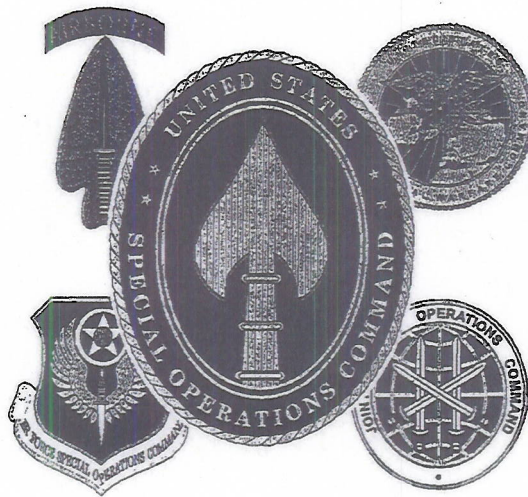


**STATEMENT OF WORK  
For The  
USSOCOM TACTICAL LAN PROGRAM  
(TACLAN)**



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## **1.0 SCOPE:**

This Statement of Work (SOW) defines two separate, but related, elements. The first is the effort required to design, integrate, fabricate, test, deliver and modernize the Tactical Local Area Network (TACLAN) in compliance with the contract and TACLAN System Specification (TSS) dated 14 April 2005, and the TACLAN Core Capability Objectives as outlined in the TACLAN Capability Production Document (CPD), dated 22 March 2004. The second is the effort required to provide life-cycle sustainment for existing, legacy TACLAN systems, as well as new, production TACLAN systems. With regard to TACLAN, the Contractor shall produce TACLAN Suites, Training Packages, Mission Planning Kits (MPK), and Field Computing Devices (FCD) that are interoperable, scalable, cost effective and efficient, and, provide for future growth and implementation of new technologies when obtainable. The Contractor shall develop and implement an Integrated Logistics Support (ILS) plan to maintain, sustain, and train currently fielded (i.e., "legacy"), and to be fielded (i.e., "production"), TACLAN Suites, Training Packages, and components. Moreover, this document identifies what the Contractor shall provide in the way of personnel, facilities, materials, equipment, software and services necessary to accomplish tasks for the TACLAN Initial Production Set (IPS), production units, and Life Cycle Sustainment for both legacy and production systems. All services and data are to be provided in accordance with (IAW) the Contract Data Requirements List (CDRL).

## **1.1 Background:**

The TACLAN concept originated in May 1998 and the TACLAN ORD was approved in June 2001. TACLAN is a modular, scalable suite of computer network equipment and workstations, providing functionality similar to the SOF garrison Command, Control, Communications, Computers, and, Intelligence, Surveillance, and Reconnaissance (C4ISR) capabilities. TACLAN extends Command, Control, Communications, Computers, and Intelligence (C<sup>4</sup>I) capabilities to tactical SOF locations to accomplish the timely exchange of information between deployed and garrison SOF headquarters, and main operating locations, while facilitating liaison and coordination with regional combat commands, Services, DOD and national agencies concerning SOF operational support. TACLAN's primary function is to provide tactical automation support with flexible interfaces to communications, databases, and mission applications that collectively extend the equivalent fixed base garrison C4ISR architecture to tactical units and remote operators. TACLAN exploits the use of these communications interfaces, which allow it to be utilized in any operational environment. The TACLAN Program provides the automated infrastructure for the SOF Mission Planning Environment (SOMPE). SOMPE is an aggregate of interoperable Commercial-Off-The-Shelf (COTS) and Government-Off-The-Shelf (GOTS) software applications, which assist the SOF user in mission planning and execution. SOMPE applications are resident on TACLAN Suites, MPKs, and FCDs, and are integrated with other GOTS and COTS applications to form the TACLAN software baseline. SOMPE software is the responsibility of the SOF Mission Planning Office (SOMPO), Ft Eustis, VA.

## 1.2 TACLAN Suite and Sub-Systems.

### 1.2.1 TACLAN Suite.

The TACLAN Suite provides a common deployed network infrastructure to support operations planning and reporting, orders dissemination and force execution, readiness and unit status monitoring, mission planning and analysis, mission rehearsal and execution, intelligence analysis and reporting, personnel support, health surveillance, and logistics planning and tracking. The TACLAN Suite consists of two variations; a Full Suite, and a Command and Control (C2) Suite. The Full TACLAN Suite consists of three network segments (SCI, SIPR, and NIPR networks). The C2 TACLAN Suite consists of only two network segments (SIPR and NIPR networks). Each network segment includes the routers, hubs, switches, servers (file, mail, and proxy), network management and information assurance tools, printers, scanners, cabling, and common-user and special-purpose (i.e., mission planning, imagery, etc) workstations and software to interconnect deployed automation users.

### 1.2.2 TACLAN Training Package.

The TACLAN Training Package provides a scalable, single-network infrastructure to support training teams. The Training Package provides deployed SOF users the capability to deploy a subset of a TACLAN Network Segment to support a limited number of users in a single network environment (i.e., NIPR, SIPR, or SCI). The TACLAN Training Package includes equipment described in TSS, para 3.7.6.

### 1.2.3 Mission Planning Kits (MPK).

The MPK supports an isolated local area network (LAN) capability, as well as networked access, to interconnect mission planning team members performing mission planning, rehearsal, and execution. An MPK consists of COTS hardware to include a switch, printer, scanner, cabling, projector, external hard drive, and up to four laptops housed in a ruggedized transit case. A SOMPE integrated software package is also provided.

### 1.2.4 Field Computing Devices (FCD).

FCDs are small hand-held computing devices used by the most forward deployed SOF to automatically interface with the TACLAN suite via tactical communications. A FCD kit consists of a small, portable, ruggedized, COTS laptop, common-user software applications, and tactical radio interface cables. The FCD supports dial-in and radio remote connectivity to interconnect tactical teams and liaison elements to the main network. The FCD also includes required network interface devices and software to support radio systems procured via other SOF and Service programs.

### 1.3 Initial Production Set (IPS).

The first phase of production will be the design, fabrication, integration, and testing of the TACLAN IPS. The IPS delivered to the Government will include a TACLAN Suite, TACLAN Training Package, MPK, and FCD as described in paragraphs 1.2.1 through 1.2.4 above. Because the Government intends to execute the first production delivery order immediately following the successful completion of CDR, the Contractor shall establish and provide all relevant program management activities and deliverables associated with tasks required to deliver a specification-compliant IPS. More specifically, tasks and deliverables associated with Program Management (PM), Test & Evaluation (T), Design (D) Quality Assurance (QA), and Integrated Logistics Support (ILS) which are required for Government acceptance of the IPS, including refurbishment, will be provided by the Contractor and included in the price of the IPS. In accordance with schedule milestones and required documentation stated in the TACLAN SOW and CDRLs, the Contractor will produce a TACLAN IPS and perform all activities relevant to personnel, facilities, materials, equipment, software, training, and other services. Concurrently, the Contractor will take all actions required to support and maintain and support the operation of legacy TACLANS. Development of the IPS shall follow accepted commercial practices and meet all CPD and TSS requirements. Following completion of functional and technical testing, as well as security accreditation, the IPS will become the approved production TACLAN baseline configuration. Upon Government approval and Contractor retrofit, the IPS will be delivered as a production TACLAN. A partial listing, provided for clarification, of the tasks and deliverables required by the Contractor prior to IPS acceptance is:

Preliminary Design Review [CDRL PM0002]	QA Plan [CDRL QA0001]	Post Award Conference [CDRL PM0002]
Critical Design Review [CDRL PM0002]	Test Support Package.	As-Built Configuration [CDRL CM0002]
Monthly Status Reports [CDRL PM0003]	System Inspection Record	Software Product Specification [CDRL D0005]
In-Plant Burn-In Test [CDRL T0002]	UE Test Plan [CDRL T0004]	Configuration Management Plan [CDRL CM0001]
Security Accreditation Plan [CDRL PM0005]	UE Test Report [CDRL T0005]	Software Requirements Specification [CDRL D0004]
Test Program Plan [CDRL T0001]	IPS Refurbishment [CDRL ILS0004]	Physical Configuration Audit [CDRL T0001]
Safety Assessment Report [CDRL PM0004]	Quality Assurance (QA) Program	Program Management Plan [CDRL PM0001]
Product Qualification Test [CDRL T0001]	In-Progress Reviews [CDRL PM0002]	Test Support Services Plan [CDRL T0003]

### 2.0 APPLICABLE DOCUMENTS:

In the event of inconsistency among requirements, the following descending order of precedence shall apply:

- a. The Contract
- b. SOW
- c. TSS
- d. CPD
- e. Other Specifications and Interface Documents (hardware and software)
- f. Contract Data Requirements List (CDRL)

Other Government publications germane to the TACLAN program include:

C4ISR Architecture Framework, Version 2.0, 18 December 1997  
USSOCOM C4IAS ORD, 2 January 2002

USSOCOM SOF Information Enterprise (SIE) Capstone Requirements  
Document (CRD), 14 September 2000  
TACLAN Capability Production Document (CPD), 22 March 2004  
TACLAN System Specification (TSS), 14 April 2005  
TACLAN Concept of Operations (CONOPS), 14 June 2001

Section 2 of the TSS provides an additional listing of the specifications, standards and other publications (except CDRLs) also germane to the TACLAN program.

### **3.0 REQUIREMENTS.**

#### **3.1 General.**

As previously stated in paragraph 1.0, there are two related elements associated with this contract. The first element is the design, integration, fabrication, test, delivery and modernization of the TACLAN production system. The second element is the Life-Cycle Sustainment of the legacy and production TACLAN systems. Henceforth, the program will be referred to as TACLAN and include both of the aforementioned elements. The work required by this contract shall be performed in accordance with the SOW, TSS, and CPD. The Contractor shall provide all personnel, facilities, materials, equipment, software and services necessary to perform the tasks described in this SOW, except as otherwise specified. More specifically, the Contractor shall provide Integrated Logistics Support (ILS), Management Systems, Production Planning, Reliability and Maintainability Programs, and Data in accordance with the specific requirements of paragraphs 3.2 and 3.3 below. The Contractor shall also provide program management, human engineering management, and logistic support planning as detailed in paragraph 3.3.1 below.

#### **3.2 Production.**

The technical objectives and goals for the TACLAN program are to meet the requirements of TACLAN as defined in the TSS and CPD. The standards, specifications, publications, and regulations listed in paragraph 2.0 above are invoked to the extent defined in the TSS and CPD.

##### **3.2.1 Program Planning.**

###### **3.2.1.1 Program Management.**

The Contractor shall provide overall management and technical direction, including program control, configuration and data control, subcontract management, and reporting. The Contractor shall plan, manage, and organize the effort to assure effective internal control to meet the requirements specified in this SOW and will ensure a successful cradle-to-grave execution of the TACLAN Program.

3.2.1.1.1 The Contractor shall develop and implement a Program Management Plan (PMP) [CDRL PM0001] that clearly defines how the TACLAN Program will be managed and

controlled. The Contractor shall submit the PMP for Government approval. The PMP shall be consistent with the Contractor's standards, detailing the nature, timing, and integration of all technical activities regarding the production efforts. At a minimum, the plan shall describe how/when the Contractor shall initiate vendor and subcontractor purchase orders and agreements, inspect/burn-in of received articles, fabricate in-house components, assemble system elements, and test and package final systems for delivery. Additionally, the plan shall address system performance, hardware/software integration, testing, fielding, systems engineering, ILS concept, training, and technical and sustainment support. The Contractor shall implement an integrated master plan/schedule, included in the PMP, clearly defining all the tasks necessary to satisfy the requirements in this SOW.

3.2.1.1.2 The Contractor shall provide project oversight for the overall contract and shall use all contract resources in such a manner as to ensure satisfaction of all contractual requirements in the most efficient manner possible for the Government.

3.2.1.1.3 The Contractor shall manage all activities among the production, systems engineering, software integration, and integrated logistics support functions to ensure a smooth, efficient, integrated effort and to ensure all tasks are completed in a timely and efficient manner.

3.2.1.1.4 The Contractor shall acquire all necessary components necessary to fabricate/produce TACLAN Suites (Full and C2), Training Packages, MPKs, and FCDs, develop software baselines, integrate hardware and software components, perform factory acceptance testing, perform accreditation testing, and field the TACLAN components to locations identified by the Government.

3.2.1.1.5 The Contractor shall provide and manage a qualified team, to include appropriately cleared personnel, to execute the provisions of the contract.

3.2.1.1.6 The Contractor shall establish and document a configuration management process for all managed baselines. The Contractor shall establish and maintain development, test, and production baselines (both hardware and software) for TACLAN Suites (Full and C2), Training Packages, MPKs, and FCDs.

#### 3.2.1.2 Management Organization.

The Contractor shall identify and establish a Program Team comprised of personnel qualified to fill key and direct labor matrix positions. This team shall be introduced at the Post Award Conference (PAC). The Contractor shall establish and implement a program management office function to manage all technical performance, including reliability, maintainability, ILS, cost, schedule, and data delivery requirements of the contract for production and legacy TACLAN systems. The Contractor shall appoint a Program Manager specifically charged with the responsibility for interfacing with the Government on all matters pertaining to the TACLAN Program. The Program Manager shall direct the Contractor's efforts through the company's internal management system, and provide progress visibility to assure on-time completion of contract requirements. In conjunction with this identification, the Contractor shall meet the security requirements for assigned personnel. The Contractor shall identify, provide, and

maintain for the duration of the contract appropriately SCI cleared key personnel for the minimum number of positions listed below. These SCI cleared key personnel shall be identified and provided at PAC.

Project Manager	1
Systems Engineer	1
Software Engineers	4
Trainers	3
Configuration Manager	1
Help Desk Support	3

#### 3.2.1.3 Integrated Product Teams (IPT).

The Contractor shall implement IPTs that include major sub-contractors and USSOCOM representatives. IPT activities shall include oversight of the design and integration effort for TACLAN to ensure a quality product is delivered on schedule, meeting TSS and CPD requirements. The Contractor shall employ sound, concurrent engineering principles by using all relevant disciplines in cross-functional teams.

#### 3.2.1.4 Conferences, Reviews, and Audits.

The Contractor shall conduct conferences, reviews, and audits as specified in this SOW, and shall respond to all Government directed questions, comments, and issues. The Contractor shall be prepared to host TACLAN-related meetings, prepare agendas, conduct meetings, and provide minutes, as requested [CDRL PM0002]. Agendas are required 10 days prior to the meeting and meeting minutes are required 5 working days after the conclusion of a meeting. Program-related meetings shall include, but are not limited to, those described in the paragraphs below. The Government may, at its option, be supported by designated support contractors at any meetings, conferences, reviews, audits, or inspections.

**3.2.1.4.1 Post Award Conference.** There shall be a Post Award Conference (PAC) at the Contractor's facility no later than (NLT) 15 days after contract award (DACA). The purpose of this conference is to ensure the Contractor has a complete and thorough understanding of the contract requirements. The Contractor shall brief the Government on the PMP, which shall include schedule, integration, and test activities. The Contractor shall prepare agendas, briefings and minutes for the reviews IAW CDRL PM0002.

**3.2.1.4.2 In-Progress Review (IPR).** IPRs [CDRL PM0002] shall be held monthly to address technical or program issues identified by either the Government or the Contractor. All IPRs shall take place at the Contractor's facility unless otherwise directed by the Government, and structured to reflect the scope of the production and ongoing ILS efforts.

**3.2.1.4.3 Program Management Reviews (PMR).** The Contractor shall conduct PMRs with the Government at the Contractor's facility every quarter until after delivery of the first production system. After that time, PMRs shall occur at the Government's request. During PMRs, the



Contractor shall report on progress of tasks covered by this SOW, problems encountered and/or anticipated, and corrective action plans. Contractor shall prepare agendas, briefings and minutes for the reviews IAW CDRL PM0002.

**3.2.1.4.4 Preliminary Design Review (PDR).** The Contractor shall conduct a PDR [CDRL PM0002] 90 days after contract award. After that time, PDRs shall occur at the Government's request. The Contractor shall finalize and formalize the design for fabrication at the PDR. Informal Design Reviews [CDRL PM0002] may be held at times agreed to by the Government and the Contractor. Written Government approval of the design is required before the Contractor is authorized to proceed with IPS fabrication. Contractor shall prepare agendas, briefings and minutes for the reviews IAW CDRL PM0002.

**3.2.1.4.5 Critical Design Review (CDR).** The Contractor shall conduct a CDR [CDRL PM0002] within 120 days after the PDR. At the CDR, the Contractor shall formally report the results of developmental tests, address design changes made during the fabrication process, and recommend design changes as a result of the developmental tests, including trade-off impacts. The Contractor shall incorporate all design changes approved by the Government during the CDR. Contractor shall prepare agendas, briefings and minutes for the reviews IAW CDRL PM0002. The Contractor shall finalize the production design at CDR.

### **3.2.1.5 Contractor Reports and Plans.**

**3.2.1.5.1 Monthly Status Report.** The Contractor shall prepare and submit a Monthly Status Report [CDRL PM0003]. The reports shall contain up-to-date issues, status, cost, schedule, and accounting data. The report shall include a program schedule reflecting the progress against significant milestones required to manufacture, test, deliver and support production TACLAN systems and continue supporting legacy TACLAN systems. The Contractor shall monitor subcontractors' product quality and performance against delivery schedules. The Contractor shall report "issue and corrective action status" in the Monthly Status Report and at PMRs. The Contractor shall also include all system/equipment failures and corrective actions with regard to life-cycle support of legacy TACLAN systems. The Contractor shall plan and execute the TACLAN program utilizing its own internal tracking and reporting system.

**3.2.1.5.2 Safety Assessment Report (SAR).** The Contractor shall perform a safety assessment of production TACLAN systems and prepare and submit to the Government for approval a Safety Assessment Report (SAR) [CDRL PM0004]. The SAR shall evaluate the safety risks being assumed prior to test or operation of the system and provide specific controls or precautions to be followed. The Contractor shall maintain a hazard tracking log and Material Safety Data Sheets for all hazardous materials or hazardous wastes, if any are identified. The SAR shall be delivered to the Government in conjunction with the IPS.

**3.2.1.5.3 Security Accreditation Plan (SAP).** The Contractor shall develop a SAP [CDRL PM0005] and a security system engineering process that ensures TACLAN security policies are correctly implemented in the production design. This Plan shall provide for the development of the necessary documentation, such as the Government's TACLAN Security Classification Guide

(SCG), Program Protection Plan (PPP), and System Security Authorization Agreement (SSAA), and, shall reflect all certification requirements of USSOCOM, DISA, and DIA.

### **3.2.2 Design, Systems Engineering and Software Engineering.**

#### **3.2.2.1 Systems Engineering and Future Design.**

The Contractor shall provide systems engineering functions to establish system engineering design goals and evolve the TACLAN system design to meet user requirements.

**3.2.2.1.1** The Contractor shall develop a System Engineering Plan, [CDRL D0001]. The Contractor will assess, recommend, and implement evolutionary technology insertions (ETI) that will:

- a. Lower total ownership cost.
- b. Improve transportability by reducing the equipment footprint and decreasing set-up time.
- c. Increase supportability through the use of unique identification devices on key components.
- d. Increase system modularity, flexibility and scalability.
- e. Improve equipment training.
- f. Improve design stability.
- g. Improve security.
- h. Increase flexibility and speed of component replacement.

**3.2.2.1.2** The Contractor shall research, analyze, demonstrate, and recommend new technologies to the TACLAN Program Office which evolves TACLAN design towards the system engineering objectives listed in paragraph 3.2.2.1.1. These shall include both Government and commercial technologies and programs. The Contractor shall provide white papers or system engineering studies as a result of the research and demonstration of these technologies. [CDRL D0002]

**3.2.2.1.3** The Contractor shall research, analyze, and demonstrate new technologies identified by the TACLAN Deputy Program Manager (DPM) that could have potential impact to the TACLAN program. These shall include both Government and commercial technologies and programs. The Contractor shall provide white papers or system engineering studies as a result of the research and demonstration of these technologies. [CDRL D0002]

**3.2.2.1.4** The Contractor shall monitor the commercial market to identify potential part/component obsolescence, recommending potential design solutions in sufficient time to prevent disruptions of the production process. The Contractor shall provide white papers or engineering studies, identifying recommendations for changes/enhancements to meet TACLAN functional user requirements. White papers and engineering studies shall include cost, schedule,

and performance issues associated with these new technologies. Compliance with Government and industry standards shall be addressed. [CDRL D0002]

3.2.2.1.5 If, after Critical Design Review (CDR), the Contractor needs to change or modify the TACLAN design, they shall prepare and submit engineering change proposals (ECP) [CDRL D0003] for technologies and/or potential design changes to the Government for approval. As an addendum to ECPs, the Contractor will provide implementation plans for migration, training and operations, and maintenance requirements, as required.

### 3.2.2.2 Software Engineering.

The production element of this program will not require the development of software. The program relies on the acquisition of COTS hardware and a variety of COTS and GOTS software applications, complete with user documentation. The Government will select specific commercial and Government-developed applications to be integrated into the production systems. The Government recognizes this integration requires development of software instructions for transition among the various applications, but does not envision any requirement for new applications requiring source level compilation. Software development shall be limited to "scripts" written to integrate the various COTS and GOTS applications.

3.2.2.2.1 Software Integration. The contractor shall be required to support the following levels of change to the TACLAN software baseline:

- Routine – Baseline and system updates implemented within the normal release process
- Incremental – Application version updates or new product deliveries
- Time Sensitive – Changes required within 30 days
- Emergency. – Changes that must be implemented immediately

3.2.2.2.2 The Contractor shall establish a software process compliant with Software Engineering Institute Capability Maturity Model Institute (SEI-CMMI) Level 3, or equivalent.

3.2.2.2.3 Software Data Validation. The Contractor shall validate document and programming materials compliance, and, accuracy with the Software Requirements Specification (SRS) [CDRL D0004]. This specification shall address requirements for both legacy and production systems. The Contractor shall provide a TACLAN SRS within 30 days after the Preliminary Design Review (PDR).

3.2.2.2.4 Software Product Specification (SPS). The Contractor shall index and cross reference the applications and structure of the integration effort, and describe the scripts developed and employed in a Software Product Specification (SPS) [CDRL D0005]. The TACLAN SPS shall be prepared and provided within 60 days of approval of the SRS.

3.2.2.2.5 The contractor shall provide a software baseline Version Description Document (VDD) [CDRL D0006] that defines the software release, provides "How-To-Build" server and client user instructions, and identifies the hardware baseline being supported.

3.2.2.2.6 Following the completion of testing and accreditation, and upon official release, the Contractor shall deliver a master copy of the latest software baseline to the TACLAN PMO on CD-ROM. Also, the Contractor shall ensure copies of the baseline are provided to all currently fielded TACLAN components on CD-ROM.

### 3.2.3 Test & Evaluation Program.

The Contractor shall develop a Test Program Plan (TPP) [CDRL T0001]. The Contractor shall ensure all functional and operational requirements established for the TACLAN baseline are met. The Plan shall include all of the test provisions specified in this SOW. After the TPP is approved by the Government, the Contractor shall submit test plans and procedures for all identified tests to the Government for approval. Test plans shall define all activities, resource and service requirements, procedures, reports, and temporal relationships required. All test reports and analyses shall contain all information required to document compliance with TSS and CPD requirements. The Contractor shall document all system/equipment failures and corrective actions experienced during any phase of acceptance testing prior to Government acceptance of the IPS. The Contractor shall perform all modifications and retests to ensure acceptability and recertification, as required. The Contractor shall document all failures, corrective actions and analyses within the applicable test report.

The Contractor shall perform system tests to ensure proper operation of the functional and physical interfaces for each subsystem. The Contractor shall ensure that testing activities conform to the provisions of the PMP and TPP, and that assembly procedures ensure the integrated system meets all requirements of the TACLAN TSS and CPD. Tests shall be conducted in accordance with test plans developed by the Contractor and approved by the Government. Tests may be conducted, upon approval of the Government, at the Contractor's facilities, at an independent laboratory, or at a commercial test facility. Government witnesses, and/or designated support contractors, may witness any or all tests. The Contractor shall provide the Government a minimum of 15 days notice prior to the conduct of each formal test, as cited in the TPP Integrated Master Schedule and IAW CDRL T0001.

#### 3.2.3.1 In-Plant Burn-In Test.

Prior to Production Qualification Testing (PQT), the Contractor shall perform a 100-hour continuous In-Plant Burn-In, at room temperature (approximately 74° F), for the IPS and all production systems. If a failure occurs, the unit under test will be repaired and the burn-in will resume until a minimum of 100 continuous failure-free hours are recorded. The Contractor shall provide a burn-in test report [CDRL T0002].

#### 3.2.3.2 Product Qualification Test (PQT).

The Government shall witness PQTs at the Contractor's facility on the TACLAN IPS, the first production system, and every fifth production system thereafter, to a maximum of 20 systems. PQT on the IPS shall completely test all items and subsequent PQT shall be on items specified by the Government. At the direction of the Government, significant changes or upgrades to the system baseline configuration will restart the PQT process. In-plant qualification tests shall

verify system compliance with the TSS and CPD and shall be conducted IAW the Contractor-proposed and Government-approved TPP [CDRL T0001]. The system shall perform within the limits specified in the TSS and CPD. The Contractor shall provide all necessary equipment for testing. The Contractor shall provide a PQT test report to the Government at least 7 days prior to the IPS User Evaluation (UE) and the shipment of the identified TACLAN systems.

#### 3.2.3.3 Physical Configuration Audit (PCA).

The Contractor shall perform a one hundred percent nondestructive PCA on all Contractor-furnished equipment and modified hardware IAW the TPP [CDRL T0001]. The PCA shall validate that all drawings adequately and accurately define the design and the details of assembled modules, assemblies, and subassemblies. The PCA may be conducted incrementally with fabrication and assembly to preclude the necessity for equipment disassembly and retest. The PCA and report shall be completed on the refurbished IPS with the report submitted to the Government for review and approval. When review or validation of the PCA reveals errors, discrepancies, or omissions of data, or the Government finds evidence that the production drawings or other documents do not adequately represent the equipment design or details of construction, the Contractor will be notified, and the Contractor shall take corrective action. Approval to begin production acceptance testing IAW the TPP [CDRL T0001] may be withheld until corrective action, acceptable to the Government, has been completed. The Contractor's PCA will be verified by a Government PCA team. The Government's PCA verification may be concurrent with the Contractor's PCA.

**3.2.3.4 Test Support Services.** The Contractor shall provide test support services [CDRL T0003]. Test support services shall include all necessary spare and repair parts, test equipment, publications, and technical/engineering services. The test support services shall be available throughout User Evaluation (UE) and/or Baseline Acceptance Testing (BAT). UE and/or BAT will be conducted at MacDill AFB, or at a Government-designated location, and last approximately 30 days. The Contractor shall be notified 60 days prior to start of UE and/or BAT and, once notified, shall provide a Test Support Services Plan within 15 days.

#### 3.2.3.5 Baseline Acceptance Testing (BAT)

The contractor shall support the Government Baseline Acceptance Testing (BAT). BAT will be conducted in conjunction with each major version release, or as directed by the Government. The primary purpose of BAT is to certify baseline functionality and obtain system security accreditation.

#### 3.2.3.6 User Evaluation (UE)

The Contractor shall support a User Evaluation (UE) of the IPS that will demonstrate all functional and operational requirements of the TSS and CPD have been met. UEs shall not be conducted until final Government acceptance of the PCA. Tests shall include access to the NIPRNET, SIPRNET, and JWICS networks using Government Furnished Equipment (GFE). The Government shall provide the USSOCOM Cypress Facility, or another Government test facility, network connectivity. Inspections and tests will be conducted by the Government to

verify compliance with system functional and performance requirements, including the design and visual, mechanical, and workmanship requirements contained in the SOW, TSS, and CPD. Final Government inspection and acceptance of production units will be at the Government's Cypress Facility. The Contractor will prepare and submit to the Government for approval a UE Test Plan [CDRL T0004]. The Contractor shall provide an associated Test Report to the Government [CDRL T0005].

**3.2.3.7 IPS Refurbishment.** Upon completion of Government UE, the Contractor shall refurbish the IPS system to the production baseline. The cost of refurbishment shall be included in the proposed IPS costs. Damage to system components other than normal wear and tear that is caused by the Government will be paid by the Government. Prior to Government's acceptance of the IPS as a production system, the Contractor will deliver an IPS Refurbishment Report [CDRL ILS0004], identifying all actions/material/labor required to bring the IPS up to production standards.

#### **3.2.4 Configuration Management Program.**

The Contractor shall establish and maintain a Configuration Management Program (CMP) in accordance with the Contractor's internal procedures for all hardware and software of both the production and legacy TACLAN systems. The Program will also address all test equipment hardware and software, and other test or simulation hardware and software.

##### **3.2.4.1 Configuration Management Plan (CMP).**

The Contractor shall prepare and submit a TACLAN-specific Configuration Management Plan (CMP) for Government approval no later than 30 days after contract award [CDRL CM0001]. The CMP may be consistent with Contractor's standards. The CMP shall describe the Contractor's organization and procedures that will be dedicated to accomplishing the production effort, and detail the Contractor's control and support philosophy for the hardware and software in the legacy and production TACLAN baselines. Governmental approval of the production design shall constitute definition of the system baseline. Changes to the system baseline are subject to Government approval through the Contractor submission of Engineering Change Notice (ECN) and Engineering Change Proposals (ECP).

##### **3.2.4.2 As-Built Configuration.**

The Contractor shall produce and maintain an As-Built Configuration database, allowing requirements traceability of all hardware and software. The database shall begin with delivery of the IPS and end with the final production unit. The Contractor shall produce and maintain an As-Built Configuration list for each delivered item [CDRL CM0002]. If an item is returned to the Contractor for repair, upgrade or replacement, the Contractor shall update the As-Built Configuration list.

### **3.2.5 Quality Assurance (QA) Program.**

The Contractor shall establish and maintain a Quality Assurance (QA) program for TACLAN in accordance with ISO-9001, or equivalent. QA personnel shall participate in IPTs, formal reviews, configuration audits, change control boards (CCB), and material review boards (MRB). QA shall develop material inspection plans (MIP) for incoming material. QA shall monitor the performance of a TACLAN system throughout the manufacturing cycle, maintain test data, and perform statistical analysis. QA shall approve ECN's, review ECP's, verify manufacturing documentation, and ensure adequate configuration control is maintained in program documentation.

#### **3.2.5.1 QA Plan.**

The Contractor shall provide a QA Plan for Government review/approval [CDRL QA0001]. The QA Plan shall be consistent with the contract requirements as outlined within the SOW, CPD, and TSS. The QA Plan shall include, but is not limited to, the following activities.

##### **3.2.5.1.1 System Inspection.** The Contractor shall establish an inspection system that:

- Provides quality assurance to support configuration audits, material review boards, and configuration management activities,
- Detects and prevents problems that could result in unsatisfactory equipment/system performance,
- Initiates timely and effective corrective action,
- Monitors the implementation of corrective actions, and,
- Provides utilization and monitoring procedures for support and test equipment calibration.

**3.2.5.1.2 System Inspection Record.** The Contractor shall establish procedures for the control of subcontractors, vendors, and suppliers to include auditing, inspection, and defect resolution. The Contractor shall develop and maintain a System Inspection Record, identifying items to be examined at final inspection, by whom, and the date of inspection.

### **3.3 Integrated Logistics Support (ILS).**

The Contractor shall provide life-cycle sustainment for legacy and production TACLAN components, provide technical and sustainment support, and develop and implement training programs for New Equipment Training (NET) and Sustainment Training.

#### **3.3.1 Integrated Logistics Support (ILS) Plan.**

The Contractor shall plan for a two-level maintenance concept (Organizational and Depot). The Contractor shall provide an ILS Plan [CDRL ILS0001] to the Government for review and approval. The TACLAN logistics support concept is based upon a modular system design that provides for operator field replacement of electronic equipment items. Upon removal, failed items will be returned to the Contractor support activity for replacement. The ILS Plan shall

include all issues associated with sparing, provisioning, warranty administration, technical support, inventory management, unique identification devices (UID), and software licensing.

### **3.3.2 Technical & Sustainment Support.**

#### **3.3.2.1 Technical Support.**

The Contractor shall provide on-call technical assistance to support system deployments, help resolve operational problems, provide technical reports and analyses, and replace and repair damaged components. Support shall commence 30 days after contract award and extend for the length of the contract. This support will be provided by a technician with at least medium-level competency in hardware, software, and communications. The tasks shall include system operation, setup, disassembly, troubleshooting, and any other support mutually agreed to by the Government and the Contractor for the proper and safe operation of the equipment.

**3.3.2.1.1** The Contractor shall establish a 24/7 Help Desk to provide technical assistance to TACLAN users via telephone, email, and/or web interface during normal business hours, and on-call after duty hours (Eastern Standard Time).

**3.3.2.1.2** The Contractor shall capture all incoming technical assistance calls in a Web-enabled, Contractor Format that identifies the fault, assistance provided, corrective actions taken, and when the issue was resolved.

**3.3.2.1.3** The Contractor shall respond to all incoming technical assistance requests and initiate actions to resolve problems within normal business hours.

**3.3.2.1.4** The Contractor shall ship available spares to TACLAN users to resolve identified problems within 24 hours.

**3.3.2.1.5** The Contractor shall travel to TACLAN user sites to provide technical assistance/repairs and support. The Contractor shall obtain approval from the Government Contracting Officer before deploying support personnel in a Temporary Duty (TDY) status.

#### **3.3.2.2 Sustainment Support.**

The Contractor shall provide Contractor Logistics Support (CLS) in support of legacy and production TACLAN systems. A two-level maintenance concept, Organizational and Depot, will be implemented by the Contractor for both the legacy and production TACLAN systems. Organizational level maintenance will remove and replace the lowest replaceable unit and notify the CLS of required parts and urgency. The CLS shall provide necessary materiel to the user organization and contact the Commercial Depot for repair and return. The CLS shall provide depot level repair and return of failed components.

**3.3.2.2.1** The Contractor shall provide CLS for the legacy TACLAN equipment identified in Table 1.



3.3.2.2.2 The Contractor shall provide CLS for all production TACLAN systems/equipment performed under this contract.

3.3.2.2.3 The Contractor shall coordinate with Property Book Officers and/or Property Manager (S4) at each gaining unit to establish and maintain property accountability for fielded equipment, to include COMSEC equipment.

3.3.2.2.4 The Contractor shall establish and maintain a Standard Operating Procedure (SOP) that describes the process of sparing, the application of warranties, a replacement parts concept, the identification of technology modifications by equipment part that addresses technology obsolescence and operational effectiveness. [CDRL ILS0002]

3.3.2.2.5 The Contractor shall conduct trend analysis, configuration control (to include incorporating and publishing updates) of training documentation, operations and maintenance manuals, materiel fielding plans, and other user related documentation as necessary for currency and accuracy [CDRL ILS0004].

3.3.2.2.6 The Contractor shall provide logistics support for repair and return of warranty and non-warranted items.

3.3.2.2.7 The Contractor shall update, support, and maintain two web servers (one on NIPRNET and one on SIPRNET; provided as GFE) that allow program management and users to:

- a. Download and review approved software packages, baselines, updates, problem resolutions, and IAVAs,
- b. Download and review program and technical documentation (i.e. O&M Plan, Training, Security, Materiel Fielding Plan, etc.);
- c. Track on-line trouble ticket/problem resolution/requisitioning information;
- d. Provide program management and user asset visibility of on-hand and fielded inventories, and,
- e. Provide other approved, paperless, TACLAN-related information.

### 3.3.3 Warranty.

The Contractor shall provide a 1 year warranty, at a minimum, for all components/software replaced in the legacy systems and for all production TACLAN components/software. The warranty will begin when the components/software is accepted by the Government. Additionally, when available, TACLAN components will have an initial manufacturer's warranty of 3 years and extended warranties will be considered. The Contractor shall address innovative ways to reduce turn-around-time of repaired components and dispute adjudication and handling of Could Not Duplicate (CND) failures. The Contractor shall document and report on all repair actions, to include trend analysis, occurring in a Warranty and Maintenance Status Report

[CDRL ILS0004]. Reporting shall include a listing of items returned (part number, serial number, description), reason for return (failed function), point of origin, dates received, item(s) repaired, repair action taken, and date repairable items were returned to the LCSM. This report will reflect warranty and non-warranty items. Quarterly submissions of this reporting requirement shall start no later than 90 days after contract award for legacy systems and will include production TACLAN systems after delivery of the refurbished IPS. Reports shall be submitted throughout the duration of the contract.

#### 3.3.4 Provisioning and Spares.

The Contractor shall provide a complete parts list with recommended on-board spares levels and LCS pipeline spares for each of the legacy and production TACLAN systems [CDRL ILS0003]. The on-board spares levels may be used to achieve required reliability. Final determination of sparing strategies and actual spares quantities to be procured will be recommended by the Contractor and approved by the Government LCSM, and shall be based on sparing analysis for actual procurement densities of both legacy and production TACLAN systems. The Contractor shall also recommend the distribution and delivery schedule and quantities of organizational-level on-site spares/repair parts to the Government LCSM for approval. Pipeline spares and repair parts shall be held at the Contractor's CONUS facility and distributed as required to support organizational-level supply requisitions/demands.

#### 3.3.5 Technical Manuals.

The Contractor shall deliver existing COTS manuals for each component replaced in the legacy systems and for all components of the production TACLAN system. The Contractor shall deliver supplements to the O&M Manuals for legacy and production TACLAN systems that provides a roadmap through the individual COTS subsystem manuals [CDRL ILS0005]. The O&M Manual shall reflect the integration of replaced legacy components and production system configurations delivered under this contract. If applicable, change pages may be provided, vice complete manuals. The O&M manual shall include; equipment technical data, equipment setup and installation procedures, detailed menu field definitions, warnings and precautions, all authorized operator level tasks/procedures, principles of operation, all authorized organizational-level testing, fault isolation, support/test equipment, and removal/replacement procedures, and warranty handling instructions. Initial delivery of the O&M Manual for production systems will be 90 days after CDR. Upon completion of UE and/or BAT, the Government may provide additional comments for incorporation into the O&M Manual. The O&M Manual shall be structured so it can be easily updated as required by follow-on Engineering Change Proposals (ECP) and technology upgrades. One O&M Manual and a full set of COTS manuals shall be delivered with each production TACLAN system and, as appropriate, for legacy systems when hardware and software components are replaced.

#### 3.3.6 Training.

The Contractor shall develop, provide, and maintain training plans/materials/courses in support of legacy and production TACLAN systems. The Contractor shall provide a System Training Plan [CDRL ILS0006]. The Contractor shall design, develop, and conduct a training program.

All training shall be conducted on system hardware at the user site to be identified by the Government. The Contractor shall provide for all training course planning, to include training support devices and course materials. The Contractor shall recommend appropriate course lengths, size, and frequency, consistent with SOW paragraphs 3.3.6.1, 3.3.6.2, and 3.3.6.3.

#### 3.3.6.1 New Equipment Training (NET) Course and Training Materials.

The Contractor shall provide a TACLAN NET operator and maintenance training course. Once approved by the Government, the Contractor will be required to conduct NET. NET training shall be conducted in conjunction with each newly-fielded TACLAN suite and C2 suite, and, shall occur within 60 days of fielding. Training shall include classroom, hands-on, and computer based training (CBT). The course focus shall be for appropriately qualified system administrator personnel. Training sessions shall be no more than three weeks in duration and include: instruction on all portions of the O&M Manual, network configurations, external network connections, the addition of new software applications, system operations, system administration, preventive maintenance, and troubleshooting. The training objective is to ensure operational forces are capable of effectively operating, maintaining, and sustaining TACLAN systems. Fielding will occur at CONUS and OCONUS locations listed in Table 2. Each class shall be presented to a maximum of 12 students. The Government, in coordination with the Contractor, will be responsible for providing the facilities and systems to conduct the training. Training materials necessary for the NET shall be the Contractor's responsibility, and shall be provided to each student [CDRL ILS0007], along with a copy of the O&M Manual. In addition to the training materials provided to each student, one CD-ROM containing all training materials in a current version of PDF format shall be provided at the training site for retention and access through the organization's training library. The CD-ROM shall also contain a PDF viewer for simplified viewing of the library materials. The Government has full reproduction rights to all training materials contained on the CD-ROM or utilized in the course of instruction. NET instruction shall include, as a minimum:

- a. Theory of Operation
- b. Network Operations and Procedures
- c. Description of equipment and components
- d. Capabilities to include any environmental anomalies
- e. Operation of the system to include:
  - Special Handling, Set-up/Tear-down procedures and preparation for shipment
  - Use of special BIT codes
  - Optimum set-up configuration
- f. Trouble-shooting and corrective maintenance actions to include:
  - BIT and operator maintenance
  - Fault isolation and removal and replacement of the faulty LRU
  - Test and checkout procedures.

#### 3.3.6.2 Sustainment Training.

The Contractor shall conduct Sustainment Training at designated sites shown in Table 3. Training shall include classroom sessions, hands-on, and use of CBT. Training sessions shall be

no more than two weeks in duration and include: system operations, system administration, preventive maintenance, and troubleshooting, and legacy system and production baseline changes. The course and materials shall be structured like NET. A Sustainment Training Plan and course materials for legacy TACLAN systems will be submitted to the Government for approval within 90 days after contract award (see also, paragraph 3.4), and, the Sustainment Training Plan and course materials for production TACLAN systems shall be submitted to the Government for approval within 90 days after CDR. [CDRL ILS0007].

### 3.3.6.3 Computer Based Training (CBT).

The Contractor shall develop and deliver a CBT course that presents the theory and demonstrates the skills to enable operators and maintainers to fully perform all mission functions and maintain the TACLAN system at the Unit/Organizational level. The CBT course shall be delivered to the Government for approval within 90 days after refurbishment of the IPS system [CDRL ILS0007]. The CBT shall consolidate all TACLAN training courseware and documentation into a standardized training package from end to end. The CBT format shall be designed to run on a multi-media capable personal computer running Windows XP, or higher, operating environment. The content of the CBT shall be developed using the Contractor's subject matter experts and delivery in "Skill Training" methodology. The CBT shall be easily modifiable without the need for special programming language skills. The CBT training course shall be delivered on CD-ROM with automatic installation software and all run-time modules necessary to permit the student to navigate the course of instruction. The CBT training course may be installed on an unlimited number of computers and the Government shall have the right to reproduce the CBT CD-ROM.

### 3.4 Government Furnished Information (GFI).

The Government shall provide the following legacy TACLAN hardware and software documentation supporting TACLAN Suites (Full and C2), Training Packages, MPKs, and FCDs. Copies of these documents will be provided in softcopy format, when available. These documents shall be maintained and updated by the Contractor throughout contract performance and as modifications are made to the legacy systems and the production systems. The list of documents and information are:

- a. TACLAN System Specification.
- b. Operations and Maintenance Manual.
- c. Version Description Document.
- d. Build Instruction Manuals.
- e. Training Materials to include Lesson Plan, Presentation Materials, and Student Guide.
- f. Materiel Fielding Plan.
- g. Sparing Concept.
- h. System Accreditation Documents.
- i. Life Cycle Sustainment Plan.

The Government shall provide the current TACLAN software baseline for TACLAN Suites (Full and C2), Training Packages, MPKs, and FCDs. Software will be provided on hard drive and DVD format.

The Government shall provide the current TACLAN NAVISION Inventory Database system to support the ILS function.

The Government shall provide the existing contents of the TACLAN Web Server to support the web server function.

### **3.5 Government Furnished Equipment (GFE).**

- 4 The Government shall provide the following legacy TACLAN assets as GFE:
- Existing hardware and spares for TACLAN Suites (Full and C2), Training Packages, MPKs, and FCDs.
  - Two (2) web servers

### **3.6 Government Furnished Facilities.**

The Government shall make available the SOF Digital Environment (SDE) Technical Support Center (STSC) and the TACLAN SCIF located at the USSOCOM Cypress facility, Tampa, Florida to assist the Contractor with live SIPRNET and JWICS connectivity testing, UE, and systems engineering demonstrations.

### **3.7 Data Requirements.**

The Contractor shall provide the required contract data as set forth in this Statement of Work and the Contract Data Requirements List (CDRL).

All delivered Contractor documents and data will be reviewed by the Government within 10 working days and comments provided for inclusion in the final deliverable.

### **3.8 Packaging, Handling, Storage and Transportation (PHS&T).**

The packing of the equipment, material and spare parts shall be such as to provide protection against damage, deterioration and wear during transportation, handling and storage (best commercial practices). Components and equipment classified as controlled cryptographic item(s) shall be handled IAW Service (Army, Navy, Air Force) prescribed procedures.

### **3.9 Contractor Transition.**

Within the 30 days following contract award, the Government shall ensure an orderly and efficient transition of all TACLAN program assets. Full disclosure of GFE, to include software,

and the services required to perform the full TACLAN effort for USSOCOM will be provided to the Contractor.

Upon completion or termination of this contract, the Contractor shall provide sufficient efforts and cooperation to ensure an orderly and efficient transition of all TACLAN services to USSOCOM or the follow-on Contractor. The incumbent Contractor shall provide full disclosure to USSOCOM or the follow-on Contractor of GFE, to include software, and the services required to perform the full TACLAN effort for USSOCOM.

<u>Fielded</u>	<u>TACLAN Suites</u>	<u>C2 Suites</u>	<u>Training Packages</u>	<u>MPKs</u>	<u>FCDs</u>
FY02	38	0	0	0	322
FY03	26	11	0	0	661
FY04	11	3	0	0	435
FY05	7	9	18	212	98
<b>Total Fielded</b>	<b>85</b>	<b>23</b>	<b>18</b>	<b>212</b>	<b>1516</b>

**Table 1: Fielded Legacy TACLAN Components**

Location From Tampa to:	Number of Trips	Days
Hawaii	1	21
Florida (Hurlburt Field)	3	21
North Carolina (Fort Bragg)	2	21
SOCKOR	1	21
SOCEUR	1	21
Kentucky (Fort Campbell)	2	21

**Table 2 – Estimated TACLAN New Equipment Training Locations**

Location From Tampa to:	Number of trips	Days
Hawaii	1	14
Far East (Korea, Japan)	1	14
Europe (Germany, UK)	1	14
Washington (Fort Lewis)	1	14
Colorado (Fort Carson)	2	14
North Carolina (Fort Bragg)	2	14
Kentucky (Fort Campbell)	2	14
California (Coronado)	2	14
Florida (Hurlburt)	2	14
Virginia (Norfolk)	1	14
Georgia (Fort Benning)	1	14

**Table 3 – Estimated TACLAN Sustainment Training Locations**