Statement of Work
512th Airlift Wing Video Teleconference Upgrades For the
Wing VTC Conference Room
Dover AFB, DE

1. Purpose

The purpose of this Statement of Work (SOW) is to upgrade/migrate existing audiovisual (AV) and video teleconferencing (VTC) equipment within the 512th Airlift Wing, building 202 Wing Conference Room (CR). The existing **UNCLASSIFIED** AV/VTC equipment can no longer support emerging technologies required to meet the needs of the 512th Airlift Wing leadership. Failure to upgrade this system will affect the Wing's leadership ability to conduct mission critical briefings, workshops, and Video Teleconferencing sessions. Due to the nature of the room and high usage, these upgrades are essential. Once completed, this upgrade will provide AFRC with conference room capabilities that meet or exceed industry standards such as digital widescreen format, high definition video and audio services.

2. Technical Requirements

The contractor shall provide a turn-key solution for the upgrade/migration of existing AV and VTC equipment in the Wing conference room. The solution must include AV system engineering, touch panel control, programming, equipment, parts, and labor. All engineering, touch panel design and system programming will remain consistent to retain a unified Audio/Video/VTC environment. The solution must support IP based VTC services compatible with the AFRC VTC Enterprise Network (Cisco Platform) and Department of Defense (DoD), Global Video Services (GVS) Network.

2.1. Any equipment requiring connection, either classified or unclassified, to the DoD global information grid (GIG) will be in compliant with Certification and Accreditation of Air Force Enclaves hosting Real Time Services guidance.

- DISA-provided approved product guide memorandum (APL Memo) associated with each certified device. (https://aplits.disa.mil/processAPList.action)
- Implementation guidelines listed in the DISA Security Technical Implementation Guidance (STIG). (https://iase.disa.mil/stigs/Pages/index.aspx)
- Vendor-provided implementation guides DoD Unified Capabilities Requirements - (UCR 20133)
- Any VoIP products used with this system shall be on the DISA UC APL and be certified to interoperate with the base GFE Call Manager (Cisco CUCM).

2.2. Contractor shall provide a technical solution outlining their approach to engineering, installation, and initial maintenance of the professional quality, multiuse facility that is

capable of VTC, collaboration, and interactive learning presentation systems that meet or exceed the requirements defined in the documentation provided. Additionally, contractor shall provide customer with complete drawings in DWG or DXF compatible format. Drawings must include, at a minimum, proposed equipment, audio and video wiring diagrams, equipment placement drawings and control wiring diagrams. Drawings will be detailed and comprehensive. Contractor is required to provide ***FULL ENGINEERING PLANS AND PROPOSED DRAWINGS*** at time of bid. Revised drawings will then be provided at project completion; reflecting any changes or modifications made during installation. All modifications/deviations from initial plans or drawings are subject to approval by customer and are to be discussed with customer prior to implementation.

2.3. Contractor will design, install, and program a video matrix that supports input from digital sources that are located in the Wing CR. Display processor must support active window resizing, monitoring, aspect ratio conversion, overlays, and transitions. ***System must maintain the ability to route any input to any output simultaneously in any configuration that the customer defines.*** Inputs and outputs must support resolutions up to but not limited to 1080p. System must provide any and all required A/D and D/A conversion. Display layout and system configuration must be customizable by the end user to ensure maximum flexibility and future mission growth and expansion. The scope of each requirement are as follows:

3. **Wing Conference Room (WCR):** Location Bldg 202 room XXX. The room contains a conference room table with seating for eight on each side and one at the head of the table. The VTC design is for unclassified VTC operation using a single codec configuration. The equipment rack resides in the back room within the WCR.

3.1.1. Video Source Devices
- 3.1.1.1. HDMI connections at the rack for GFE Non-Secure computers.

3.1.2. Output Display Devices
- 3.1.2.1. 100” Video projector
- 3.1.2.2. New 22” display on articulating arms mounted to the podium
- 3.1.2.3. Removal of 90” display

3.1.3. Video Teleconferencing (VTC) Codec for Non-Secure Capabilities.
- 3.1.3.1. VTC Codec (Non-Secure Internet Protocol Router (NIPR) network) 3.1.4.
- 3.1.4.1. Digital Media Switcher located in the AV rack to handle routing.
- 3.1.4.2. HDMI Inputs and outputs from VTC codec and GFE computers
- 3.1.4.3. HDMI connected to display.

3.1.5. Camera
- 3.1.5.1. High definition PTZ camera mounted on Front Wall of room.

3.1.6. Sound System

3.1.6.1. Digital Sound Processor (DSP) with VoIP integration and capable of up to acoustic echo cancelling, with analog inputs and outputs.

3.1.6.2. Digital array beam tracking ceiling microphones with LED mute indicator. A master control on a touchscreen controller will mute/unmute all simultaneously.

3.1.6.3. Drop down ceiling microphones

3.1.6.4.

3.1.7. Control System

3.1.7.1. A master control processor mounted in AV rack that will handle all the control signals.

3.1.7.2. 9" Wired touchscreen controller with tabletop charging dock that will allow end user to select any source connected to the matrix chassis and route it to the displays or dial a phone or video call.

4. Video Teleconference (VTC)

Codec must be a current make/model product and on the JITC Approved Products List (APL). Codec must be sustainable for a minimum of five years from installation completion date. Codec must be interoperable with AETC's Cisco Bridge/Expressway technology and support H.460.18 and H.246.19 firewall traversal. Codec must support H.323, IPv4, IPv6 and Session Initiation Protocol (SIP) transport capabilities with network interfaces of 10/100/1000Mbit. Video standards must include H.261, H.263, H.263+, H.264 and H.265 as a minimum. Codec must support native widescreen format up to 1920 x 1080@60 Hz (1080p60) and H.239 dual stream capabilities. Audio standards must include but, not limited to, G.711, G.722, G.722.1, G.728, G.729AB, and MPEG4 AAC-LD mono and stereo. Embedded encryption must support Advanced Encryption Standard AES-128 and AES-256. All above listed items are minimum requirements. All Video Teleconferencing requirements, for NIPR connectivity, must be configured in accordance with (IAW) VTC Services Policy STIG Version 1, Release 8. Codecs must be sustainable IAW the Department of Defense Information Technology Contracting Organization Joint **Enterprise Level Agreement**

5. Equipment Rack

Current GFE equipment racks can be utilized for this upgrade. Equipment rack must also include an Uninterrupted Power Supply (UPS) large enough to support the power load requirement.

Ground

ing must have internal grounding bus IAW Mil Std 188.129. All equipment racks must be built at contractors' location and bench tested prior to delivery on-site.

6. Wires/Cables

All old wires/cables must be removed by contractor and replaced with new wires/cables. Contractor is responsible for disposing all old wires/cables. Contractor is responsible for ensuring all existing conduits are of sufficient diameter to meet cabling requirements. All cable snakes must be protected using braided split wrap.

7. Special Asset Tagging

The contractor shall provide special asset tags IAW MIL STD-130, DODI 8320.04, Item

Unique Identification (IUID) Standards for Tangible Personal Property and DFARS 252.211-7703, Item Identification and Valuation. The current list of accepted unique item identifier types is maintained at http://www.acq.osd.mil/dpap/pdi/uid/uii_types.html. All DoD recognized unique identification equivalents are listed at http://www.acq.osd.mil/dpap/pdi/uid/iuid_equivalents.html.

8. Energy Star Mandate

The contractor shall ensure the product meets Energy Star guidelines.

9. IPV6 Mandate

The contractor shall ensure the product meets IPV6 capabilities per UCR 2013 and certified by the DoD UC approved products list.

10. Unified Capabilities (UCR) 2013 Mandate

The Contractor shall provide UC approved products. The UC APL is a consolidated list of products that have completed interoperability and information assurance certification and is managed by Defense Information Systems Agency (DISA).

11. TEMPEST Program Mandates

The contractor shall provide TEMPEST products certified by the NSA TEMPEST approved products list.

12. Technical Contractual Requirements

12.1. Technical Refresh

In order to ensure new design enhancements and technological updates or advances, the contractor shall offer, under this DO, hardware and software components available to the contractor's commercial customers. Furthermore, the contractor shall make available any commercially available updates to the hardware and software provided under this DO. If such updates are available to other customers without charge, then they shall also be made available to the Government without additional charge. The contractor will ship these updates to existing customers who have acquired the hardware/software being updated under this DO. Vendor commercial product offerings shall include “state of the art” technology, i.e., the most current proven level of development available in each product category.

12.2. Trade Agreement Act (TAA)

All proposed products must be compliant with the Trade Agreements Act of 1979 (TAA) and related clauses in Section I of this contract. In accordance with DFARS 252.225-7021, the Trade Agreements Certificate at DFARS 252.225-7020 shall be provided for each end item defined and specified in a solicitation that exceeds the TAA threshold subject to the waivers and exceptions provided in FAR 25.4, and DFARS 225.4 offered in response to any RFQ issued under this contract. Please note that Federal Acquisition Regulation (FAR) paragraph 25.103(e) includes an exemption from the Buy American Act (BAA) for acquisition of information technology that is commercial items.

12.3. Authorized Resellers

The contractor may be an authorized reseller of new and refurbished/remanufactured equipment for OEMs proposed under this DO. The contractor may also procure directly from the OEM or utilize other legitimate distribution channels to provide the required products in accordance with the OEM's policies on reselling. Any contractor's channel relationships with their OEM partners (gold, silver, etc.) will be represented in the best pricing offered. If the contractor is not an OEM reseller, the contractor shall clearly identify this on the submitted proposal and list the OEM resell partner's registered relationship with the OEM. DOs may restrict the use of authorized resellers, specific OEMs, or identify required OEMs. The contractor shall ensure all products are genuine and eligible for any OEM warranties, maintenance agreements and licensing as offered. Genuine products are those products the OEM, by their policy, considers not "secondary", destroyed, stolen or scrapped.

12.4. Remanufactured/Refurbished Products

Any product offering that is remanufactured or refurbished shall be clearly identified as such by the contractor on the submitted proposal. Remanufactured products shall have the OEM or factory certification, if available, for that product. Remanufactured and refurbished products shall be certified according to the standards set forth in the policy of the OEM.

12.5. Items on Backorder

In their response to a Request for Quote (RFQ), the contractor shall provide notification, if applicable, that a particular item is on backorder, the expected lead-time to fulfill the order, etc. It shall be implicit that a response to an RFQ with no items identified on backorder is a declaration that the items are available at the time of quote submission.

12.6. Warranty

The contractor shall provide any OEM pass through warranty and standard commercial warranties applicable to the products being purchased at no cost. This shall apply to new, refurbished and remanufactured equipment.

The Contractor shall provide all technical, support maintenance, logistical and other services required to maintain or repair installed AV/VTC equipment. Equipment, materials and labor will be provided under manufacturer warranties or provided by the contractor for a period of one year from time of system installation certification/acceptance. Technical support shall include Help Desk support, receiving/installing mandated equipment/software upgrades (IAW JTIC Approval) and emergency equipment repair or replacement services.

The Contractor shall provide a toll-free number, or email, to a Help Desk, Mon-Fri, 0700-1630 hrs., for equipment outage, problem identification and resolution. The Contractor shall respond to AETC/A3/6- IT, through the Help Desk, within one (1) hour after receiving a trouble call via telephone or email. The contractor must respond to system deficiency or degradation issues and determine if technical support is required to correct the discrepancy. The Contractor will provide the necessary equipment/materials prior to arrival.

If equipment issues cannot be resolved via the Help Desk within two (2) business hours, the issue will require on-site technical support, by a certified technician, no later than the next business day. If the criterion identifies an equipment failure requiring replacement, the

Help Desk ticket shall remain open until the new equipment is installed, tested, and approved by the Site Facilitator. Additionally, if installed/replaced equipment requires training, the training shall be provided by contractor.

The contractor shall provide three option year maintenance/warranty to be executed annually.

13. Hardware and Associated Software and Peripherals

All hardware delivered under this DO shall include associated software, documentation and associated peripherals required for operations (such as controllers, connectors, cables, drivers, adapters, etc.) as provided by the OEM. This is true only if the applicable OEM provides such items with the product itself.

14. Software

For all software that is outside of hardware and purchased independently, the contractor shall provide the software license registered to the customer's organization.

15. Training

The prime contractor shall provide a one-day training session for up to five personnel. Training must cover a system overview and operations of the touch panel control system. During this session, a control system programmer must be on site to make programing adjustments, as necessary.

16. Specification Documentation

The contractor shall provide block diagrams and all associated documents required for each facility. The contractor shall divide the documentation into separate binders for each facility. Each binder must include, as a minimum, as built drawings (block diagram), Control System source code, equipment manuals and a warranty page with instructions for placing services calls.

17. Records Management

The contractor shall manage all data created for Government use or legally controlled by the Government, in support of the functional activity or required by AF publications, IAW with the AF Records Management procedures in Air Force Instructions (AFI) 33-332, Air Force Manual (AFMAN) 33-363 and Air Force Instructions (AFI) 33-364 (or their subsequent replacements).

18. Timeframes

The contractor shall adhere to the following Product Delivery Capability requirements when providing products under this DO. The contractor shall deliver the quantities of NetCentric products to meet ordinary as well as fluctuating (war-time, Terrorist Tempo, Ops Tempo) government requirements in accordance with prescribed delivery schedules stipulated in individual DOs. Delivery of products will be to CONUS, OCONUS, and remote locations as identified below. For AOR's and/or remote sites that do not permit commercial deliveries,

the vendor's delivery capabilities must be in accordance with AFI 24- 203, Preparation and Movement of Air Force Cargo, 13 April 2007. Additional delivery terms or schedules, such as ship-in-place, expedited shipping or shipping to APO/FPO addresses, shall be negotiated between the Contractor and the Ordering Contracting Officer (OCO).

Definitions: CONUS: The 48 contiguous states, Alaska, Hawaii, and the District of Columbia. OCONUS: Germany, Italy, Japan, Korea, Belgium, Turkey, Puerto Rico, United Kingdom, and the Netherlands.
Remote OCONUS: those locations that are not listed under CONUS or Named

OCONUS. The following figure sets forth the maximum performance

parameters for deliveries:

Timeframe	CONUS	OCONUS	Remote OCONUS
Routine	NLT 30 calendar days	NLT 45 calendar days	NLT 45 calendar days
Critical	NLT 3 calendar days	NLT 5 calendar days	NLT 10 calendar days
Emergency/War Tempo	Within 24 hours	Within 48 hours	Within 72 hours

19. DO Order Shipping Date
This DO requires the following delivery timeframe

Deliver Order	Timeframe
Equipment Delivery	NLT 45 day from time of award
Installation Start Date	NLT 60 days from time of award
Installation Completion Date	NLT 90 days from time of award

20. Delivery Delays
Contractor is required to meet the timeframes as stated in section 25.1 unless Department of Commerce approval and/or review activities prevent the contractor from meeting these timeframes. In the event that the contractor determines they are unable to achieve the stated timeframes, the contractor shall notify the Contracting Officer within two (2) business days of such determination, or immediately upon such determination if operating under the Emergency/War Tempo timelines.

21. Shipping Information
All products shall be shipped to the contractor's location. Contractor is responsible for delivery all equipment, to the address below, upon the start of installation start date.

Inspection/Acceptance: The following Government officials are responsible for receiving the

products and performing inspection:

ATTACHMENTS:
1. Wing Conference Room Topology layout