

**Performance Work Statement (PWS)
Building 350 LAN Drop Installation**

Organization:	[REDACTED]
Address:	[REDACTED] <i>Eglin AFB, FL 32542</i>

1.0 Purpose

Customer wants to install 22-total Plenum UTP Non-secure Internet Protocol Router (NIPR) white CAT 6 data cabling and jacks from the 2nd floor comm room to room 283.

1.0.0 Specific Task Objectives

Contractor shall perform and adhere to the following:

- 1.0.1 In 2nd floor comm room, install a 48 port CAT 6 Modular Patch Panel with strain relief into Rack C.
- 1.0.2 Contractor shall use cable tray in room 283 going into the 2nd floor comm room above the drop ceiling. Approx. 45-feet of J-hooks with retaining clips shall be installed using pathway illustrated in drawing T-001.
- 1.0.3 Install 22-total Plenum UTP Non-secure Internet Protocol Router (NIPR) white CAT 6 data cabling and jacks from the 2nd floor comm room to room 283.
 - 1.0.3.1 Downward sloped 4 port face plates with label windows shall be used. All CAT 6 terminations shall be TIA-568A.

Contractor shall adhere to the following:

- 1.1.0 All new work area outlets shall have a j-hook placed either above the ceiling or with in proximity to an under the floor outlet and a minimum of 12-inches of slack provided on the j-hook. Reference drawing T-001.
- 1.1.1 The contractor shall provide all materials and perform all work in strict adherence to The attached PWS, and the above applicable standards.
- 1.1.2 Contractor shall submit product submittals line items and quantities with part numbers For approval before installation.

- 1.1.3 Contractor shall provide fiber and copper cable slack within the cable tray for maintenance within the horizontal cabling system configuration as follows in Telecommunications room cable ladder - UTP/ScTP 10-feet and SM/MM 10-feet, Work area outlet - UTP/ScTP 1-foot and SM/MM 3.5-feet above ceiling. Do not put slack or service loops in communications cabinets or racks.
- 1.1.4 Category 6 network wiring shall be tested per industry standards, such as DB loss, head room, wire map, attenuation and length of the cable between the telecommunications room and the work area outlet or connection point. The test results shall be documented with equipment having a current calibration date.
- 1.1.5 The government reserves the right to refuse final acceptance until all discrepancies have been resolved to the satisfaction of the government.
- 1.1.6 The provided floor plan illustrates our customers' preliminary requirement. (See Attachment 1)

2.0 General Technical Requirements

The following design criteria provides additional requirements and guidance for Eglin AFB installations. These specific requirements are to be implemented by means of all applicable publications and documents referenced within this guide:

2.1 Inside Plant:

Common Patch Panel configuration with Modular style terminations. Site survey will be used to determine best arrangement to fit customer needs and system standards. Ladder rack and cable tray will be included in the TR design to properly facilitate cable routing. All cabinets, racks, ladder rack and cable tray will be grounded per Industry Standard, ANSI 607.

2.2 Telecomm Outlets/Jacks:

Single Gang Outlet Box - Flush Mount. (Single Gang Faceplate Mounting Bracket for Low Voltage Applications, 1-1/4" Maximum Wall Thickness, Finish: Pre-galvanized.)

Single Gang Outlet Box - Surface Mount. (Single gang two-piece screw together outlet box. Box accepts Pan-Way® Screw-On Faceplates or any NEMA standard single gang faceplate. For use with Pan-Way® LD profile raceway. 5.19in L x 3.45in W x 1.75in H (131.9mm x 87.7mm x 44.4mm). Breakouts for 1/2in, 3/4in, or 1in diameter conduit, International White)

Single Gang 4 Port Faceplate. (4 port minimum. Mini Com Classic series single gang downward sloped faceplate that accepts four modular jacks, Off White)

Data Jack. (The Category 6, RJ45, 8-position, 8-wire, UTP Mini-Com® universal jack module has TG-style termination. Off white)

Blank Inserts. (Mini-Com® 1-port blank module, reserves space for future use, White)

Surface Mount Raceway System. Tamper resistant two-piece latching surface raceway. Supplied with pre-punched mounting holes and factory applied adhesive tape. Available in 6', 8', and 10' lengths, Off White. Compatible with surface mount outlet box. Additionally, all surface mounted raceway systems shall be screwed to the wall to prevent adhesive from detaching from mounted surface.

2.3 Telecommunications Cabling:

Riser CAT 6. (CAT6+ (600MHz), 4-Pair, U/UTP-Unshielded, Riser-CMR, Premise Horizontal Cable, 23 AWG Solid Bare Copper Conductors, Polyolefin Insulation, X Spline, Ripcord, PVC Jacket)

Plenum CAT 6. Copper Cable, Giga SPEED XL 2071E, 23 AWG, 4 Pair, Unshielded, UTP, Solid Bare Copper Conductor, FEP/PVC, CMP, white jacket)

2.4 Cat 6 Connector Block (Patch Panel):

24/48 Port. Constructed for maximum strength and durability. Supports both T568A and T568B wiring configurations using an easy-to-read color-coded wiring label. Rack-mount modular panels shall include an integrated cable management requirement for cable routing and strain relief. Provide a complete modular system from patch panel to work area outlet.

Strain Relief Requirements. All Strain relief bars shall consist of a metal bar that mounts to the rear of a standard EIA 19" rack to support a minimum of 24 cables exiting from the back of a patch panel with a 2-inch to 5-inch inward mounted offset. Cables shall be secured with integrated adjustable clips, hook and loop strips or cable ties. Optional quick release brackets shall provide an easy way to remove the strain relief bar without the use of tools.

3.0 Singularly Managed Infrastructure with Enterprise Level Security (SMI-ELS)

3.1 Infrastructure Implementation and Operation

3.2 Network Services and Solutions

3.2.1 Site Preparation and Installation Services

The contractor shall perform site preparation and installation activities to support implementation of required services and solutions under this contract at any AF, DoD or other Federal Agency location.

3.2.2. Requirements Analysis and Conceptual Design

3.2.3 Site Survey

The contractor shall perform site surveys at required locations. The findings of the site survey and any actions required in preparation for system installation shall be documented.

3.2.4 Installation

The contractor shall engineer, install, configure, modify, relocate or remove Communication and Information (C&I) systems for operational use. The systems and equipment installations or modifications must comply with established architectures. The contractor shall perform validation and verification testing on the system, assist users in configuring the system to meet their system requirements and provide all applicable operating manuals/system management guides. Further, the contractor shall provide pre-cutover and post-cutover on-site training IAW with TOs. The government will identify personnel who will receive this training. The training shall provide for in-depth hands-on maintenance, operations and database administration.

3.2.5 Inside Plant

The contractor shall, (as required by each TO), install and configure all the components for inside the plant (e.g., power, groundings, racks, fiber optic distribution panels, equipment, internal cabling, comm. closet, etc.). The contractor shall install and test all cable and components IAW accepted industry standards, unless superseded by a Government approved IS indicated within the TO. Electrical and communications cable, conduits, and circuits shall be installed IAW the National Electric Code (NEC). The contractor shall clearly label each end of every individual cable in accordance with the floor plans or engineering

drawings. The contractor shall provide attached labels that are durable and legible. For any deviations to the specific installation specification, the contractor shall submit a proposal to the CO for approval.

3.2.6 Tools and Testing Support

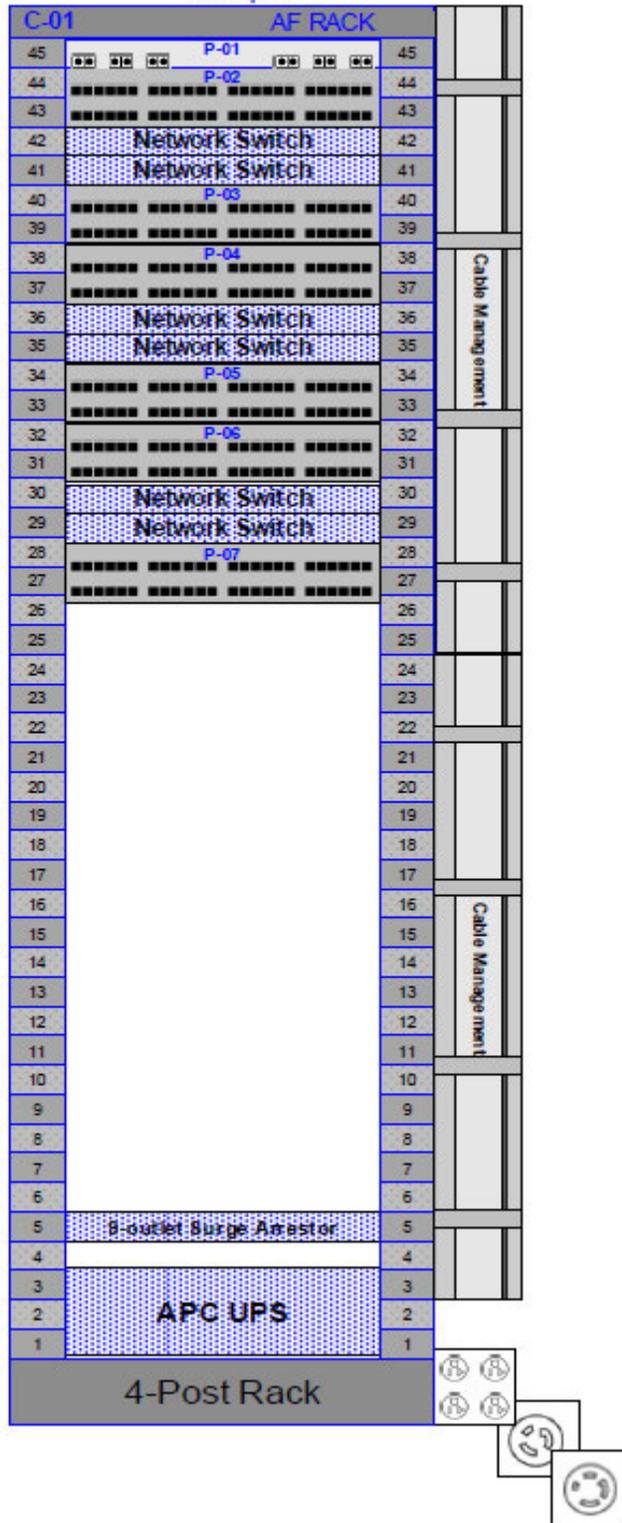
The contractor shall provide all tools, installation materials and test equipment required to perform any required product installation and maintenance as called for by the TO. All tools and test equipment shall remain the property of the contractor. Any damage caused by the contractor to existing site facilities or equipment which might occur during site preparation, installation, testing or cutover of the system will be repaired at the expense of the contractor unless otherwise directed by the government. The site shall be restored to the original condition which existed prior to the event unless otherwise directed. The TO will specify testing and inspection requirements. The contractor shall demonstrate that the system design meets the reliability/availability/maintainability requirements of the TO.

4.0. DELIVERABLES

As-Built Documentation. Contractor format for deliverables is subject to Government acceptance. The installer shall provide accurate As-Built documentation of the entire install (i.e. rack elevations, cable route drawings, etc.) with type of cable path variations identified clearly. All deliverables shall be produced using recommended software tools/versions as accepted by the Government.

Standard Air Force NIPR/SIPR Data/Voice Rack Elevation

Example



5.0 Test and Acceptance Documentation.

The Contractor shall submit test reports within 3 duty days prior to final test and acceptance. The test reports shall show the tests performed to verify compliance with the specified performance criteria. Test reports shall include record of the physical parameters verified during testing. The contractor shall correct any errors or performance deficiencies detected by testing. The government reserves the right to refuse final acceptance until all discrepancies have been resolved to the satisfaction of the government.

APPLICABLE STANDARDS CONTRACTORS & INSTALLERS SHALL ADHERE TO:

Standards shall be used as a baseline of quality and craftsmanship for installing communications products and systems connectivity the AFNET

National Electrical Code (NEC) and National Electrical Manufacturers Association (NEMA) Standards: NFPA 70

Unified Facilities Criteria: (UFC) 3-520-1, 3-580-1, 4-010-06 dated most recent.

American National Standards Institute/Telecommunications Industry Association (ANSI/TIA) Standards: 568, 569, 606, 607 dated most recent.

National Electrical Contractors Association/Fiber Optic Association: (NECA/FOA) 301-2016 Installing and Testing Fiber Optics

Building Industry Consulting Service International (BICSI) - Telecommunications Distribution Methods Manual 14, Industry Best Practices "Preferred"

96th Communications Squadron Cyber Infrastructure Standards and Installation Specifications, to include Applicable Publications and Standards referenced in Attachment G, dated NOV 2022

All DoD and Industry standards/guidelines shall be used to provide a complete system, from end to end. Note: *Since Standards are continually being revised, contractors and installers should refer to the latest version of any relevant standard for compliance.*

Communications Deliverables: Contractor/Installer shall provide for review final ISP/OSP copper or fiber test report(s) and as-built/as-installed drawings prior to scheduling a final quality assurance inspection. Note: Deliverable guidance can be found in the 96 CS Cyber Infrastructure Standards and Installation Specifications.

6. Contractual Requirements

6.1 Performance Reporting

The contractor’s performance will be monitored by the government and reported in Contractor Performance Assessment Reporting (CPARs). Performance standards shall include the contractor’s ability to:

1. Provide quality products, incidentals and customer support.
2. Meet customer’s agreed-upon timelines for scheduled delivery of items, warranty, and/or incidental services: Emergency/critical, Maintenance/Warranty – 24 x 7 x 365, and remote OCONUS, OCONUS vs. CONUS response times.
3. Provide satisfactory product repairs or advance replacement, as appropriate.
4. Provide timely and accurate reports.
5. Respond to the customer’s requests for proposals and configuration assistance as identified in each delivery order.
6. Meet subcontracting goals.

6.2 Program Management

The contractor shall identify a Program Manager who shall be the primary representative responsible for all work awarded under this contract, participating in Program Management Reviews and ensuring all standards referenced herein are adhered to.

6.2.1 Services Delivery Summary

The Services Delivery Summary (SDS) will be in accordance with AFI 63-101, Acquisition and Sustainment Life Cycle Management and FAR Subpart 37.6, Performance-Based Acquisition. SLAs will be defined in each TO.

Desired Outcome		Performance Objective	Performance Threshold	
Overall Outcome	Specific Outcomes		Target	Tolerance
Compliance with Infrastructure Solutions support requirements	Ensure compliance with Infrastructure Solutions deliverables requirements	Deliver the Infrastructure Solutions w/ predetermined outcomes and on time	Documentation submitted IAW CDRL A001 verifies the TO was completed on time	98% of the time

(delivery, quality)				

6.2.2 TO Management

The contractor shall establish and provide a qualified workforce capable of performing the required tasks. The workforce may include a project/TO manager who will oversee all aspects of the TO. The contractor shall use key performance parameters to monitor work performance, measure results, ensure delivery of contracted product deliverables and services, support management and decision-making and facilitate communications. The contractor shall identify risks, resolve problems and verify effectiveness of corrective actions. The contractor shall institute and maintain a process that ensures problems and action items discussed with the government are tracked through resolution and shall provide timely status reporting. Results of contractor actions taken to improve performance should be tracked and lessons learned incorporated into applicable processes. The contractor shall establish and maintain a documented set of disciplined, mature and continuously improving processes for administering all contract and TO efforts with an emphasis on cost-efficiency, schedule, performance, responsiveness and consistently high-quality delivery.

6.2.3 Configuration and Data Management

The contractor shall establish, maintain and administer an integrated data management system for collection, control, publishing and delivery of all program documents. The data management system shall include but not be limited to the following types of documents: CDRLs, White Papers, Status Reports, Audit Reports, Agendas, Presentation Materials, Minutes, Contract Letters and TO Proposals. The contractor shall provide the government with electronic access to this data, including access to printable reports. The contractor shall have an approved property control system IAW FAR 45, DFARS 245 and approved procedures to document and track all GFM and GFE. The contractor shall provide as-built documentation including, but not limited to, drawings and diagrams of the solution provided under each TO identifying specific cards in a chassis/shelf. The as-built documentation shall also include layout drawings, power drawings/specifications, floor plans and engineering specifications generated in support of the installation of the system. Documentation shall also include equipment listing with serial/model numbers and manufacturer specifications.

6.2.4 Records, Files and Documents

All physical records, files, documents and work papers, provided and/or generated by the government and/or generated for the government in performance of this PWS, maintained by the contractor which are to be transferred or released to the government or successor contractor, shall become

and remain government property and shall be maintained and disposed of IAW AFMAN 33-363, Management of Records; AFI 33-364, Records Disposition – Procedures and Responsibilities; the Federal Acquisition Regulation, and/or the Defense Federal Acquisition Regulation Supplement, as applicable. Nothing in this section alters the rights of the government or the contractor with respect to patents, data rights, copyrights, or any other intellectual property or proprietary information as set forth in any other part of this PWS or the NetOps and Infrastructure Solutions contract of which this PWS is a part (including all clauses that are or shall be included or incorporated by reference into that contract).

6.3 Security Management

6.3.1 Safeguarding Classified Information

The contractor shall transmit and deliver classified material/reports IAW the National Industrial Security Program Operations Manual (NISPO) and the National Industrial Security Program Operating Manual (DoD 5220.22-M). These requirements shall be accomplished as specified in the TO. All Classified Contracts must have at a minimum, the Clause 52.204-2 Security Requirement, incorporated into the contract.

Each base will follow its own classified process IAW with the proscribed Federal guidance of the NISPO and FAR “Subpart 4.4 along with DD Form 254. When transmitting classified information ensure all classified information is properly sanitized and/or degaussed of all sensitive/classified information IAW AFSSI 5020.

6.3.2 Personnel Security

Individuals performing work under these TOs shall comply with applicable program security requirements as stated in the TO. NETCENTS-2 will support the following levels of security: Unclassified; Unclassified, But Sensitive; Secret (S); Secret Sensitive Compartmented Information (S/SCI); Top Secret (TS) and Top Secret Sensitive Compartmented Information (TS/SCI).

6.3.3 Travel Requirements

The contractor shall coordinate specific travel arrangements with the individual CO or COR to obtain advance, written approval for the travel about to be conducted. The contractor’s request for travel shall be in writing and contain the dates, locations and estimated costs of the travel in accordance with the basic contract clause H047.

If any travel arrangements cause additional costs to the TO that exceed those previously negotiated, written approval by CO is required, prior to undertaking such travel. Costs associated with contractor travel shall be in accordance with

FAR Part 31.205-46, Travel Costs. The contractor shall travel using the lower cost mode transportation commensurate with the mission requirements. When necessary to use air travel, the contractor shall use the tourist class, economy class or similar accommodations to the extent they are available and commensurate with the mission requirements. Travel will be reimbursed on a cost reimbursable basis; no profit or fee will be paid.

6.3.4 Other Direct Cost (ODC)

The contractor shall identify ODC and miscellaneous items as specified in each TO. No profit or fee will be added; however, DCAA approved burdened rates are authorized.

Attachment 1

