#### GOVERNMENT OF THE DISTRICT OF COLUMBIA

### Office of the Attorney General



### Statement of Work

### For an

## Audio-Visual and Teleconferencing System

The Office of the Attorney General for the District of Columbia is seeking a Vendor to submit a proposal to provide and install an audiovisual system for the 6<sup>th</sup> Floor Main Conference Room located at 441 4<sup>th</sup> St NW, Washington DC. This Scope of Work is comprehensive and inclusive. System capabilities not specifically stated are excluded in this Scope of Work.

### Glossary:

**GFE-Government Furnished Equipment** 

LCD-Liquid Crystal Display

**HD-High Definition** 

CLIENT-Office of the Attorney General for the District of Columbia

ATC-Audio Tele-Conferencing

# Section 1. System Capabilities and Functionality

### 1 Overview

Office of the Attorney General for the District of Columbia is requesting a proposal to provide and install an audiovisual presentation system for the 10<sup>th</sup> Floor Main Conference Room, in which, a vendor shall provide and install an audiovisual system with the following features and capabilities:

### 1.1 Main Conference Room

The Main Conference Room will feature a large screen high definition monitor capable of displaying computer and video sources along with a sophisticated ATC and audio system.

## **1.1.1 Display**

One Sharp 70" LCD monitor will be mounted on the right wall as you enter the conference rooms utilizing a tilting flat panel mount. This monitor shall feature full

HD 1920 x 1080p resolution with a low profile bezel and anti-image retention technology.

### 1.1.2 Sources

- **1.1.2.1** One dedicated government-furnished (GFE) computer located in the equipment cabinet. OAG will be responsible for the proper OS and software packages needed to perform the functions of the GFE computer. A wireless keyboard/mouse will be provided by Vendor, for use with the dedicated GFE computer. OAG is responsible for data and power connections for the GFE computer.
- **1.1.2.2** Two guest laptop connections, a connection shall be located at each end of the conference table. A 6 ft. VGA with audio cable shall be provided for use with the guest laptops.
- **1.1.2.3** OAG shall furnish one HD cable tuner located in the equipment cabinet.
- **1.1.2.4** All sources shall be routed through a video scaling switcher located in the equipment rack. This will allow the appropriate source to be displayed on the LCD monitor.

### **1.1.3** Audio

- **1.1.3.1** All computer and video sources shall include audio playback through four ceiling mounted loudspeakers. The ATC calls will be heard through these same speakers.
- 1.1.3.2 All audio signals are routed through a digital audio processor that provides the feedback suppression, echo and room noise cancellation and matrix routing to enable the appropriate signal distribution and audio control needed for this room. ATC calls will be clear and articulate with natural two-way (full duplex) participation. Dialing and other ATC operations are done from the AV control touch screen. The audio processor has unused outputs for future system expansion.
- **1.1.3.3** In order to allow the highest quality ATC calls while providing fast and simple operation without exposed cabling, The selected vendor shall design and install a custom ceiling microphones that provide excellent coverage and intelligibility with a sleek, modern style.

### 1.1.4 Control

**1.1.4.1** OAG wishes to have a single unified AV control system utilizing a wireless, preferably color, approximately 6.4" touch screen that includes a docking/charging station. This type of system shall provide the reliability of a "wired" panel, as the touch screen is charged and active whenever it is in the docking station along with the flexibility of a wireless panel. The touch screen is programmed to provide a logical, easy to use AV interface for the non-technical user.

The control functions shall include:

- System on/off with user-selectable auto shut-down time
- Presentation Presets simple one-button selection of up to three of the most common

- Display –power, picture mute, auto PC adjust, input selection
- Visual source computer source, cable HD tuner
- ATC operation dialing controls, microphone mute, speaker mute, volume
- Cable HD Tuner –Tuner control including 6 favorite channel direct tune buttons
- Program Volume up / down / mute
- Microphone Volume up / down / mute

## 1.1.5 Equipment Rack

**1.1.5.1** All of the audiovisual equipment shall be stored in a two bay custom credenza with a laminate finish, caster base, locking front access doors, locking removable back panel, 16RU rack rails in each bay and will measure 38"-H x 43"-W x 18"-D. The color of the credenza will be determined with the client at a later date.

# Section 2. Services or Action Items Provided by OAG

### 2 OAG shall:

- **2.1** Provide room modifications as noted in this scope of work. The OAG's General Contractor (GC) is aware and familiar with the room modifications required. Any requirements noted "by others" indicates that this requirement is to be undertaken by the OAG's GC or other subcontractors thereof.
- 2.2 Please note that the construction schedule impacts the audiovisual installation schedule. While some tasks, such as cable pre-wire and some equipment rough-ins, can take place during construction, the majority of the audiovisual install requires a dust-free, painted and air conditioned site in order for Vendor to complete the equipment installation and integration phase of this Scope of Work. The audiovisual installation will start after most of the construction work is complete in order to protect sensitive and costly optics and electronics that must be kept clean and free of dust during installation. Installation of audiovisual systems may be delayed by unforeseen construction delays
- **2.3** Provide a ceiling free of HVAC ductwork, insulation, and other impediments in areas required for the installation of ceiling mounted equipment.
- **2.4** Cut outs in the floor for the audiovisual floor boxes supplied by the GC prior to any audiovisual pre-wire activities.
- 2.5 Provide and install two Wire mold AV3 floor poke-thru devices for audiovisual connectivity from the conference table location the equipment rack.
- **2.6** Provide all conduit, J-boxes, cable trays, cable, plates and panels, enclosures, floor boxes, power circuits, power cable and power connections.
- **2.7** Provide all LAN, analog telephone lines drops at the equipment rack location.
- 2.8 Provide existing client-furnished equipment in good working order for integration into the

audiovisual system. This equipment needs to be provided prior to the beginning of the system installation.

- **2.8.1** One dedicated CFE computer
- **2.8.2** One HD cable box
- **2.9** Provide and coordinate the installation of all dedicated 120 VAC receptacles as shown in this scope of work. A dedicated 120 VAC receptacle is required in the following rooms and locations.
- **2.9.1** Provide and install one 120VAC receptacle at the LCD monitor location (60"-AFF).
- **2.10** Provide wall backing sufficient to support the weight of all wall-mounted displays or other wall-mounted devices with a 4x safety factor.
- **2.11** Provide any painting or patching of walls, ceiling tile finishing work, and other related work around the audiovisual equipment and displays.
- 2.12 Provide uninterrupted access to all rooms necessary for installation of the audiovisual system during normal business hours, with necessary escorts, for the duration of the installation. This includes any documentation required by the Client's Security Department to allow Vendor and Vendor subcontractors to bring in the tools, test equipment and laptops necessary to install and complete the installation.
- **2.13** Provide directions for motor vehicle access, parking of work vehicles and clear and easy access to the loading docks.
- **2.14** Provide a clear delivery path through the building including access to service elevators and corridors.
- **2.15** Provide Contacts on-site authorized to sign for receipts of equipment and assign secure storage for equipment and tools.
- **2.16** Ensure that no other activity is scheduled for the rooms involved in the audiovisual installation. This is especially critical during final testing and set up.
- **2.17** Provide a dedicated computer, such as will be used with the audiovisual system, for testing and calibration with the display system. The computer should be capable of at least a 1024 x 768 output resolution.
- **2.18** Client shall sign the completion and final completion forms.

# Section 3. Services or Action Items Provided by Vendor, Inc.

### **3 Vendor shall:**

- **3.1** Develop system build drawings.
- 3.2 Assign a dedicated project manager to coordinate site scheduling with the Client's point of

contact or general contractor to assure logical installation flow progression.

- **3.3** Plan installation crew scheduling.
- **3.4** Order and stage audiovisual equipment.
  - 3.4.1 One Sharp 70" commercial LCD monitor will be mounted on the south wall utilizing a tilting mount. The Sharp monitor features full HD 1920x1080p resolution with a low profile bezel, anti-image retention technology and a 3-year manufacturer's warranty. A professional monitor was selected to provide superior performance and reliability, as well as minimal screen glare from ambient light.
  - **3.4.2** Wood backing and a 120 VAC quad receptacle will be provided by others at 60" AFF. Vendor will provide and install a flat panel surge protector behind the display.
  - 3.4.3 All video sources will be routed through a Crestron (or equivalent) DM switcher. This "hybrid" matrix switcher will feature the ability to accept a combination of analog/digital inputs and digital output and will be located in the equipment rack enclosure. The Agency is specifying this product to ensure it matches or exceed the existing technology installed and is operational in the Public Safety Division's ATC Conference Center. Also, this technology has proven to be a solution that can reliably distribute all analog and uncompressed HD digital signals, and properly manage embedded data such as High-bandwidth Digital Content Protection (HDCP), Extended Display Identification Data (EDID) and Consumer Electronics Control (CEC).
  - 3.4.4 All audio signals must be routed through the latest generation Biamp NEXIA TC digital audio processor (or equivalent), which provides the feedback suppression, echo and room noise cancellation and matrix routing to enable the appropriate signal distribution and audio control needed for this room. ATC calls will be clear and articulate with natural two-way (full duplex) participation. Audio calls require an analog POTS line for proper operation at the equipment credenza location. Dialing and other ATC operations are done from the AV control touchscreen.
  - 3.4.5 In order to allow the highest quality Audio-Teleconferencing (ATC) calls while providing fast and simple operation without exposed cabling, Agency requires a vendor custom ceiling microphone system. The custom ceiling microphone system will be available in the room for ATC calls only.
  - 3.4.6 All sources will be heard through (8) Atlas Sound ceiling recessed loudspeakers powered by a Crown 70V mono audio amplifier (or equivalent) located in the equipment rack.
  - 3.4.7 Vendor will provide and install a new unified AV control system that will feature a wireless 5.7" touch panel. The user interface will be laid out to provide a logical, easy to use AV interface for the non-technical user. This touchscreen features bi-directional communications to support accurate AV system status to the control system and will be located on a tabletop charging dock station at the equipment rack, when not in use.
  - **3.4.**8 Control functions will be programmed as follows:

- System on / off with user-selectable auto shut-down time
- Display power, picture mute, auto PC adjust, input selection
- Microphone Mute/Un-mute ceiling microphone
- Visual sources –guest laptops, dedicated PC, HD Cable TV tuner,
- ATC operation dialing controls, microphone mute, speaker mute, volume, flash
- HD Cable TV tuner Channel up, channel down, keypad, menu functions, guide, info, exit
- Program Volume up / down / mute
- Voice Audio up / down / mute
- X-Panel
- 3.5 Install rack mounted equipment into audiovisual racks, wire and test.
- **3.6** Pre-wire site as shown on audiovisual system drawings.
- **3.7** Develop the control system program as necessary.
- **3.8** Deliver and set up wired and tested audiovisual rack as well as the remainder of the audiovisual equipment.
- **3.9** Perform the remainder of the audiovisual systems interconnects as shown on the audiovisual system drawings.
- **3.10** Install audiovisual equipment as described in Section 1 of this document.
- **3.11** Adjust visual displays as needed.
- **3.12** Test and debug the control system program.
- **3.13** Test, equalize, and set audio system gain structure and other audio processors as needed.
- **3.14** Set up and test video teleconferencing.
- **3.15** Make note of any changes to audiovisual system drawings for creation of As Built system drawings.
- **3.16** Obtain signed Substantial Completion Acceptance Form from Owner or Owner's Agent.
- **3.17** Obtain signed Final Completion Acceptance Form from Owner or Owner's Agent.
- **3.18** Provide a one-year warranty on the audiovisual equipment and labor from the date of Substantial Completion.
- **3.18.1** Client furnished equipment is not covered under this warranty.
- **3.18.2** Covers all parts and labor needed for equipment breakdown, excluding lamps, filters and image retained optical surfaces and assemblies.