-to-peak.
 - 3. Monitor Hum and Noise Level:

Test overall hum and noise to be at least 50 dB below rated power output with amplifier controls set for optimum signal-to-noise, using input from cassette, VCR, and gooseneck microphones.
 - 4. Electric Distortion:
 - a. Load power amplifiers with resistors matching nominal impedance of output terminals used in system in place of actual loudspeaker loads.
 - b. Adjust gain controls as for hum and noise level test.
 - c. Apply 250, 500, 1,000, 2,000, and 4,000 Hz sine wave signal from oscillator having less than .01% T.H.D. to each microphone and line level input at level required to produce full amplifier output.

- d. Distortion must measure less than 0.5%.
5. Parasitic Oscillation and RF Pickup:
- a. Set up system for each specified mode of operation.
 - b. Use an oscilloscope with a 5MHz bandwidth and speaker monitoring.
 - c. Check to ensure the system is free of spurious oscillation and RF pickup in the absence of any input signal and with the system driven momentarily to full output at 160Hz.
 - d. Repeat this test for each mode of operation of the lighting dimmers (incandescent, neon, and fluorescent).
6. Buzzes, Rattles and Distortions:
- a. Apply high quality music from audiocassette and adjust volume for peak output.
 - b. In both cases, listen carefully for buzzes, rattles, and objectionable distortion.
 - c. Correct all causes of such defects. If cause is outside system, promptly notify the Government indicating cause and suggested corrective procedures.
7. Equalization:
- a. Equalize the sound systems in order to provide uniform seat-to-seat response, raise the threshold of feedback, suppress ring modes, and insure natural, pleasing sound in equal and adequate amplitude with maximum degree of intelligibility, and provide performance conforming to the requirements specified under "Acceptance Testing." Equalization shall be adjusted for flat response from 125 Hz to 2k Hz and -3 dB per octave above 2k Hz.
8. Level Balance:
- a. Adjust all items of similar equipment for identical measured voltage gain.
 - b. Unless otherwise specified, use tamper-proof security covers on all controls affecting overall system level balance and signal-to-noise ratio, such as power amplifier input level control, and input-output level controls for equalizers, mixers, amplifiers, etc.
 - c. Some controls may require re-adjustment as the result of "Acceptance Testing".
9. Controls:
- a. Meet with the Government and Government's Representatives and make system control changes as directed.
10. Final Acceptance:
- a. Upon approval of the Contractor's test report and at a time set by the Government, demonstrate to the Government that the final system adjustments and tests meet the performance requirements. Provide all labor, materials, tools, and measurement equipment necessary for these tests and adjustments.
 - b. Contractor's Representatives performing these tests must be thoroughly familiar with all details of the system. The test team must include the Field Supervisor and the Engineer in charge during the installation work.
 - c. Contractor is responsible for all costs incurred to satisfy criteria requirements.
 - d. Acceptance Tests may include speech intelligibility surveys and subjective evaluations by observers viewing and listening at various positions under various operating conditions, using speech, music, and live or recorded effects material. Acceptance tests shall include viewing of monitor images for sharpness, contrast, brightness, and color.
 - e. Measurement of frequency response, distortion, noise, wave form, color vector, or other characteristics may be performed (or a demonstration test requested) by the Government on any item or group of items deemed necessary to determine conformity with criteria.

IX. WARRANTIES REGARDING SERVICE PLAN, EQUIPMENT REPAIRS AND REPLACEMENTS

- A. Installation of each system in its entirety shall be installed per manufacturer's specifications and warranted by the Contractor for a period of one (1) year from date of written acceptance to meet all performance requirements outlined herein. Warranties may not be pro-rated.
- B. **During the warranty period, no charges shall be made for any labor; new, repaired, replacement equipment; shipping and handling; or transportation necessary to maintain performance and functions.**
- C. **During the warranty period, the Contractor shall respond with a remedy to a trouble call within twenty-four (24) hours after receipt of such a call, and shall provide a 24-hour service phone number, and Contractor shall provide a prepared and certified technician onsite at the direction of the Court.**
- D. Equivalent replacement equipment shall be temporarily provided when immediate on-site repairs cannot be made.
- E. At least two routine inspection and adjustment visits will be scheduled for the first year. Submit reports to the Government.

X. SPARE PARTS

- A. Replacement fuses, lamps, and connectors shall be provided in sufficient quantities that should last one (1) year.

XI. GOVERNMENT COORDINATION

1. Coordinate excluded equipment.
2. Review and Approve touch panel control page layouts.
3. Review and Approve submittals.
4. Review and approve variance Submittals.
5. Coordinate integration into millwork, conduit, and power.
6. Coordinate mount location.
7. Review and approve all substitutions.
8. Review report of test results.
9. Acceptance testing.

XII. GOVERNMENT PROVIDED ITEMS

1. Conduit, AC power circuits with grounds, floor boxes, pull strings and power.
2. Computers, existing equipment, digital and analog recorders.
3. Schedule for installation, training, and acceptance.

4. Phone connection and configuration.

XIII. TRAINING

- A. Technical - Technical Training of the Government personnel when necessary.

XIV. SOFTWARE

- A. The Government expects that the source code for this installation will be delivered to the Government at the completion of the installation. The installer shall provide a labeled CD-ROM inserted into a plastic computer media sleeve containing software setup and configuration files for all configurable equipment, including control system processors, software controlled screens, computer workstation controllers, software-configured signal switchers, mixers, DSP units, or other signal processors. Provide all software settings/configuration files, custom source-code, compiled programs, and all custom display screens on CD-ROM, organized by system/location in subdirectories. Provide all installation programs and drivers necessary to transfer the software settings or programs to each respective piece of equipment. Complete documentation for the software shall be provided as well as the CD-ROM, which shall be furnished in a binder at project closeout along with a printout of the contents of the CD-ROM.

XV. PRICING SCHEDULE

In addition to a detailed proposal with line item list of required equipment, the contractor shall submit an Open Market firm fixed pricing based on the pricing schedule set forth below.

This pricing will be for this base year, fiscal year 2022, as well as for future fiscal years 2023 and 2024 pursuant to Clause 2-90B, Option for Increased Quantity - see Attachment A.

The judiciary may require the delivery of the numbered line items, identified as an option item, in the quantity and at the price stated in the line item. The contracting officer may exercise the option by written notice to the contractor no later than September 30, 2022. Delivery of added items shall continue at the same rate that like items are called for under the contract unless the parties otherwise agree.

Pricing is inclusive of all labor, equipment, tools, materials, parts, transportation, travel, supervision, coordination, etc. required for a complete operational installation as described in the Statement of Work.

PRICING FOR COURTROOM 801:

Equipment \$

Labor \$

Travel (If Applicable) \$

Optional Items \$

Miscellaneous Items \$

Equipment Warranty & Service Plan (Year One) \$

TOTAL INSTALLATION \$

Equipment Warranty & Service Plan (Option Year Two) \$

ATTACHMENT A

END OF SOLICITATION