AUTOMATIC IDENTIFICATION TECHNOLOGY IV (AIT-IV)

STATEMENT OF WORK (SOW)

.

1 SCOPE.

The mission of Product Manager Joint-Automatic Identification Technology (PM J-AIT) is to provide a single point of contact for procurement and technical expertise across the suite of Automatic Identification Technology (AIT) enabling technologies that support focused logistics, total asset visibility (TAV), and the integration of global supply chains. The Automatic Identification Technology (AIT-IV) contracts are multiple award, indefinite-delivery-indefinite-quantity (IDIQ) contracts that will provide commercial hardware, software, documentation, and, services to authorized users worldwide. Services include training, warranty and maintenance services, and technical engineering services (TES). Hardware and software delivery and installation, as well as performance of associated training, warranty, maintenance, and documentation shall be required at continental United States (CONUS) and outside the continental United States (OCONUS) Government sites. Performance of TES shall be required at CONUS and OCONUS Government sites and the contractor facility.

1.1 AUTOMATIC IDENTIFICATION TECHNOLOGY ACQUISITION OBJECTIVES.

The objectives of the Automatic Identification Technology IV (AIT-IV) acquisition are to provide a state-of-the-art, common, integrated structure for logistics tracking, locating, and monitoring of assets and processes. In addition, data collection, storage information, information processing, and transmission of AIT data will greatly enhance systems within Department of Defense (DoD), United States Coast Guard (CG), North Atlantic Treaty Organization (NATO), Coalition Partners, other Foreign Military Sales (FMS), and other Federal Agencies. AIT technologies will provide standardization among Government users of AIT components purchased from this Contract.

1.2 DESCRIPTION AND SPECIFICATION.

a. This Statement of Work (SOW) sets forth the requirements for the AIT-IV technology acquisition. The Contract shall provide for state-of-the-art, commercial items needed for automatic identification, data collection, keyless data entry, data processing, data storage, data retrieval, data transmission, and the tracking of assets, including the use of Radio Frequency (RF) technology for users throughout DoD, CG, North Atlantic Treaty Organization (NATO), Coalition Partners, other Foreign Military Sales (FMS), other Federal Agencies, and contractor purchases in support of DoD. The Government requires software for development (libraries, device drivers, application programming interfaces, and software development tool kits), equipment operating systems, radio frequency transaction management (RF engines), bar code label and form generation, application generation software, application software development kits, and communications. Associated technical engineering services (and turnkey integration services, systems integration, software development, surveys and installations), instruction and training, warranty, maintenance, documentation, and program management are required.

b. The technologies required by the Government encompass bar code symbologies, contact or touch memory, direct thermal and thermal transfer printing, radio frequency data communications, and future technologies as they are developed. These future technologies include, but are not limited to, biometrics, systems using satellite communications to relay data and provide position information, cellular telephony, voice recognition, smart labels (combined bar code label and RF transponder), Item Unique Identification (IUID) marking equipment, and Radio Frequency Identification (RFID) technologies. The Government requires equipment with these technologies to support both current and future requirements. The requirements are for both civilian and military operations worldwide. The Government requires equipment compliant with open systems standards as described in the Defense Information Standards Registry (DISR).

The categories of required equipment include, but are not limited to:

1. Data collection devices (portable, pen-based, and mobile);
2. Bar code laser scanners and imaging scanners;
3. Printers (direct thermal and thermal transfer bar code label printers);
4. Contact or touch memory devices.

c. Turnkey solutions integrating technology purchased under the AIT-IV Contracts with existing Government provided Passive RFID and Active RFID shall be provided under TES Task Orders to provide a transparent solution to the user. To support the warfighter in field operations, the AIT-IV Contract shall also provide transit cases to safely transport AIT-IV equipment and related accessories required to install and operate AIT-IV equipment. The

AIT-IV equipment is required to meet worldwide DoD and CG, NATO, Coalition Partners, and other Federal Agencies needs in various CONUS and OCONUS locations. Since DoD components have shared AIT technology with Allied partners in joint operations, such as Operation Enduring Freedom and Operation Iraqi Freedom, the AIT-IV Contracts will be available for orders to meet FMS requirements in order to provide standardization for logistics support with Allies.

1.3 AIT-IV APPLICATIONS.

Some anticipated AIT-IV applications include, but are not limited to:

a. Inventory and warehousing environments;
b. Large open-area storage facilities (austere marshaling areas, and staging and assembly areas), with or without electrical power or an established communications infrastructure;
c. Maintenance, repair, and tracking facilities;
d. Entry and exit points of military facilities, and roadside installations;
e. Restricted office and laboratory environments;
f. Transactions at custody exchange points (for example, weapons issue facilities);
g. Military transportation community (for example, seaports and air terminals), and petroleum distribution points (including fueling operations at airports, in-flight, and at sea);
h. Handling of hazardous, explosive, or other regulated materials;
i. Military convoys.

1.4 UID AND IUID POLICY.

Updates to Policy and associated Guides for Unique Identification (UID) and IUID of Tangible Items, can be obtained from the following:

http://www.uidforum.com/

http://www.acq.osd.mil/dpap/pdi/uid/index.html

1.5 WORLD WIDE GEOGRAPHIC SUPPORT.

The Government requires equipment that can be used worldwide. The Contractor shall provide AIT-IV hardware, software, documentation, and incidental services, to include TES, training, warranty, and maintenance to support the DoD operations in U.S. Northern Command (USNORTHCOM), U.S. Pacific Command (USPACOM), U.S. Central Command (USCENTCOM), U.S. European Command (USEUCOM), U.S. Southern Command (USSOUTHCOM) and, U.S. Africa Command (AFRICOM).

1.6 RESTRICTION OF HAZARDOUS SUBSTANCES (ROHS).

All hardware provided under the Contract shall comply with the Directive 2002/95/EC of the European Parliament and of the Council of 27 January 2003 on the restriction of the use of certain hazardous substances in electrical and electronic equipment: http://eur-lex.europa.eu/LexUriServ/LexUriServ.do?uri=CELEX:32002L0095:EN:HTML.

1.7 OFFICIAL HOURS OF OPERATION.

The Contractor shall provide support during local Official Hours of Operation, based on the geographic location of the Government site at which the support will be provided. Help Desk requirements are specified in the paragraph entitled “Toll-Free Customer Support Help Desk.”

1.8 ATTACHMENTS AND EXHIBITS.

The following exhibits are contained in this Part:

Exhibit-A, AIT-IV Contract Status Report

Exhibit-B (DELETED)

The following attachments are contained in this Part:

Attachment 1, Labor Categories Descriptions

Attachment 2, DD 254, Department of Defense Contract Security Classification Specification

Attachment 3, Army Information Assurance (IA) Letter to Industry

Attachment 4, Contract Level Metrics

2 APPLICABLE DOCUMENTS, DEFINITIONS, AND ACRONYMS.

2.1 FEDERAL INFORMATION PROCESSING STANDARDS.

Copies of the Federal Information Processing Standards (FIPS) may be obtained from:
U.S. Department of Commerce
National Technical Information Service
5285 Port Royal Road
Springfield, VA 22161
Telephone: 1-800-553-6847

2.2 AMERICAN NATIONAL STANDARDS INSTITUTE.

Copies of ANSI standards may be obtained from:
American National Standards Institute
25 W 43rd Street 4th Floor
New York, NY 10036
Customer Service or Document Sales
8:30am – 6:00pm EST
Telephone: 1.212.642.4980
http://www.ansi.org

2.3 INTERNATIONAL ORGANIZATION FOR STANDARDIZATION.

Copies of ISO standards may be obtained from: http://www.iso.org/iso/home.htm.

2.4 FEDERAL COMMUNICATION COMMISSION REGULATIONS.

Federal Communications Commission Regulations may be obtained from the Government Printing Office web site: http://bookstore.gpo.gov

2.5 UID AND IUID POLICY.

Updates to Policy and associated Guides for Unique Identification (UID) and Item Unique Identification (IUID) of Tangible Items, can be obtained from: http://www.acq.osd.mil/dpap/pdi/uid/index.html

2.6 DEFINITIONS AND ACRONYMS.

The following are definitions of terms used in this SOW. All other definitions and meanings used shall be those which are commonly used in the Automatic Identification Technology industry:

Automatic Identification Technology — Microprocessor-based, hand-held devices designed to gather, process, and store source-entry data, and transmit and receive data.

Configuration Item — A configuration item is an aggregation of hardware or software that satisfies an end-use function and is designated by the Government for separate configuration management.

Continental United States (CONUS) — All locations and sites within the 48 contiguous States.

Equipment — The term equipment as used throughout the SOW refers to any combination of hardware, software, device drivers, utilities, libraries, and firmware.

Functional Configuration Audit — The formal examination of the functional characteristics of a configuration item to verify that the item has achieved the requirements specified in its functional and allocated configuration documentation.

Hand-held, Non-contact Bar Code Scanners — These bar code scanners are lightweight and ergonomically designed, provide bar code scanning from varying distances, and do not require the user to physically touch the bar code with the scanner.

HERO — Hazards of Electromagnetic Radiation to Ordnance (See paragraph entitled "Ordnance Environment").

Host Computer — A computer running Microsoft Windows XP or latest version Operating System (updated with the latest Service Pack), or other common operating system executing application programs on behalf of users, and employing standard network communication services in support of this function.

Industrially Hardened Components: Components that can operate in a warehouse or manufacturing setting and survive the rough treatment and handling often found in shipping areas, loading docks, catwalks, ladders, or on the floor of a manufacturing facility.

Non-Government Standard — A standardization document developed by a private sector association, organization, or technical society which plans, develops, establishes, or coordinates standards.

Nonincendive — See paragraph entitled "Hazardous Environment."

Outside Continental United States (OCONUS) — All locations outside the 48 contiguous States.

Outside Official Hours of Operation — All hours not included in Official Hours of Operation, i.e., from 5:00 p.m. to 8:00 a.m. local time, Monday through Friday, and all day during Saturday, Sunday and U.S. Federal and Host Nation holidays, based on the geographic location of the U.S. Government site.

Return Material Authorization (RMA): A number assigned by the Contractor and furnished to the AIT-IV user to assist in quickly ascertaining the status of components returned for warranty or maintenance service.

Workday: Monday through Friday, excluding U.S. Federal holidays.

The following acronyms are used in this SOW:

AC	Alternating Current
AIT	Automatic Identification Technology
ANSI	American National Standards Institute
API	Application Programming Interface
ASCII	American Standard Code for Information Interchange
CAC	Common Access Card
CAGE	Contractor And Government Entity
CCP	Contract Change Proposal
CD	Compact Disk
CG	Coast Guard
CLIN	Contract Line Item Number
CONUS	Continental United States
COR	Contracting Officer's Representative
DC	Direct Current
DISR	Defense Information Standards Registry
DoD	Department of Defense
EC	Engineering Change
ECP	Engineering Change Proposal
EMC	Electromagnetic Compatibility
FCA	Functional Configuration Audit

FCC	Federal Communications Commission
FMS	Foreign Military Sales
GCSS-Army	Global Combat Support System – Army
HERO	Hazards of Electromagnetic Radiation To Ordnance
HHT	Hand Held Terminal
IETM	Interactive Electronic Technical Manuals
IP	International Protection rating
ISO	International Organization for Standardization
IUID	Item Unique Identification
IEC	International Electrotechnical Commission
IPT	Integrated Product Team
LAN	Local Area Network
LOGMARS	Logistics Applications of Automated Marking and Reading Symbols
MESR	Monthly Equipment Service Report
NEMA	National Electrical Manufacturer's Association
NI	Nonincendive
NIST	National Institute of Standards and Technology
NSN	National Stock Number
OCONUS	Outside Continental United States
OEM	Original Equipment Manufacturer
OS	Operating System
PBUSE	Property Book Unit Supply Enhanced
PC	Personal Computer
PCA	Physical Configuration Audit
PPR	Project Progress Review
RAM	Random Access Memory
RC	Repair Center
RF	Radio Frequency
RFDC	Radio Frequency Data Communications
RFID	Radio Frequency Identification
RMA	Return Material Authorization
ROM	Read Only Memory
SAMS-E	Standard Army Maintenance System – Enhanced
SAMS-IE	Standard Army Maintenance System – Installation Enhanced
SOW	Statement of Work
TCO	Total Cost of Ownership
UC APL	Unified Capabilities Approved Product List
UID	Unique Identification
UII	Unit Item Identifiers
UPC	Universal Product Code

3 AIT-IV SYSTEM REQUIREMENTS.

3.1 GENERAL.

The Government requires equipment that supports the requirements of the DISR. The Government requires Contractor support during Official Hours of Operations. AIT-IV commercial equipment and its components shall operate in worldwide locations and in the identified environments. The equipment shall support required industry standard symbologies. The equipment shall support U.S. and Host Nation Country electrical power and radio frequency requirements. The platforms of Automatic Identification Technology are required to support the requirements of the Government. Transit Case Groups are required to support missions that require rapid deployment worldwide of groups of AIT-IV equipment. The Government requires commercial software packages and software for application development. Program Management is required to support the Government's efficient execution of this Contract. Warranty and Maintenance services are required to ensure the reliability and availability of AIT-IV equipment. Technical Engineering Services are required to help the Government incorporate AIT-IV

equipment into its applications. Instruction, training and documentation are required to inform and educate the Government users.

3.2 DEFENSE INFORMATION STANDARDS REGISTRY (DISR) COMPLIANCE.

The DISR is the minimal set of rules governing the arrangement, interaction, and interdependence of the parts or elements that together form an information system. Its purpose is to ensure that DoD systems are interoperable, scalable, and portable. AIT-IV equipment specified in this Contract is not considered by DoD to be a system. Rather, AIT-IV equipment is used to provide data entry front-ends for DoD systems. This Specification includes small computer platforms and components that may be proprietary, or that have neither the capacity nor the scope to satisfy DISR requirements. For example, the operating systems for hand held terminals do not meet Common Operating Environment requirements. DISR requirements for modeling and designing a system are also not required by this Contract. Systems developers incorporating AIT-IV equipment purchased from this Contract will address AIT product modeling and design requirements in their system models and designs. The DISR requirement for purposes of this Contract is for AIT-IV equipment to interface with supported systems. Interface requirements for AIT-IV equipment are part of the specifications for these components. For each component provided by the Contractor, the Contractor shall identify each external interface of the component for which a standard interface specified in the DISR applies, and shall certify that each interface is compliant with a DISR standard.

3.3 OPERATING ENVIRONMENTS.

AIT-IV components shall operate in diverse environments, and under a full spectrum of climatic conditions. AIT-IV components may be subjected to rough handling, shock, and vibration during transportation, setup, and dismantling. All AIT-IV components shall be operated in industrial, hazardous, and ordnance environments, on board surface and subsurface naval vessels, aircraft, tanks, in conditions that range from protected and controlled (office settings) to extremely harsh and severe environments, and in areas with high levels of electromagnetic noise and interference. AIT-IV components are required for outdoor use and may be subjected to desert and Arctic areas. The Contractor shall certify that the provided components meet applicable Environmental Protection Act (EPA) requirements. The Government requires AIT-IV equipment that can be used in the following environments: electromagnetic, hazardous, ordnance, radio frequency, and rugged environments. However, the Laser Marking Equipment and Integrated Marking Cart Configuration are exceptions and are intended for use in an indoor industrial environment.

3.3.1 ELECTROMAGNETIC ENVIRONMENT.

Commercial AIT-IV equipment may be used in the vicinity of spectrum-dependent devices that receive low-level signals and/or transmit high-level signals (See MIL-STD-464A (https://acc.dau.mil/CommunityBrowser.aspx?id=30513&lang=en-US): Interface Standard for Systems Electromagnetic Environmental Effects). In order to certify the use of commercial AIT-IV equipment in these environments, the Government may subject representative categories of equipment to radiated emission and susceptibility tests (See MIL-STD 461D (https://acc.dau.mil/CommunityBrowser.aspx?id=127372): Requirements for the Control of Electromagnetic Interference Emissions and Susceptibility, and MIL-STD-462D (https://acc.dau.mil/CommunityBrowser.aspx?id=127377&lang=en-US): Measurement of Electromagnetic Interference Characteristics). The Contractor shall support Government-testing efforts by providing technical data sheets and responding to the Contracting Officer's Representative (COR) requests for additional data.

3.3.2 HAZARDOUS ENVIRONMENT.

The Contractor shall provide equipment that is identified and certified as Nonincendive (NI) for operation in environments where flammable and explosive gases and vapors may be present. At a minimum, the following NI requirements shall be met:

Class 1 (Gases and Vapors)
Division 2 (Not present in normal operation)
Groups
A (Acetylene)

B (Hydrogen)
C (Ethyl Ether, Ethylene)
D (Acetone, Ammonia, Benzene, Butane, Cyclopropane, Ethanol, Gasoline, Hexane, Methanol, Methane, Natural Gas, Naphtha, Propane)

Class 2 (Combustible Dust)
Division 2 (Not present in normal operation)
Groups
F (Combustible carbonaceous dusts)
G (All other combustible dusts, such as grain dust)

Class 3 (Easily Ignitable Fibers)
Division 2 (Not present in normal operation)

NI is a rating classification of equipment specifically defined in the National Electrical Code (NEC). To be given an NI rating, the Contractor shall have demonstrated that equipment cannot, under normal operation, produce a spark or other undesirable effects that might cause combustion in any potentially hazardous environment. The presence of gases, vapors, flammable liquids, combustible dust, or ignitable fiber or flyings are examples of potentially hazardous environments. Equipment shall be certified by an approved testing laboratory meeting OSHA standards. Circuits shall not produce a spark under normal operation. AIT-IV equipment may be used under conventional, chemical, or biological warfare conditions. The Contractor shall label components that are approved for use in a hazardous environment in accordance with governing body markings.

3.3.3 ORDNANCE ENVIRONMENT.

AIT-IV equipment may be used in the vicinity of ordnance susceptible to radiated energy. In order to certify that AIT-IV equipment is safe to use in these environments, the Government will select and subject a single item from each pertinent AIT-IV Contractor's equipment categories to stringent Hazards of Electromagnetic Radiation to Ordnance (HERO) environment testing (See MIL-STD 464A).

3.3.4 TESTING.

If required by the Government user, each AIT-IV item tested shall successfully complete HERO testing prior to being made available for ordering on the AIT-IV Contract to include equipment added after contract award. Each AIT-IV Contractor shall be responsible for providing any and all support required to successfully complete HERO testing for their equipment at the direction of the Government COR at no additional cost to the Government. Contractors may be required to provide on-site support at the Government test facility (USN Dahlgren Laboratory) to support testing. The Government will bear the cost of the initial testing for each AIT-IV hardware item. All subsequent testing costs due to failure of an item to meet the HERO requirements shall be the responsibility of the Contractor.

3.3.5 SPECTRUM SUPPORTABILITY COMPLIANCE.

The DoD will obtain spectrum supportability guidance and approvals prior to procuring equipment that is designed to either transmit or receive electromagnetic (radio frequency) energy. Spectrum supportability includes spectrum certification, frequency assignments, and host nation coordination where employment of the system or equipment is planned. Radio frequency dependent components of the proposed system shall comply with applicable DoD, national, and international spectrum management policies and regulations to include spectrum certification in accordance with DoD Directive 4650.1, "Management and Use of the Radio Frequency Spectrum" and DoD Directive 5000.1, "The Defense Acquisition System". Frequency allocation shall be documented with a DD Form 1494 (APPLICATION FOR EQUIPMENT FREQUENCY ALLOCATION) and/or a "Note to Holder" as appropriate. The Contractor shall provide the technical data required to complete the spectrum supportability process, including information concerning specifications and testing of the transmitter, receiver, and antenna characteristics necessary for host nation coordination. The Contractor shall provide the technical support necessary to complete the DD Form 1494 no later than 30 days after the effective date of the Notice to Proceed or approval of a contract change proposal (CCP) to add or replace applicable items on the Contract. All Contractor-provided spectrum supportability compliance support shall be provided at no additional cost to the Government.

3.3.6 RUGGED ENVIRONMENT.

AIT-IV hardware will be used by the Government in “rugged environments” (i.e. industrial and field settings under temperate, arctic, maritime, desert, and tropical conditions). The words “rugged” or “ruggedized”, when used in this Part D, mean that the Government requires AIT-IV hardware that is industrially hardened, designed, built, and tested to ensure reliable and continuous performance in all rugged environments. In this environment, AIT-IV components may be subjected to rough handling, continuous operational use, vibration, dropping onto hard surfaces, and shock caused by transportation over rough terrain. Contractor-provided AIT-IV HHTs and the Access Points with NEMA enclosures shall be ruggedized (Industrial Hardened) and weatherproof (rain, wind, etc.) and shall comply with the IEC 60529 IP54 rating requirement.

3.4 ORIGINAL EQUIPMENT MANUFACTURER ENGINEERING CHANGES

All Original Equipment Manufacturer (OEM) sponsored Engineering Changes (ECs) adopted prior to the date of contract award shall be incorporated into the hardware and software delivered under this contract.

3.5 CONNECTIVITY TO GOVERNMENT-OWNED COMPUTERS.

The Government currently uses a wide variety of Pentium processor-based computers that shall be connected to the Contractor-provided AIT-IV components. Connections shall be in accordance with standard protocols (e.g., RS-232, RS-485, USB 1.1 or higher, and TCP/IP).

3.6 AC/DC POWER REQUIREMENTS.

3.6.1 POWER REQUIREMENTS.

The Contractor shall provide equipment designed and certified to meet quality and safety standards of Underwriters Laboratory (UL) or equivalent certified. The Contractor shall provide AIT-IV equipment with power supplies, fuses, and cables for AIT-IV components that shall allow the use of locally available commercial power. All AIT-IV components shall be compatible with the power supply, and power outlets or connectors, for the geographic area in which it is to be operated as specified in the Delivery Order, Task Order or Government Purchase Card Order. The Contractor shall also provide all necessary and appropriate AC plug adapters (when required for AC operation) for AIT-IV components delivered. The plug adapters are exempt from UL or equivalent certification.

3.6.2 POWER SUPPLIES.

AIT-IV devices and printers shall, to the extent available, automatically enter a low-power mode after a period of inactivity and automatically return to active mode upon resumption of system activity or receipt of external input. AIT-IV devices and printers shall be shipped with the power management feature enabled. The power supplies and AC adapters (when required for AC operation) shall be of a type to prevent damage to the device when transient high voltage is present. The Contractor shall provide a single unit to convert the plug type to one that is required by the country where the equipment will be operated. The power supplies and AC adapters shall be appropriately marked to indicate the product’s safety and quality.

3.6.3 BATTERY-OPERATED AIT-IV EQUIPMENT.

The Contractor shall provide two sets of rechargeable batteries (one set operational and one set spare) with each battery-operated AIT-IV device acquired under this Contract.

3.6.3.1 RECHARGEABLE BATTERIES.

The Contractor shall provide rechargeable batteries that supply eight hours operation under typical use (Note: see more specific requirement for printers in subparagraphs under the paragraph entitled “Bar Code Label Printers”) and that require no more than five hours to fully recharge. Typical use is benchmarked as the device powered on with two complete actions per minute. HHTs are to scan, decode, display data, and transmit data from (via RF) two bar codes per minute. Rechargeable batteries shall be chargeable without removal from AIT-IV equipment. Batteries or battery packs shall be user-replaceable in the field in less than two minutes, and without special tools. Positive and negative terminals of rechargeable batteries shall be clearly marked unless the shape of the rechargeable battery prevents improper or reversed installation. All battery charging devices shall be equally capable of charging batteries, e.g. waking up a battery, if required, to affect a charge.

3.6.3.2 INTERNAL BACK-UP POWER.

The Contractor shall provide:

a. A method to maintain the data content of RAM for all HHTs during changing of the battery and for a minimum of five minutes when the battery is removed.
b. AIT-IV Devices shall not require special storage procedures to prevent internal backup batteries from failing unless such batteries are user replaceable without special tools or training.
c. A method to maintain the RAM of HHTs for a period of 72 hours when not in use.

3.6.3.3 LOW-POWER OPERATION.

Battery-operated AIT-IV equipment shall provide the operator with a visible signal when battery power is low. The low-battery power signal shall provide the operator with at least five minutes of advance warning of an automatic shutdown. To preserve stored data and to conserve power, battery-operated AIT-IV equipment shall automatically shut down before battery power is completely depleted.

3.7 ACCESSIBILITY

a. The Contractor shall provide a comprehensive list of all provided specific electronic and information technology (EIT) products (supplies and services) that fully comply with Section 508 of the Rehabilitation Act of 1973, per the 1998 Amendments, and the Architectural and Transportation Barriers Compliance Board's Electronic and Information Technology Accessibility Standards at 36 CFR Part 1194. The Contractor shall clearly indicate where this list with full details of compliance can be found (e.g., Contractor, subcontractor, vendor's, or other exact web page location). The Contractor shall ensure that the list is easily accessible by typical users beginning five calendar days after receipt of the notice to proceed. The Contractor shall maintain this detailed listing of compliant products for the full contract term, including all forms of extensions, and shall ensure that the detailed listing is updated within three calendar days of changes to the Contractor, subcontractor's, or vendor's product line.

b. The Contractor shall ensure that all EIT products that are less than fully compliant are the most compliant products and services available to satisfy this Contract's requirements.

c. For every EIT product provided under this Contract that does not comply with 36 CFR Part 1194, the Contractor shall, at the discretion of the Government, make every effort to replace or upgrade it with a compliant product or service, if commercially available and cost neutral.

3.8 BAR CODE SYMBOLOGIES.

The AIT-IV equipment provided shall decode symbologies that comply with industry standards and specifications for Code 39, Code 128, CODABAR, Interleaved 2 of 5, GS1 Bar Codes, Universal Product Code (UPC), Data Matrix, and PDF 417. The Contractor provided equipment shall at a minimum read Medium (10.0) density Bar Code labels and, decode labels in accordance with the specifications defined in ANSI MH10.8.2 Data Application Identifier Standard, ANSI MH10.8.3M Material Handling - Unit Loads and Transport Packages – Two Dimensional Symbols, ANSI MH10.8M For Material Handling – Unit Loads and Transport Packages – Bar Code Symbols, and ANSI X3.182 Bar Code Print Quality Guidelines. When additional standards are developed during the life of the contract, the Government may require other symbologies.

3.9 EQUIPMENT DELIVERY REQUIREMENTS.

The Contractor shall provide all necessary equipment, software, cables, connectors, drivers, essential accessories, or ancillary items in order to make each deliverable item fully operational.

3.10 EXPEDITED DELIVERY REQUIREMENTS.

The Contractor shall provide Expedited Delivery for CONUS and OCONUS locations when specified in equipment orders (Delivery Orders and Government wide Purchase Card Orders). Delivery shall comply with the requirements of the paragraph entitled "Expedited Delivery" in Part C-1-1.

3.11 UNIQUE IDENTIFICATION.

Applicable items, as identified in DFARS 252.211-7003, Item Identification and Valuation (Aug 2008), in Contract Part C-1-1, shall be permanently marked in accordance with the "Revision of Update to Policy for UID and IUID of

Tangible Items - New Equipment, Major Modifications, and Reprocurement of Equipment and Spares," December 22, 2003. Marking shall include the UID on the item or identification plate in Data Matrix Bar Code symbology with Human Readable Interpretation (if adequate space is available). Data format shall be in accordance with the "Department of Defense Guide to Uniquely Identifying Items," Version 2.0, October 1, 2008. See Paragraph "UID and IUID Policy" in this Part for the website for UID and IUID Policy Regulations.

3.12 IPV6 ENABLED ASSETS

The Contractor shall warrant that each item delivered under the AIT-IV Contract shall accurately transmit, receive, process, and function correctly using the Internet Protocol Version 6 (IPv6). Specifically, the Contractor warrants that: 1) each item delivered complies with the current DISR developed IPv6 standards profile; 2) each item delivered maintains interoperability with IPv4 (specifically, shall operate on/coexist on a network supporting IPv4 only, IPv6 only, or a hybrid of IPv4 and IPv6); and 3) each item delivered is supported by the Contractor's IPv6 technical support. Additionally, as IPv6 evolves, the Contractor shall upgrade or provide an appropriate migration path for each item delivered. The duration of this warranty and the remedies available to the Government for breach of this warranty shall be as defined in, and subject to, the terms and limitations of the Contractor's standard commercial warranty or warranties contained in this Contract, provided that notwithstanding any provision(s) to the contrary in such commercial warranty or warranties, the remedies available to the Government under this warranty shall include repair or replacement of any product whose non-compliance is discovered and made known to the Contractor no later than one year after acceptance. Nothing in this warranty shall be construed to limit any rights or remedies the Government shall otherwise have under this AIT-IV Contract with respect to defects other than IPv6 performance.

3.13 BAR CODE DENSITY.

Bar Code density is directly related to the width of the narrowest element (bar or space) of the bar code, which is called the "x" dimension. The "x" dimension is measured in mils (thousandths of an inch). Typical densities vary for each bar code symbology but are still related to the "x" dimension. The family of densities in this Specification is referred to as low density, medium density and high density. The bar code density is critical in defining the ability of bar code scanners to read various densities, and to the ability of bar code label printers to print various densities. The relationship of densities and the corresponding "x" dimensions are as follows:

Density	**Nominal "X" Dimension (in Mils)**
Low	12.5+
Medium	10.0
High	7.5

Note: The values listed in the right-hand column refer to "x" dimensions for linear bar codes and PDF 417, and to the cell width module for Data Matrix 2D symbology. Where Data Matrix is specified, the Contractor shall provide scanning/imaging equipment that shall read and decode Data Matrix ECC 200 symbology with nominal cell width module of 10 Mils and a minimum dark/light contrast of 35%. Label printers shall print Data Matrix ECC 200 at a nominal cell width module of 10 Mils.

4 EQUIPMENT REQUIREMENTS.

The Contractor shall provide programmable Hand Held Terminals, imagers, IUID marking devices, printers, wired and wireless communications capabilities, interfaces, and various storage media with the associated readers and writers.

4.1 HAND HELD TERMINAL (HHT) REQUIREMENTS.

Hand Held Terminals (HHT) are microprocessor-based, hand-held devices used to automatically capture and store data. The HHTs shall accept data through touch screen, keypad, integral bar code imager, and attached devices, and shall communicate via communications docking station or 802.11g/i network with a host computer for data transfer and for downloading HHT program instructions from a host computer. The Contractor shall provide devices with graphical user interfaces and pen-based data input capability. The devices shall be provided with an operating

system as described in the paragraph entitled "Hand Held Terminal Operating Systems." All HHTs shall be delivered with a Common Access Card (CAC) Reader. For each HHT delivered under the AIT-IV Contract with a CAC reader the Contractor shall affix a permanent label to the HHT on or near the CAC reader that states "WARNING! THIS ITEM SHALL NOT BE USED IN A HAZARDOUS ENVIRONMENT WHEN A CAC IS INSERTED IN THE CAC READER." When available, all HHTs shall be delivered with CAC enablement software installed and enabled. The Contractor shall provide a Communication Docking Station/Battery Charger with a physical interface for communicating between the HHT and a host computer. The unit shall also charge the batteries in the HHT without removing the batteries from the HHT. HHTs shall be capable of supporting DoD Public Key Infrastructure (PKI) interfaces (reference: http://iase.disa.mil/pki/index.html). As a separately orderable component, the Contractor shall provide a semi-transparent and flexible dust cover for the keypad and screen to prevent dust and sand intrusion and damage to screen while permitting full use of the device (keypad, screen, and scanner). These HHTs are intended for use in the office, warehouse, and outdoor military environments worldwide.

4.1.1 TECHNICAL REQUIREMENTS.

The Contractor shall provide HHTs with all of the following attributes and components:

a. An integral bar code imager with capability to read the linear and 2-D bar codes specified in the paragraph entitled "Bar Code Symbologies";
b. The integral bar code imager (with the exception of the HHT-F with Direct Part Mark reading capability) shall provide a depth of field of at least 4 inches for low and medium density bar codes and 2 inches for high density bar codes.
c. Ruggedized construction;
d. Minimum operating temperature range of -10° to + 50° Celsius;
e. Certified Nonincendive; (desired certification for HHT-G and HHT-H)
f. A screen or display that can receive input via pen and touch;
g. A minimum of ¼ VGA Color display;
h. A minimum 128 Mbytes RAM;
i. Retain data in memory for a minimum of 5 minutes without main battery power;
j. A minimum of 128 Mbytes user programmable ROM for OS and Application Software;
k. Operating system (OS) as described under "Hand Held Terminal Operating Systems";
l. Cabled data communications to a host PC;
m. Provided with a communications dock /battery charger; (with the exception of HHT-G and HHT-H)
n. Provided with one set of operational and one set of spare rechargeable batteries;
o. Provided with tethered stylus and spare stylus;
p. Provided with a user accessible memory card slot; (with the exception of HHT-G and HHT-H)
q. Provided with Removable Memory Media appropriate to the user accessible memory slot, in 2GB capacity.
r. Built-in Wireless Radio Frequency Data Communications conforming to IEEE 802.11g, with capability to deactivate radio (assured deactivation), except that those classes designated as 'Batch' shall have all radios (if any) deactivated with no user capability to enable the radios.

4.1.2 HAND HELD TERMINAL-A (HHT-A) WITH ABBREVIATED KEYPAD AND WIRELESS 802.11G/I DATA COMMUNICATIONS

The Contractor shall provide a hand-held, user-programmable HHT-A with abbreviated keypad and 8012.11g/i wireless communications function as Separately Orderable Components.

The HHT-A that complies with paragraph "Hazardous Environment" in this Part shall be available for ordering on the AIT-IV contract no later than 90 calendar days after the effective date of the notice to proceed.

4.1.2.1 SEPARATELY ORDERABLE COMPONENTS.

The Contractor shall provide the following Separately Orderable Components for the HHT-A:

a. Universal (Right or Left-handed) HHT Holster with adjustable, detachable shoulder strap and means of belt attachment;
b. Detachable handle with trigger (if available and not inherent to HHT-A);
c. Rechargeable Battery;

d. Multiple Battery Charger for a minimum of 4 batteries;
e. Transparent, flexible dust cover, and
f. One pack of 12 tethered replacement styli.

4.1.3 HAND HELD TERMINAL-B (HHT-B) WITH ABBREVIATED KEYPAD AND BATCH COMMUNICATIONS (NO WIRELESS CAPABILITY)

The Contractor shall provide a hand-held, user-programmable HHT-B with abbreviated keypad and batch communications function. It shall not have any wireless function, and if any radios are present on the motherboard, they must be permanently disabled.

The HHT-B that complies with paragraph "Hazardous Environment" in this Part shall be available for ordering on the AIT-IV contract no later than 90 calendar days after the effective date of the notice to proceed.

4.1.3.1 SEPARATELY ORDERABLE COMPONENTS.

The Contractor shall provide the following Separately Orderable Components for the HHT-B:

a. Universal (Right or Left-handed) HHT Holster with adjustable, detachable shoulder strap and means of belt attachment;
b. Detachable handle with trigger (if available and not inherent to HHT-B);
c. Rechargeable Battery;
d. Multiple Battery Charger for a minimum of 4 batteries;
e. Transparent, flexible dust cover, and
f. One pack of 12 tethered replacement styli.

4.1.4 HAND HELD TERMINAL-C (HHT-C) WITH FULL ALPHANUMBERIC KEYPAD WITH WIRELESS 802.11I/G COMMUNICATIONS.

The Contractor shall provide a hand-held, user-programmable HHT-C with a full alphanumeric keypad capability and wireless 802.11g/i wireless communications function. The HHT-C shall be capable of communicating with the Portable/Wearable Bar Code Label Printer through a cable interface. The Contractor shall provide a User specified Operating System of either Win Mobile 5.0 or Win Mobile 6.x (latest version). Although not a mandatory requirement, the Government desires that the HHT-C can operate in a wider temperature range than the operating temperatures stated in this Part.

4.1.4.1 SEPARATELY ORDERABLE COMPONENTS

The Contractor shall provide the following Separately Orderable Components for the HHT-C Class:

a. Universal (Right or Left-handed) HHT Holster with adjustable, detachable shoulder strap and means of belt attachment;
b. Detachable handle with trigger (if available and not inherent to HHT-C);
c. Rechargeable Battery;
d. Multiple Battery Charger for a minimum of 4 batteries;
e. Transparent, flexible dust cover,
f. One pack of 12 tethered replacement styli;
g. WinMobile 5.0 option; and
h. Win Mobile 6.x (latest version) Upgrade, with user assisted installation option.

4.1.5 HAND HELD TERMINAL-D (HHT-D) WITH FULL ALPHANUMERIC KEYPAD AND BATCH COMMUNICATIONS (NO WIRELESS CAPABILITY)

The Contractor shall provide a hand-held, user-programmable HHT-D with full alphanumeric keypad and batch/wired communications function. It shall not have any wireless function, and if any radios are present on the motherboard, they must be permanently disabled.

4.1.5.1 SEPARATELY ORDERABLE COMPONENTS.

The Contractor shall provide the following Separately Orderable Components for the HHT-D Class:

a. Universal (Right or Left-handed) HHT Holster with adjustable, detachable shoulder strap and means of belt attachment;
b. Detachable handle with trigger (if available and not inherent to HHT-D);
c. Rechargeable Battery;
d. Multiple Battery Charger for a minimum of 4 batteries;
e. Transparent, flexible dust cover; and
f. One pack of 12 tethered replacement styli.

4.1.6 HAND HELD TERMINAL-E (HHT-E) WITH EXTENDED SCAN RANGE, FULL ALPHANUMERIC KEYPAD, AND WIRELESS 802.11I/G COMMUNICATIONS.

The Government desires a hand-held, user-programmable HHT-E with a full alphanumeric keypad capability and wireless 802.11g/i wireless communications function. This HHT-E shall have the capability of reading extended range linear bar codes at a range of up to 40 feet.

The HHT-E that complies with paragraph "Hazardous Environment" in this Part shall be available for ordering on the AIT-IV contract no later than 90 calendar days after the effective date of the notice to proceed.

4.1.6.1 SEPARATELY ORDERABLE COMPONENTS.

The Contractor shall provide the following Separately Orderable Components for the HHT-E Class:

a. Universal (Right or Left-handed) HHT Holster with adjustable, detachable shoulder strap and means of belt attachment;
b. Detachable handle with trigger; (if available and not inherent to HHT-E)
c. Rechargeable Battery;
d. Multiple Battery Charger for a minimum of 4 batteries;
e. Transparent, flexible dust cover
f. One pack of 12 tethered replacement styli.

4.1.7 HAND HELD TERMINAL-F (HHT-F) WITH DIRECT PART MARK READING CAPABILITY, FULL ALPHANUMERIC KEYPAD, AND WIRELESS 802.11I/G COMMUNICATIONS.

The Contractor shall provide a hand-held, user-programmable HHT-F with a full alphanumeric keypad capability and wireless 802.11g/i wireless communications function. This HHT-F shall have the additional capability of reading Direct Part Markings encoded in the Data Matrix Symbology on a variety of base materials and produced by the various methods listed in MIL-STD 130N (http://assist.daps.dla.mil/quicksearch/basic_profile.cfm?ident_number=35521), including laser etching and dot peen, with minimum cell size of 7.5 mil.

The HHT-F that complies with paragraph "Hazardous Environment" in this Part shall be available for ordering on the AIT-IV contract no later than 90 calendar days after the effective date of the notice to proceed.

4.1.7.1 SEPARATELY ORDERABLE COMPONENTS.

The Contractor shall provide the following Separately Orderable Components for the HHT-F Class:

a. Universal (Right or Left-handed) HHT Holster with adjustable, detachable shoulder strap and means of belt attachment;
b. Detachable handle with trigger (if available and not inherent to HHT-F);
c. Rechargeable Battery;
d. Multiple Battery Charger for a minimum of 4 batteries;
e. Transparent, flexible dust cover, and
f. One pack of 12 tethered replacement styli.

4.1.8 HAND HELD TERMINAL-G (HHT-G) INTEGRATED IMAGER, FULL ALPHANUMERIC KEYPAD CAPABILITY, LARGE DISPLAY, AND WIRELESS 802.11I/G COMMUNICATIONS.

a. The Contractor shall provide a hand-held, user-programmable HHT-G with a full alphanumeric keypad capability, Bluetooth, and wireless 802.11b/g/i(WPA2) wireless communications function. The user shall have the capability to enable/disable the 802.11(b/g) radio both manually and by firmware. The HHT-G shall be capable of communicating with the Portable/Wearable Bar Code Label Printer through a cable interface. The HHT-G shall at a minimum have a touch screen display, be a ruggedized, Industrially Hardened, dual-core processor, with a shock mounted or solid state 128 GB Hard Drive, 4 GB RAM, 1.2 GHz minimum processing speed, one stylus (no spare required), an integrated CAC reader, 4 hours operational time w/ hot-swappable batteries, and docking connector, serial, Ethernet and two USB port connections. The HHT-G shall meet or exceed the IP 54/IEC 60529 standard for sealed against water and dust intrusion and meet or exceed multiple 4 foot drops according to MIL-STD-810G. The mobile device shall have a nominal screen size between 9" to 12" diagonal and weigh no more than 4 lbs. The HHT-G shall include one set of operational batteries and a means to charge the batteries. The HHT-G shall be equipped with an integrated barcode scanner capable of reading all the symbologies listed in the paragraph entitled "Bar Code Symbologies."

b. The mobile device shall be configured with the Microsoft Windows Vista or latest version Operating System (updated with the latest Service Pack). The Contractor shall Harden the OS to the DISA Field Security Operations (FSO) Security Content Automation Protocol (S-CAP). The POC at the Defense Information Systems Agency (DISA) is: disa.letterkenny.FSO.mbx.stig-customer-support-mailbox@mail.mil. For Army orders only: the latest version Army Golden Master (AGM) shall be installed with a default AGM image for the Operating System. NETCOM will manage and maintain configuration management control over the standard AGM configuration and provide updates to each contractor. If the Contractor is not listed on the approved Army vendors list, the Contractor shall coordinate with the AIT-IV customer (Army government agency) the availability of the appropriate AGM-based image so that it can be integrated onto the HHT platform, or the Contractor shall obtain a customer waiver (exemption) for the AGM install. The contractor shall maintain and update images for their platforms using the AGM standard configuration and provide NETCOM with a copy of each platform specific image delivered to the Army. Note: The US Army Golden Master program is responsible for the release of the Army Standard Baseline Configurations for commonly used computing environment within the Army Enterprise Infrastructure. The AGM baseline may change throughout the life of the contract as directed by the government

4.1.8.1 SEPARATELY ORDERABLE COMPONENTS.

The Contractor shall provide the following Separately Orderable Components for the HHT-G Class:

a. Detachable shoulder strap;
b. Detachable handle; (if available and not inherent to HHT-G)
c. Rechargeable Battery;
d. Multiple Battery Charger;
e. Transparent screen protector
f. One each tethered replacement styli
g. Docking Station

4.1.9 HAND HELD TERMINAL-H (HHT-H) INTEGRATED IMAGER, FULL ALPHANUMERIC KEYPAD CAPABILITY, SMALL DISPLAY, AND WIRELESS 802.11I/G COMMUNICATIONS.

a. The Contractor shall provide a hand-held, user-programmable HHT-H with a full alphanumeric keypad capability, Bluetooth, and wireless 802.11b/g/i(WPA2) wireless communications function. The user shall have the capability to enable/disable the 802.11(b/g) radio both manually and by firmware. The HHT-H shall be capable of communicating with the Portable/Wearable Bar Code Label Printer through a cable interface. The HHT-H shall at a minimum have a touch screen display, be a ruggedized, Industrially Hardened, dual-core processor, with a shock mounted or solid state 128 GB Hard Drive, 2 GB RAM, 1.2

GHz minimum processing speed, one stylus (no spare required), an integrated CAC reader, 4 hours operational time w/ hot-swappable batteries, and docking connector, serial, Ethernet and two USB port connections. The HHT-H shall meet or exceed the IP 54/IEC 60529 standard for sealed against water and dust intrusion and meet or exceed multiple 4 foot drops according to MIL-STD-810G. The mobile device shall have a nominal screen size between 5" to 7" diagonal and weigh no more than 4 lbs. The HHT-H shall include one set of operational batteries and a means to charge the batteries. The HHT-H shall be equipped with an integrated barcode scanner capable of reading all the symbologies listed in the paragraph entitled "Bar Code Symbologies."

b. The mobile device shall be configured with the Microsoft Windows Vista or latest version Operating System (updated with the latest Service Pack). The Contractor shall Harden the OS to the DISA Field Security Operations (FSO) Security Content Automation Protocol (S-CAP). The POC at the Defense Information Systems Agency (DISA) is: disa.letterkenny.FSO.mbx.stig-customer-support-mailbox@mail.mil. For Army orders only: the latest version Army Golden Master (AGM) shall be installed with a default AGM image for the Operating System. NETCOM will manage and maintain configuration management control over the standard AGM configuration and provide updates to each contractor. If the Contractor is not listed on the approved Army vendors list, the Contractor shall coordinate with the AIT-IV customer (Army government agency) the availability of the appropriate AGM-based image so that it can be integrated onto the HHT platform, or the Contractor shall obtain a customer waiver (exemption) for the AGM install. The contractor shall maintain and update images for their platforms using the AGM standard configuration and provide NETCOM with a copy of each platform specific image delivered to the Army. Note: The US Army Golden Master program is responsible for the release of the Army Standard Baseline Configurations for commonly used computing environment within the Army Enterprise Infrastructure. The AGM baseline may change throughout the life of the contract as directed by the government

4.1.9.1 SEPARATELY ORDERABLE COMPONENTS.

The Contractor shall provide the following Separately Orderable Components for the HHT-H Class:

a. Detachable shoulder strap;
b. Detachable handle; (if available and not inherent to HHT-H)
c. Rechargeable Battery;
d. Multiple Battery Charger;
e. Transparent screen protector
f. One each tethered replacement styli
g. Docking Station

4.2 BAR CODE SCANNING/IMAGING DEVICES.

The Contractor shall provide bar code scanning and imaging devices that are lightweight, ergonomically designed, and operator-activated. Cable interfaces shall consist of a coiled, strain-relieved USB cable, expandable from 3 feet to 8 feet in length.

4.2.1 TECHNICAL REQUIREMENTS.

The Contractor shall provide ruggedized bar code scanning and imaging devices. Bar code scanning/imaging devices shall scan bar codes printed with direct thermal, thermal transfer, dot matrix, ink jet, and laser technologies, as well as bar codes printed on colored substrates that meet the grade requirements of subparagraph b below. The scanners/imagers shall read and decode all of the symbologies listed in the paragraph entitled "Bar Code Symbologies." The Contractor shall provide bar code imagers that:

a. Read the bar codes and densities specified and have a depth of field of at least 4 inches for low and medium density bar codes and 2 inches for high density bar codes and 2D bar codes;
b. Shall read a minimum print quality of grade C bar codes in accordance with ANSI ASCX3.182-1990 (R1995);

4.2.2 IMAGER FOR PC INPUT – GENERAL BAR CODE (WITH DATA CONVERSION).

The Contractor shall provide a bar code imaging device that shall read printed symbologies and high contrast data plate markings.

4.2.2.1 TECHNICAL REQUIREMENTS.

The Contractor shall provide General Bar Code Imagers that shall:

a. Be provided with a desktop stand to hold the barcode imager when not in use;
b. Be user configurable as a keyboard wedge or as a direct serial input device with a USB connector;
c. Inherently perform data conversion (user configurable) to substitute printable characters for the non-printable ASCII characters utilized in IUID data syntax.

4.2.3 IMAGER FOR PC INPUT – IUID DIRECT PART MARKING (WITH DATA CONVERSION).

The Contractor shall provide a bar code imaging device that shall read direct part markings meeting MIL-STD 130N requirements, including laser etching and dot peen marks on a variety of materiel substrates and surfaces in addition to printed symbologies and high contrast data plate markings.

4.2.3.1 TECHNICAL REQUIREMENTS.

The Contractor shall provide IUID Direct Part Marking Imagers that shall:

a. Be provided with a desktop stand to hold the barcode imager when not in use;
b. Be user configurable as a keyboard wedge or as a direct serial input device with a USB Connector;
c. Inherently perform data conversion (user configurable) to substitute printable characters for the non-printable ASCII characters utilized in IUID data syntax.

4.2.4 MAGNETIC STRIP AND BAR CODE READER.

The Contractor shall provide a combination device that shall read magnetic stripe cards and bar codes printed on paper or plastic card stock. The device shall read infrared bar codes for security-based applications where bar codes are overprinted to prevent duplication. The reader shall read up to three tracks of magnetic stripe encoded information with a single swipe in either direction. The device shall be provided with a USB interface to a PC.

4.3 BAR CODE LABEL PRINTERS.

4.3.1 GENERAL REQUIREMENTS.

The Contractor shall provide printers designed for single and bulk production of Bar Code Labels. Printers shall be designed and ruggedized for an industrial warehouse environment.

4.3.2 TECHNICAL REQUIREMENTS.

The Contractor shall provide ruggedized Bar Code Label Printers that shall generate general purpose labels, and special purpose labels with special adhesives for use in rugged environments. They shall produce labels on various synthetic and paper label media utilizing both thermal transfer and direct thermal technologies. The printers shall print bar codes, text, and black and white graphics on the labels. The Contractor shall provide bar code label printers with the following features:

a. Each bar code printer shall print all bar code symbologies listed in the paragraph entitled “Bar Code Symbologies” at standard densities with at least a Grade A print quality, as defined in ANSI X3.182-1990 (R1995);
b. Store and produce two forms comparable in size and data content to the DD Form 1348-1;
c. Print bar codes in all four of the cardinal directions (both picket fence and ladder bar codes);
d. Print bar code symbologies with a minimum resolution of 203 dpi;
e. Print bar codes, using direct thermal and thermal transfer printing;
f. A minimum four-inch throat size;

g. Drivers provided for Microsoft Windows XP or latest version Operating System (updated with the latest Service Pack) operating system.

4.3.3 PORTABLE/WEARABLE BAR CODE LABEL PRINTER.

The Contractor shall provide a Portable Bar Code Label Printer that can be used as a portable or fixed printer with the following attributes and components:

a. Printer size allows the unit to be easily carried with one hand;
b. Easily fastened to a belt or shoulder strap;
c. Delivered with operating and spare rechargeable batteries;
d. Delivered with a cable to interface to the HHT-C;
e. Delivered with a USB cable to interface to a PC;
f. Print speeds of at least one and one half inches-per-second;
g. Print labels while the printer is being carried by the user;
h. Print 1200 linear inches of labels on a single battery.

4.3.3.1 SEPARATELY ORDERABLE COMPONENTS.

The Contractor shall provide the following Separately Orderable Components for the Portable Bar Code Label Printer:

a. Rechargeable Battery;
b. Battery Charger;
c. Printer Carrying Case with shoulder strap (for printer only).

4.3.3.2 CONSUMABLE SUPPLIES.

The Contractor shall provide the following Consumable Supply for the Portable Bar Code Label Printer: Label and Ribbon Set consisting of 6 rolls of 4-inch by 6-inch synthetic labels and matching resin-based ribbon stock.

4.3.4 PORTABLE/STATIONARY BAR CODE LABEL PRINTER.

The Contractor shall provide a portable/stationary bar code label printer suitable for mobile applications, such as set-up at a temporary desk or a moving cart, with the following attributes and components:

a. Delivered with a USB interface cable for one-way or two-way communications to a PC host;
b. Minimum throughput speed of four inches-per-second;
c. Delivered with means of operating from standard electrical power supply (electrical cable and plug or AC Adapter);
d. Easily transported and carried in carrying case with one hand.

4.3.4.1 SEPARATELY ORDERABLE COMPONENTS.

The Contractor shall provide a Soft Carrying Case with Strap as a Separately Orderable Component for the Portable/Stationary Bar Code Label Printer.

4.3.4.2 CONSUMABLE SUPPLIES.

The Contractor shall provide the following Consumable Supplies for the Portable/Stationary Bar Code Label Printer:

a. Roll of stock for 4-inch by 6-inch synthetic Labels;
b. Resin-based Printer Ribbon for 4-inch width labels.
c. Stationary Bar Code Label Printer with Wireless IEEE 802.11g/i RF communications interface with antenna.

4.3.5 STATIONARY BAR CODE LABEL PRINTER.

The Contractor shall provide Stationary Bar Code Label Printers with the following attributes and components:

a. Built in diagnostic display and keypad for configuration and troubleshooting;
b. Parallel, USB, and Ethernet communications ports;
c. Delivered with a USB interface cable;
d. On-demand printing for at least 16 hours per day;
e. Use a roll of label stock with a diameter of 8 inches;
f. Automatic sensing for different label sizes;
g. Minimum print speed of 6 inches-per-second;
h. Dispense a self-stripped label on demand for the Stationary Bar Code Label Printer with Installed Take-Up Reel.

4.3.5.1 CONFIGURATIONS.

The contractor shall provide the following models of the Stationary Bar Code Label Printer:

a. Stationary Bar Code Label Printer;
b. Stationary Bar Code Label Printer with Installed Take-Up Reel, that shall rewind the entire backing from an 8-inch diameter roll of label stock;
c. Stationary Bar Code Printer with 802.11g/i Wireless Communications.

4.3.5.2 CONSUMABLE SUPPLIES.

The Contractor shall provide the following Consumable Supplies for the Stationary Bar Code label Printer:

a. 8-inch roll of 4-inch by 6-inch synthetic Label stock;
b. 8-inch roll of 4-inch by 3-inch synthetic Label stock; and
c. Resin-based Printer Ribbon for 4-inch width labels.

4.3.6 STATIONARY EPC GLOBAL PASSIVE RFID/BAR CODE LABEL PRINTER/ENCODER.

The Contractor shall provide a Passive EPC Global Stationary Bar Code Label Printer with the following attributes and components:

a. Built in diagnostic display and keypad for configuration and troubleshooting;
b. Parallel, USB, and Ethernet communications ports;
c. Delivered with a USB interface cable;
d. Capable of on-demand printing for at least 16 hours per day;
e. Utilize a roll of label stock with a diameter of 8 inches;
f. Automatic sensing for different label sizes;
g. Minimum print speed of 6 inches-per-second;
h. Dispense a self-stripped label on demand;
i. RESERVED; and
j. Encode and verify an EPC Global RFID GEN2 device embedded in each label.

4.3.6.1 CONSUMABLE SUPPLIES.

The Contractor shall provide the following Consumable Supplies for the Stationary EPC Global Bar Code label Printer:

a. 8-inch roll of 4-inch by 6-inch synthetic Label stock with embedded EPC Global GEN2 RFID; and
b. Resin-based Printer Ribbon for 4-inch width labels.
c. 8-inch roll of 4-inch by 2-inch synthetic Label stock with embedded EPC Global GEN2 RFID data communications.

4.4 ITEM UNIQUE IDENTIFICATION (IUID) MARKING AND VERIFICATION EQUIPMENT.

4.4.1 GENERAL REQUIREMENTS.

The Contractor shall provide equipment for producing IUID marks on various materials, including directly marking parts and permanent labels, in the Data Matrix ECC200 symbology and DOD IUID specified data syntax.

4.4.2 LASER MARKING EQUIPMENT.

The Contractor shall provide laser marking equipment with the following attributes and components:

a. A minimum 45 Watt CO2 laser, or equivalent YAG, or Fiber laser;
b. Marking platform to accommodate label or metal sheet stock up to 12 inches by 24 inches and objects up to 12 inches wide by 12 inches long and 1 inch high;
c. Be capable of producing IUID markings on temperature resistant laser engraveble adhesive film, temperature resistant aluminum data plate stock with coating for thermal discoloration, and anodized (black) aluminum data plate stock; and produce markings on stainless steel utilizing ceramic boding materials;
d. Integrated carbon/HEPA air filtration system;
e. Safety features to protect the vision of operator and personnel who may be in proximity to equipment in use; and
f. Accommodation for use of 120V 20 amp power.

4.4.3 DOT PEEN MARKING EQUIPMENT.

The Contractor shall provide Dot Peen Marking Equipment with the following attributes and components:

a. Produce dot peen marks at a cell size between 7.5 and 25 mils;
b. Method of securing data plate stock up to 12 inches by 24 inches and objects up to 12 inches wide by 24 inches long and 8 inches high while in operation;
c. Accommodation for use of 120V 20 amp power.

4.4.4 VERIFICATION EQUIPMENT.

4.4.4.1 TECHNICAL REQUIREMENTS.

Verification equipment shall verify Data Matrix ECC 200 marks to ISO 15415, SAE AS9132, and AIM DPO Guideline standards. Equipment shall also validate data structure encoded in the marks to DoD IUID Syntax. At a minimum, the equipment shall verify marks with cell sizes from 7.5 mil to 25 mil and up to one square inch in overall size. The equipment shall interface to a computer operating Windows XP or later and shall include necessary software to produce, store, and print verification reports for each mark verified.

The Contractor shall provide the following models of IUID/Data Matrix Verification Equipment:

a. Desktop Verifier for Direct Part Marks and Labels that shall accommodate objects up to 12 inches wide by 24 inches long and 8 inches high.
b. Desktop Verifier for Labels that shall accommodate label and data plate stock up to 12 inches by 24 inches.

4.4.5 INTEGRATED MARKING CART CONFIGURATION.

The Contractor shall provide an Integrated Marking Cart Configuration consisting of AIT-IV equipment that meets all of the requirements as individually specified in this Statement of Work. The make and model of all items included in the Integrated marking Cart Configuration specified below shall be the same as the individual items listed in the Contractor's AIT-IV CLIN list. The Contractor shall provide an Integrated Marking Cart Configuration with the following attributes and components:

a. Configured on a mobile cart mounted on four heavy duty full-swivel casters of minimum size of 4 inch diameter, with at least two casters having locking brakes, the cart width not exceeding 32 inches.
b. Electric cord of minimum 25 foot length from cart to 120V 20 amp power supply source;
c. Laser marking equipment as described above;
d. Stationary Bar Code Label printer;
e. IUID Desktop Verifier for Direct Part Marks and Labels;
f. IUID Direct Part Mark Imager;
g. Label design and printing software for Bar Code Printer;

h. CAC enabled industrially hardened PC operating Windows XP or later with IUID Marking Integration Software (described in "Software, Firmware, and Security Requirement" in this Part) loaded and interfaced to the above marking reading components.

4.5 SMALL ARMS ROOM KIT NOTEBOOK COMPUTER.

a. The Contractor shall provide a Small Arms Room notebook computer that shall at a minimum have a touch screen display, be a ruggedized, Industrially Hardened, dual-core processor, with a shock mounted and removable 80 GB Hard Disk Drive, 1 GB RAM, 1.2 GHz minimum processing speed, a CAC reader, and combination internal or external DVD-ROM and CDR/RW drive. The notebook computer shall meet or exceed the IP 54/IEC 60529 standard for sealed against water and dust intrusion. The notebook computer shall weigh no more than 7 lbs and shall be equipped with an additional outdoor viewable Point of Sale (POS) 15" LCD touch screen display for customer user data input to the Small Arms Room Kit notebook computer.;

b. The Small Arms Room Kit notebook computer shall be configured with the Microsoft Windows Vista or latest version Operating System (updated with the latest Service Pack). The Contractor shall Harden the OS to the DISA Field Security Operations (FSO) Gold Disk Platinum settings. The POC at the Defense Information Systems Agency (DISA) for the Gold Disk is: fso_spt@disa.mil. The Small Arms Room Kit Notebook Computer shall be capable of hosting the Small Arms Room Management software described in paragraph 5.9 of this SOW.

4.5.1 TECHNICAL REQUIREMENTS.

The Contractor shall provide spread spectrum RFDC configurations for 2.4 to 2.5 GHz (IEEE 802.11g/i conformant) frequency bands. The Contractor shall provide components with field-selectable/adjustable frequency bands. Components operating in the 2.4 to 2.5 GHz band shall have an operating range of at least 500 feet in open unrestricted environments. Since the allowable power and frequency bands of 2.4 to 2.5 GHz configurations vary from country to country, the Contractor shall provide units with allowable output power and frequency bands consistent with the laws, regulations, and rules of the country stated on the Delivery Order, or Task Order . These components shall comply with requirements of FCC Part 15, Subparts A, B, and C for Class A digital devices. In order to certify the use of AIT-IV equipment in these environments, the Government may subject representative categories of equipment to radiated emission and susceptibility tests (See MIL-STD 461D: Requirements for the Control of Electromagnetic Interference Emissions and Susceptibility, and MIL-STD-462D: Measurement of Electromagnetic Interference Characteristics). Those components operating in the 2.4 to 2.5GHz (IEEE 802.11g conformant) band shall maximize net throughput and conform to IEEE 802.11g, Wireless Local Area Networks (WLANs), and provide TCP/IP addressing. The 802.11g requirements shall adhere to the IEEE 802.11i security standard.

4.6 RADIO FREQUENCY DATA COMMUNICATION CONFIGURATIONS.

The Contractor shall provide real-time, Radio Frequency Data Communication (RFDC) configurations components that use spread spectrum transmission for linking information to material flow in various applications; for example, in yard, warehouse, and retail operations. Configuration components are RF terminals, access points, and gateways.

4.6.1 TECHNICAL REQUIREMENTS.

The Contractor shall provide spread spectrum RFDC configurations for 2.4 to 2.5 GHz (IEEE 802.11g/i conformant) frequency bands. The Contractor shall provide components with field-selectable/adjustable frequency bands. Components operating in the 2.4 to 2.5 GHz band shall have an operating range of at least 500 feet in open unrestricted environments. Since the allowable power and frequency bands of 2.4 to 2.5 GHz configurations vary from country to country, the Contractor shall provide units with allowable output power and frequency bands consistent with the laws, regulations, and rules of the country stated on the Delivery Order, or Task Order . These components shall comply with requirements of FCC Part 15, Subparts A, B, and C for Class A digital devices. In order to certify the use of AIT-IV equipment in these environments, the Government may subject representative categories of equipment to radiated emission and susceptibility tests (See MIL-STD 461D: Requirements for the Control of Electromagnetic Interference Emissions and Susceptibility, and MIL-STD-462D: Measurement of Electromagnetic Interference Characteristics). Those components operating in the 2.4 to 2.5GHz (IEEE 802.11g conformant) band shall maximize net throughput and conform to IEEE 802.11g, Wireless Local Area Networks

(WLANs), and provide TCP/IP addressing. The 802.11g requirements shall adhere to the IEEE 802.11i security standard.

4.6.2 RF ACCESS POINTS.

RF access points are small transceivers that are wired into network configurations (combined transceiver, controller, and bridge between wireless and wired communication). These access points permit two-way communications between mobile RF data collection terminals, and a PC or LAN. The Contractor shall provide RF access points that provide 2.4 to 2.5 GHz (IEEE 802.11g/i conformant) spread spectrum communications. The RF access points shall be provided with appropriate antenna(s). The RF access points shall have a direct interface for communicating with a host computer. The 2.4 to 2.5 GHz access point shall be provided with an IEEE 802.3/Ethernet interface card with a 10BaseT connector and shall implement TCP/IP addressing and shall provide Simple Network Management Protocol, and Management Information Base (MIB) I and MIB II reporting. IEEE 802.3af "Power over Ethernet" function shall be provided. Access Points shall be user configurable by both serial and IP connection. User Configuration function shall allow complete integration into new and existing IEEE 802.11g/i Wireless Networks. The RF Access Points shall be sufficiently ruggedized for use in industrial warehouse and warehouse docking areas when mounted under-cover (protected from direct precipitation).

The Contractor shall provide the following models of the RF Access Point:

a. Access Point, Indoor Environment, and
b. Access Point, NEMA Enclosure for worldwide indoor/outdoor use.

4.6.3 RF GATEWAY.

RF gateways provide a communications point between access points and a PC or LAN. The Contractor shall provide RF gateways that provide 2.4 to 2.5 GHz (IEEE 802.11g/i conformant) spread spectrum communications. The RF gateways shall have a direct interface for communicating with a host computer. The 2.4 to 2.5 GHz access point shall be provided with an IEEE 802.3/Ethernet interface card with a 10BaseT connector and shall implement TCP/IP addressing and shall provide Simple Network Management Protocol, and Management Information Base (MIB) I and MIB II reporting.

4.7 DATA STORAGE MEDIA.

4.7.1 SMALL CONTACT MEMORY DEVICES.

Contact Memory Devices are intended for permanent affixing to a variety of cases and weapon system components for use in serial number tracking and recording of component configuration, usage, and repair data. These contact memory devices, also known as buttons, will be subjected to extreme environmental conditions including low atmospheric pressure at high altitudes. Contact memory devices shall perform dynamic read/write functions; that is, they shall overwrite specific data without reformatting the entire device**.** The contractor shall provide battery-less Contact Memory Devices with the following attributes:

a. Two data capacities utilizing same physical and logical interfaces:
    1. Minimum of 32 Kbyte
    2. Minimum of 64 Kbyte
b. Button form factor with as small a footprint as possible.
c. Method of permanent attachment to a flat surface.
d. Data retention of at least 50 years.

4.7.2 MICRO CONTACT MEMORY DEVICES.

Micro Contact Memory Devices are intended for permanent affixing to a variety of weapons for use in serial number tracking and recording of component configuration, usage, and repair data. These micro contact memory devices, also known as buttons, will be subjected to extreme environmental conditions including low atmospheric pressure at high altitudes. Contact memory devices shall provide dynamic read/write functions; that is, they shall overwrite specific data without reformatting the entire device. The contractor shall provide battery-less Micro Contact Memory Devices with the following attributes:

a. Data capacities of at least 4 Kbytes.
b. Button form factor with as small a footprint as possible.
c. Method of permanent attachment to a flat surface.
d. Data retention of at least 50 years.

4.8 READERS, WRITERS, AND ENCODERS FOR DATA STORAGE MEDIA.

4.8.1 READER/WRITER FOR SMALL CONTACT MEMORY DEVICES.

Primary application of the Reader/Writer (probe) will be for use within maintenance facilities, although occasional outdoor use under moderate conditions may be expected.

4.8.1.1 TECHNICAL REQUIREMENTS.

Each probe shall be provided with copy/license for any runtime modules, device drivers, etc., required to utilize probe and button functionality.

4.8.1.2 FORM FACTORS.

a. Reader/Writer with USB interface to PC;
b. Reader/Writer with interface for HHTs-C.

4.8.2 READER/WRITER FOR MICRO CONTACT MEMORY DEVICES.

Primary application of the Reader/Writer (probe) will be for use within maintenance facilities, although occasional outdoor use under moderate conditions may be expected.

4.8.2.1 TECHNICAL REQUIREMENTS.

The contractor shall provide Readers/Writers for the Micro Contact Memory Devices. Each probe shall be provided with copy/license for any runtime modules, device drivers, etc., required to utilize probe and button functionality.

4.8.2.2 FORM FACTORS.

a. Reader/Writer with USB interface to PC;
b. Reader/Writer with interface for HHTs-C.

4.9 TRANSIT CASES.

The contractor shall use best commercial practices in the design and manufacturer of the configured transit cases to protect the contained AIT-IV equipment. The transit cases shall be rigid, stackable, lockable, suitable for rugged environments, reusable, and waterproof to protect AIT-IV components during intermodal transport and storage. Transit cases shall protect AIT-IV components from rugged environment damage resulting from dropping during cargo loading and unloading, and vibration and shock when transported as loose cargo over unpaved secondary roads. The transit case shall be flexible enough to absorb shock, yet durable enough to protect the contents from forces striking the case from any angle. Transit cases shall be equipped with automatic pressure-vacuum relief valves to accommodate differences in pressure from sea level up to an altitude of 40,000 feet.

4.9.1 CONTENTS.

The Contractor shall provide Transit Cases that contain cutouts or molded cushioning to protect the contents from damage during transit and storage. AIT-IV components contained within the Transit Cases shall not be affixed to the Case. The Transit Case cover shall be non-hinged and inserts shall be split so as to be an integral part of the top and bottom pieces of the case. Cushioning material used for cutouts or molded compartments shall be non-flaking, permanent, reusable, and attached to the Transit Case.

4.9.2 INVENTORY LIST.

Each Transit Case shall have a durable, permanent inventory list of all AIT-IV components in the case that includes: Nomenclature, Quantity of Each Component, Number of Cases per Configuration, and Graphic Packing Instructions. The Inventory list shall be affixed to the inside top cover and visible to the user.

4.9.3 TRANSIT CASE COLOR.

The Contractor shall provide Transit Cases in Olive Drab.

4.9.4 TRANSIT CASE SURVIVABILITY.

Transit Case materials shall be treated, or otherwise engineered to protect against Transit Case deterioration caused by moisture, mold, rot, ultraviolet radiation, industrial solvents, hydraulic fluids, petroleum products, and jet fuel. All metallic parts shall be corrosion-resistant.

4.9.5 HUMAN FACTOR SIZE, WEIGHT, AND DIMENSION LIMITATIONS.

The Contractor shall make every effort to minimize the weight, size, and number of Transit Cases for each Configuration. Transit Cases shall be able to fit through a 30-inch wide opening, such as a doorway. The weight of the Transit Case contents shall be evenly distributed between the Transit Case handles, with a low center of gravity when fully loaded or unloaded. The gross weight of the Transit Case plus contents shall not exceed 130 pounds. The use of the Transit Case cover for storage shall not make the cover inordinately heavy causing problems during the lifting or removal of the cover. The weight lifting limits per Transit Case shall not exceed those listed below:

a. One-person lift: 37 pounds;
b. Two-person lift: 74 pounds;
c. Four-person lift: 130 pounds.

4.9.6 HANDLES AND CLASPS.

The Contractor shall provide Transit Cases with a sufficient number of handles to facilitate movement by the specified number of personnel. All one-person and two-person lift Transit Cases shall have at least two handles. Transit Cases requiring a four-person lift shall have a minimum of two handles on each side of the case. Handles shall return to a closed position by a spring-loaded mechanism or a simple restraining mechanism when not in use. Handles and clasps shall be recessed, non-reflective, dark in color, non-corrosive, easily accessible, and operable by personnel wearing low-temperature protective gloves.

4.9.7 IDENTIFICATION PLATE.

An Identification (ID) Plate shall be permanently affixed to each Transit Case. ID Plate lines, letters, numerals, and characters shall be permanent and legible in compliance with DoD Unique Identification Policy reference provided at Appendix A of the Policy. ID Plates and mounting provisions shall be resistant to abrasion, rain and salt spray, and common cleaning solutions. ID Plates shall not detach from the Transit Case when subjected to the elements and extreme temperatures. ID Plates shall have smooth edges, and shall be free of blisters, cracks, sharp corners, foreign matter, or any other defects. The ID Plate drawings shall be provided to the COR for approval prior to commencement of manufacture of ID Plates and the assignment of serial numbers. The Contractor shall assign a serial number to each Transit Case, and this serial number shall be included in the UID.

4.9.7.1 ID PLATE DIMENSIONS.

Identification plate dimensions shall be no less than 1.75 inches wide by 3.0 inches long. The thickness for all identification plates shall be 0.03 inch, plus or minus 0.0005 inch, without backing material.

4.9.7.2 ID PLATE PRINTING.

Letters printed on ID Plates shall be Gothic capitals, and numbers and characters shall be of similar appearance. The background color shall be black and the printed characters shall be white. Bar codes shall be on a white background with the bar codes printed in black.

4.9.7.3 ID PLATE INFORMATION.

As a minimum, the Government requires the following information on the ID Plate:

a. Contract Number;

b. Contractor And Government Entity (CAGE) Code;
c. RESERVED;
d. Approved Government Nomenclature, or Transit Case Group and Configuration Name;
e. Type Designation;
f. Transit Case Serial Number;
g. Government ownership designation “PROPERTY OF THE U.S. GOVERNMENT”;
h. The UID of the Transit Case Group and Configuration shall be bar-coded in Data Matrix Symbology.

4.9.7.4 ID PLATE LOCATION.

Identification Plates on Transit Cases shall be located at the left or center of the exterior, vertical surface of the top portion of the Transit Case that is facing the user when the case is ready to be opened. An ID Plate shall also be affixed to the left or center of the exterior, vertical surface of the bottom portion of the Transit Case that is facing the user when the case is ready to be opened. Location of ID Plates shall be consistent for all Transit Cases.

4.9.8 TRANSIT CASE HEALTH AND SAFETY LABELS.

The Contractor shall label each Transit Case to inform users of health and safety considerations before moving or opening the Transit Case. Transit Case health and safety labels shall be placed horizontally (on the front of the case) and externally on the top of each Transit Case in a consistent manner. The health and safety labels shall identify:

a. Gross or loaded weight;
b. Volume in cubic feet and cubic centimeters;
c. External linear dimensions in inches and centimeters;
d. The number of persons required to lift the case (for example, “FOUR-PERSON LIFT”) in accordance with the paragraph entitled “Human Factor Size, Weight, and Dimension Limitations” above;
e. Any other considerations that may affect the health or safety of users attempting to lift, move, or open the Transit Case.

4.10 TRANSIT CASE CONFIGURATIONS.

The Contractor shall provide Transit Case Configurations consisting of AIT-IV equipment that meets all of the requirements as individually specified in this Statement of Work. The make and model of all items included in the Transit Cases specified below shall be the same as the individual items listed in the contractor’s AIT-IV CLIN list. If requested through a task order, the Contractor shall request a National Stock Number (NSN) for each Transit Case Group by submitting a DD Form 61, Request for Nomenclature. The Contractor shall provide Transit Case Configurations that are grouped as defined in the following subparagraphs. Each Configuration shall be self-contained, and shall include all necessary adapters, cables and components, and commercial user manuals to operate worldwide. Recognizing that many countries have unique power plug designs, the Government will accept operation with the three plug types designed for use in Central Europe (Germany), North America (United States), and the United Kingdom (Great Britain) as fulfilling the requirement for Worldwide Operation. Most countries of the world conform to one of these plug types. Generally, the North American type plug is acceptable in North and Central America, Western South America, Japan, and parts of Korea. The Central Europe type plug is acceptable in most of Continental Europe and some of the Middle East and Africa. The United Kingdom type plug is acceptable in Great Britain, Ireland, Malaysia, and many countries in the Middle East and Africa. The Contractor shall consolidate applicable accessories with the associated primary component identified in a Transit Case. Commercial user manuals shall be provided in accordance with the paragraph entitled “USER MANUALS” and secured within appropriate width slot(s) within each Transit Case.

4.10.1 HAND HELD TERMINAL TRANSIT CASE GROUP.

4.10.1.1 FIVE HAND HELD BAR CODE TERMINAL (HHT-C) WITH WIN MOBILE 6.X (LATEST VERSION) RF TRANSIT CASE CONFIGURATION.

The Five Hand Held Terminal (HHT-C) RF Transit Case Configuration shall consist of the following:

a. HHT-C stored in a Universal HHT Holster, with attachable handle (if available) and trigger, inside a Transit Case cutout, 5 each;
b. Rechargeable Batteries, Operating and Spare, 5 sets each;

c. Multiple Battery Charger, 1 each;
d. Communication Docking Station/Battery Charger with USB interface, 5 each;
e. Set of Universal Power Cords for seven items: Multiple Battery Charger, 5 Communication Docking Station/Battery Chargers, and Access Point, 1 set;
f. Commercial Manuals, 1 per each piece of equipment;
g. Contractor-Furnished Transit Case Configurations Training CD-ROM;
h. Transit Case;
i. RF Access Point (NEMA Enclosure) with power supply and interface cable, 1 each.

4.10.1.2 FIVE HAND HELD BAR CODE TERMINAL (HHT-C) WITH WIN MOBLIE 5.0 OS RF TRANSIT CASE CONFIGURATION.

The Five Hand Held Terminal (HHT-C) RF Transit Case Configuration shall consist of the following:

a. HHT-C stored in a Universal HHT Holster, with attachable handle (if available) and trigger, inside a Transit Case cutout, 5 each;
b. Rechargeable Batteries, Operating and Spare, 5 sets each;
c. Multiple Battery Charger, 1 each;
d. Communication Docking Station/Battery Charger with USB interface, 5 each;
e. Set of Universal Power Cords for seven items: Multiple Battery Charger, 5 Communication Docking Station/Battery Chargers, and Access Point, 1 set;
f. Commercial Manuals, 1 per each piece of equipment;
g. Contractor Furnished Transit Case Configurations Training CD-ROM;
h. Transit Case.
i. RF Access Point (NEMA Enclosure) with power supply and interface cable, 1 each.

4.10.1.3 STATIONARY BAR CODE LABEL PRINTER TRANSIT CASE CONFIGURATION.

The Stationary Bar Code Label Printer Transit Case Configuration shall consist of the following;

a. Stationary Bar Code Label Printer;
b. USB Interface Cable to host computer;
c. Set of Universal Power Cords, 1 set;
d. Commercial Manuals, 1 per each piece of equipment;
e. Contractor Furnished Transit Case Configurations Training CD-ROM;
f. 8-inch roll of 4 by 6-inch, plastic bar code label stock, 1 each;
g. Resin Printer Ribbon, 1 each;
h. Transit Case.

4.10.1.4 HAND HELD BAR CODE TERMINAL (HHT-C) WITH WIN MOBILE 6.X (LATEST VERSION) OS AND STATIONARY BAR CODE PRINTER AND TRANSIT CASE CONFIGURATION.

The Stationary Hand Held Bar Code Terminal (HHT-C) and Stationary Bar Code Label Printer Transit Case Configuration shall consist of the following;

a. HHT-C stored in a Universal HHT Holster, with attachable handle and trigger (if available), inside a Transit Case cutout, 1 each;
b. Rechargeable Batteries, Operating and Spare, 1 set each;
c. Multiple Battery Charger, 1 each;
d. Communication Docking Station/Battery Charger with USB interface cable, 1 each;
e. Stationary Bar Code Label Printer;
f. USB Interface Cable to host computer;
g. Set of Universal Power Cords for three items: Multiple Battery Charger, 1 Communication Docking Station/Battery Chargers, and Stationary Bar Code Label Printer, 1 set;
h. Commercial Manuals, 1 per each piece of equipment;
i. Contractor Furnished Transit Case Configurations Training CD-ROM;
j. 8-inch roll of 4 by 6-inch, plastic bar code label stock, 1 each;
k. Resin Printer Ribbon, 1 each;

l. Transit Case.

4.10.1.5 HAND HELD BAR CODE TERMINAL (HHT-C) WITH WINMOBLIE 5.0 AND STATIONARY BAR CODE PRINTER AND TRANSIT CASE CONFIGURATION.

The Stationary Hand Held Bar Code Terminal (HHT-C) and Stationary Bar Code Label Printer Transit Case Configuration shall consist of the following;

a. HHT-C stored in a Universal HHT Holster, with attachable handle and trigger (if available), inside a Transit Case cutout, 1 each;
b. Rechargeable Batteries, Operating and Spare, 1 set each;
c. Multiple Battery Charger, 1 each;
d. Communication Docking Station/Battery Charger with USB interface cable, 1 each;
e. Stationary Bar Code Label Printer;
f. USB Interface Cable to host computer;
g. Set of Universal Power Cords for three items: Multiple Battery Charger, 1 Communication Docking Station/Battery Chargers, and Stationary Bar Code Label Printer, 1 set;
h. Commercial Manuals, 1 per each piece of equipment;
i. Contractor Furnished Transit Case Configurations Training CD-ROM;
j. 8-inch roll of 4 by 6-inch, plastic bar code label stock, 1 each;
k. Resin Printer Ribbon, 1 each;
l. Transit Case.

4.10.1.6 SMALL ARMS ROOM KIT TRANSIT CASE CONFIGURATION.

The Small Arms Room Transit Case Group shall be available for ordering on the AIT-IV contract no later than 90 calendar days after the effective date of the notice to proceed.

The Small Arms Room Kit Transit Case Group shall at a minimum contain the following:

a. 1 Transit Case with foam inserts to support the below items;
b. 1 Bar Code Imager for Direct Part Marks as specified in paragraph 4.2.3 of this Part;
c. POS 15” LCD touch screen display;
d. Portable laser document printer;
e. Ruggedized Notebook Computer with Touch Screen Monitor;
f. Mini Port Replicator;
g. CAC Reader;
h. Signature Pad;
i. 1 back up hard drive;
j. 1 Uninterrupted Power supply (UPS);
k. Packing lists for each case; and
l. Installation Manual & hardware manuals for individual products.

The Contractor shall provide a hard copy and electronic setup manual with the Small Arms Room Kit transit case that specifies the step-by-step instructions with illustrations for equipment connection, setup, and use. Each Notebook computer shall include an on-line tutorial application to provide the user with all information required to successfully install and operate the Kit. In addition to the above required equipment, two deliverables shall accompany this Transit Case Group: the Setup Manual shall describe the procedures required to assemble and make operational the Small Arms Room Kit (also, an electronic version).

4.11 SEPARATELY ORDERABLE COMPONENTS FOR TRANSIT CASE CONFIGURATIONS.

The Contractor shall provide the following Separately Orderable Components for the Transit Case Configurations:

a. Transit Case Only for the Five Hand Held Terminal Transit Case Configuration;
b. Transit Case Only for the Stationary Bar Code Label Printer Transit Case Configuration;
c. Transit Case Only for the Hand Held Terminal and Stationary Bar Code Printer Transit Case Configuration.

d. Transit Case Only for the Small Arms Room Kit Transit Case Configuration.

5 SOFTWARE, FIRMWARE, AND SECURITY REQUIREMENTS.

The Contractor shall provide software that will operate on a variety of Government-owned workstations, and on AIT-IV equipment provided under this Contract. The Contractor shall provide the necessary software to enable the Government to develop applications for AIT-IV equipment. The Contractor shall provide Bar Code Label and Form Design and Printing Software, IUID Marking Integration Software, Application Software Development Kit, Application Generation Software, and Wireless Transaction Support Software. The Contractor shall provide development software that operates under the Microsoft Windows XP or latest version Operating System (updated with the latest Service Pack) operating system. The Contractor shall provide all AIT-IV software on CD-ROM or via electronic download.

5.1 BAR CODE LABEL AND FORM DESIGN, AND PRINTING SOFTWARE.

5.1.1 BAR CODE LABEL AND FORM DESIGN SOFTWARE.

Bar Code Label and Form Design Software is a set of programs in one package that shall allow the Government user to design and print bar code labels and forms. The Contractor shall provide bar code label and form design and printing software with graphic function, as well as ISO 9075 SQL Call-Level Interface (open database connectivity). The software shall generate low, medium, high, and ultra-high Code 39 bar codes, as well as the other bar code symbologies listed in the paragraph entitled “Bar Code Symbologies.” The software shall also generate DD 1348-1 and DD 1387 forms, and shall be designed to drive the provided bar code label printers. The Contractor shall provide software that allows rapid label and form design without having to learn the complexities of bar code symbologies and printer control languages, displays a “what-you-see-is-what-you-get” editor for designing bar code labels and forms, and allows viewing of bar code labels and forms prior to printing. The software shall also permit the use of fixed or variable data for label or form text and bar codes, and shall import information to be used with labels and forms from databases. The bar code label and form design and printing software shall execute under Microsoft Windows XP or latest version Operating System (updated with the latest Service Pack). The software shall perform network printing, and no custom programming shall be required for use.

5.1.2 BAR CODE PRINTING SOFTWARE.

The Contractor shall provide bar code printing software that prints on stand-alone print stations where bar code design capabilities are not needed. This software shall execute under Microsoft Windows XP or latest version Operating System (updated with the latest Service Pack).

5.2 IUID MARKING INTEGRATION SOFTWARE.

The Contractor shall provide IUID Marking Integration Software that shall interface with and operate all of the equipment listed under IUID Marking Equipment. At a minimum this software shall:

a. Assemble pedigree data required for legacy data submission to the DoD IUID Registry and provide data output in a registry-acceptable data format;
b. Control marking equipment and provide that equipment with format and data to be marked; Enable real-time access to the DoD IUID registry as required to determine whether an item that is a candidate for marking and registration has previously been assigned a Unique Item Identifier and, if so, retain that UII for use in remarking that item;
c. Defer registration of items for which labels are produced until confirmation that the labels have been installed on the appropriate items;
d. Fill required screen input fields via keyboard and input from IUID Direct Part Imager.

5.3 HAND HELD TERMINAL OPERATING SYSTEMS.

The Contractor shall provide HHTs with the Win Mobile 6.0 or later operating system configured to provide the following:

a. Graphical User Interface with Pen/Character Recognition;

b. Support for both IPv4 and IPv6;
c. Full system support of color touch screen;
d. Host FIPS-140 security client;
e. Include software to perform data synchronization via cable and wireless to a host PC running Microsoft Windows XP or latest version Operating System (updated with the latest Service Pack);
f. Full addressing of on-board RAM and ROM memory and storage card memory of up to 2 GB;
g. Programs developed and compiled from Visual Basic, .NET, and C/C++ development environments/compilers;
h. Wireless data communications (IEEE 802.11g/i);
i. Include an Internet Browser that shall pass XML data and PKI certificates;
j. Include utility program to monitor and display battery status.

5.4 HAND HELD TERMINAL CAC ENABLEMENT SOFTWARE.

The Contractor shall provide CAC enablement software for each HHT provided on the AIT-IV Contract when available.

5.5 OPERATING SYSTEMS.

Unless otherwise specified the Contractor shall provide HHTs with the Win Mobile 6.x or later operating system configured to provide the following:

5.6 SOFTWARE DEVELOPMENT RESOURCE KITS.

The Contractor shall provide Software Development Resource Kits that can be used with standard application development tools to produce executable code for all of the provided Hand Held Bar Code Terminals.

5.6.1 HAND HELD BAR CODE TERMINAL SOFTWARE DEVELOPMENT RESOURCE KIT.

The Hand Held Bar Code Terminal Software Development Resource Kit shall provide all of the features of the AIT-IV Hand Held Bar Code Terminals (HHTs A-F). Software development resource kit libraries provided by the Contractor shall interface with Basic, .NET, and C/C++ language compilers and program development environments. Library routines shall be callable by programs developed with standard languages, including Basic, .NET, and C/C++. The software development resource kit shall include all necessary library routines, run time support, and distribution rights to permit full functionality of developed software using the Software Development Resource Kit on all deployed platforms, including scanner/imager, screen backlight, and other device-specific features.

5.6.2 SOFTWARE DEVELOPMENT RESOURCE KIT FOR CONTACT MEMORY DEVICES AND READER/WRITER.

The Contractor shall provide a Software Development Resource Kit that shall be useable with Basic, .NET, and C/C++ compilers and program development environments. Library routines shall be callable by programs developed with these languages. The Software Development Resource Kit shall include all necessary library routines, run time support, and distribution rights to permit full functionality of developed software using the Software Development Resource Kit on the Hand Held Bar Code Terminal platforms and PCs operating under Microsoft Windows XP or latest version Operating System (updated with the latest Service Pack). The Software Development Resource Kit shall include necessary software components and libraries to program full functionality of the Contact Memory Devices, and Reader/Writer on the HHT terminals (in conjunction with standard program development environments/compilers and the Hand Held Bar Code Terminal Software Development Resource Kit) and PCs operating under Microsoft Windows XP or latest version Operating System (updated with the latest Service Pack).

5.7 APPLICATION GENERATION SOFTWARE.

The Contractor shall provide Application Generation Software for the hand held bar code terminals and the host computer. Generated software shall provide batch processing, and wired and wireless transactions. The software code generator shall enable programmers and technically oriented non-programmers to create AIT-IV application programs for data collection terminals. The application generation software shall produce executable code for the data collection terminals and the host computer. The application generation software shall provide graphic design,

automatic program generation, and an integral simulator to test compiled code, application functionality, and operation prior to the final application being installed on data collection terminals. The Application Generation Software shall run on the Microsoft Windows XP or latest version Operating System (updated with the latest Service Pack) operating system. The Application Generation Software shall include all that is necessary to develop, test, debug, load, and execute on a single HHT. The software shall transfer collected data to a host computer both via wired and wirelessly.

5.7.1 SEPARATELY ORDERABLE COMPONENTS.

The Contractor shall provide the following Separately Orderable Component for the Application Generation Software: Single Client Runtime License for Application Generation Software.

5.8 MANUFACTURING AND WAREHOUSE MANAGEMENT SOFTWARE.

The Contractor shall provide Manufacturing and Warehouse Management software that provides the following minimum functions; enable AIT for front end processes including: data acquisition, work order management, inspection, receiving, inventory, shipping, labor tracking, and asset visibility. The software shall be modular, user selectable functions and user configurable. The software shall provide for an interface to an SAP Enterprise Resource Planning software system.

5.9 SMALL ARMS ROOM MANAGEMENT SOFTWARE

a. The contractor shall provide commercial automated small arms room management software. The software shall use both bar code and data matrix-based AIT, including data matrix encoded unique item identifiers compliant with MIL-STD-130N, to automate processes related to all small arms and other serially managed items found in Army arms rooms. The automated processes shall include, as a minimum, issue, receipt, inventory, maintenance management, and ammunition management. The software shall assign specific serialized arms and accessories to specific soldiers and control issues based on those assignments. The software shall produce standard and ad-hoc management reports, an automatic data backup capability and document transactions on appropriate standard Army printed forms. Access to the system shall be CAC enabled. The software shall be deployable, and allow use of its full suite of capabilities in both garrison and in field environments such as the Army's National Training Center. The small arms room management software shall support the assignment and labeling of uniquely managed items not marked with standard unit item identifiers (UII) with machine readable temporary unique identifiers and associate items to their assigned serial numbers and to their UIIs, if assigned. For uniquely managed items lacking UIIs, the small arms room management software shall associate to temporary unique identifiers as well as providing an automated capability for the armor to issue and receive using electronic signatures and CACs. The small arms room management software shall allow performance of manual inventories and input of that data to the digital arms room module and manage non-standard weapons and sensitive items. The small arms room management software shall support continuity of operations by providing data backup and a process for data recovery. Provide an automated capability to restrict issue of weapons for administrative reasons.

b. The Government desires additional functions be included in the small arms room management software. The additional functions are as follows: maintain a lifecycle history of items while managed by the system, including issues, turn-ins and maintenance; provide host Interactive Electronic Technical Manuals (IETM), to include ability to use all IETM features not requiring external communications; provide a capability to read and store information from all types of standard Army bar coded media and ECC200 data matrix symbology, employing the area imager in the keyboard wedge mode; maintain and track training information related to Soldier skill qualification on items in the arms room; provide warning when Soldier qualification doesn't match an item's skill qualification requirement; provide an intuitive user interface that requires minimal training; enable automated cyclic inventory scheduling; automate key control management; automate the production of weapons cards; provide a feature during system shut down that will alert the armorer to weapons pending return; provide automatic alerts for issued items not returned to the arms room as scheduled; automate functionality of current weapon key control registers, Standard Form 701, DA Form 3749, DA Form 2062 and DA Form 2404, key control for weapon racks and trigger locks (Key Control Register and Inventory 5513-R); maintain a lifecycle history of items while managed by the system, including issues, turn-ins and maintenance.

5.10 WIRELESS NETWORK MANAGEMENT PLATFORM AND SOFTWARE.

The Contractor shall provide the Network Management Platform and Software which shall allow for configuration and management of a wireless network. The software shall allow for monitoring and configuring the wireless components of the network such as access points and HHTs.

5.10.1 SEPARATELY ORDERABLE COMPONENTS.

The Contractor shall provide the following Separately Orderable Component for the Wireless Network Management Software: Wireless Network Management Client Software/License for a Single HHT.

5.11 FIRMWARE REQUIREMENTS.

The Contractor shall provide necessary firmware as part of the equipment configuration of AIT-IV contract components. Firmware shall reflect the baseline configuration and all subsequent Government-approved Engineering Changes. All firmware available to the user shall be selectable by DIP-switch or software. All firmware shall be installed prior to equipment delivery.

5.12 WIRELESS NETWORK INFORMATION ASSURANCE (IA).

5.12.1 SERVER INFORMATION ASSURANCE (IA) SOFTWARE.

The Contractor shall provide a Federal Information Processing Standard (FIPS 140) server software solution to communicate securely with associated FIPS 140 Hand Held Bar Code Terminal Client software. The server software shall be a minimum of FIPS 140-2 Level 2 Compliant and Certified. Server IA Software procured must be on the Department of Defense Unified Capabilities Approved Products List (DoD UC APL) (https://aplits.disa.mil/processAPList.do). Server Information Assurance (IA) Software shall be preloaded and configured on a hardware appliance device prior to delivery to the Government.

5.12.2 CLIENT INFORMATION ASSURANCE (IA) SOFTWARE.

The Contractor shall provide a Federal Information Processing Standard (FIPS 140) client software solution for all the Hand Held Bar Code Terminals to communicate securely with associated FIPS 140 Server software. The client software shall be a minimum of FIPS 140-2 Level 1 Compliant and Certified. Client software that is FIPS 140-2 Level 2 Compliant and Certified shall be proposed via a Contract Change Proposal when it becomes commercially available.

5.12.3 HHT INFORMATION ASSURANCE (IA) SOFTWARE.

The Contractor shall provide a minimum of one Data-at-Rest, one Malicious Code Detectors (Anti-Virus), and, one Firewall software product for each HHT delivered under the AIT-IV contract no later than 90 days after the products are listed on the Department of Defense Unified Capabilities Approved Products List (DoD UC APL). The software provided shall be one of the specific products and versions identified in the DoD UC APL, and no other products are acceptable. When software products or specific versions of products are updated on the DoD UC APL the Contractor shall provide the updated software for their currently fielded HHTs and HHTs on new orders no later than 90 days after the DoD UC APL has been updated. It is the Contractor's responsibility to monitor the APPL to identify any required software additions and changes. When none the required IA software listed on the DoD UC APL is compatible with the HHTs Operating System (OS) then the Contractor shall propose through the CCP process (see Section C-1) an IA product that is compatible with the OS no later than 90 days after it is added to the DoD UC APL. It is the Contractor's responsibility to enable the APL OS compatible IA software for operation on their HHTs prior to distribution and fielding under the contract.

6 SECURITY.

6.1 PASSWORDS.

The Contractor shall provide software to initiate password protection at the device level for the HHTs. This password protection shall be presented to the user as a sign-in screen on the HHT and shall prevent an unauthorized user from running applications or accessing files on the HHT. No other password authentication is required.

6.1.1 SECURITY STANDARDS.

The Contractor shall comply with the following standards, and Government guidelines to include all new versions, amendments, and modifications made to the listed documents and standards, as applicable.

a. Office of Management and Budget (OMB) Circular No. A-130 Revised, (Transmittal Memorandum No. 4) Management of Federal Information Resources – Appendix III, Security of Federal Automated Information Resources, 28 November 2002.
b. National Institute of Standards and Technology (NIST) Federal Information Processing Standards (FIPS) Publication 140 – 2, Security Requirements for Cryptographic Modules, 25 May 2001.
c. Department of Defense Directive (DoDD) 8100.2, Use of Commercial Wireless Devices, Services, and Technologies in the Department of Defense (DoD) Global Information Grid (GIG), 14 April 2004.
d. Assistant Secretary of Defense Memorandum, Use of Commercial Wireless Local-Area Network (WLAN) Devices, Systems, and Technologies in the Department of Defense (DoD) Global Information Grid (GIG), 02 June 2006.
e. Department of Defense Directive (DoDD) 8500.01E, Information Assurance (IA), 24 October 2002, current as of April 24, 2007.
f. Department of Defense Instruction (DoDI) 8500.2, Information Assurance (IA) Implementation, 06 February 2003.
g. Department of Defense Instruction (DoDI) 8510.01, DoD Information Assurance Certification and Accreditation Process (DIACAP), November 28, 2007.
h. Army Regulation (AR) 25-2, Information Assurance, 24 October 2007.
i. Best Business Practice 03-EC-M-0003, Wireless Security Standards, Version 2.0, 15 June 2007.

After award, the contractor may propose alternatives at no additional cost to the Government that meet or exceed the provisions of the listed standards.

6.1.2 DOD WIRELESS DEVICE SECURITY REQUIREMENTS.

AIT-IV implementations that utilize Institute of Electrical and Electronics Engineers (IEEE) Standard 802.11 Wireless Local Area Network (WLAN) products to store, process, or transmit unclassified information shall comply with the requirements specified in Assistant Secretary of Defense Memorandum, Use of Commercial Wireless Local-Area Network (WLAN) Devices, Systems, and Technologies in the Department of Defense (DoD) Global Information Grid (GIG) (reference d).

6.1.3 ARMY WIRELESS DEVICE SECURITY REQUIREMENTS.

Army AIT-IV implementations that utilize Institute of Electrical and Electronics Engineers (IEEE) Standard 802.11 Wireless Local Area Network (WLAN) products or other wireless technologies to store, process, or transmit unclassified information shall comply with the applicable requirements specified in Army Regulation (AR) 25-2, *Information Assurance* (reference h) and Army Best Business Practice 03-EC-M-003, *Wireless Security Standards* (reference i). Other Services (e.g., USAF, USN) AIT-IV implementations that may include wireless devices will have the security requirements stated in the individual contract order.

6.1.4 COMMON CRITERIA COMPLIANCE REQUIREMENTS.

Common Criteria compliance is determined and verified by favorable product testing against a Common Criteria Protection Profile (CCPP). CCPPs are developed under sponsorship of the National Security Agency (NSA). Common Criteria tests are conducted by a Common Criteria Test Laboratory (CCTL) that has been approved and accredited by the National Information Assurance Partnership (NIAP). NIAP is a partnership agreement between NSA and the National Institute of Standards and Technology (NIST). No such CCPP currently exists for AIT-IV technology. Therefore, upon approval and adoption of a CCPP for AIT-IV technology, the Contractor shall no later than six months after the adoption of a relevant CCPP submit product(s) with documentation to a designated CCTL for Common Criteria testing. Subsequently, only products tested and compliant at the Medium Robustness level (as defined in the CCPP standard) shall be permitted through this Contract. Information regarding Common Criteria Compliance can be obtained from the following web site: http://www.commoncriteriaportal.org/.

6.1.5 SECURITY MAINTENANCE SERVICES.

The Contractor shall ensure that the devices and/or systems provided under this contract comply with all new versions, amendments, and modifications made to the security documents and standards cited in this Solicitation, when applicable and commercially available. To ensure continued compliance, the Contractor shall perform the necessary configuration changes, as approved by the Government. These configuration changes may include, but are not limited to: performing system configuration changes, installing patches and bug fixes; conducting hardware/software upgrades, updates, and replacements.

6.1.6 GOVERNMENT EVALUATION.

The Contractor shall support Government compliance verification evaluation and security certification and accreditation of the products provided under this Contract. The Government will coordinate the scheduling of any evaluation with the Contractor. The Contractor shall cooperate with Government personnel and Government representatives who plan, conduct, and report any Government testing. Support of Government testing, when requested, includes Government or its agents access to Contractor facilities, documentation, and/or personnel used by the Contractor to produce the products provided under this Contract. The Contractor shall assist in resolving any problems resulting from the Government verification evaluations and security certification and accreditation process. This shall address problem reports, technical investigations, and any testing performed.

7 MANAGEMENT.

7.1 AIT-IV PROGRAM MANAGEMENT. THE REQUIREMENTS FOUND IN THIS PARAGRAPH, AIT-IV PROGRAM MANAGEMENT, SHALL NOT BE SEPARATELY PRICED.

a. The Contractor shall provide the following AIT-IV Program Management activities and services:

1. Two-work day response to program issues and problems associated with the execution of the Contract as identified by PM J-AIT;
2. Support by means of Electronic Commerce/Electronic Document Interchange (EC/EDI), web access for Contractor-provided information and data;
3. Maintain accurate records
4. Provide response within one workday to PM J-AIT questions;
5. Provide information to various Services and Agencies with the approval of PM J-AIT;
6. Receive and process customer Delivery Orders, purchase card orders, and Task Orders;
7. Develop, update, and maintain the Ordering Catalog;
8. Coordinate shipments and deliveries;
9. Report order and delivery status;
10. Provide the requisite Repair Center(s) (RC) to perform all warranty and maintenance services required by this Contract;
11. Maintain warranty and maintenance records;
12. Provide access for AIT-IV Users to an identified customer support database location for this Contract. The database shall at a minimum contain information on delivery order/task order status, product support issues, such as recalls or problem reports, product safety, product news and other useful information for customers;
13. Develop and execute a management plan that incorporates configuration management and risk management, and provide an AIT-IV Management Plan;
14. Schedule project reviews and internal seminars and conferences, and present Contractor's vision of new technology;
15. Schedule and perform demonstrations;
16. Conduct Project Progress Reviews (PPR);
17. Provide Status Reports to include Warranty Status Reports;
18. Provide Monthly Equipment and Service Reports (MESR).
19. Report Contractor Manpower Information in accordance with the paragraph entitled "Contractor Manpower Reporting" in this Part.

b. The Government desires Contractors, and their respective subcontractors, teaming partners and commercial manufacturers who currently hold and maintain commercial quality certifications, e.g. ISO certifications, Lean Six Sigma, Capability Maturity Model Integration (CMMI), over the life of the Contract.

7.1.1 POINTS OF CONTACT.

The Contractor shall provide a list of Contractor points-of-contact to the COR no later than ten workdays after the effective date of the Contract. The list shall include names, telephone numbers, facsimile numbers, e-mail addresses, and areas of responsibility for the AIT-IV Contract. The Contractor shall notify the COR no later than five workdays of replacement of a point-of-contact.

7.1.2 AIT-IV CONTRACT PROGRAM MANAGER.

a. The Contractor shall identify to the Government a Program Manager for the AIT-IV Contract. The Program Manager shall at no additional cost to the Government be available with a 24 hours notice to meet with the Government at Newington, Virginia. The AIT-IV Contract Program Manager shall address and resolve AIT-IV programmatic issues, facilitate information exchange with the Government, and enhance management coordination.

b. The Contractor's AIT-IV Program Manager shall manage all Delivery Orders, Task Orders, and purchase card orders, and shall be the Contractor's authorized point-of-contact for the PM J-AIT, the COR, and the point-of-contact for Delivery Orders, Task Orders and purchase card orders. The Contractor's AIT-IV Program Manager shall be responsible for formulating and enforcing work standards, assigning schedules, and reviewing work discrepancies, communicating policies, purposes, and goals of the organization to the assigned Contractor personnel for performance of this Contract. The Contractor's AIT-IV Program Manager shall manage Delivery Order and Task Order performance.

7.2 AIT-IV MANAGEMENT PLAN.

The Contractor shall provide an AIT-IV Management Plan. The Plan shall be submitted to the COR no later than 30 calendar days after the Contract effective date specified in the Notice to Proceed. The PM J-AIT will either approve the Management Plan, or provide comments to the Contractor for incorporation into the Management Plan. The Contractor shall then have 10 workdays to incorporate the Government's comments into the Plan, and resubmit the Plan to the COR. The Contractor shall manage the Contract in accordance with the Government-approved AIT-IV Management Plan. The AIT-IV Management Plan shall include, but not be limited to the following:

a. Management and Reporting Methodology for Gathering, Validating and Generating Reports;
b. AIT-IV Configuration Management Plan;
c. Risk Management;
d. Repair Center Approach;
e. Integrated Process Team (IPT) Methodology;
f. Electronic Commerce and Electronic Data Interchange Methodology;
g. Web Site Methodology;
h. Training Development and Support;
i. Technology Assessment and Control;
j. Logistics Support to include the Contractor's approach to satisfying unusual or surge requirements and to deal with crisis situations.

7.2.1 INTEGRATED PRODUCT TEAMS.

The Contractor shall participate with the Government on AIT-IV Integrated Product Teams (IPTs) and provide minutes of the meetings no later than five workdays after each meeting. IPTs will be composed of representatives from all functional disciplines, working together to identify and resolve issues. IPTs will also make sound and timely decisions, build a successful and balanced program, and make maximum use of timely input from the entire Team, including customers and suppliers.

7.2.2 PROJECT PROGRESS REVIEWS.

a. The Contractor shall conduct Project Progress Reviews (PPRs) for Government personnel at a mutually agreeable facility. The PM J-AIT will schedule the initial PPR. It is anticipated that the first PPR will occur no later than 90 calendar days after the Contract effective date specified in the Notice to Proceed. Thereafter, PPRs shall occur on a monthly basis for the next twelve months of the Contract, and quarterly thereafter, for the life of the Contract. During each PPR, the Contractor shall present material that addresses:

a. Status of current technological substitutions and additions;
b. Status of configuration and risk management activities;
c. Status of Task Orders, Delivery Orders and purchase card orders, to include but not limited to, received and processed dates (listed by ordering agency), scheduled delivery date, and shipped date;
d. Actions under warranty and maintenance;
e. Significant trends (quantities by CLIN, component reliability safety issues, problems, and recommended solutions);
f. Minutes from the previous PPR;
g. Activities determined to be of importance to the Government, such as unanticipated problems, and high visibility issues identified by the Government;
h. Status of significant program events;
i. Customer feedback;
j. Agencies and organizations contacted and initiatives with each;
k. Reason for delinquent Task Orders, Delivery Orders, and purchase card orders.

b. The Contractor shall include in each review, a current organizational chart that includes the names and telephone numbers of all key personnel, and any key personnel changes highlighted. The key personnel for this Contract are Software Systems Engineer; Project Manager; and Senior Programmer performing on Task Orders and the Contract Program Manager. The Contractor shall prepare and coordinate with the COR, an agenda for all PPRs at least five workdays before a scheduled PPR. The Contractor shall provide the briefing charts to the COR electronically three workdays prior to the day of the PPR. The Contractor shall prepare and coordinate minutes of the PPRs with PM J-AIT no later than five workdays after the PPR. Coordination shall be accomplished through electronic mail. Upon PM J-AIT approval, the Contractor shall, no later than five workdays, post the minutes on the web site specified in the paragraph “Web Site” in this Part. The Contractor shall hotlink the web site to the PM J-AIT web site.

7.2.3 STATUS REPORT.

The Contractor shall prepare and submit a Status Report in Microsoft Office Excel format, twice a year. The report shall include all orders placed by the Government and by Government Contractors (reference the paragraph “Government Contractor’s Use of Contract” in Part C-1-1) during the reporting period. The Contractor shall submit the first report to the COR on the 10th day of the month following the six-month period after the Contract effective date specified in the Notice to Proceed. The Contractor shall submit subsequent reports in six-month increments on the 10th day of the month following the reporting period throughout the performance period of the Contract. The report shall include, as a minimum, a list of all equipment delivered by:

a. CLIN, with brief description, by month, by Service or Agency, total quantities and dollar amount;
b. Year-to-date, total quantities and dollar amount;
c. Contract-to-date, total quantities and cumulative dollar amount.

An example report format is located at Exhibit A in this Part.

7.2.4 CONTRACTOR MANPOWER REPORTING.

The Office of the Assistant Secretary of the Army (Manpower & Reserve Affairs) operates and maintains a secure Army data collection site where the Contractor shall report ALL Contractor manpower (including subcontractor manpower) required for performance of this Contract. The Contractor is required to provide all of the required information using the following web address: https://Contractormanpower.army.pentagon.mil. The required information includes: (1) Contracting Office, Contracting Officer, Contracting Officer's Technical Representative; (2) Contract number, including task and Delivery Order number; (3) Beginning and ending dates covered by

reporting period; (4) Contractor name, address, phone number, email address, identity of Contractor employee entering data; (5) Estimated direct labor hours (including sub-Contractors); (6) Estimated direct labor dollars paid this reporting period (including sub-Contractors); (7) Total payments (including sub-Contractors); (8) Predominant Federal Service Code (FSC) reflecting services provided by Contractor (and separate predominant FSC for each sub-Contractor if different); (9) Estimated data collection cost; (10) Organizational title associated with the Unit Identification Code (UIC) for the Army Requiring Activity (the Army Requiring Activity is responsible for providing the Contractor with its UIC for the purposes of reporting this information); (11) Locations where Contractor and sub-Contractors perform the work (specified by zip code in the United States and nearest city, country, when in an overseas location, using standardized nomenclature provided on the website); (12) presence of deployment or contingency Contract language; and (13) Number of Contractor and sub-Contractor employees deployed in theater this reporting period (by country). As part of its submission, the Contractor shall also provide the estimated total cost (if any) incurred to comply with this reporting requirement. The reporting period shall be the period of performance not to exceed 12 months ending September 30 of each Government fiscal year and shall be reported by 31 October of each calendar year. Contractors may use a direct XML data transfer to the database server or fill in the fields on the website. The XML direct transfer is a format for transferring files from a Contractor's systems to the secure web site without the need for separate data entries for each required data element at the web site. The specific formats for the XML direct transfer may be downloaded from the web site.

7.3 CONFIGURATION MANAGEMENT.

7.3.1 AIT-IV CONFIGURATION MANAGEMENT PLAN.

The AIT-IV equipment shall be configuration-controlled, accounted for, and audited in accordance with the Government-approved AIT-IV Configuration Management Plan. The Contractor shall provide the AIT-IV Configuration Management Plan as an Annex to the AIT-IV Management Plan, which shall be submitted to the COR for approval no later than 30 calendar days after the Contract effective date specified in the Notice to Proceed. The AIT-IV Configuration Management Plan shall reflect best commercial practices and shall be in accordance with accepted industry standards. The Plan shall define those instances when the Contractor shall notify the Government of pending changes to the AIT-IV Equipment Baseline Configuration.

7.3.2 CHANGES AND MODIFICATIONS.

All OEM changes prior to Contract award shall be included in equipment provided under this Contract at no additional cost to the Government. The Contractor shall notify the Contracting Officer of all OEM-sponsored changes to any equipment provided on the Contract. All changes shall be provided to the Government at least 45 calendar days prior to implementation for evaluation and will be subject to the Contracting Officer’s approval before the changed products may be placed on the Contract.

7.3.3 CHANGES TO SOFTWARE.

The Contractor shall notify the Contracting Officer of all changes to the software and documentation provided under the Contract throughout the warranty period, including any software updates and upgrades (for example, bug fixes, new features, enhancements, and revisions) as they become available. Software changes are further defined as any software product and documentation which is provided for any other customer free of charge, or which the software manufacturer does not consider a new product. Changes to software or documentation (e.g., User Manuals) (including packaging and shipping) shall be provided at no additional cost to the Government.

7.3.4 NOTIFICATION OF SOFTWARE CHANGES.

The requirement for any software change involving a change to form, fit or function, is that the Contractor shall provide PM J-AIT one copy of the changed software with documentation (e.g., User Manuals) for each affected software item previously accepted by the Government. After Government evaluation of the changed software, the Contracting Officer will notify the Contractor of the acceptance or rejection of the latest release. Software changes not involving a change to form, fit or function shall be provided to the Government on the Contract after notification is provided to the Contracting Officer.

7.3.5 CORRECTION OF SAFETY HAZARDS OR EQUIPMENT MALFUNCTIONS.

In accordance with commercial practices, the Contractor shall notify the Contracting Officer and PM J-AIT of all OEM-sponsored changes to correct safety hazards or equipment malfunctions. The Contractor shall implement changes to correct safety hazards in accordance with commercial practices. The implementation shall be in accordance with a mutually agreed-upon schedule. All such changes shall be implemented at no additional cost to the Government.

7.3.6 CONFIGURATION AUDITS.

The Government is required to maintain configuration control over functional and performance requirements (form, fit, and function). Subject to the issuance of a TES Task Order, the Contractor shall support the Government in performing Functional Configuration and Physical Configuration Audits. The Contractor shall provide a demonstration of the equipment. At least seven workdays prior to commencement of the equipment demonstration, the Contractor shall deliver a Demonstration Plan to the Government. The Plan shall include the agenda, demonstration procedures, and a matrix identifying the baseline equipment. The baseline matrix shall include, at a minimum: Equipment Nomenclature, Model Number, Firmware Version, Software Version, Relevant Specification Paragraph, and any constraints. The matrix shall be in Microsoft Office Excel format.

7.3.7 PHYSICAL CONFIGURATION AUDIT.

A Physical Configuration Audit (PCA) is the formal examination of the "as-built" configuration of a commercial item against its technical documentation to establish or verify the commercial item's product baseline.

7.3.8 FUNCTIONAL CONFIGURATION AUDIT.

A Functional Configuration Audit (FCA) is the formal examination of the functional characteristics of a configuration item to verify that the item has achieved the requirements specified in its functional and allocated configuration documentation. The FCA is performed by the Government's Configuration Management Team or Quality Control Representative, by auditing the requirements specifications against the AIT-IV Contractor specifications of each configuration item (hardware, middleware, and software).

7.4 RISK MANAGEMENT.

Risk Management is an essential part of program management. The Contractor shall continually identify, assess, manage, and control project risks. The objective is to reduce program uncertainties, and to classify risks according to their probability of occurrence, and possible consequences. In accordance with the Government-approved Management Plan, the Contractor shall identify project risks or actions that affect the accomplishment of program objectives. The program risk events include, but are not limited to:

a. Technical performance;
b. Operational performance;
c. Schedule performance;
d. Training;
e. Technical standards;
f. Logistics readiness.

The Contractor shall prioritize project risks and determine the status of risk reduction or mitigation efforts. The Contractor shall report the status of risk management efforts during the PPRs.

7.5 MONTHLY EQUIPMENT AND SERVICE REPORT.

The Contractor shall provide PM J-AIT, the COR, and Contracting Officer with a Monthly Equipment and Service Report (MESR) in Microsoft Office Excel format via electronic mail and post it on the Contractor's web site for on-line viewing and ad hoc inquiries by authorized Users. The initial MESR shall be submitted covering the month the first AIT-IV item is received by the Contractor for repair (warranty or maintenance), and shall be provided no later than 10 calendar days after the end of each subsequent month e.g., January report is due by 10 February. The Contractor shall provide, as part of the MESR, a consolidated list of service User calls for troubleshooting assistance. This detailed information for warranty and maintenance repairs will be used to identify trends and

compliance with equipment turn-around requirements. The MESR shall include a separate line item of description for each AIT-IV item service incident and, as a minimum, shall include the following:

a. Return Material Authorization (RMA) number and date assigned to User Category of service action: Per-incident maintenance, Monthly Maintenance, On-call maintenance or Warranty;
b. Identify if User requests same serial number item returned. Also, note if User changed their mind because of time delay in receiving the same serial number in return;
c. Identity of the Federal agency (that is, Army, Navy, DLA, etc.), Government User and Point of Contact, and site requiring the maintenance;
d. Parts breakout: nomenclature; National Stock Number (NSN), if available; part numbers; model number, CLIN; and serial number;
e. Quantity of each type of component repaired or replaced by CLIN under the Contract to date;
f. Equipment warranty expiration date;
g. Equipment maintenance start date and expiration date for monthly maintenance;
h. Delivery Order number or purchase card order date and activity;
i. Date field engineer arrival on-site, or receipt of the failed AIT-IV equipment at the repair facility;
j. Date repair action was completed, or equipment was sent back to the User, shipper or carrier, or when picked up by the User;
k. Remarks section providing information outside of the items listed above, which gives a brief, non-technical description of equipment problems identified, repair action accomplished, parts replaced, serial numbers of replacement AIT-IV items (if the item was replaced by the Contractor), problems identified but causes not isolated, or a statement of no evidence of failure.

7.6 WARRANTY STATUS REPORT.

The Contractor shall provide a Warranty Status Report in Microsoft Office Excel format, once each Contract year as requested by the COR, to include but not limited to, a list of all equipment due to leave warranty status no later than the next twelve months with serial number, model number, Federal Agency, Unique Control Number, Delivery Order number, shipping date, warranty end date, Government User, point of contact and telephone number. The initial report format shall be provided by the Contractor for Government review and approval no later than 30 calendar days after issuance of the Contract effective date specified in the Notice to Proceed.

7.7 CONTRACT-LEVEL METRICS.

The Government will evaluate the Contractor's performance at the contract level based on Attachment 4, Contract-Level Metrics. Task orders issued under this contract will contain specific metrics that the Contractor shall meet.

8 REPAIR REQUIREMENTS.

8.1 REPAIR CENTERS.

The Contractor shall provide a Repair Center(s) (RCs) to be operational no later than 90 calendar days after the first Delivery Order is issued. The Contractor shall repair or replace failed equipment, provide on-call and mail-in repair, and provide technical assistance to the Users. The Contractor shall provide maintenance personnel who have maintenance experience on the AIT-IV equipment. The maintenance personnel shall have obtained experience with the AIT-IV configurations prior to their assignment to the AIT-IV Contract. All Contractor personnel providing assistance shall understand and speak fluent English.

8.1.1 POINTS OF CONTACT.

The Contractor shall provide the Contracting Officer and the COR with the Point-of-Contact, telephone numbers, facsimile numbers, e-mail addresses, and mailing addresses for each RC. The Contractor shall provide updates to the Government as changes occur.

8.1.2 REPAIR CENTER (RC) HOURS OF OPERATION.

The RC(s) shall be operational between the hours of 8:00 A.M. through 5:00 P.M., local time, Monday through Friday. This excludes U.S. Federal and Host Nation Country holidays in the geographic location of the RC.

8.1.3 EQUIPMENT RETURN AND TRACKING.

The Contractor shall provide a method to enable the Government User and the Contractor to quickly identify and track components being forwarded to, and returned from, the Contractor RCs for warranty and maintenance services. The Contractor shall assign the User a RMA number prior to the Government mailing in the failed equipment to the RC for repair or replacement. The User shall be informed of the RMA number and serial number of each component returned to the Contractor for warranty and maintenance service. All failed equipment returned to the RC shall be identified by the RMA number. The RMA number will be used by the Government to help track the failed component through the warranty or maintenance service process.

9 CUSTOMER SUPPORT.

The requirements found in this paragraph, Customer Support, shall not be separately priced.

9.1 TECHNICAL ASSISTANCE.

The Contractor shall provide Technical Assistance, as follows:

a. Troubleshooting and correction of equipment problems;
b. Processing requests for On-call Maintenance;
c. Processing Mail-in warranty and maintenance service issues; for example, assigning RMA numbers;
d. Providing Contractor address of the Repair Center(s).

9.1.1 TOLL-FREE CUSTOMER SUPPORT HELP DESK.

The Contractor shall provide toll-free telephonic support for a Customer Support Help Desk in CONUS and OCONUS. The Help Desk shall be staffed 24 hours a day, 7 days per week, except when U.S. Government holidays and OCONUS Host Nation holidays coincide. The Help Desk shall respond to the User's call no later than 4 hours after receiving the User's call 95% of the time, maintain a database of calls received and acted upon, and track User calls for troubleshooting assistance. Except for the purpose of leaving a phone number for the Contractor to return a call no later than one hour during periods of high call volume, recorded answering services are not acceptable to the Government; however, the Contractor may use an on-line knowledge base, and an on-line RMA input functionality to assist Help Desk staff meet the workload. Contractor personnel staffing the Customer Support Help Desk shall possess sufficient expertise to recommend troubleshooting procedures and possible corrective actions for equipment and software acquired under the AIT-IV Contract. Contractor personnel staffing the Help Desk shall understand and speak fluent English. The Contractor shall maintain records of User calls for troubleshooting assistance capturing the following: failed item Point-of-Contact, location, date, problem, and resolution. This information shall be provided in the MESR.

9.1.2 WEB SITE.

The Contractor shall establish and maintain a worldwide web site for Government Users no later than 60 calendar days after the Contract effective date specified in the Notice to Proceed. The web site shall be hot linked to the PM J-AIT web site and shall be available daily on a 24-hour basis, until the expiration of the last active Order issued under the Contract. As a minimum, the Web site shall include, or provide hotlinks to:

a. Methods for User to track status of Delivery Orders and Task Orders using the Government's order number and a Unique Control Number;
b. Warranty and maintenance support;
c. Warranty and maintenance tracking using the RMA number;
d. Exchange of technical information between the Contractor and individual User and groups;
e. Point-of-Contact, telephone and facsimile number, email address and mailing address for each RC;
f. Technical troubleshooting support;
g. Failed equipment tracking and status;
h. Ordering Catalog;
i. Reference and User Manuals (i.e., Commercial Manuals, Technical Manuals, Software Manuals);
j. Project management reports (schedules, IPT and PPR minutes, etc.);

k. Recent news items from PM J-AIT or the Contractor (for example, notifications of the web site being down for maintenance, etc.);
l. Other data as mutually agreed to by the Government and the Contractor;
m. AIT-IV device drivers;
n. Monthly Equipment and Service Report, Status Report, and Warranty Status Report;
o. List of products that fully comply with Section 508 of the Rehabilitation Act.

The Contractor shall ensure that all device drivers required to operate AIT-IV equipment are posted to the web site. At a minimum, the Contractor shall post to the web site those drivers that were developed by the Contractor for use under this Contract. All initial drivers shall be posted to the web site no later than 60 calendar days after the Contract effective date specified in the Notice to Proceed. New and updated drivers shall be posted to the web site no later than 48 hours of the COR's approval. In the event that drivers are updated, the original version shall also be maintained on the web site.

10 WARRANTY.

The Contractor shall provide a minimum of a three-year warranty, including all parts, labor, and transportation costs for all AIT-IV components provided under this Contract. The Contractor shall provide a minimum of a three-year warranty for all software products. The Contractor shall repair or replace all failed AIT-IV components covered under warranty in this Contract in accordance with the procedures outlined below. All warranties shall be included in the purchase price of the component, and not priced separately. The Contractor shall immediately notify the ordering Contracting Officer and order Point of Contact (POC) regarding equipment requiring repair or replacement due to apparent User abuse, negligence, or missing significant parts, such as circuit cards or boards.

10.1 WARRANTY SUPPORT.

The warranty shall not apply if damage to the equipment is occasioned by fault or negligence of the Government. During the equipment warranty period, the Contractor shall implement changes to correct equipment malfunctions in accordance with best commercial practices. The implementation shall be in accordance with a mutually agreed-upon schedule. These changes shall be made at no additional cost to the Government. The warranty shall fully protect the Government against equipment malfunctions due to material defects, workmanship, or intrinsic operating problems. The warranty period for items ordered by Delivery Order shall begin upon Government acceptance of the equipment. In the event the Contractor is authorized to use a Certificate of Conformance, the warranty period for items ordered by a Delivery Order shall begin on the date of shipment. The warranty period for items ordered by purchase card shall be in accordance with the paragraph entitled "Governmentwide Commercial Purchase Card" in Part C-1-1. The warranty shall include mail-in procedures and on-call procedures as specified below.

10.2 WARRANTY MAIL-IN PROCEDURES.

The requirement for warranty mail-in service, including commercial carriers, is that the Contractor shall bear all shipping costs, both from and back to Government sites. The Contractor shall be responsible for the equipment from the time of receipt until safe return to the Government. The Government will provide the Contractor with any unusual transportation instructions for return shipment after repair. When the User does not require the same serial number equipment, the Contractor shall ship a replacement item no later than 24 hours after notification of failed AIT-IV components. If the User requires the same serial number equipment, the Contractor shall restore all malfunctioning equipment covered under warranty to a fully operational condition and ship the equipment back to the User no later than ten workdays after receipt of the failed equipment (CONUS and OCONUS). In the event a same serial number component requested by the User cannot be repaired, the Contractor shall notify the Government User no later than three workdays after receipt of the component at the Contractor's facility. The Government User will provide the Contractor with disposition instructions for un-repairable AIT-IV components.

10.3 COMPONENT RETURN AND TRACKING.

The Contractor shall assign a RMA number and inform the User of the RMA number as the tracking number, and serial number for each AIT-IV component returned to the Contractor for warranty service.

10.4 WARRANTY REPLACEMENT PARTS.

The requirement for Contractor Warranty service is that only new parts, or parts warranted as new by the OEM, shall be used for repairs of failed Government AIT-IV components. Additionally, all replacement parts shall be equal to or better than the replaced parts in terms of quality and performance. The warranty for all replacement items installed during the initial warranty period shall be equal to the remaining warranty period for the original item, or 90 calendar days, whichever is greater. Failed parts replaced by the Contractor shall become the property of the Contractor. However, the Government reserves the right to purchase unserviceable parts containing sensitive or classified material, as required by statute or regulation.

10.5 WARRANTY ON-CALL PROCEDURES.

The Contractor shall provide on-call warranty service for AIT-IV IUID Marking equipment in CONUS only. The requirement for CONUS locations, is that the Contractor shall provide on-call repair no later than three workdays of notification. The Contractor shall provide on-call warranty service outside the official hours of operation when required by the using activity. When warranty service outside the official hours of operation is ordered in CONUS locations, the Contractor shall replace or return the equipment to a fully operational status no later than five calendar days from the time the Contractor is notified of the malfunction. The Contractor shall provide On-call Warranty service support to repair the item on-site.

11 MAINTENANCE.

Upon expiration of the warranty, the Contractor shall provide worldwide maintenance to repair or replace AIT-IV components and provide updates and changes to software covered under maintenance. Maintenance prices shall include all parts, labor, and transportation back to the User.

11.1 MAINTENANCE TURN-AROUND TIME.

The repaired AIT-IV component shall be returned and received by the User no later than seven workdays after receipt at the Contractor's facility. In the event the AIT-IV component cannot be repaired, the Contractor shall notify the Government User no later than three workdays after receipt of the component at the Contractor's facility. The Government User will provide the Contractor with disposition instructions for un-repairable RFID components.

11.1.1 AIT-IV COMPONENT RETURN AND TRACKING.

The Contractor shall assign a RMA number and inform the User of the RMA number as the tracking number and serial number for each AIT-IV component returned.

11.1.2 MAIL-IN MAINTENANCE.

The Contractor shall provide Mail-in Maintenance to include parts and labor on a Monthly and Per-incident basis for AIT-IV Multi-Protocol Fixed Readers, Hand Held Readers, and Printers. In accordance with the "Transportation" paragraph in this paragraph, the Contractor shall be responsible for transportation back to the User for all mail-in items.

11.1.3 ON-CALL MAINTENANCE.

a. The Contractor shall provide worldwide On-call Maintenance for AIT-IV IUID Marking equipment. When maintenance service is ordered in CONUS locations, the Contractor shall replace or return the equipment to a fully operational status no later than seven workdays from the time the Contractor is notified of the malfunction. The requirement for OCONUS locations, is that the Contractor shall replace or return the equipment to fully operational status no later than ten workdays of notification.

b. The Contractor shall provide on-call maintenance outside the official hours of operation when required by the using activity. When maintenance outside the official hours of operation is ordered for CONUS locations, the Contractor shall replace or return the equipment to a fully operational status no later than seven calendar days from the time the Contractor is notified of a failure. When maintenance outside the official hours of operation is ordered for OCONUS locations, the Contractor shall replace or return the equipment to fully operational status no later than ten calendar days of notification. The Contractor shall provide the required maintenance service in accordance with

the Task Order issued for the instant requirement; or in accordance with a Task Order for monthly maintenance; or in accordance with a Task Order issued pursuant to the subparagraph entitled "Special Funding of Per Incident Maintenance" in Part C-1-1.

11.1.4 MONTHLY MAINTENANCE.

The Government may, at its sole discretion, order monthly maintenance to be effective immediately upon the expiration of the warranty and continuously thereafter for any item for which monthly maintenance is provided. If the Government orders monthly maintenance after a lapse in coverage due to the expiration of the warranty or a lapse in monthly maintenance, then the Contractor may subject such items to inspection to assure the item is in proper working order. If any such item requires repair, the Government must order per incident maintenance for that item before the Contractor is required to accept that item under monthly maintenance. The Contractor shall then accept for monthly maintenance any item that it has inspected and found to be in working order, any item for which inspection is not requested no later than seven calendar days after receipt of order for monthly maintenance or any item after completion of per incident maintenance.

11.1.5 MAINTENANCE PROCEDURES.

The Contractor shall replace or return equipment to a fully operational status and ship the equipment back to the User no later than ten workdays after receipt of the failed equipment (CONUS and OCONUS). Transportation arrangements shall be in accordance with the provisions of the paragraph entitled "Transportation" in this Part. In the event an AIT-IV component cannot be repaired or if any discrepancy is noted between the equipment received and the Task Order, the Contractor shall notify the Government User no later than three workdays after receipt of the component at the Contractor's facility. The Government User will provide the Contractor with disposition instructions for un-repairable AIT-IV components.

11.1.6 MAINTENANCE REPLACEMENT PARTS.

Contractor Maintenance support shall utilize only new parts, or parts warranted as new by the Original Equipment Manufacturer, that shall be used for repairs of failed Government AIT-IV components. Additionally, all replacement parts shall be equal to or better than the replaced parts in terms of quality and performance. Failed parts replaced by the Contractor shall become the property of the Contractor. However, the Government reserves the right to purchase unserviceable parts containing sensitive or classified material, as required by statute or regulation to be destroyed or retained by the Government. The effective warranty for all replacement items installed during the maintenance period shall be a minimum of 90 calendar days.

11.1.7 SOFTWARE MAINTENANCE.

Software maintenance shall be provided for all commercial software provided under this Contract in accordance with customary commercial software maintenance terms and conditions offered to the general public to include all fixes, updates and changes necessary to maintain the software in an operational state.

11.2 PREVENTIVE MAINTENANCE.

Preventive maintenance includes all actions performed in an attempt to retain an item in a specified condition by providing systematic inspection, detection, and prevention of incipient failures. Unless otherwise specified, Government personnel will perform all preventive maintenance for items acquired under this Contract. The Contractor shall provide to the Government, in detail, all requirements and procedures for preventive maintenance and troubleshooting-level diagnostics, in documentation and User Manuals. The Contractor shall provide Material Safety Data Sheets to the Contracting Officer, COR and all users as specified in the individual order in accordance with FAR Clause 52.223-3 in Part C-1-1. The Contractor shall provide documentation for each appropriate hardware CLIN that shall include preventive maintenance checks, service schedules, and troubleshooting-level diagnostics. The Contractor shall be responsible for all other maintenance and support.

11.3 TRANSPORTATION.

Transportation of AIT-IV components shipped to the Contractor for Maintenance will be arranged and paid for by the Government. Return transportation of repaired or replaced components shipped to the User shall be arranged and paid for by the Contractor. The Contractor shall use a return shipping method equal to or better than the User's

method of shipment to the Contractor. The Government will provide the Contractor with any unusual transportation instructions for return shipment after repair.

12 TECHNICAL ENGINEERING SERVICES (TES).

12.1 GENERAL.

The Contractor shall provide TES on-site at Government sites and at the Contractor's facility as specified in the Task Order. TES shall include those services required for AIT-IV turnkey implementation, IUID implementation support, equipment integration, site analysis, installation, de-installation, relocation, problem-solving, user unique training, IPT support, conducting PCAs/FCAs, software development; communications, interfaces to other Government systems, equipment and systems engineering services, System Design and systems integration to include middleware integration to enterprise systems. Any cables or adapters not listed in this Contract, middleware or other items and materials required for installation of Contractor-provided AIT-IV components, may be ordered through this Contract in accordance with the provision entitled "Incidental Materials" in Part C-1-1.

12.1.1 PROPOSAL REQUEST FOR TES.

The Government will issue proposal requests for TES in accordance with Part C-1-1, paragraphs, "Ordering Procedures for Orders Exceeding $3,000," and "Task Order – Technical Engineering Services (TES)." The Contractor is encouraged to respond to all proposal requests by the specified submission dates. Proposals submitted in response to a proposal request shall comply with the requirements of the referenced Part C-1-1 paragraphs.

12.1.2 TRAVEL.

Prices for Contractor personnel travel and per diem to perform TES shall be in accordance with the requirements set forth in "Task Orders – Technical Engineering Services" in Part C-1-1.

12.1.3 TES TRIP REPORT.

The Contractor shall submit a TES Trip Report to the Task Order POC or Task Order COR, if applicable, no later than five workdays after the completion of each trip made for TES. The trip report shall be in the Contractor's format and shall contain as a minimum:

Report Date;
Customer Name, address, POC, e-mail address, and telephone number;
Project Name;
Time arrived, time departed;
Any recommended or provided Incidental Material description;
Contractor's summary of work completed;
Contractor POC name and signature.

12.1.4 TES RESPONSE TIME.

The Contractor shall provide TES within the time specified in the Task Order for specific technical services. The on-site locations and objectives of the TES to be provided shall be stated in the Task Order.

12.1.5 SOFTWARE DEVELOPMENT SERVICES.

Software Development Services (SDS) shall be limited to development incidental to the AIT-IV-related mission that utilizes equipment acquired under this Contract. The AIT-IV SDS shall be limited to the development work required to implement, modify, interface, and integrate an AIT-IV application(s) to an existing Government application(s) and database(s) e.g., Standard Army Retail Supply System (SARSS), Transportation Information System (TIS). Services include new software development, which may include translation of existing Government code that has been determined necessary to ensure operation of the system.

12.2 INSTALLATION / DE-INSTALLATION / RELOCATION.

12.2.1 INSTALLATION/DE-INSTALLATION/RELOCATION.

The Contractor shall conduct Installation/De-installation/Relocation services as specified in the Task Order for each location requiring the services. The ordering contracting officer will issue proposal requests with schematic drawings of the Government site. Additionally, AIT-IV Contractors submitting TES proposals may conduct site surveys at their own expense or at AIT-IV Contractor's own discretion rely solely on the Government-furnished site information when formulating their proposals. The Government does not guarantee accuracy and completeness of the Government-furnished site information.

12.2.2 INSTALLATION/DE-INSTALLATION.

The Contractor shall install and de-install AIT-IV configurations as specified in the Task Order. The Contractor shall provide all necessary installation support equipment, cables for the interface of the various components forming an installation, including the AIT-IV devices, servers, peripheral devices, and power sources as required. Upon receipt of a Task Order requiring installation/de-installation, and in accordance with the schedule contained therein, the Contractor shall install/de-install AIT-IV equipment in accordance with the approved Installation Plan. In instances where work to be performed by the Contractor requires interaction with existing facilities and equipment, the Contractor shall be responsible for any damage to existing facilities or equipment. After installation is completed, the Contractor shall remove all packing, shipping, and storage materials left over from the installation.

12.2.3 RELOCATION OF AIT-IV COMPONENTS.

Upon receipt of a Task Order requiring relocation of AIT-IV equipment, and in accordance with the schedule contained therein, the Contractor shall install AIT-IV equipment in accordance with the approved Installation Plan. The extent of the services performed by the Contractor shall be specified in the Task Order and may vary from minimal involvement to total responsibility for the relocation.

12.2.4 INSTALLATION PLANS.

The Contractor shall submit an Installation Plan with supporting documentation and attachments for evaluation as a part of its proposal for TES. The Installation Plan shall include, but is not limited to, the following items:

a. Specific details of the methodology for the installation and the resources required;
b. Detailed description, by major subheadings, of all installation work to be accomplished by the Contractor at the site to include scheduling and dependency of the various tasks;
c. Site layout plan including detailed drawings of all AIT-IV components, such as racks, cabinets, or consoles;
d. General component specifications including equipment, physical specifications, templates, manufacturer's specific machine configuration and space requirements, special operational line-of-sight requirements between various components, lighting requirements, site construction requirements, power requirements, cabling requirements, network connections, communication lines including satellite communications, cooling requirements, shipping requirements, and all special requirements that do not fall under normal operating conditions;
e. Description of any actions, such as site modifications, which the Government will complete prior to installation of the AIT-IV equipment, in sufficient detail to facilitate successful installation of the equipment.

12.3 CONTRACT SUPPORT PERSONNEL.

The Contractor shall provide all technical labor categories described in Attachment 1. The Government will issue proposal requests for specific tasks to be performed under Task Orders. Personnel performing TES and training under this Contract shall posses the qualifications that the Contractor requires for, and be part of the same work force, providing such services to the general public. The Contractor shall provide labor categories that represent a blend of demonstrated technical, supervisory and managerial expertise, analytical skills and knowledge to provide specific tasks, using efficient and state-of-the-art processes, made up of functions including, but not limited to, the following:

a. AIT-IV component integration;
b. Installation and de-installation;
c. User unique training, on-site or classroom;
d. Systems integration;
e. Complex programming support;
f. Designing, developing, and troubleshooting complex applications;
g. Modeling simulation;
h. Analysis in designing operating systems utilities;
i. Troubleshooting, following established testing procedures to ensure equipment is operating properly;
j. Development and revision of technical documentation for software, hardware, and systems;
k. Testing online documents for correct operation, content and usability;
l. Analyzing systems to identify project objectives and data elements;
m. Preparing high level flow-charts and diagrams from which detailed program designs may be further developed;
n. Database management, associated data analysis and design, and data dictionary tools, as well as distributed systems, and data base development methods and techniques;
o. Total system development and integration efforts, including all equipment, software, telecommunications, and networks, based on expert knowledge of automatic identification and data capture fields;
p. Outlining problems, and providing solutions to data communication projects and problems based on expert knowledge of modern data transfer methods and networks;
q. Technical problem analysis and resolution based on expert knowledge of RF equipment and systems, wireless technologies, and wireless test procedures requirement analysis.

13 DOCUMENTATION REQUIREMENTS.

13.1 GOVERNMENT RIGHTS.

The Government shall have full and unrestricted rights, in accordance with copyright laws and regulations, to use and reproduce for its own use, all documentation provided under this Contract. The Contractor shall provide the AIT user community with online access to, including the capability to download, all User Manuals and software reference documentation for any piece of equipment that interfaces with a host computer system. User Manuals and software documentation shall be in English and in the Contractor's format using Portable Document Format (PDF) files.

13.2 COMMERCIAL USER MANUALS.

The Contractor shall provide commercial User Manuals for each piece of equipment that provide step-by-step procedures for each function performed by the equipment. These User manuals shall identify all preventive maintenance tasks and troubleshooting procedures. The commercial User Manuals shall be included with each delivered piece of equipment and shall not be separately priced.

13.3 SOFTWARE REFERENCE DOCUMENTATION.

The Contractor shall provide software reference documentation for use by software developers creating AIT-IV applications for all software offered in hard copy and for online access. The documentation shall contain specific details for the integration of AIT-IV equipment. The documentation shall be at a level of detail sufficient to fully define the operator interface and application operations. The software reference documentation shall not be separately priced.

14 TRAINING REQUIREMENTS.

14.1 MULTIMEDIA TRAINING.

The Contractor shall provide multimedia training on CD-ROMs and via the internet on a dedicated web site that blocks access to all users except those users accessing the web site from ".mil" and ".gov" internet domains. The multimedia training shall instruct the students on how to operate, maintain, repair, and develop unique application software programs for AIT-IV equipment acquired under this Contract. The Contractor is required to provide a CD ROM and web-based training package for the first year of the contract. The Government may order updates to the

Training for years two and three of the contract when required. Training updates may include addition of new or modified products and other types of training updates as necessary.

14.1.1 TARGET AUDIENCES AND AREAS.

Target audiences utilizing the AIT-IV training will include technically skilled specialists responsible for supporting and implementing the use of AIT-IV components and end users responsible for operating the Contractor-provided hardware and software. The AIT-IV Configuration Training shall encompass an overview of instruction in the following areas:

a. AIT-IV Configuration Overview (hardware, software, communications). Hardware characteristics and principles of operation, AIT-IV Configuration hierarchy and software components (including the Operating System communication software interfaces), data structures, queues, and internal tables of the Operating System;
b. Hardware and Software Architecture. Communications processing (including protocols), software designs, interfaces, and assembly (Operating System development) language;
c. Operating System commands;
d. Operating System tailoring and generation, method for the distribution of fixes, problem resolution, and implementation of new software releases;
e. Operations. Set Interrogator parameters, collect loaded information, read and write information, search data to identify priorities and find specific items, create prioritized lists of containers to be unloaded, and locate specific containers based on container number or content data;
f. Diagnostics. Problem definition and resolution, and diagnostic software utilization;
g. Security features (including management considerations, controls, procedures, and software design); and
h. Hardware maintenance and support. Preventive maintenance checks and services, and user-level repair operations.

14.1.2 WEB BASED AND CD-ROM TRAINING.

The Contractor shall provide both Web Based and CD-ROM training as a Multimedia Training package (MMTP). The MTMP will be accessible by users utilizing MS Internet explorer version 7 or higher. The MMTP shall provide information in the areas of hardware and software installation, addressing initial problem diagnostics, performance measurements, diagnostic software, and basic component operations. The MMTP shall be developed for the specific target audiences and areas identified in the paragraph entitled “Target Audiences and Areas” in this Part. The MMTP shall be a stand-alone software training package providing menu-driven selection of hardware introduction or specific operational task selection using loaded data to simulate real-time scenarios. The MMTP shall be of a type to allow the Government to copy and paste selected information from the CD-ROM into other Government applications. The Contractor shall provide the Government all necessary documentation to enable the Government to perform modifications to the CD-ROM, and the Government shall have the right to modify, copy, and distribute the MMTP as required for its own use within the U.S. Government. Any software license or notice that is embedded in, or otherwise accompanies, the MMTP shall in no way supersede or limit the Government’s rights under this contract or Federal law. Each training module within the MMTP shall be no longer than 50 minutes in length. All Training shall be developed for the Levels I and II as follows:

a. Basic Interactivity (Level I) This is the lowest level of development. Level I lessons are linear (one idea after another) and often introduce an idea or concept. There is little "interaction" other than the student touching the screen or using a keystroke or mouse click to continue. Branching is not a feature other than in the use of a menu system. Testing includes immediate feedback. Level I does not include the use of a Computer Managed Instruction (CMI) system. The media used are primarily text and graphics (not complex), but may also include audio and video.

b. Medium Interactivity (Level II) This level involves all levels of learning from recall of information to performing skills. Level II allows the user to have increased control over lesson presentation; that is, there is more interaction. Multiple objects may appear on the screen and may move independently, or the user may be able to control their use. This level combines audio, video, text, graphics, and animation. Level II uses branching (one to two levels), testing, and immediate feedback. Lessons use CMI features to track and analyze student performance. Level II lessons include designs for recall of facts, rules, and concepts, but they also support other instructional strategies at the low end such as tutorials, drill/practice, collaborative learning, and discovery method.

14.1.3 DRAFT MMTP.

The Contractor shall provide the COR draft storyboards, and graphics materials no later than 60 calendar days after the date of a Task Order for the AIT-IV Training Master CD-ROM or for the AIT-IV Web-based training. The COR will review and approve the drafts and provide comments to the Contractor. The Contractor shall amend or edit the draft MMTP based on the Government's comments and resubmit a revised draft no later than 14 calendar days after receipt of the Government's comments. The Contractor shall provide the final MMTP no later than 30 calendar days after receipt of the COR's final approval of the draft MMTP materials.

At the Government's discretion, the Contractor shall attend a minimum of two meetings at PM J-AIT designated facilities to provide for Government review and input into the MMTP prior to COR final approval of the draft MMTP materials. The Contractor shall provide the COR draft storyboards, scripts, and graphics materials no later than ten workdays prior to each meeting. The Contractor shall also provide an agenda at least ten workdays prior to each meeting, and shall provide meeting minutes no later than ten workdays after the conclusion of each meeting.

14.1.4 TRAINING DELIVERABLES.

If ordered, the Contractor shall provide the following items in accordance with the approved MMTP within 45 days after approval of the MMTP or within 45 days after the date of the order, whichever is later:

a. Web-based training
b. One (1) Master CD-ROM to be used by the Government for reproduction and distribution purposes. This Master CD-ROM, along with a one (1) copy of the CD-ROM, shall be delivered to the COR.
c. An updated version of the Web-based training
d. An updated version of the Master CD-ROM and copy of the CD-ROM.

15 PRODUCT AND SERVICES ORDERING CATALOG.

15.1 PURPOSE.

a. The Contractor shall provide a Product and Services Ordering Catalog (OC) to assist Government users in determining the system configuration that shall best meet their operational requirements. The Contractor shall provide the OC no later than 90 calendar days after the Contract effective date specified in the Notice to Proceed.

b. The Contractor shall provide a draft OC electronically to the COR, PM J-AIT, and Contracting Officer for review no later than 30 calendar days after issuance of the Contract effective date specified in the Notice to Proceed. The Contracting Officer will either approve the OC or provide comments to the Contractor for incorporation into the OC. The Contractor shall then have no more than 15 workdays to edit and return the OC based on Government comments. Upon Government acceptance and approval by the Contracting Officer of the draft, the Contractor shall post the OC on the Contractor's web site.

c. The initial OC shall be approved by the Contracting Officer prior to posting the OC on the Contractor's web site. Subsequent revisions resulting from a formal contract modification shall be posted to the web site no later than five workdays after issuance of the contract modification. The Contractor shall update the OC for other changes (e.g., Government point of contacts) no later than five workdays after the receipt of a request from the COR. The Contractor shall post Contractor-related changes no later than five workdays after the change.

15.2 FORMAT.

The OC shall be provided in sections for ease of use. The Sections shall provide a user with a complete product list, with detailed description of features and prices for ordering of all hardware, software, cables, documentation, training, and technical services provided. The OC shall also include Sections which provide information on warranty, maintenance support, ordering procedures, customer support, and CLIN list with prices, and other support services. The Contractor shall provide access for Government users to the approved OC via the World Wide Web.

15.3 SECTIONS.

Each section of the OC shall be technically accurate and complete with descriptions of the equipment (to include pictures), software, and services. CLINs shall be used throughout the document to allow the user to properly

identify the appropriate item. CLINs shall be clearly annotated on drawings, charts, product descriptions, specification sheets, etc. When a product requires the purchase of additional CLINs to make a complete workable product, the CLINs shall be clearly identified in the description. All references to a geographic area where products may, or may not, be used shall be clearly annotated in the description, when applicable. The OC shall include, but not be limited to, the Sections identified below which address the minimum requirements in each Section.

15.3.1 ORDERING PROCEDURES.

This section shall contain procedures that provide the user with all the necessary information required to order AIT-IV products and services.

15.3.2 EQUIPMENT.

The Equipment section shall be organized into sub-sections based upon the major types of equipment provided, and shall include a discussion of the main features of each piece of equipment, including physical dimensions, power requirements (wattage and voltage), and heat generated by equipment. Precautions, such as the minimum distance between various devices, shall be provided. All cable requirements for equipment installation shall be described in the Section titled “Cables.” This Section shall clearly indicate the appropriate cables and interfaces for the various AIT-IV components and provide a reference to the applicable parts of the Section titled “Cables”. The OC shall contain instructions for users to specify equipment destination to ensure the AIT-IV equipment is compatible with the commercial power supply and adapter plugs for the geographic area in which it shall be operated.

15.3.3 SOFTWARE.

This Section shall provide a full description of all software packages that includes the primary function, minimum memory requirements, program capabilities, and major features and benefits. This section shall explain, in non-technical terms, the recommended software packages for specific applications.

15.3.4 CABLES.

This Section shall list all provided cables, and equipment cable requirements in a chart format that shall allow the user to identify the correct cables for connecting AIT-IV devices. CLINs shall be provided on the chart.

15.3.5 TECHNICAL ENGINEERING SERVICES.

This Section shall contain procedures that provide the user with all necessary information required to order TES. All TES identified in the paragraph entitled “Technical Engineering Services” shall be addressed in this Section.

15.3.6 TRAINING.

This Section shall provide course descriptions, lengths, prerequisites, course objectives, and recommended audiences for each Training Course.

15.3.7 WARRANTY SUPPORT.

This Section shall address the warranty provisions of the Contract.

15.3.8 MAINTENANCE SUPPORT.

This Section shall describe the various maintenance services available to users worldwide and instructions for ordering maintenance support.

15.3.9 CLIN LIST AND PRICES.

This Section shall provide the CLIN List and Prices.

16 CERTIFICATIONS.

16.1 AIT-IV CERTIFICATIONS.

16.1.1 ENERGY STAR.

Equipment meeting the specifications defined in PB 95-250304 shall be certified by the Contractor and properly labeled as meeting the Environmental Protection Agency requirements.

16.1.2 NON-INCENDIVE CERTIFICATION.

The Contractor shall certify that equipment identified as Non-incendive as well as its sub-components, shall be designed, manufactured and tested to Non-incendive standards, as specified in the National Electrical Code.

16.1.3 RUGGED ENVIRONMENT CERTIFICATION.

Transit Cases shall be manufactured and tested in accordance with ATA Specification No. 300, "Packaging of Airline Supplies" - 1960 (R1996) for Category 1, or have previously been accepted by DoD for use in a rugged environment.

16.1.4 PRODUCT SAFETY CERTIFICATION.

Equipment shall be certified by an authorized, Nationally Recognized Testing Laboratory to ANSI/UL1950-1997.

16.1.5 ELECTROMAGNETIC COMPATIBILITY (EMC) COMPLIANCE AND HAZARDS OF ELECTROMAGNETIC RADIATION TO ORDNANCE (HERO) COMPLIANCE.

All applicable equipment shall meet, as appropriate, the requirements of National Telecommunications and Information Administration (NTIA) Manual Annex K and FCC Part 15, regulations for Government operations. In order to certify the use of commercial AIT-IV equipment in these environments, the Government will subject representative categories of equipment to radiated emission and susceptibility tests (See MIL-STD 461D: Requirements for the Control of Electromagnetic Interference Emissions and Susceptibility, and MIL-STD-462D: Measurement of Electromagnetic Interference Characteristics). The applicable equipment shall remain unchanged after installation of Contractor-provided radio frequency devices. All applicable equipment for CONUS shall meet the International Special Committee on Radio Interference (CISPR) 22, Class A (International) standards for Radio Frequency Interference/Electromagnetic Interference, and be Underwriters Laboratory (or equivalent) and European Community certified. The Contractor shall test and certify equipment per the guidance provided in the U.S. Department of Commerce NTIA, FCC, and International Standards.

16.1.6 SELF-CERTIFICATION.

The Contractor's self-certification of standards (e.g., ISO 18000-7:2008) shall be based on the results of testing or inspection the Contractor undertakes or authorizes others to undertake on the Contractor's behalf. Self-certification shall be performed in accordance with ANSI Z-34.2-1987, American National Standard for Certification — Self-Certification by Producer or Supplier.

17 BACKGROUND INVESTIGATIONS FOR CONTRACTOR PERSONNEL.

17.1 BACKGROUND.

When applicable, Contractor personnel performing services under this contract, task order shall be required to undergo a background investigation. Task Orders may require Contractor personnel to have access to Unclassified Sensitive information in accordance with DoDD 8500.01E, DoDI 8500.2, AR-25, and the Privacy Act of 1974 (Public Law 93-579). At a minimum, some CONUS and OCONUS Task Orders will require the Contractor personnel accessing this information to have a favorable National Agency Check (NAC) and/or a DoD Secret clearance (Interim Secret clearances are acceptable). Investigative packages may contain the following forms:

1. SF-85, Questionnaire for Non-Sensitive Positions
2. SF-85P, Questionnaire for Public Trust Positions

3. SF-86, Questionnaire for National Security Positions
4. Credit Report Release Form
5. FD-258, Fingerprint Card,

17.2 NAC FILE RECORDS.

a. The Contractor shall take the necessary steps to ensure the ability to timely respond to the Task Orders stating a requirement for a NAC or DoD Secret clearance. When a Task Order specifically addresses a requirement for a NAC, the Contractor personnel assigned to this effort shall complete a Standard Form 85 or 85P. When a Task Order specifically addresses a requirement for a DoD Secret clearance, the Contractor personnel assigned to this effort shall complete a Standard Form 86.

b. The completed paperwork shall be submitted to the Contractor Security Manager for review of completeness. The Contractor Security Manager shall obtain a DoD Secret clearance from the Defense Security Service (DSS) or from the appropriate Government agency. The Contractor shall maintain a record of all requested NAC and DoD Secret clearance approvals and disapprovals.

17.3 CONTINUED PERFORMANCE DURING SUPPORT OF CRISIS SITUATIONS, CONTINGENCY OR EXERCISE.

The Contractor shall provide continued performance during support of crisis situations, contingency or exercise in accordance with the paragraph entitled “Continued Performance During Support of Crisis Situations, Contingency or Exercise” in Part C-1-1.

18 ORGANIZATION CONFLICT OF INTEREST (OCI).

18.1 NON-DISCLOSURE AGREEMENT.

a. Due to the nature of the work to be performed under this multiple award IDIQ contract the contractor may be required to submit signed non-disclosure agreement forms for all personnel working on a specific delivery/task order under this contract. Individual delivery/task orders will detail the scope of work to be performed under this contract. Without exception, all contractors are required to report potential OCI issues to the contracting officer immediately regardless of the stage of the acquisition/contract/order (e.g. Pre-solicitation, pre-award, post award, etc.) and regardless of what provisions and clauses are provided for in the contract/order. The cognizant contracting officer will provide the specific certificate of non-disclosure when applicable.

b. Organizational Conflicts of Interest. **Per FAR 9.5, organizational conflicts of interest may result when factors create an actual or potential conflict of interest on a contract, or when the nature of the work to be performed on the contract creates an actual or potential conflict of interest on a future acquisition. In this procurement, the Army has particular concerns that any proposal received from an offeror which would have the potential to perform services on any implementation contract to which that offeror is organizationally connected, is likely to result in an impermissible “Impaired Objectivity”, “Unequal Access to Information” or “Biased Ground Rules” OCI (one or more), and thus be ineligible for award under FAR 9.5**. Therefore, with respect to this Contract and subsequent task orders, the contractor agrees that, in consideration of the award of this contract, the contractor, any subcontractor, consultant, or employee of the contractor, any joint venture involving the contractor, any entity with which it is or becomes affiliated by common ownership or with or into which it merges, or any successor or assignee of the contractor, shall not provide services as a prime, sub-Contractor or consultant under any systems integrator contract for current or future Army PEO EIS programs. The contractor shall include this requirement in subcontracts at all tiers. The contractor agrees that this restraint shall extend throughout this contract/task order period of performance, including any exercised options. The contractor agrees and acknowledges that compliance with this restraint at all tiers is a material requirement of this task order and the contract. (FAR 9.505-1) **The only exception to these restrictions will be if the contractor submits a comprehensive mitigation plan to the contracting officer that, at the sole discretion of the contracting officer, gives the Government confidence that any current or potential OCIs will be satisfactorily neutralized**.

c. The Contractor agrees that if it assists in the preparation of non-developmental specifications or of work statements for a system or services under this Contract, or assists in the development of acquisition strategies or evaluation criteria or otherwise provides acquisition support under this Contract, it will not be allowed to furnish these items or services, either as a prime Contractor, a sub-Contractor or as a consultant (FAR 9.505-2).

d. The Contractor agrees that if it gains access to proprietary data of other companies, it will protect such data, and it will not use such proprietary data in supplying systems or components in future competitive procurements (FAR 9.505-4). In addition, the Contractor agrees to protect the proprietary data and rights of other organizations disclosed to the Contractor during performance of this Contract with the same caution that a reasonably prudent Contractor would use to safeguard highly valuable property. The Contractor also agrees that if it gains access to the proprietary information of other companies that it will enter into an agreement with the other companies to protect their information from unauthorized use or disclosure for as long as it remains proprietary and refrain from using the information for any purpose other than that for which it was furnished.

e. The Contractor agrees that it will not distribute reports, data or information of any nature arising from its performance under this Contract, except as provided by this Contract or as may be directed by the Contracting Officer.

f. The Contractor agrees that it will neither evaluate nor advise the Government with regard to its own products or activities. The Contractor will objectively evaluate or advise the Government concerning products or activities of any prospective competitors.

g. The Contractor agrees that it will include the above provisions, including this paragraph, in agreements with teaming partners, consultants or sub-Contractors at any tier which involve access to information covered above. The use of this Section 18 in such agreements shall be read by substituting the word "teaming partner," "consultant," or "subcontractor" for the word "Contractor" whenever the latter appears.

h. Personal Conflicts of Interest. In the course of performance pursuant to this contract, Contractor employees will be participating personally and substantially in duties that have a direct and predictable effect upon other non-Federal entities. The Contractor agrees to use its best efforts to ensure those employees and others performing services under this contract avoid conflicts of interest or the appearance thereof. To that end, the Contractor agrees that its employees and others performing services under this contract will, prior to the commencement of performance, sign the Certificate of No Conflict of Interest provided by the cognizant contracting officer.

i. Personal and Substantial. To participate personally means to participate directly. It includes the direct and active supervision of the participation of a subordinate in the matter. To participate substantially means that the employee's involvement is of significance to the matter. Participation may be substantial even though it is not determinative of the outcome of a particular matter. However, it requires more than official responsibility, knowledge, perfunctory involvement, or involvement on an administrative or peripheral issue. A finding of substantiality should be based not only on the effort devoted to a matter, but also on the importance of the effort. While a series of peripheral involvements may be insubstantial, the single act of approving or participating in a critical step may be substantial. Personal and substantial participation may occur when, for example, an employee participates through decision, approval, disapproval, recommendation, investigation or the rendering of advice in a particular matter.

j. Non-Disclosure. In the course of performance pursuant to this Contract, the Contractor will access nonpublic information, including acquisition sensitive information. The Contractor agrees that it will not use or disclose any such information unless authorized by the COR. Contractor further agrees that it will use its best efforts to ensure that its employees and others performing services under this Contract will not use or disclose any such information unless authorized by the COR. To that end, the Contractor agrees that its employees and others performing duties under this Contract will, prior to the commencement of performance, sign the Certificate of Non-Disclosure provided by the cognizant contracting officer.

18.2 THE FOLLOWING INFORMATION IS PROVIDED FOR CLARITY PERTAINING TO THE GENERAL OCI SITUATIONS WHERE CONFLICTS MAY ARISE. OCI CATEGORIES INCLUDE, BUT ARE NOT LIMITED TO:

a. Unequal Access to Information: A contractor has access to nonpublic information as part of its performance under a contract that leads to an unfair advantage in the competition for a later contract. Example: A support contractor obtains source selection sensitive information relating to a procurement and competes for that procurement.

b. Biased Ground Rules: A contractor sets the ground rules for a future competition. Example: A contractor develops requirements (such as the PWS or SOW) then competes to provide products or services to satisfy those requirements, thus obtaining a competitive advantage.

c. Impaired Objectivity: A firm is asked to perform tasks that require objectivity, but another role the firm plays casts doubt on the firm's ability to be truly objective. Example: Where a contractor's work under a contract entails evaluating itself, a subsidiary or affiliate, or a competitor.

EXHIBIT A

AIT-IV Contract Status Report

			[Month-Year]		Year-to-date		Contract-to-date	
CLIN	Description	Service	Quantity	Total Amt	Quantity	Total Amt	Quantity	Total Amt
0001AA	HHT-A	Army	5	$5	10	$10	30	$30
		AF	1	$1	3	$3	30	$30
		Navy	10	$10	30	$30	50	$50
		Marine	0	$0	5	$5	10	$10
		Coast Grd	0	$0	5	$5	10	$10
		DLA/Other	4	$4	5	$5	10	$10
		TRANSCO	2	$10	3	$15	10	$10
	TOTALS		**22**	**$30**	**61**	**$73**	**150**	**150**
0005AA	Imager for PC Input	Army	10	$50	20	$100	50	$250
		AF	0	$0	3	$15	10	$50
		Navy	5	$25	10	$50	20	$100
		Marine	0	$0	0	$0	2	$10
		Coast Grd	0	$0	0	$0	0	$0
		DLA/Other	0	$0	5	$25	10	$50
		TRANSCO	0	$0	5	$25	10	$50
	TOTALS		**15**	**$75**	**43**	**$215**	**102**	**$510**

Note: The CLINs, Description, Quantity numbers, and Total Amounts shown above are for illustrative purposes only. The contractor may provide each of the three summaries (Current month and year, Year-to-date, and Contract-to-date) on separate worksheets of the same spreadsheet file

EXHIBIT B

(Deleted)

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ATTACHMENT 1

AIT-IV LABOR CATEGORY DESCRIPTIONS

Project Manager: The Contractor's AIT-IV Project Manager shall serve as primary manager of large projects and shall be responsible for management, performance, and completion of major projects, as defined by the individual Task Order. The Project Manager shall be responsible for formulating and enforcing work standards, assigning schedules, and reviewing work performed for Task Orders.

Software Systems Engineer: Applies business process improvement practices to reengineer methodologies/principles and business process modernization projects. Applies, as appropriate, activity and data modeling, transaction flow analysis, internal control and risk analysis and modern business methods and performance measurement techniques. Assist in establishing standards for information systems procedures. Develops and applies organization-wide information models for use in designing and building integrated, shared software and database management systems. Constructs sound, logical business improvement opportunities consistent with corporate Information Management guiding principles, cost savings, and open system architecture objectives. Provides daily supervision and direction to staff.

Senior Programmer: Analyzes functional business applications and design specifications for functional activities. Develops block diagrams and logic flow charts. Translates detailed design into computer software. Tests, debugs and refines the computer software to produce the required product. Prepares required documentation, including both program-level and user-level documentation. Enhances software to reduce operating time or improve efficiency. Provides technical direction to programmers to ensure program deadlines are met.

Systems Analyst: Analyzes and develops computer software possessing a wide range of capabilities, including numerous engineering, business and records management functions. Develops plans for automated information systems from project inception to conclusion. Analyzes user interfaces, maintain hardware and software performance tuning, analyze workload and computer usage, maintain interfaces with outside systems, analyze downtimes, analyze proposed system modifications, upgrades and new COTS products. Analyzes the problem and the information to be processed. Defines the problem, and develops system requirements and program specifications, from which programmers prepare detailed flow charts, programs, and tests. Coordinates closely with programmers to ensure proper implementation of program and system specifications. Develops, in conjunction with functional users, system alternative solutions.

Junior Programmer: Participates in the design of software tools and subsystems to support reuse and domain analysis. Assists Applications Engineer and Applications Programmer to interpret software requirements and design specifications to code and integrate and test software components.

Systems Engineer: Analyzes and studies complex system requirements. Designs software tools and subsystems to support software reuse and domain analyses and manages their implementation. Manages software development and support using formal specifications, data flow diagrams, other accepted design techniques and Computer-Aided Software Engineering (CASE) tools. Estimates software development costs and schedule. Reviews existing programs and assists in making refinements, reducing operating time and improving current techniques. Supervises software configuration management.

Data Communications / Network Specialist: Analyzes network characteristics (e.g., traffic, connect time, transmission speeds, packet sizes and throughput) and recommends procurement, removals and modifications to network components. Designs and optimizes network topologies and site configurations. Plans installations, transitions and cut-overs of network components and capabilities. Coordinates requirements with users and suppliers.

RF Technical Radio Specialist: Focuses on the design and implementation of AIT-IV system. The individual will organize and configure the installation of an AIT-IV site. This includes the proper RF installation of AIT-IV readers, antennas, and printers. Identifies the proper location for the readers at the prescribed distances along the supply chain; on conveyors, at loading dock portals, near palletizers, and mounted on vehicles. Also properly deploy hand-held readers for use in warehouses, distribution centers, and field environments. Be able to identify the physical and RF environments, as well as throughput, speed and accuracy requirements. Required to be able to analyze the RF environment to identify any RF interference and take proper measures to avoid RF interference.

Technical Writer: Assists in collecting and organizing information required for preparation of user's manuals, training materials, installation guides, proposals, and reports. Edits functional descriptions, system specifications, user's manuals, special reports, or any other customer deliverables and documents.

Technical Training Specialist. Conducts the research necessary to develop and revise training courses. Develops and revises these courses and prepares appropriate training catalogs. Prepares instructor materials (course outline, background material, and training aids). Prepares student materials (course manuals, workbooks, handouts, completion certificates, and course critique forms). Trains personnel by conducting formal classroom courses, workshops and seminars.

Instructional Design and Development Specialist. Under minimal direction, conducts needs analysis of groups, processes, or products to identify performance requirements of training and curricula to insure effectiveness in achieving desired training results and meet mission objectives. Analyzes, delivers, and evaluates training and support materials. Assures delivery of training courses supporting specific customer needs. Enhances customer satisfaction and loyalty by assisting in the definition, implementation, rollout, marketing, and continual evaluation of the program. Provides consulting services to customer on all program aspects to include program development, organizational readiness, and marketing strategies. Manage implementation/deployment projects for new and upgraded products and services. Coordinates interaction between government and contractor to support and enhance client program initiatives, quality assurance, and problem resolution. Contributes directly to the building of customer goodwill, satisfaction, and loyalty. Facilitates defining/enhancing the client's business needs, goals, success criteria, and program strategy. Demonstrates excellent teamwork and strategic partnership skills and abilities."

ATTACHMENT 2

DD 254, DEPARTMENT OF DEFENSE CONTRACT SECURITY CLASSIFICATION SPECIFICATIONS

Provided in a separate document.

ATTACHMENT 3

Provided in a separate Document entitled Attach 3, AITIV/Part D SOW.

ATTACHMENT 4

CONTRACT-LEVEL METRICS

The Contract-Level Metrics for service level outcomes will be measured against the following metrics:

a. Metric: Submittal of Deliverables and Quality of Work – Contractor's work is complete, accurate, and timely.

1) Target Goal: 99% of Monthly Performance Evaluation of Maintenance Support is satisfactory.

2) Means of Surveillance: COR conduct surveillance based on criteria in the Quality Assurance Surveillance Plan (QASP).

b. Metric: Adherence to Government schedule.

1) Target Goal: Schedule is met 99% of the time.

2) Means of Surveillance: COR conduct surveillance and provide monthly report.

c. Incentive/Disincentive: The extent to which a contractor has met or exceeded the contract-level metrics will be considered in each Task Order evaluation. Task Order level metrics will be proposed by the contractor and negotiated for each Task Order at the time of award of the Task Order. A Performance Requirements Summary will be provided as a part of the Performance Work Statement when the individual Task Order is competed.