

Air Force Nuclear College (AFIT/OL-A)
Centrally Managed Alarmed Carrier PDS Scope of Work
Building 20724, Kirtland Air Force Base, New Mexico
6 February 2023

PART 1
CENTRALLY MANAGED ALARMED PDS SOLUTION

1. **Scope of Work.** The Contractor shall furnish all labor, transportation, materials, equipment, special tools, expertise, supervision, and services required to performing all work to install a centrally managed alarmed Protected Distribution System (PDS) with the following requirements in Building 20724, Air Force Nuclear College (AFIT/OL-A), located on Kirtland Air Force Base (AFB), New Mexico (NM).

1.1. **Minimum Specifications.** The requirements contained herein are the minimum required specifications and features to be accepted under the resulting contract.

1.2. **Period of Performance Installation.** The period of performance for this project, proposed for 1 March 2023 to 30 June 2023, shall be accomplished upon contract award.

1.3. **Gold Warranty Services.** The Contractor will provide, via the existing Kirtland AFB Gold Support Contract with DAFIA, the following warranty services for the first 12 months, starting from the first day of full operational capability of the installed equipment and fiber, as determined by the Government:

- Priority TAC support
- Online support
- Four (4) web-based training classes
- IA documentation support

Contractor will provide around-the-clock (24/7/365) technical support to ensure receipt of support requests and assignment of ticket number to each request. For support requests submitted by the Government between Monday and Friday, Contractor will provide callbacks within 24 hours and, for support requests submitted by the Government on weekends and Federal holidays, Contractor will provide callbacks within 72 hours.

The Contractor's one-year written warranty covers any deficiencies and failures resulting from poor workmanship and/or materiel defects. The Contractor shall correct any deficiencies and damages caused by the Installation Contractor at the installer's own expense. All work shall be inspected and accepted collectively by the 377 ABW Cybersecurity Office (377 MSG/SCXS) and AFIT/OL-A points of contact: [REDACTED]

2. General Information.

2.1. **Place of Performance.** Work is to be performed inside the Air Force Nuclear College, Building 20724, located at [REDACTED] Kirtland AFB, NM [REDACTED].

2.2. **Type of Contract.** Reserved.

2.3. **Hours of Operation.** The Contractor is responsible for conducting business between the hours of 0700-1600 Monday through Friday, except Federal holidays or when the Government facility is unavailable due to local, state, or national emergencies, administrative closings, or similar Government-directed facility closings. The Contractor must at all times maintain an adequate workforce for the uninterrupted performance of all tasks detailed in this Statement of Work when the Government facility is not closed for the above reasons. When hiring personnel, the Contractor shall keep in mind that the stability and continuity of the workforce are essential.

2.4. **Base Access.** All commercial trucks must enter through the Contractor's gate located south of the intersection of Gibson Blvd SE and Carlisle Blvd SE. In accordance with Kirtland AFB vehicle processing requirements, the Contractor must adhere to base entry procedures mandated by Kirtland AFB security forces. The Contractor (and their Suppliers) will coordinate with AFIT/OL-A POC, [REDACTED] and with Base Security to secure permission to access Kirtland AFB. Contractor's Gate hours of operation are 0600-1800. Once at the gate, the driver must be able to show:

- Current Vehicle Registration
- Current Proof of Insurance
- Valid and current Driver's License (for the driver)
- Valid and current Driver's License or other State Identification (for any passengers)
- Bill of Lading, which includes the Air Force installation name, anticipated delivery date, and specific destination information

2.5. **Recognized Holidays.** The following holidays are recognized as Federal holidays; Government offices will not be open:

New Year's Day (Jan 2 – observed)	Labor Day
Martin Luther King Jr. Day	Columbus Day
President's Day	Veterans' Day (Nov 10 – observed)
Memorial Day	Thanksgiving Day
Juneteenth	Christmas Day
Independence Day	

In addition, AFIT/OL-A is closed on the following Air Force Family Days:

Friday, January 13	Friday, September 1
Friday, February 17	Friday, November 24
Friday, May 26	Friday, December 22
Monday, July 3	Friday, December 29

2.6. **Post Award Conference.** To be determined.

2.7. **Key Personnel.** The following are considered key personnel by the Government:

377 MSG/PKB, Ms. Rachel Copeland, Contracting Officer
377 MSG/PKB, Ms. Chrisaundra Henderson, Contracting Specialist

[REDACTED]
[REDACTED]
[REDACTED]

The Contractor shall provide a Contract Manager who shall be responsible for the performance of the work.

3. **Overview of Scope of Work.** Contractor will implement an Interceptor Alarmed Carrier PDS to secure fiber optic distribution cables throughout Building 20724. Contractor will install one (1) 4-port multimode Interceptor to secure two (2) fiber optic distribution cables leading to the two (2) conference rooms (Little Boy and Fat Man) in Building 20724. Contractor will provide and install an Intrusion Prevention System (IPS) container within Office 6 to house the fiber optic patch panel, Interceptor, StopLight, TACLANE, and network switch. Contractor will use interlocking armored fiber optic cable between the IPS container and the PDS drop locations.

Contractor will utilize two (2) available strands of dark multimode (MM) fiber for each alarmed interlocking armored fiber optic cable. Contractor will install the Layer 1 fiber infrastructure. Moreover, the Contractor will perform the following:

- Racking and installation of the Interceptor devices (1RU) within a secure telecommunications room or safe
- Install an IPS container
- Install the interlocking armored fiber optic cable from the IPS container to the drop locations
- Assign an IP address, provided by the Government, to each Interceptor device
- Perform an auto-configuration mode to begin the process of the system learning Building 20724's ambient environment
- Enroll the Interceptor device into CyberSecure Infrastructure Monitoring System (IMS)
- Perform loop back splices or fiber patching in order to create alarmed zones
- Patch the devices into the switch (network) on which CyberSecure resides
- Install and patch StopLight

Contractor installation will comply with Air Force Systems Security Instruction (AFSSI) 7702 and AFSSI 7703 requirements.

4. **Cybersecure IMS Requirements.** The Contractor will ensure that the Interceptor CyberSecure units report back to the centrally managed software platform, CyberSecure IMS. Contractor will integrate all alarmed zones into CyberSecure IMS. Contractor will provide system installation and commissioning services, including:

- Installation of CyberSecure IMS on each Department of the Air Force Inspection Agency (DAFIA)-provided server
- Detailed visual drawings and pictures of each alarm zone (customizable)
- Creation of an active directory of personnel to be notified for each alarm zone
- Development of standard operating procedures (SOP) for alarm response for each alarm zone
- End-to-end system commissioning and System Acceptance Testing (SAT)
- Operational level training for Government-designated end users

5. **StopLight Requirements.** Contractor will:

- Provide one (1) 8-port MM StopLight
- Ensure the StopLight device automates the required periodic testing and creates information assurance (IA) audit trails that are sent to the appropriate Government personnel

- Ensure the StopLight device enables response time for after-hour alarms to increase from 15 minutes to 24 hours, if data shut-off is utilized

6. **Software Solution Requirements.** The Contractor-provided PDS software solution must satisfy the following requirements:

- Must support a user-configurable optical warning threshold for false alarm mitigation
- Must support fiber forensics optical disturbance severity analysis
- Must support user-configurable Standard Operating Procedures for all alarmed zones
- Must be highly scalable and capable of centrally managing all secure facilities under a single dashboard interface
- Must integrate into any existing Network Monitoring and Ticketing System
- Must support data shut-off for all facilities not occupied around the clock (24/7/365)
- Must support automated periodic testing of the Alarmed Carrier PDS system without manual intervention
- Must support Active Directory integration
- Must have AFIA/AFNWC past performance as a Centrally Managed Alarmed Carrier PDS system
- Must have minimum operating system and software: Windows Server 2008 R2 & SQL Server 2008

7. **Cabling Solution Requirements.** The PDS hardware solution must utilize Interlocking Armored Fiber and PDS Box Installation.

- Verify all existing PDS infrastructure and pathways for workstation outlets
- Use existing PDS cabling, if any, for the Alarmed PDS Solution
- Install new sleeving material to accommodate all cabling leaving the secure room
- Install J-hooks to complete all pathways for workstation outlets
- Pull cabling for workstation outlets to be installed
 - Dress in all cabling tightly into J-hooks
 - Ensure all cabling has no slack or is not loosely hanging along the entire pathway
- Install PDS approved workstation outlet boxes at Government-required locations
 - Drop cables through the wall to enter the backside of each box
 - Install push on box connectors to be secured to each box
 - Leave ample amount of slack for connectors and splicing to be done inside boxes
- Install an IPS container junction box with lockable door within the secure room
 - Junction box will accommodate all interlocking fiber cables prior to leading into the box housing the equipment
 - Flex tube will be installed and lead to the box so that the fiber can land within the fiber enclosure/patch panel
- All penetrations leading into the secure room must be sealed in accordance with local building standards
 - There will be modifications to the secure room walls for cabling
 - Once installation is complete, the Government is responsible to recertify the room, if required
 - Key parties may include [REDACTED], Air Force Nuclear Weapons Center Tempest Manager [REDACTED]; [REDACTED], 377 Air Base Wing Information Protection Office

██████████ and ██████████, 377 Air Base Wing Cybersecurity Office ██████████
Contractors cannot be responsible for recertification.

8. Splicing and Connector Requirements.

- Splicing will take place at each User Drop Box location to establish a loop back to the head end
 - The loop back splice will be dressed in behind the face plate and attached to the back wall of each box
- LC/OM3 splice on connectors must be used at each end of the fiber
- Each outlet will have a 2-port faceplate, 1 port for secured data and 1 port to be used as a spare
- A 4U fiber enclosure will be installed in the cabinet within the secure room to house all the data and alarmed fibers
- All patching for the alarmed fiber will be in place

9. Installation and Commissioning of Equipment Requirements. Racking and installation of the Alarmed PDS Hardware (1RU) is within the safe to be installed by the Contractor in Office 6.

10. Racking/Installation of Data Shut off and Periodic testing hardware Requirements.

- Assign IP addresses to devices
- Patch all zones into the devices to be monitored
- Ensure all loopbacks are in place and receiving good power readings
- Perform an auto-configuration mode to begin the learning of the facility's ambient environment
- Install conductor wire to an existing IDS panel for alarm notification, if required

11. Implementation of Central Management Software Requirements.

- Enroll the Alarmed PDS Devices into the CMS
- Configure sensitivity levels and warning thresholds on each alarm zone

PART 2

DEFINITIONS AND ACRONYMS

1. Definitions.

1.1. **Contractor.** A supplier or vendor awarded a contract to provide specific supplies or service to the Government. The term used in this contract refers to the prime.

1.2. **Contracting Officer (CO).** A person with authority to enter into, administer, and or terminate contracts, and make related determinations and findings on behalf of the Government. Note: The only individual who can legally bind the Government.

1.3. **Deliverable.** Anything that can be physically delivered and / or installed per this Scope of Work, and associated attachments.

1.4. **Quality Assurance (QA).** Reserved.

1.5. **Quality Control (QC).** Reserved.

1.6. **SubContractor.** Reserved.

1.7. **Work Day.** The number of hours per day that the Contractor provides services in accordance with the contract.

1.8. **Work Week.** Monday through Friday, unless specified otherwise.

2. **Acronyms.** These acronyms may or may not apply to this Scope of Work.

AFB - Air Force Base

AFSSI - Air Force Systems Security Instruction

CO - Contracting Officer

DISS - Defense Information Security System

DoD - Department of Defense

IA - Information Assurance

IMS - Infrastructure Monitoring System

IPS - Intrusion Prevention System

PDS - Protected Distribution System

POC - Point of Contact

PRS - Performance Requirements Summary

PART 3
GOVERNMENT FURNISHED PROPERTY, EQUIPMENT, AND SERVICES

1. **Services.** Not applicable.
2. **Facilities.** The Government will provide the necessary workspace for the Contractor to stage materials on site and/or within the facility. The Government will make bathroom facilities available to the Contractor. The Government will have snacks and drinks available for purchase to the Contractor in the Building 20724 Break Room at posted costs.
3. **Utilities.** The Government will provide power requirements or back-up power sources and water. The Contractor shall instruct employees in utilities conservation practices. The Contractor is responsible for operating under conditions that preclude the waste of utilities, which include turning off water faucets or valves after use.
4. **Equipment.** Not applicable.
5. **Materials.** The Government will provide network connections to the Contractor. The Government will provide access to the Contractor with a Windows Server (2008 R2) and a SQL Server (2008) owned by DAFIA via agreement between DAFIA and AFIT/OL-A.
6. **Computer Network Communications.** The Government will provide an Internet Protocol (IP) address for each Interceptor device.

PART 4
CONTRACTOR FURNISHED ITEMS AND SERVICES

1. **General.** The Contractor shall furnish all supplies, equipment, facilities, and services required to perform work under this contract.
2. **Secret Facility Clearance.** All Contractors working inside Building 20724 must have a Secret level security clearance. Security clearances must be provided with quote. AFIT/OL-A will utilize Defense Information Security System (DISS) to manage all matters pertaining to eligibility and access, security management, and visit authorizations.
3. **Materials.** The Contractor shall furnish materials, supplies, and equipment necessary to satisfy the requirements specified in this Statement of Work.
4. **Equipment.** The Contractor shall provide equipment necessary to satisfy the requirements specified in this Statement of Work.

PART 5

SPECIFIC TASKS

1. **Basic Services.** The Contractor shall provide services for Building 20724, Air Force Nuclear College (AFIT/OL-A), located on Kirtland AFB, NM. Required tasks, furnishings, and installation locations are specified in Part 6, Attachment 1, *Building 20724 PDS Drop Layout*, of this Statement of Work.
2. **Trash.** The Contractor is responsible for all trash and shall remove trash daily from the worksite. Trash disposal shall be in accordance with state laws. Packaging and other recyclable materials shall be recycled wherever possible.
3. **Shipping Damage.** The Contractor shall inspect all product for shipping damage. If damage is found, it shall be the responsibility of the Contractor to notify an authorized Government representative and make all arrangements for replacement or repair of the damaged item(s). Damaged items are not to be installed unless otherwise directed by [REDACTED], Director, Air Force Nuclear College.
4. **Damage to Facility.** The Contractor shall be liable for any damage to Government property caused by the Contractor or the Contractor's representatives. The Contractor shall not perform repairs to finishes but will hire a licensed General Contractor to perform the work at no cost to the Government.

PART 6
ATTACHMENT LIST

Attachment 1. Building 20724 PDS Drop Layout.

