

# STATEMENT OF WORK AND REQUEST FOR PROPOSAL

## **Background:**

The United States Bankruptcy Court for the Eastern District of New York is soliciting proposals to install video equipment in Courtroom 3577 in our Brooklyn, NY Courthouse. The technical representative on this project is Tom Earlie, 631-712-6212 and the contracting officer is Karen Bonello-Ellis, 347-394-1723.

## **Scope:**

The court is seeking to replace the current video system in this video conferencing enabled courtroom. All equipment must be current models with full new installation warranties. The proposal must include the equipment found in the attached equipment list (or equivalent)..

This equipment will replace the existing analog video system currently installed. The new video system will have the following functionality:

1. The courtroom video system will include three (3) high definition (HD) Pan-Tilt-Zoom (PTZ) cameras.
  - a. The cameras will be controllable from the control system. Controls will include PTZ movement, as well as storing/recalling presets.
  - b. The cameras will have a 30x zoom to adequately capture views in the courtroom.
  - c. The cameras will be able to extend their signals up to 500’.
  - d. The cameras will include a remote camera control unit to manage camera controls and video.
2. The courtroom video system will also be able to send any system source to the far end of the video conferencing system.
  - a. The source can be sent over a separate input from the camera(s) to allow dual streams during a video call, where the camera input can be seen as well as the presentation source.
  - b. HDCP sources (content protected) will not be supported by the codec.
3. The courtroom video system will be able to send a quad-view composite signal to the far end.
  - a. This quad view will include the three courtroom cameras, as well as a presentation source.
  - b. The video system will feed a video window processor to create this image.
  - c. The far end of the video call will be able to see all three cameras and the video source at the same time.
4. The courtroom video system will require an HD video conferencing codec.
  - a. The codec will support resolutions of 1080P and 720P.
  - b. The codec will be able to accept both a camera and presentation input, and transmit both at the same time to the far end.
  - c. The codec will support digital video inputs and outputs.
  - d. The codec will support line level audio inputs and outputs.
  - e. The video system will send two feeds to the codec (camera and presentation), and receive two feeds from the codec (primary and secondary outputs).
  - f. The network connectivity for the codec will be provided by the courts.
5. The lectern will support two digital video sources to send signals back to the main video matrix switcher, as well as a multi-touch interactive display.
  - a. The first input will allow for laptop connectivity. It will accept VGA+Audio as well as HDMI laptop sources.
  - b. The second input will allow for document camera (HDMI) connectivity (a document camera has not been provided in this proposal).
  - c. A 22” monitor will reside on the lectern, allowing counsel to view system sources.
6. A 22” monitor will reside in the witness stand, allowing the witness to view system sources.

7. The video upgrade will include a 16x16 digital video matrix switcher, which will be populated as follows:
  - a. The main video matrix switcher will have the following inputs:
    - i. Camera 1 (HDMI)
    - ii. Camera 2 (HDMI)
    - iii. Camera 3 (HDMI)
    - iv. Lectern Position 1 (Digital Video)
    - v. Lectern Position 2 (Digital Video)
    - vi. Defense PC Input (Digital Video)
    - vii. Prosecutor PC Input (Digital Video)
    - viii. Quad View Processor Output (HDMI)
    - ix. Codec Primary Output (HDMI)
    - x. Codec Secondary Output (HDMI)
  - b. The main video matrix switcher will have the following outputs:
    - i. Feed to the Video Conferencing codec, Camera Input (HDMI)
    - ii. Feed to the Video Conferencing codec, Presentation Input (HDMI)
    - iii. Quad View Feed, Window 1 (HDMI)
    - iv. Quad View Feed, Window 2 (HDMI)
    - v. Quad View Feed, Window 3 (HDMI)
    - vi. Quad View Feed, Window 4 (HDMI)
    - vii. Judge's Monitor
    - viii. DA feed to Public Displays-1 (Projector, Lectern, Witness, Jury)
    - ix. DA feed to Counsel Monitors (Defense, Prosecutor Monitors)
    - x. DA feed to Private Displays (Courtroom Reporter, Clerk)
    - xi. Courtroom Deputy Monitor
8. The upgrade will include all new 22" monitors for the Judge, Reporter, Clerk, Counsel (2x), Jury (4x) and Deputy.
9. The upgrade will interface with the existing public displays (projector).
10. The system displays will be fed via digital video DAs over shielded category cable.

The new equipment will reside in the equipment closet with the audio system. The audio system was recently upgraded, and does not require any changes. However, the video system will need to integrate with the audio system in terms of program audio and conferencing audio.

1. The echo cancellation for the system will take place in the existing audio system.
2. Audio calls must be able to be added to video calls, and vice versa.
3. Conversations must have no echo heard on the far end, and have good duplex performance (both sides able to hear each other when talking at the same time, with no lost syllables) while the system is heard at 70 dB-SPL, a-weighted in the room and with standard talker levels (60 dB-SPL @ 1m).

The project includes all required cable dressing to make the installation neat and manageable. The installer will follow industry best practices for AV installations as per InfoComm and AQAV standards.

The project includes pulling all required cable to and from the courtroom. Contracting out to third party vendors/technicians is only permitted for cable installations with a licensed and insured cable company.

Current functionality will be reviewed with the bidders. The control system will need to be updated to account for the new equipment. System operation should not change much from the existing touch panels since most of the functions are the same, but with current equipment. However, the control system will be updated.

1. The functionality of the system will remain largely the same as the existing system.
2. A new control processor will be provided.
3. Three new touch panels will be provided.
  - a. They will reside at the lectern, judge's station, and clerk's station.
    - i. The judge and clerk will have control over all aspects of the system.
    - ii. The lectern will have limited source selection controls.
    - iii. This will follow the existing control system deployment.

- b. The touch panel layouts will be submitted for review and approval before being implemented.

EDID settings in the digital video switcher will be set according to courtroom preferences, to include AT LEAST the following resolutions:

1. 1280x720 @ 60Hz, 2Ch Audio (Preferred)
2. 1920x1080 @ 60 Hz, 2Ch Audio
3. 1024x768 @ 60 Hz, 2Ch Audio

Although the audio system will not be changed, it still must be tested with the new equipment to confirm that its current functionality still operates as expected by the Court.

The entire system (updated and existing components) must be commissioned according to the AV9000 Quality Management Standard for the AV industry, and a successfully complete checklist turned over with the equipment documents.

The project will also include criteria-based training to certify courtroom operators on the use and troubleshooting of the new system, and review system functionality. A Preventive Maintenance visit, approximately six months after the installation, is required to ensure the system is performing and functioning as proposed.

All system drawings will require updating, and will be provided to the Court at the project's completion. Final un-compiled/unprotected source code that was modified must be provided to the Court on USB flash drive.

The system configuration and hardware will be warranted for 1 year from project completion, against any and all defects in equipment, labor and installation practices.

### **Tasks:**

All parties are invited to submit a proposal including a detailed list of equipment with model numbers and the price of each unit along with labor costs. The proposal must also include company history with three business references. Also include education certifications for technicians who will install and configure the equipment.

Anyone wishing to view the courtroom may do so by August 31, 2016. Please schedule an appointment with Tom Earlie at 631-712-6212. Proposals are due by September 2, 2016. The contract should be awarded on or before September 6, 2016. Entire project should be completed by October 28, 2016, unless the Court extends this date. Installation must be completed between the hours of 8:00AM and 4:30PM, Monday through Friday, excluding federal holidays. Although this is currently a spare courtroom, flexibility working around our Court schedule may be required at times. Proposals should be sent by e-mail to [Karen.Bonello-Ellis@nyeb.uscourts.gov](mailto:Karen.Bonello-Ellis@nyeb.uscourts.gov) and [Thomas.Earlie@nyeb.uscourts.gov](mailto:Thomas.Earlie@nyeb.uscourts.gov).

### **Place of Performance:**

This project will take place at The Conrad B. Duberstein Courthouse, 271 Cadman Plaza East, Brooklyn, NY 11201. The installation will be performed in Courtroom 3577. Access to loading dock and freight elevator must be pre-scheduled.

Dated: June 15, 2016

Manuf	Model	Description	Qty
<b>Display System</b>			
OFE		Projector	1
NEC	EA224WMI-BK	22" HDMI 1080P Monitor	12
<b>Video System</b>			
Crestron	DVPHD-4	Quad Input Digital Window Processor, w/ 2 DVI-I and 2 HDMI inputs	1
Cisco	CTS-SX80-K9	Telepresence HD Video Conferencing codec	1
Cisco		Codec Maintenance	1
Vaddio	999-9917-000	RoboSHOT 30 QCCU System	3
Crestron	DM-TX-4K-302-C	4K DM 8G+ Transmitter 302 (PC, Doc Cam @ Lectern)	1
Crestron	DM-TX-201-C	DM 8G+ Transmitter (Def and Pros PC)	2
Crestron	DM-MD16x16	DM Matrix Switcher	1
Crestron	DMC-4K-C	4K DM 8G+ Input card	4
Crestron	DMC-4K-HD	4K HDMI Input card	6
Crestron	DMC-HDO	2Ch HDMI Output card w/ analog audio	6
Crestron	DMC-4K-CO-HD	2Ch DM 8G+ Output card	1
Crestron	DM-RMC-100-C	DM 8G+ Receiver (judge, deputy monitors)	2
Extron	60-1437-01	DTP HD DA4 4K 230, HDMI to Four Output DTP DA, 230'	2
Extron	60-1271-13	DTP HDMI 4K 230 Rx, DTP Rx, 230'	15
Extron	60-1438-01	DTP HD DA8 4K 230, HDMI to Eight Output DTP DA, 230'	2

Manuf	Model	Description	Qty
<b>Display System</b>			
OFE		Projector	1
NEC	EA224WMI-BK	22" HDMI 1080P Monitor	12
<b>Video System</b>			
Crestron	DVPHD-4	Quad Input Digital Window Processor, w/ 2 DVI-I and 2 HDMI inputs	1
Cisco	CTS-SX80-K9	Telepresence HD Video Conferencing codec	1
Cisco		Codec Maintenance	1
Vaddio	999-9917-000	RoboSHOT 30 QCCU System	3
Crestron	DM-TX-4K-302-C	4K DM 8G+ Transmitter 302 (PC, Doc Cam @ Lectern)	1
Crestron	DM-TX-201-C	DM 8G+ Transmitter (Def and Pros PC)	2
Crestron	DM-MD16x16	DM Matrix Switcher	1
Crestron	DMC-4K-C	4K DM 8G+ Input card	4
Crestron	DMC-4K-HD	4K HDMI Input card	6
Crestron	DMC-HDO	2Ch HDMI Output card w/ analog audio	6
Crestron	DMC-4K-CO-HD	2Ch DM 8G+ Output card	1
Crestron	DM-RMC-100-C	DM 8G+ Receiver (judge, deputy monitors)	2
Extron	60-1437-01	DTP HD DA4 4K 230, HDMI to Four Output DTP DA, 230'	2
Extron	60-1271-13	DTP HDMI 4K 230 Rx, DTP Rx, 230'	15
Extron	60-1438-01	DTP HD DA8 4K 230, HDMI to Eight Output DTP DA, 230'	2
<b>Audio System</b>			
Existing			
<b>Control System</b>			
Crestron	Pro3	Control Processor	1
Crestron	CEN-SW-POE-5	5-Port PoE Switch	1
Crestron	TSW-752-B-DMPS3_PAK	7" Touch screen package w/ TSW-752-B-S, TSW-750-TTK-B-S Table top kit	3
<b>Rack &amp; Power</b>			
SurgeX	SX1115RT	Power conditioner and distribution unit	1

<b>Miscellaneous</b>			
	Lot	Misc cables connector hardware	1
<b>Labor for Installation</b>			<b>Qty</b>
		Engineering and Programming	
		Rack fabrication and staging	
		Installation and commissioning	
		Training and Preventive Maintenance	