

## **SECTION C – DESCRIPTION / SPECIFICATION / WORK STATEMENT**

### **C1.0 INTRODUCTION**

This contract will support the CADD/GIS Technology Center for Facilities, Infrastructure and Environment and its Partnering Agencies (See Section G, Authorized Buyers). Initial contract term minimum is four years, with up to three optional renewals of 24 months each, for a total contract life not to exceed ten years.

### **C1.1 PROCUREMENT OBJECTIVE**

Services and products to be procured under this contract will be used by the CADD/GIS Technology Center and its Partnering Agencies to increase productivity and reduce costs in the areas of information technology (IT) for facilities/installation management, geographic information systems (GIS), Network IT Infrastructure, force protection and homeland security, and the environment. The contract provides services and products to include computer-aided design and drafting (CADD), GIS, IT, facilities/installation management, management consulting, database management, document management, records management, e-business, systems integration, knowledge management, public safety, information assurance, physical security, infrastructure security, emergency management and response applications, IT security, aerial surveys, cartography, photogrammetry, and on site support. The primary focus of the contract is delivering users a comprehensive solution, with an emphasis on services, also including supplying software and hardware and support. This objective includes providing follow-on products and services for the IM/FCAD2 contracts.

### **C1.2 CADD/GIS TECHNOLOGY CENTER ORGANIZATION STRUCTURE AND MISSION**

The CADD/GIS Technology Center for Facilities, Infrastructure and Environment was established to promote CADD, GIS, FM and IT technology applications. The “Center” is located at the U.S. Army Corps of Engineers (USACE), Engineer Research and Development Center (ERDC), Information Technology Laboratory, Vicksburg, Mississippi. The Center was originally chartered by the following agencies: U.S. Army, U.S. Army Corps of Engineers, U.S. Navy, U.S. Naval Facilities Engineering Command, U.S. Air Force and the U.S. Marine Corps. Since the Center’s establishment, a number of other DoD and non DoD agencies have become Center Partners. The Center’s mission includes setting standards, promoting system integration, supporting centralized acquisition, and providing assistance for the installation, training, operation, and maintenance of CADD, GIS, FM and IT technology systems and applications. This also includes directing specific application developments, promoting communications, developing and promoting standards, furnishing technical advice, interfacing with professional organizations and industry, evaluating technological developments, and recommending necessary policy to ensure the maximum benefits are received from these technologies. The organization also serves as the Federal Geographic Data Committee (FGDC) Working Group on Facilities, Infrastructure and the Environment, actively supporting the National Spatial Data Infrastructure (NSDI).

### **C1.3 CENTER FUNCTIONS**

**C1.3.1 Role in Acquisition:** The Center is responsible for defining the technical requirements for acquiring and managing future large centralized CADD/GIS acquisitions for DOD and other potential users.

**C1.3.2 Applications Development:** The Center acts as a focal point for consolidation of CADD/GIS and FM automation products. The Center relies on other organizations to develop automated applications such as private Contractors and other Government laboratories/agencies to obtain the maximum leverage from the Center's resources.

**C1.3.3 Promote Communication:** The Center provides the vehicle to share information, programs, processes, techniques and available training programs. The Center shall record ideas and needs of the DOD and other agencies and coordinate with vendors and users in industry. In all cases, the Center will actively coordinate with other Federal laboratories/agencies and offices to eliminate potential duplication.

**C1.3.4 Promote Standards:** Logical and portable standards must be advanced at all levels, from the detailed levels of standard naming conventions, common layers, and standard symbology, up to actual sharing of CADD designs for various similar facility types and GIS databases and analysis tools when needed. The Center plays key roles in developing and making these standards available and in facilitating sharing of these standards. The Center educates management by marketing the benefits of standardization. The Center strives to promote the highest level of standards in existence at industry, national, or international levels by maintaining working relationships with recognized standards organizations.

**C1.3.5 Furnish Technical Advice:** The Center as the focal point for facilities, infrastructure and environmental CADD, GIS, FM and related IT standards and applications within the DOD and Federal Government, is in a unique position to act as a clearinghouse for both hardware and software issues. The Center establishes objectives to maximize the benefits of consolidated acquisitions and promotes an integrated data structure. The Center provides advice and assistance to Federal agencies in identifying their needs for CADD, GIS, FM and related IT application software and hardware.

**C1.3.6 Interface with Professional Organizations and Industry:** The Center establishes contacts and maintains working relationships with professional organizations and industry to aid in sharing information.

### **C1.4 USER ORGANIZATIONS**

The products and services offered on this contract shall be available to the Center and its Partnering Agencies. Current Partnering Agencies are listed in Section G under Authorized Buyers. Additional Authorized Buyers shall be added as other agencies join the Center as Partners.

## **C2.0. GOVERNMENT REQUIREMENTS**

### **C2.1 GENERAL**

The technical features listed in this specification are essential to accomplishing the procurement objectives. The requirements of this specification with regard to hardware, software, and system performance have been developed using standards of general industry availability.

### **C2.2 EQUIPMENT CONDITION**

All equipment delivered under this contract shall be new and unused or warranted as new, and delivered with the latest OEM engineering changes.

## **C3.0 SCOPE**

Services and products to be procured under this contract will be used by the CADD/GIS Technology Center and its Partnering Agencies in the areas of IT for facilities/installation management, GIS, Network IT Infrastructure, force protection and homeland security and the environment. The contract provides services and products to include CADD, GIS, IT, facilities/installation management, management consulting, database management, document management, records management, e-business, systems integration, knowledge management, public safety, information assurance, physical security, infrastructure security, emergency management and response applications, IT security, aerial surveys, cartography, photogrammetry and on site support. The primary focus of the contract is delivering users a comprehensive solution with an emphasis on services, including hardware, hardware maintenance, software and software support. This Scope explicitly includes all products, services or requirements provided or satisfied formally by the IM/FCAD2 contracts.

### **C3.1 REQUIRED CORE CAPABILITIES**

- Provide installation and asset management through implementation and integration of CADD, GIS, real property management applications, system integration, document management, records management systems (RMS), and computer-aided dispatch (CAD) that increase efficiency across an installation
- Provide integrated systems to support management and monitoring of facilities, installations, critical assets, and other infrastructure
- Provide expertise to plan, implement, integrate, and optimize multi-vendor geospatial and mapping applications
- Provide complete public safety/decision support solutions for military and civilian Government installations to support emergency response, force protection, antiterrorism, disaster management, video analysis, and security monitoring
- Deliver field-proven CAD and RMS environments as well as services and support

- Provide security solutions for physical security, information assurance, personnel security, video forensics, surveillance, and emergency response/management. This should include IT infrastructures, tools, and processes that protect information and support decision making.
- Provide networkiness /information assurance solutions and services for continuous life-cycle approach to improve information security
- Provide personnel/identity security solutions to help customers protect personnel data and identities through integrated database, process, and communication security measures
- Provide IT infrastructures, tools, and processes that protect information and support decision making
- Provide management consulting to analyze and assess a customer's current situation, provide effective tools and resources to help improve inefficient processes, and realign an organization towards common goals and objectives. This can include activity-based costing/management (ABC/M).
- Provide IT infrastructure support solutions including Microsoft and Sun environment support, network development, information assurance/system security, on-site support, and implementation of new technologies
- Provide business systems integration that addresses human, system, data, and application interoperability issues
- Provide a framework to integrate the viewing of data, automating business processes, and implementing new technologies.
- Consolidate data sources to deliver the precise information needed to make timely decisions or develop an e-business
- Automate data capture, improve database administration, and provide tools that deliver data in a usable format
- Provide help desk services offering skilled, experienced, and quick-response phone support for hardware, operating system, and applications
- Provide maintenance and resident services to meet needs for dedicated system support, either part-time, full-time, on-site, or remote
- Provide e-learning systems that include multimedia- and Web-based training, knowledge management and delivery, and learning management capabilities
- Provide cartography, digital data conversion, map production, and photogrammetric services.
- Provide security solutions for IT, physical and infrastructure security.

### **C3.2 SERVICE CONTRACT ACT**

This contract has been determined to be exempt from the requirements of the Service Contract Act.

### **C4.0 TECHNICAL SUPPORT SERVICES**

As ordered and described by individual delivery orders issued under the terms of this contract, the Contractor shall provide CAFM, CADD, GIS, CAD, IT, management consulting, e-business, systems integration, knowledge management, public safety, information assurance, physical security, infrastructure security, emergency management and response applications, IT security, aerial surveys, cartography, photogrammetry, and on site support or any other in-scope services.

#### **C4.1 PERFORMANCE EVALUATION OF TECHNICAL SUPPORT SERVICES**

The Contractor's performance of Technical Support Services will be evaluated for each Delivery Order for Services in accordance with Section H6.4. The criteria for evaluation will be the following: Cost/Price Control; Schedule Control; Contract Administration; Responsiveness to Government; Contract Compliance with Technical Requirements; and performance of Key Personnel. Each of these categories will be rated as exceptional, satisfactory, unacceptable or not applicable. In addition, an Overall Composite rating will be given that takes into consideration the relative importance of each of the individual ratings considering the specific work performed. Exhibit 4, Evaluation of Contractor's Delivery Order Performance, will be used for the evaluation. The ratings will be a significant consideration for contract renewal of any option periods. If the Contractor receives an overall composite rating of Unsatisfactory, then the Contractor shall submit a corrective action plan to the authorized buyer/customer. If the corrective action plan does not cure the Unsatisfactory rating, then the Government may terminate this contract.

### **C5.0 SOFTWARE**

The Contractor shall provide software licenses to authorized buyers that conform with Federal Law. Application or operating software may need to be implemented as part of an organization's project. This contract will provide the ability to purchase application software that relates to the technical support services described in this document or for a related technology. Commercial-off-the shelf software is desired, but software customization may be needed as well, depending on the effort. Products will be specified as either Catalog Items, Non-Catalog Items, Unpriced Items (Within Scope Items), or Reimbursable Items (Enterprise Software Agreement (ESA) Software). Commercial terms and conditions for warranty will apply.

#### **C5.1 COMPUTER-AIDED DISPATCH (CAD) SOFTWARE**

The Contractor shall provide application software that supports a computer-aided dispatch system. The operating system will be commercial-off-the shelf software. The database is a relational database management system with the capability to create

specialized reports. The application software shall meet one or more of the following needs:

- a. An "intelligent" interactive mapping and data entry system (termed CAD) to dispatch, monitor, and manage emergency services using the Contractor's expertise in both public safety and geographic information systems
- b. An interface to a server database that stores information such as, addresses, incident histories, location hazard information and much more, automating the calltaking process
- c. The emergency dispatching hub of using a server database and configuration tools in which an agency can store, use and report on information, such as addresses, incident histories, unit activities, etc., in a way that is logical and useful to the dispatcher and administrator
- d. A modular database system using a friendly graphical user interface based on the latest Microsoft® Windows® standards to enter data and query the system including interfaces to the CAD system and NIBRS/IBR/UCR reporting
- e. A standalone or integrated management system for automating incarceration processes
- f. Manage fire service records according to NFIRS standards
- g. Support the analyzing of data from the CAD and RMS databases; support the tactical operations of the Dispatching and Records Management organizations by providing a tool for easily analyzing and presenting strategic information
- h. A remote resource, relying on standard intranet technology, that allows personnel throughout an agency to retrieve dispatch information without having special CAD software installed on their computers
- i. Software for routine, non-emergency dispatching situations, both in public safety as well as in non-public safety departments
- j. Provide capabilities for voiceless dispatch, status updates, messaging, and queries to a variety of systems such as NCIC; interface with automatic vehicle location (AVL) hardware and provide extensive map capabilities
- k. A native interface providing Mobile Data Computer clients the ability to query the CAD system for status updates, field event creations, event updates, text messaging, and a host of other outbound reports
- l. Accept incoming vehicle location data received from an AVL controller or from the mobile data terminal
- m. Allow users to quickly retrieve pertinent information related to vehicles, persons, and property
- n. Integrate the control of the voice radio system with dispatching software to enable dispatchers to deal with the radio system within the base environment
- o. Server software providing support for an off-site, near real-time backup of a CAD database server
- p. Provide a link between the telephone system and the CAD system, enhancing the capabilities of both dispatching and calltaking software
- q. Allow an organization to administer training, plan for future training needs, and efficiently manage the entire training function

- r. An advanced rostering product that supports automatic generation of a roster based on criteria specified by a user within the CAD system
- s. Provide a facility within the base system for storing major incident plans that meet a predefined criteria specified by a user within the CAD system
- t. Support the calltaker/dispatcher function in the CAD system by providing a predefined line of questioning

### **C5.2 Geospatial Software**

The Contractor shall provide application software that supports the implementation of GIS and geospatial information based solutions. Projects needing this type of software could include collecting, analyzing, distributing, managing, integrating and applying geospatial information and solutions. The software will be commercial-off-the-shelf.

### **C5.3 Standards Management Software**

The Contractor shall provide application software that supports standards management. The application shall meet one or more of the following needs: standards compliance, project collaboration among local, remote and external design teams as well as develop, manage, document and deploy multiple standards from a single database.

### **C5.4 OTHER SOFTWARE**

Additional application or operating system software relating to the scope of this contract that needs to be implemented as part of an organization's project shall be provided. The operating system shall comply with current and future Government regulations and policies. Compliance with these specifications shall include updates for future revisions and incorporation of evolving standards.

### **C5.5 SOFTWARE SUPPORT**

The Contractor shall provide annual software support for selected software at commercial terms and conditions. Software support shall include phone support and upgrades where commercially available. The Contractor will propose annual support CLINs as appropriate and as needed for selected CLINs. Third-party resources may provide software support services, but such support activities must be transparent to the Government. Software support will be performed during the Principal Period of Maintenance (PPM). The Principal Period of Maintenance (PPM) for this Contract will be 8:00 A.M. to 5:00 P.M., local time at the Government activity where the maintenance is being performed.

The Contractor will maintain records of all software products sold to each customer. These records will include warranty period and software support coverage dates for selected products. Before the end of each fiscal year, the Contractor will provide to each customer that has products eligible for software support coverage a proposal for the upcoming fiscal year. Prior to ordering software support, the software item must be covered by a warranty plan or be under a current support contract with the Contractor. Otherwise, the customer must back pay for the lapsed software support coverage.

Without incurring any ancillary or administrative expense, and by providing 30 days written notice to the Contractor (or a shorter notice when agreed to by the Contractor), the Government may discontinue, add to or change support service.

## **C6.0 HARDWARE**

Hardware may need to be implemented as part of an organization's project. This contract will provide the ability to purchase hardware that relates to the technical support services described in this document or for a related technology. Products will be specified as either Catalog Items, Non-Catalog Items, Unpriced Items (Within Scope Items), or Reimbursable Items (Enterprise Software Agreement (ESA) Software). Commercial terms and conditions for warranty will apply.

### **C6.1 GENERAL REQUIREMENTS**

This section specifies the general requirements for all hardware devices defined in this document.

- a. The Contractor shall provide available detailed technical specifications for any hardware components (e.g. processors, cache, controllers, disk drives) to the Contracting Officer's Representative (COR) upon request.
- b. All devices shall have, if possible, labeling providing the manufacturer's name, model, part number and serial number.
- c. The Contractor shall provide installation information for devices that require special installation procedures related to the following:
  1. Connecting power requirements
  2. Environmental conditions
  3. Mounting
  4. Changes to existing devices

#### **C6.1.1 Generated Noise**

Any hardware devices that are not installed in system room conditions shall not generate excessive or irritating noises:

- a. The overall ambient noise level shall not exceed a level of 75dB measured in any direction for server and peripheral equipment in normal operation.
- b. The overall ambient noise level shall not exceed a level of 60dB measured in any direction for all desktop and workstation equipment in one location in normal operation.

#### **C6.1.2 Environmental and Utility Availability**

The environmental and utility availability in the indicated areas is as follows, unless otherwise stated. Each site's environmental and utility requirements are unique, and sites will vary. Not all hardware manufacturers have the same environmental and utility criteria. The Contractor will provide hardware with the minimum requirements below:

- a. Desktop Computers, Portables, Workstations, and Servers:
  - 1. Voltage: 115 VAC +/- 10%, 60Hz, single phase, up to 15 amps per workstation or server
  - 2. Temperature: 75 degree F +/- 15 degree F
  - 3. Humidity: 30% to 80% noncondensing
- b. Standalone Peripherals:
  - 1. Voltage: 115 VAC +/- 10%, 60Hz, single phase, up to 15 amps per peripheral
  - 2. Temperature: 75 degree F +/- 15 degree F
  - 3. Humidity: 30% to 80% noncondensing
- c. Ruggedized Workstations and Servers:
  - 1. Voltage: 115 VAC +/- 10%, 60Hz, single phase, up to 15 amps per workstation or server
  - 2. Temperature: 75 degree F +/- 35 degree F
  - 3. Humidity: 10% to 90% noncondensing

### **C6.1.3 Cables**

The Contractor will have the ability to provide all cables required for site installations. The cables will meet the following criteria:

- a. Power cable:
  - 1. UL certified
  - 2. Commercial standard length
- b. Interconnecting cable:
  - 1. UL certified
  - 2. 100% shielded if required
  - 3. Commercial standard connectors

### **C6.1.4 Stabilization**

The Contractor will have the ability to provide stabilization for tall hardware equipment, such as racks or bundled devices. The stabilization will meet commercial safety standards for tip over from front to back for drawer configurations and side to side.

## **C6.2 HARDWARE SOLUTIONS**

The Contractor shall provide commercial workstations, servers, portables with support for desktop network presence (e.g. docking station, port replicators), storage systems (e.g., Networked Attached Storage, Storage Arrays, Storage Area Networks), networking equipment (including wireless), operating systems, peripherals, communications devices, transit cases, power devices, displays and other accessories (e.g. cables, cabinets, racks), original equipment manufacturer (OEM) and extended equipment warranty, technology insertion which includes but is not limited to biometrics, embedded

encryption and equipment upgrades. Hardware solutions will also include video teleconferencing solutions, voice-over-internet protocol (VOIP) solutions, and associated documentation to meet worldwide requirement of the Government. In addition, the Contractor will provide related services including installation, equipment maintenance, site survey, system configuration and integration, image loading, data migration, and asset tracking.

#### **C6.2.1 Workstations**

This section defines the minimum requirements for the desktop computers. The system shall execute general office applications. The system shall be a modular system that can be configured to meet individual needs. Each system will have these common characteristics:

- a. A commercial keyboard and mouse for each system
- b. Operate in an office environment without requiring additional power or thermal devices
- c. Operate as a standalone or as a network system
- d. The following components will be made available: processors, memory, disk drive, peripherals, graphics card, network card, operating system, and warranty

#### **C6.2.2 Servers**

This section defines the minimum requirements for servers. The system shall execute in the following three modes:

- a. Providing dedicated database services to other servers and workstations
- b. Providing dedicated mass storage services to other servers and workstations
- c. Operating in a dual mode, simultaneously providing database and mass storage services to other servers and workstations.

The system shall be a modular system that can be configured to meet individual needs. Each system will have these common characteristics:

- a. A commercial keyboard and mouse for each system
- b. The system can either be a system designed to operate in an office environment without requiring additional power or thermal devices such as a tower unit, or a system designed to operate in a back-room environment requiring additional power or thermal devices such as a 19-inch rack configuration.
- c. The following components will be made available: processors, memory, disk drive, peripherals, network card, and operating system, hot plug redundancy, racks, and warranty.

#### **C6.2.3 Portables**

This section defines the minimum requirements for portables. The system shall execute general office applications and design applications. The system shall be a modular system that can be configured to meet individual needs. Each system will have these common characteristics:

- a. The system will be designed to operate in an office environment without requiring additional power or thermal devices.
- b. The system shall have the capability to operate as a standalone or as a network system.
- c. The following components will be made available: processors, memory, disk drive, peripherals, accessories, network card/modem, operating system, and warranty.

#### **C6.2.4 Storage Systems**

This section defines the minimum requirements for storage systems. A storage system will include a variation of storage arrays, storage area networks, network attached storage, storage arrays, Just a Bunch Of Disks (JBODs), varying sizes of hard disk drives, storage cables, adapters, storage expansion cabinets, storage network bridge devices, power supplies, storage area networks (SAN) and backup management software, tape and optical backup devices, tape and optical media, and warranty.

#### **C6.2.5 Network Equipment**

This section defines the minimum requirements for network equipment. Network equipment for a site will include managed switches, routers, associated cables, adapters, firmware, memory modules and upgrades, interface and port cards, power supplies, expansion bays, service packs, software, and warranty.

### **C6.3 COMPUTER-AIDED DISPATCH HARDWARE**

#### **C6.3.1 General Description and Minimum Requirements**

The Contractor shall provide hardware that supports a computer-aided dispatch system and upgrades to a dispatch system. The initial system will be comprised of workstations and servers, with one workstation set up as the administrator/supervisor dispatch position and the other workstations set up as the dispatch positions to support Military Police, fire, and emergency services and other departments. The system will also support multiple concurrent users accessing the base system via an Internet browser.

The system hardware configuration will be a network-based, distributed computing environment with each workstation running its own application software and having sufficient processor and disk capacity to run its tasks in isolation. These workstations will communicate with, and through, the database server(s) and the interface/communications server over a local area network (LAN) or a wide area network (WAN). The system network infrastructure may include a switched Ethernet LAN that can be interfaced to a site's existing LAN infrastructure through a firewall in order to provide connectivity for remote web clients and access to various LAN/WAN functions.

#### **C6.3.2 Computer-Aided Dispatch Workstation System**

The computer-aided dispatch workstation system shall have the following minimum requirements: Xeon/2.4 GHz, 1 GB, 36GB HD, DVD, NIC; flat panel monitors, keyboard, and mouse; a Smartcard USB; a switch and video card; and warranty.

### **C6.3.3 Computer-Aided Dispatch Server Systems (includes Database and Interface/Communications Servers)**

The computer-aided dispatch database server system shall have the following minimum requirements: XEON/2.8 GHz (dual), 3 GB memory, 6, 36.4 GB HD (SCSI/RAID), DVD-ROM/CD-RW; redundant power supply; fan; NIC cards; at least one DLT tape (minimum is 2, typical is 4 in 2 racks); flat panel monitor, keyboard, and mouse; a switch and video card; and warranty.

Rack parts for the computer-aided dispatch system shall have the following minimum requirements: 42U rack; 42U side panel kit and rack blanking kit; keyboard/monitor/mouse switch box; UPS; power distribution unit for each rack; stabilizing feet; cable management D ring; and warranty.

### **C6.3.4 Computer-Aided Dispatch Communications System**

The computer-aided dispatch communications system shall have, at a minimum, a system that supports the customer's operation. If data is to be transmitted, then the system must be capable of handling it economically. The ability to interface and use many communications systems is desired.

### **C6.3.5 Computer-Aided Dispatch Networking System**

The computer-aided dispatch networking system shall have the following minimum requirements: a dedicated, switched network that is treated as sensitive but unclassified (SBU) and has DMZ/Firewall isolation from the intranet and Internet, and warranty. Secure, encrypted wireless is acceptable (802.11b and g, using AES encryption). Networks should be designed to work within DITSCAP guidelines.

### **C6.3.6 Computer-Aided Dispatch Backup System**

The computer-aided dispatch backup system shall have the following minimum requirements: one set of the database and communications servers in a rack; a connection to the backup site (dedicated data circuit, either wireline or wireless); backup application software; appropriate database license; and appropriate application software; need at least one workstation (preferably two or more) with a dispatcher application software license; and warranty.

### **C6.3.7 Computer-Aided Radio System**

The computer-aided radio system shall have the following minimum requirements: APCO P25 compliant, narrow band (mandated for DOD to be completed by 1 January, 2008), data capable, digital is desired, and warranty. The system must also support an API or SDK so that an application that integrates the control of the voice radio system can be interfaced.

### **C6.3.8 Computer-Integrated Telephony**

The computer-integrated telephony system shall have the following minimum requirements: provide a link between the telephone system and the computer-aided dispatch system, using either new or legacy phone switches, and warranty. The system must work with multiple brands of switches. The customer will provide access to the

subscriber data so the standalone automatic location identifier (ALI) database can be built. The customer will maintain this standalone system. It must be able to work with the State E911 coordinator and mutual aid jurisdictions to work out the interoperability agreements for the 911 requirements and to get hooked up with the TELCO to work out trunk connection, Master Street Address Guides (MSAGs), and trunk re-routing to support full E 911 with ANI/ALI for all emergency call needs within the installation Area of Responsibility (AOR).

### **C6.3.9 Alarm and Sensor Systems**

The computer-integrated alarm system shall have the following minimum requirements: the alarm systems shall have the ability to provide a two-way data interface to the alarm application software module so alarms can automatically generate the appropriate event in the computer-aided dispatch system. An XML interface is desired, but a serial/IP text interface is adequate. The system must also interface with alarms and sensors and provide intrusion detection, fire/smoke/pull box, access control, CCTV, and other technologies. The Contractor shall provide sensor systems such as photo-electric and ionization. Provide product warranty.

### **C6.3.10 Communications/Operations Center Infrastructure**

The Communications/Operations Center Infrastructure shall include consoles, specialized chairs, modular walls, dividers, and other features needed to accommodate 24 x 7 operations for communicators or "watch standers."

### **C6.3.11 Video Analysis System**

Provide comprehensive, effective, and user friendly solutions for video enhancement and analysis, with full-resolution, frame-by-frame analysis. The system will provide tools necessary to capture, analyze, enhance, process, and edit any type of video. System can be used for security applications, law enforcement, and surveillance, among other uses. The system shall have software that meets one of more of these specifications.

- a. Video Image Stabilization and Registration (VISAR\*) technology (*\*VISAR is licensed from the National Aeronautical and Space Administration under U. S. Patent Nos. 6,459,822 and 6,560,375*).
- b. Support for the international ITU-R 601 uncompressed video format standard
- c. Multisource input/output: use a variety of data sources to analyze and enhance images and output to a variety of data sources
- d. Magnification, contrast and brightness
- e. Demultiplexing up to 24 cameras
- f. De-interlacing for field level viewing to enhance detail
- g. Frame averaging
- h. Tracking by area of interest from initial to end frame with annotation and frame centering
- i. Slow motion - selectable playback speed
- j. Picture in Picture (PIP)
- k. Stackable tools - simultaneous application of multiple enhancement tools
- l. User selectable order of tool application
- m. Storage of digital video
- n. Digital video and Web streaming

- o. Support for third-party software by integrating toolsets from other Windows-based products to expand overall analysis capabilities
- p. Stabilize and enhance unclear video clips
- q. Analyze mission- or case-critical video
- r. Sort, sequence, and compare footage
- s. Scan, zoom, and view in slow motion; track footage
- t. Store footage and view and track suspects
- u. Microsoft® Windows® 2000 (or later)-based interface

### **C6.3.12 Video**

The Contractor shall provide video products such as video cameras, video encoders, digital video recorders, media converters, video network switches, video software, and warranty.

### **C6.4 ADDITIONAL HARDWARE SOLUTIONS**

The Contractor shall provide additional hardware items as well, including: commercial flat-panel liquid-crystal display (LCD) and cathode ray-tube (CRT) monitors; uninterruptible power supplies (UPS) that maintain system power during failure of outside utility power; commercial printers and plotters and scanners that recognize industry standards and warranty, including other in scope items as required.

### **C6.5 RUGGEDIZED PRODUCTS**

Ruggedized products will be available for purchase from this contract to satisfy the field needs of an organization. Ruggedized products must endure the extremes of heat and cold, resist dust and moisture, keep out salt water or snow, and remain stable in the midst of explosions or violent jarring. Stainless steel chassis and bodies, reinforced mounts, and polymer shocks absorb the jars, knocks, and rigors of a field environment, while an outer enclosure protects from the elements. Products will be designed to meet the applicable National Electrical Manufacturers Association (NEMA) and MILSPEC standards.

#### **C6.5.1 Objective**

The Contractor shall design, develop, and manufacture rugged workstations, servers, displays, expansion boxes, and consoles based on customer's mission requirements and using best commercial practices and ISO 9001:2000 processes.

The Contractor will employ COTS electronic components/ parts that are designed and developed based on recognized industry standards. Typical components include:

- Motherboards
- Memory chips
- Processors
- Hard drives
- DVDs
- CD-RWs
- Network cards

- Graphics cards
- Sound cards
- Media converters
- SCSI controllers
- Other system expansion cards
- Keyboards
- Trackballs
- CRT monitors
- LCD monitors

### **C6.5.2 Design MIL Standards**

The Contractor shall take all reasonable steps to design ruggedized hardware to meet or comply with the following environmental certifications as appropriate:

- MIL-STD-461E- Department of Defense Interface Standard, Requirements for the Control of Electromagnetic Interference Characteristics of Subsystems and Equipment.
- MIL-S-901D- Military Specification, Shock Tests, H.I. (High Impact) Shipboard Machinery, Equipment, and Systems, Requirements. The ruggedized systems shall meet Grade A standards with applicable isolation applied.
- MIL-STD-167-1- Department of Defense Test Method, Mechanical Vibrations of Shipboard Equipment (Type I- Environmental and Type II- Internally Excited). The Contractor shall design to meet Type I and Type II vibrations.
- MIL-STD-889B- Military Standard, Dissimilar Metals

### **C6.6 CUSTOM CONFIGURED SYSTEMS**

Custom configured systems must be available for purchase from this contract, particularly in the area of force protection; organizations need unique and mobile custom configured solutions. These solution sets comprise products, services to configure them, and often a vehicle base -- for example, a trailer with a weather station and GPS mounted on the top. Custom configured systems will be ordered using other contract CLINS (HW/SW, In Scope, Non-Catalog, Services, etc.).

### **C6.7 OTHER HARDWARE**

The Contractor will provide additional hardware relating to the scope of this contract that needs to be implemented as part of an organization's project.

### **C6.8 HARDWARE WARRANTY**

The Contractor shall provide warranty for hardware at commercial terms and conditions. Warranty will include phone support and/or on-call support. The Contractor will also propose specialized warranty as appropriate including, but not limited to, the following:

extended warranty duration, 24 x 7 warranty, on-site support, mission-critical warranty, and OCONUS warranty. Third-party resources may provide warranty services, but such support activities must be transparent to the Government. Warranty will be performed during the Principal Period of Maintenance (PPM). The Principal Period of Maintenance (PPM) for this Contract will be 8:00 A.M. to 5:00 P.M., local time at the Government activity where the maintenance is being performed.

The Contractor shall maintain records of all hardware products sold to each customer. These records will include warranty period and maintenance coverage dates for selected products. Before the end of the warranty period, the Contractor will provide to each customer that has products eligible for hardware maintenance coverage a proposal for the upcoming fiscal year or balance of the fiscal year. Prior to ordering maintenance, the hardware item must be covered by a warranty plan.

### **C6.9 HARDWARE MAINTENANCE**

The Contractor shall provide annual maintenance for selected hardware at commercial terms and conditions. Maintenance will include phone support and/or on-call support. The Contractor will propose annual maintenance CLINs as appropriate and as needed. Specialized maintenance such as 24 x 7, resident onsite and time and material maintenance also may be proposed under this support CLIN. Third-party resources may provide maintenance services, but such support activities must be transparent to the Government. Maintenance will be performed during the Principal Period of Maintenance (PPM). The Principal Period of Maintenance (PPM) for this Contract will be 8:00 A.M. to 5:00 P.M., local time at the Government activity where the maintenance is being performed.

The Contractor shall provide services related to equipment acquired under this contract on a firm fixed-price basis under the equipment maintenance CLINS. Price is TBD. Related services includes installation, equipment maintenance, site survey, system configuration and integration, image loading, data migration, asset tracking, and, potentially, legacy equipment maintenance. Other direct costs for items used in providing the services, including travel, shall be priced on a firm fixed price basis under the CLINS.

The Contractor shall maintain records of all hardware products sold to each customer. These records will include warranty period and maintenance coverage dates for selected products. Before the end of each fiscal year, the Contractor will provide to each customer that has products eligible for hardware maintenance coverage a proposal for the upcoming fiscal year. Prior to ordering maintenance, the hardware item must be covered by a warranty plan or be under a current maintenance contract. Otherwise, the maintenance must be brought to a current status.

Without incurring any ancillary or administrative expense, and by providing 30 days written notice to the Contractor (or a shorter notice when agreed to by the Contractor), the Government may discontinue, add to or change maintenance.

### **C7.0 DOCUMENTATION**

Documentation is defined as all written reference materials (exclusive of instruction materials) applicable to the use of hardware and software delivered through this contract. This includes, but is not limited to, CD, hardcopy and electronic online documentation.

- a. Documentation costs for each individual CLIN shall be included in the unit cost for the CLIN (i.e., it shall not be separately priced).
- b. Compact disk and electronic documentation shall be accessible at input prompts in the graphics environment and in all application programs.
- c. When available, one copy of documentation, corresponding to the hardware or software ordered, shall be delivered to each shipping address identified on the individual delivery order.
- d. The Government shall have unlimited duplication rights, as required to prudently conduct business.

## **C8.0 RESERVED**

## **C9.0 STANDARDS**

The scope provides Contractors with maximum flexibility to conceive and propose innovative approaches and solutions. However, in some cases, there may be constraints that the Government must place on those solutions. The following specifications, standards, policies and procedures represent the constraints placed on this acquisition. All documents listed are mandatory, as applicable. Applicability is as defined in the document. The list is not all-inclusive. Other documents required for execution of tasks issued under this contract will be cited in the relevant delivery order. As indicated, a number of documents are still TBD or in draft. Web links are provided wherever possible.

### **C9.1 NETCOM NETWORTHINESS PROGRAM (TBD)**

The following is a list of known and envisioned documents that will bind service and product implementation efforts when specifically connected to or concerned with the Army Enterprise Infrastructure under this contract. The program is being phased and these documents will be evolving.

- SAIS-IOE-S, Memorandum, Subject: Networthiness Program 02 Apr 2003
- SAIS, Networthiness Certification Guidance Document (Draft)
- NETCOM, Networthiness Implementation Document (TBD)
- Directory Services, Army Enterprise Infrastructure Directory Services Naming Conventions and Standards, Vers. 2.2, 9 Sep 2002.
  - VPN-NETCOM, Virtual Private Network Implementation Document (Draft)

- Standardization-NETCOM for Army level-Computer Desktop Configuration (NETCOM), 28 Mar 2003.
- Information Assurance, NETCOM/ESTA, Discussion Paper, Army Protected Networks, 13 Nov 2002

## **C9.2 DoD AND ARMY DOCUMENTS**

- Army Knowledge Management, HQDA, The Army Knowledge Management Implementation Plan, 31 Oct 2002 (final draft)
- CONOPS – Army, NETOPS CONOPS, Vers. 1, 29 Oct 2002.
- U.S. Army Local Area Network (LAN) and Wireless Portable Electronic Devices (PED) Policy [http://www.usapa.army.mil/pdffiles/125\\_02\\_1.pdf](http://www.usapa.army.mil/pdffiles/125_02_1.pdf)
- DoD Information Technology Security Certification and Accreditation Process (DITSCAP) <http://iase.disa.mil/ditscap/>
- Defense Information Infrastructure Master Plan, Version 7.0 <http://www.disa.mil/diimp/diimp-t.html>
- DoD Joint Technical Architecture (version 4.0) <http://www-jta.itsi.disa.mil/>
- DoD Joint Technical Architecture (version 4.0) List of Mandated & Emerging Standards (LMES).
- Joint Technical Architecture – Army (version 6.5) <https://akea-cio.army.mil/jtaa/jtaa.asp>
- Joint Technical Architecture – Army (version 6.5) [https://akea-cio.army.mil/jtaa/docs/JTA-Army\\_6.5\\_Profile\\_Final.xls](https://akea-cio.army.mil/jtaa/docs/JTA-Army_6.5_Profile_Final.xls)
- Common Operating Environment <http://diicoe.disa.mil/coe/index.html>
- Common Criteria <http://www.commoncriteria.org/cc/cc.html>
- DoD 4140.1-R DoD Supply Chain Materiel Management Regulation Draft, September 2002 [http://www.acq/osd.mil/log/logistics\\_materiel\\_readiness/organizations/sci/html/2002\\_reg.htm](http://www.acq/osd.mil/log/logistics_materiel_readiness/organizations/sci/html/2002_reg.htm)
- Deputy Under Secretary of Defense (Logistics and Materiel Readiness) Logistics Enterprise Integration and Transformation [http://www.acq/osd.mil/log/logistics\\_materiel\\_readiness/organizations/lsm/assets/articles/Ent%20Integ%20and%20Transformation%20Dec%2001%20FINAL.pdf](http://www.acq/osd.mil/log/logistics_materiel_readiness/organizations/lsm/assets/articles/Ent%20Integ%20and%20Transformation%20Dec%2001%20FINAL.pdf)

## **C9.3 OTHER REGULATORY AND COMMERCIAL REQUIREMENTS**

- National Policy Governing the Acquisition of Information Assurance (1A) and IA-Enabled Information Technology Products  
[http://www.nstissc.gov/Assets/pdf/nstissp\\_11.pdf](http://www.nstissc.gov/Assets/pdf/nstissp_11.pdf)
- Distributed Management Task Force Desktop Management Interface (DMI Version 2.0) <http://www.dmtf.org/standards/spec.php>
- EPA Energy Star Program
  - PC and Monitor Memorandum of Understanding  
[http://estar4.energystar.gov/estar/ESPartnerLogos.nsf/PDF/files/\\$File/Computer.MOU.V3.pdf](http://estar4.energystar.gov/estar/ESPartnerLogos.nsf/PDF/files/$File/Computer.MOU.V3.pdf)  
[http://estar4.energystar.gov/estar/ESPartnerLogos.nsf/PDF/files/\\$File/Monitor.MOU.V3.pdf](http://estar4.energystar.gov/estar/ESPartnerLogos.nsf/PDF/files/$File/Monitor.MOU.V3.pdf)
  - Printer and FAX Memorandum of Understanding  
[http://estar4.energystar.gov/estar/ESPartnerLogos.nsf/PDF/files/\\$File/PF.MOU.V3.0.pdf](http://estar4.energystar.gov/estar/ESPartnerLogos.nsf/PDF/files/$File/PF.MOU.V3.0.pdf)
- Certified Smart Card Readers  
<https://setdweb.belvoir.army.mil/training/cardreader.html>
- Section 508 of the Rehabilitation Act of 1973  
<http://www.section508.gov> <http://www.access-board.gov/sec508/guide/1194.26.htm> <http://www.access-board.gov/sec508/guide/1194.21.htm>
- Security Requirements for Cryptographic Modules  
<http://csrc.nist.gov/publications/fips/fips140-2/fips1402.pdf>
- Latest Windows 2000 and Windows NT Hardware Compatibility List <http://support.microsfot.com/default.aspx?scid=kb:EN-US;q131303>

#### **C9.4 AREAS FOR FORTHCOMING OR ENVISIONED POLICIES AND GUIDANCE**

- Army Level
  - Enterprise Directory Service
  - Enterprise System Management
  - Information Assurance
  - Army Enterprise Infrastructure-Repository—Army level, CONOPS (envisioned)
  - Configuration Management
  - Server Consolidation

Standard Desktop Software Configuration