

Statement of Work

C.1 General

C.1.1 Customers: The purpose of the TACOM Strategic Service Solutions (TS3) effort is for the Contractors to perform the services specified by individual Task Orders (TO) issued hereunder, to satisfy the requirements of various Government customers that may include one or more of the following: the Program Executive Offices for Combat Support & Combat Service Support (PEO CS&CSS) and Ground Combat Systems (PEO GCS) and their assigned Project, Product and Program Managers, System of Systems Engineering and Integration (SoSE&I), US Army Tank-Automotive Research, Development and Engineering Center (TARDEC), and the US Army Tank-automotive and Armaments Command (TACOM) to include its depots and arsenals.

C.1.1.1 New Customers, Missions and Projects: This Statement of Work (SOW) is intended to apply to the requirements of the current TS3 customers listed above or any renamed, reorganized, or successor TS3 customer organizations(s), as well as any new missions, initiatives or projects assigned to those organizations and any element of the TACOM Life Cycle Management Command (LCMC).

C.1.1.2 Use by Other Organizations: In the event a request is made for use of TS3 by an outside activity or organization, a written determination will be made by the PCO prior to issuance of any TOs.

C.1.2 Work Authorization: All work under TS3 shall be performed only to the extent authorized and funded by discrete TOs, which have been signed by a Government PCO.

C.1.2.1 Performance Based Work Statement (PWS): Each TO issued hereunder shall provide, within the following SOW, specific requirements, performance objectives, standards of performance, incentives and management controls.

C.1.3 Scope: The objective of this contract is to define the services that the Contractor may provide for TS3 customers. The following SOW and individual TOs shall contain types of work that fall into one or more of the following services portfolio groups: Knowledge Based Services (KBS); Equipment Related Services (ERS); Facilities Related; and Research & Development (R&D).

C.1.3.1 Performance Locations: The Contractor may be required to perform services ordered hereunder off-site (any facility or location utilized by the Contractor in performance of a TO issued under this MA IDIQ which is not under the control of a government agency, e.g. Contractor's home or branch office) or on-site (any facility or location where performance is required or directed under a TO issued under the MA IDIQ which is not under the control of the contractor, e.g. U.S. Government base or installation, or other contractor facility

within the continental United States (CONUS) or outside the continental United States (OCONUS)), as required by an individual TO.

C.1.3.2 Concurrency: The Contractor may be called upon to provide simultaneous support to multiple TS3 customers to meet competing priorities.

C.1.3.3 Limitations: The SOW and the specific PWSs for TOs under this contract shall not be construed to require the performance of services that are considered inherently governmental, close to inherently governmental or those defined as personal services.

C.1.3.4 Portfolio Limitations: The SOW is not intended to cover services that are identified under the Housekeeping and Social Services Portfolio under the Facilities Related Portfolio Group. The SOW is not intended to cover enterprise level Information Technology (IT) services identified under the KBS Portfolio Group. Programmatic, technical, or functional support of IT services may be procured, subject to the requirement being specified in the individual TO.

C.1.4 Government Responsibilities

- a) **Contracting Officer's Representative (COR):** Each awarded TO issued hereunder will have a PCO appointed COR in accordance with (IAW) Defense Federal Acquisition Regulation Supplement (DFARS) Subpart 201.602-2.
- b) **Quality Assurance Surveillance Plan (QASP):** Each awarded TO issued hereunder will have a QASP that contains the performance metrics that the Government will evaluate to ensure the quality of services provided is acceptable.
- c) **Period of Performance:** Each awarded TO issued hereunder will specify its own period of performance or schedule. TOs may be in support of missions during peace time, contingency operations and war; and on a full-time, part-time, or project-related basis.
- d) **Place of Performance:** Each awarded TO issued hereunder will require specific location(s) for performance of the service. In those cases, the TO will explicitly list the performance location(s).
- e) **Deployment Details:** Each awarded TO issued hereunder may require deployment of Contractor personnel OCONUS. TOs requiring deployment will include pertinent details regarding, and requirements for, contractors to deploy.

C.1.5 Contractor Responsibilities: The Contractor, as an independent Contractor, and not as an agent of the Government, shall provide all materials and services required to efficiently and effectively manage the accomplishment of TOs issued hereunder. The Contractor shall furnish the labor necessary to perform all services required by

individual TOs in an orderly, timely, and efficient manner, as well as adequate supervision for its personnel.

C.1.5.1 Contractor Management Focal Point: The Contractor shall establish a single management focal point and maintain a supporting program management system tailored to accomplish the administrative, management, security, quality control, technical, and financial requirements associated with each TO.

C.1.5.2 Subcontractor and Teammate Management: The prime Contractor will be held fully responsible for all aspects of TO performance and oversight and for all TOs awarded to it, regardless of any arrangement between the prime and its proposed subcontractors and teammates.

C.1.5.3 Contractor Personnel: Contractor personnel providing services hereunder are employees of the Contractor and are under its sole administrative control and supervision. Accordingly, the Contractor shall select, assign, provide direction over its employees performing services under all TOs awarded to it IAW this contract. The Government will not exercise any supervision or control over the Contractor's employees in their performance of services under this contract.

C.1.5.3.1 Deploying Personnel: Deployable personnel shall meet the requirements as specified in Army Regulation (AR) 715-9, Contractors Accompanying the Force and/or Combatant Command(s) supplementary guidance as required.

C.1.5.3.1.1 Reserved.

C.1.5.3.2 Contractor Personnel Qualifications: The Contractor shall utilize qualified and experienced employees capable of achieving the requirements set forth in each TO. All contractor personnel assigned to perform work hereunder will maintain current qualifications and obtain any and all training required to meet TO requirements.

C.1.5.4 Contractor Quality Assurance: The Contractor shall establish and maintain a quality assurance program governing performance of all TOs issued hereunder, for identifying and correcting deficiencies in the quality of services. The Contractor shall ensure that an auditable quality assurance process commensurate with the scope and content of each TOs requirements and its associated QASP is documented and followed to make sure the service provided is acceptable. The Contractor shall employ its certified quality management system (ISO 9000 or ISO 9001) to the extent the system applies to each TO.

C.1.5.5 Federal Information Security Management Act (FISMA), PUBLIC LAW 107-347 Compliance: The FISMA lays out the framework requiring federal organizations to do the following: provide information security protections corresponding with the assessed risk, ensure senior leaders provide information security for assets under their control, ensure the organization has trained personnel to assist in complying with FISMA and related policies, ensure the CIO reports

annually on the effectiveness of the organization's information security program, develop, document and implement an information security program and develop and maintain an inventory of information systems under the control of the organization.

C.1.5.5.1 Information Assurance (IA) User Awareness Training: All Contractor personnel whose work under any TOs issued hereunder requires them to access any DoD-owned or contractor-owned computing resource processing Army information shall receive initial awareness orientation or training as a condition of being granted access to those resources. Each user must be given refresher training thereafter on an annual basis. This applies to access to all computer systems (whether they are stand alone or networked, are in a classroom, office, vehicle, tent, foxhole, or are portable) and applies to all classification levels from Unclassified through Top Secret Compartmented information.

C.1.5.6 Computer Software Compatibility: In performing the requirements of individual TOs issued hereunder, the Contractor shall use computer software compatible with the hardware and software specified in the individual TOs.

C.1.5.7 Access to Contractor Data: As requested by the PCO, the Contractor shall provide access at its worksite, during normal business hours, to records and data generated in the course of performing an individual TO. The Government shall have retention rights to all data (e.g. hard copy and computer files generated under the applicable task order, and all underlying data and files) as well as plans, reports, assessments, software programs, technical reports, quality procedures, and analyses, unless otherwise specified in an individual TO.

C.1.5.8 Sensitive Information: While performing individual TOs under this contract, the Contractor, its Subcontractors, and teammates may receive or have access to sensitive information, which may include information provided on a proprietary basis by equipment manufacturers and other public or private entities.

C.1.5.8.1 Non Disclosure Agreements (NDA): A Nondisclosure Agreement for Contractor Employees may be required at the TO level.

C.1.5.8.2 Guarding Sensitive Information: The Contractor, its Subcontractors, and teammates shall, in all cases, restrict access to sensitive and proprietary information to the minimum number of employees necessary for TO performance. The Contractor, and its subcontractors, shall take the necessary steps and precautions to prevent the disclosure of sensitive information to any unauthorized party. The Contractor shall, when specified in an individual TO, train its personnel, at contractor's expense, to be able to identify sensitive information and how to handle sensitive information.

C.1.5.8.3 Sensitive Information Usage: The Contractor, its Subcontractors, and teammates, shall use any and all sensitive and proprietary information exclusively to perform under the TO, and for no other purpose.

C.1.5.8.4 Reserved.

C.1.5.8.5 Contractor Prepared Solicitation: In the event a Contractor prepares, or assists in preparing, a work statement to be used in competitively acquiring a system or services, the Contractor shall comply with the requirements of Federal Acquisition Regulation (FAR) Subpart 9.5, entitled "Organizational and Consultant Conflicts of Interests." Failure to comply may result in the Contractor not being able to compete on the TO.

C.1.5.9 Reserved.

C.1.5.10 Duplication of Effort: In performing under this contract, the Contractor shall not to duplicate or otherwise provide efforts in accordance with this contract that are required to be performed under any other Government contracts with the Contractor. The Contractor shall notify the PCO and COR at the TO solicitation phase if the effort is similar to, or a duplication of, existing work the Contractor is already performing on another Government contract.

C.1.5.11 Contractor Manpower Reporting: The contractor shall report ALL contractor labor hours (including subcontractor labor and teammate hours) required for performance of services provided for TS3 via a secure data collection site. The contractor is required to completely fill in all required data fields using the following web address: <http://www.ecmra.mil/>, and then click on "Department of the Army CMRA" or the icon of the DoD organization that is receiving or benefitting from the contracted services. Reporting inputs will be for the labor executed during the period of performance during each Government fiscal year (FY), which runs October 1 through September 30. While inputs may be reported any time during the FY, all data shall be reported no later than October 31 of each calendar year, beginning with 2013. Contractors may direct questions to the help desk by clicking on "Send an email" which is located under the Help Resources ribbon on the right side of the login page of the applicable Service/Component's CMR website.

C.2 Tasks: The Contractor shall perform work that may involve the following disciplines, whether singly or in combination as specified in individual TOs as long as doing so does not result in an OCI.

C.2.1 Science, Technology, Engineering and Integration: The Contractor shall identify, develop, evaluate mature technologies and provide engineering services which may occur in any phase of the acquisition lifecycle. The Contractor shall provide systems engineering and integration services that bring together technologies, hardware, vehicle systems, weapon systems, and software into products that satisfy operational needs or user requirements.

C.2.1.1 Science & Technology (S&T)

C.2.1.1.1 Research, Development, Test, and Evaluation (RDT&E) Plans:

The Contractor shall develop RDT&E plans in order to identify new technologies, ideas, and concepts to address emerging requirements. Each RDT&E plan shall provide a roadmap that shall be used to guide the research or development effort.

C.2.1.1.2 Emerging Technologies: The Contractor shall monitor and assess relevant state-of-the-art technological innovations (emerging technologies) and make recommendations regarding technology development opportunities for current and future systems. The Contractor shall inform the Government of any identified technological opportunities, to include, but not limited to, recommendations for further analysis and suggested applications. This effort shall include, but not limited to, identification and analysis of any possible shared technology opportunities.

C.2.1.1.3 S&T Expertise: The Contractor shall provide technical expertise in the review of all areas of current and emerging policy and guidance, as well as, implementing programs, documents, and reports relating to technology development and applications.

C.2.1.2 Systems Engineering (IAW Department of Defense Instruction (DoDI) 5000.02)

C.2.1.2.1 Systems Engineering Plan (SEP): The Contractor shall develop and implement a SEP that shall capture the required steps to manage the system during its life cycle phases to include, but not limited to, the following:

C.2.1.2.1.1 Materiel Solution Analysis: The Contractor shall provide engineering services for materiel-solution-analysis-specific processes and activities, to include the support technology development strategy, that requires review, update, or execution of the following:

- a) Science and technology information;
- b) Cost, schedule and performance goals;
- c) Exit criteria for technology demonstration;
- d) Technology readiness level assessments and roadmaps;

- e) Preparation of test and evaluation strategy and test plans;
- f) Applied research activities;
- g) Lifecycle logistics functions, IAW standards and regulations identified in the TO, to include the following: training plans, manpower estimates, human system integration (HSI) strategy, repair analysis, assessments for special sets/kits/tools/outfits, special test, measurement, and diagnostic equipment, HAZMAT impact, environmental, occupational health evaluation and Chemical, Biological, Radiological and high-yield Explosive CBRNE;
- h) Information technology hardware or software, IAW standards and regulations identified in the TO to include the following: global information grid architecture, net-centric data sharing plans and architecture, spectrum supportability, and electromagnetic effects;
- i) Program management activities, to include technical and administrative support for program reviews, milestone decision events, cost/benefits analysis, cost estimating, industrial capability, competition analysis, and development and update of the SEP;
- j) Warfighter material needs analysis.

C.2.1.2.1.2 Technology Development Phase: The Contractor shall provide engineering services for technology-development-phase-specific processes and activities, to include the following:

- a) Test, Evaluation, and Demonstration activities, to include the following: development of the Test and Evaluation Master Plan (TEMP), engineering support for operational assessments and live fire test and evaluations (LFT&E), to include, component and system-level testing;
- b) Advanced technology demonstrations and outcome-based performance measures;
- c) Lifecycle logistics functions, to include the following: training plans, human systems integration portion of Manpower Integration (MANPRINT), manpower estimates, systems support and maintenance objectives and requirements, interoperability;
- d) Information technology (IT) and information assurance (IA) activities, to include the following: net-ready key performance parameters (KPP), integrated architectures, global information grid KPPs, information support plan, and IA acquisition strategy;
- e) DOD Information Assurance Certification and Accreditation Process (DIACAP), to include the following: spectrum support, electromagnetic environmental effects (E3), Command, Control, Communications, Computers and Intelligence Support Plan (C4ISP) and

Command, Control, Communications, Computers, Coalition Intelligence, Surveillance, and Reconnaissance (C5ISR). Support acquisition and technology activities to include the following: acquisition strategy, system performance specification development, capability development document (CDD) development, system threat assessment, economic analysis, life cycle cost estimates, programmatic environment safety and occupational health evaluation (PESHE), and assure business modernization management program (BMMP) compliance;

- f) Program management activities, to include the following: technical and administrative support for program reviews, milestone decision events, cost/benefits analysis, cost estimating, industrial capability and competition analysis, and development and update of the systems engineering plan (SEP).

C.2.1.2.1.3 Engineering and Manufacturing Development (EMD) Phase: The Contractor shall provide engineering services for EMD-phase-specific processes and activities, to include the following:

- a) Test, evaluation, and demonstration activities to include the following: test plan preparation, Test and Evaluation Master Plan (TEMP) updates, operational assessment, Live Fire Test and Evaluation (LFT&E), developmental test and evaluation, technical support and interpretation of results of Operational Test and Evaluation (OT&E);
- b) Lifecycle logistics activities to include the following: performance based logistics, unique item identification, training plans, human systems integration strategy, manpower estimates, interoperability, product support plan and capability, and review special kits, outfits, sets, tools, test, measurement and diagnostic equipment;
- c) Information technology (IT) and information assurance (IA) activities to include the following: net-ready key performance parameters (KPP), integrated architectures, global information grid KPPs, information support plan updates, metadata management, develop and evaluate IA solutions and update IA strategy, support of DOD Information Assurance Certification and Accreditation Process (DIACAP), and other applicable processes, spectrum certification compliance, E3, and net centric requirements;
- d) Acquisition and technology activities to include the following: provide prototypes and engineering development models, review and update designated science and technology information, perform technology readiness assessments, assess production readiness levels and manufacturing readiness levels, review security classification guide, counterintelligence support plan, system threat assessment, updates to the integrated architecture and supporting views, support the type of classification and materiel release processes, updates to the capability production document (CPD), programmatic environment safety and occupational health evaluation (PESHE), and assure business modernization management program (BMMP) compliance;

- e) Program management activities to include the following: technical and administrative support for program reviews, milestone decision events, cost/benefits analysis, cost estimating, industrial capability and competition analysis, and development and update of the SEP.

C.2.1.2.1.4 Production and Deployment Phase: The Contractor shall provide engineering and data architecture analyses, design and testing services, and integration and interoperability services to include tear down, inspection, and recommended fixes. This work may include tasks such as the following: failure analysis, engineering design review for life cycle cost reductions, and product-change analysis of components and end items. The Contractor may provide component and vehicle testing, design analysis, design layout and simulation, prototype build and delivery of recommended design changes to the Government. The Contractor shall provide engineering services for production and deployment phase-specific processes and activities to include the following:

- a) Test and evaluation activities to include the following: initial Operational Test and Evaluation (IOT&E) technical support and execution, LFT&E execution and report, Production Verification Testing (PVT) and First Article Testing (FAT) technical support, high altitude electromagnetic pulse testing, and Test and Evaluation Master Plan (TEMP) execution and assessment.
- b) Lifecycle logistics activities to include the following: performance based logistics, unique item identification, human systems integration, manpower estimates, interoperability certification, and review of special kits, outfits, sets, tools, support equipment and test, measurement and diagnostic equipment;
- c) Information technology (IT) and information assurance (IA) activities to include the following: economic analysis for major automated information system (MAIS), Clinger-Cohen Act (CCA) compliance, net-ready key performance parameters (KPPs), integrated architectures, global information grid KPPs, information support plan updates and support IA strategy and certification;
- d) Technical advice for specified acquisition and production activities to include the following: Initial Operational Capability (IOC) and Full Rate Production (FRP) decisions, beyond Low Rate Initial Production (LRIP) report, acquisition program baseline development, physical configuration audit (PCA), production baseline, review and update designated science and technology information, review security classification guide, counterintelligence support plan, system threat assessment, provide technical advice for the type of classification and materiel release processes, programmatic environment safety and occupational health evaluation (PESHE), and assure business modernization management program (BMMP) compliance;

- e) Program management activities to include the following: technical and administrative support for program reviews, milestone decision events, cost/benefits analysis, cost estimating, industrial capability and competition analysis, and development and update of the SEP.

C.2.1.2.1.5 Operations and Support Phase: The Contractor shall provide engineering services for operations phase-specific processes and activities to include the following:

- a) Test and Evaluation activities to include the following: Follow on Test and Evaluation (FOT&E) planning and execution, preparation and execution of test plans for new components and systems to include lab and vehicle performance and durability testing;
- b) Lifecycle logistics activities to include the following: performance based logistics, unique item identification, technical manuals, human systems integration, and special kits, outfits, sets, tools, test, measurement and diagnostic equipment;
- c) Information technology (IT) and information assurance (IA) activities to include the following: monitoring of system changes to determine impact on spectrum supportability and E3, continued life cycle compliance with the information support plan, to include updates for each major weapon system upgrade, interoperability requirements certification, and the information technology and national security system interoperability certification, and support continued life cycle compliance with information assurance certification and accreditation;
- d) Fielded system sustainment activities to include the following: technology insertion, systems integration, modification kit development and implementation, value engineering, Operations & Support Cost Reduction (OSCR) initiatives, resolve spare parts technical and obsolescence issues, support industrial base, qualify additional spare parts sources, investigate and resolve fielded vehicle performance, safety, and reliability issues, perform root cause analysis and failure analysis, develop, fabricate, and test solutions, develop modification work orders (MWO), update and validate Technical Data Packages (TDP), provide technical input and support to RESET/RECAP programs, and develop systems modernization plans;
- e) Support program management activities including technical and administrative support for program reviews, milestone decision events, cost/benefits analysis, cost estimating, industrial capability/competition analysis, and development and update of the SEP.

C.2.1.2.1.6 Demilitarization and Removal from Service: The Contractor shall provide engineering services for demilitarization and disposal activities as specified in the individual TO.

C.2.1.2.2: Design Engineering Process: The Contractor shall ensure traceability to user defined capabilities as defined by the Joint Capabilities Integration and Development System (JCIDS) process (Initial Capabilities Document, Capabilities Decision Document, and Capabilities Production Document). The Contractor shall furnish systems engineering services for design processes, to include the following: requirements development, logical analysis, design solution, at specified levels of the system and component structure and subsequently applied to the physical, logical, services and operational architectures at each phase of the life cycle. The Contractor shall assess whether requirements traceable from the user are feasible and effective, and ensure that these requirements are updated as more information is learned throughout the product system development lifecycle.

a) Requirements Development - Requirement Gathering: The Contractor shall perform requirements decomposition and analysis of input from stakeholders into the technical requirements and also perform analysis to identify capability gaps which may require materiel solutions. The Contractor shall provide support to the definition and refinement of system, subsystem, and lower level functional and performance requirements and interfaces. The Contractor shall provide technical or other support to market research efforts. The Contractor shall provide support to the refinement of operational needs, attributes, performance parameters and translation of constraints and customer needs into performance parameter objectives and thresholds and the identification and assessment of affordability and scheduling of technical constraints. The Contractor shall perform an analysis of existing commercial or non developmental items which can meet user requirements, support development of Analysis of Alternatives (AoA), and ensure that open system architecture and principles are applied to reduce life cycle costs and development cycle time. The Contractor may be required to use DOORS or other similar software programs in performance of the work.

b) Logical Analysis: The Contractor shall obtain sets of logical solutions and clarify defined requirements and their functional, behavioral, and temporal relationship to include the following:

- i.** Define the derived technical requirements for the system design and allocate performance parameters and constraints;
- ii.** Perform functional analysis, behavioral analysis, timeline analysis, object-oriented analysis, data-flow analysis, structured analysis, state flow and state machines;
- iii.** Partition a system of cohesive logical groupings into interchangeable and adaptable elements to enable ease of change and technology transparency and to mitigate risk;

- iv.** Define interfaces and key system (within and with-out) interface definitions, interface standards, protocols, and data interchange language and standards;
 - v.** Utilize commercial standards when available and support the development of new standards, which may subsequently be adopted and maintained by recognized standards organizations;
 - vi.** Develop the functional architecture, which orders required functions and sequences the system tasks;
 - vii.** Develop a functional "picture" of the system, which details the complete set of functions to be performed along with the relationships between the functions.
- c) Design Solution:** The Contractor shall iteratively translate output of requirements development and logical analysis processes into alternative design solutions in order to support the selection of final design. The Contractor shall perform trade studies, analysis of alternatives, and data gathering activities.
- C.2.1.2.3 Design Solution Realization Process:** The Contractor shall provide systems engineering services to develop innovative design solutions, to include products and processes and related internal and external interfaces to include the following:
- a)** Assess risk and feasibility in achieving program specified objectives and thresholds and re-evaluate performance parameters;
 - b)** Develop a design or a physical architecture that forms the basis for design definition documentation to include the following: specifications, baselines, work breakdown structures and cost element structures;
 - c)** Develop detailed physical architectures that allow confirmation of upward and downward requirements, traceability, confirmation of interoperability and open systems performance requirements, in order to demonstrate that the products satisfy the applicable acquisition phase exit criteria;
 - d)** Perform design analysis, design modeling, and simulations;
 - e)** Perform prototype development, fabrication, and testing;
 - f)** Identify lowest level systems in the specified system hierarchy which may be bought, fabricated (joined, formed, finished), reused, and coded (in the case of software);
 - g)** Develop or improve manufacturing systems using the technical and management processes, to include the following: performance of producibility, manufacturability assessment and improvement-related activities;

- h) Identify implementation process constraints imposed on the design solution process;
- i) Prepare system element(s) for integration, verification, and validation, to include, testing and input to appropriate reviews and reporting;
- j) Develop methodologies for packaging, handling, and storage;
- k) Develop supporting documentation for system elements, to include the following: operations, maintenance, and installation manuals.

C.2.1.2.4 Systems Integration: The Contractor shall integrate the design solutions into the overall systems, to include the following systems engineering efforts:

- a) Support the integration of subsystems or components into the system;
- b) Identify and assess constraints that the integration processes, including assembly sequencing, fixtures, hardware and compilers (software), may impose on the design solution;
- c) Utilize the technical management processes;
- d) Enable the incorporation of the final system into its operational environment and defined external interfaces;
- e) Assess interface management activities;
- f) Develop and maintain documentation which validates that the correct system and element were built;
- g) Evaluate performance of systems and system components with regard to the intended operational environments and potential operators and users;
- h) Furnish technical support to validation events and requirements, to include the following: development or testing of prototypes, performance of simulations, preparation and evaluation of mock-ups of the system, modeling or simulation of the system's intended operational environment;
- i) Develop and maintain documentation used to assess whether the system element was built correctly (IAW the design-to or build-to specifications) including performance of reliability, availability, maintainability analysis;
- j) Perform testing, or furnish technical support for the testing, of system elements against defined requirements;

- k) Conduct verification events and tests, or furnish technical support for verification events and tests for the system elements and interfaces from lowest level to total system in order to ensure conformance to build-to specifications;
- l) Generate and maintain evidence to confirm that system elements at each hierarchy level meet the build-to specifications;
- m) Validate that materials used in the system solution can be used safely and in an environmentally compliant manner;
- n) Perform analyses of alternatives, physical examinations, demonstrations, testing, modeling and simulation;
- o) Support or perform functions, which transition the events of the design and realization process from the system element to the next level in the physical architecture or to the user, dependent upon the life-cycle phase;
- p) Furnish technical services for installation of hardware and software at the operator or user site.

C.2.1.2.5 Modeling & Simulation (M&S): The Contractor shall, as an integral to other systems engineering efforts or as a standalone task, perform the following:

- a) Identify and validate commercial off-the-shelf (COTS) M&S applications and technologies. This work shall involve tasks to include the following: employing M&S to perform detailed engineering analyses of specified systems and major sub-systems to quantify the system and major sub-system or for use when assessing the capabilities of COTS M&S applications and technologies to meet both technical and operational requirements;
- b) Use of Government Furnished Information (GFI) and specified systems and sub-systems to develop data for analyses. This work shall include the following: use of high fidelity models and simulations to quantify the technical and operational benefits and burdens of mobility and survivability enhancements to systems in terms of structural integrity, system level sustainability, and force level effectiveness;
- c) Develop, modify, maintain and operate M&S applications. This work shall include the following: use of stand-alone capabilities and interactive simulation (man-in-the-loop) via the Defense Simulation Internet (DSI) network, in support of efforts related to Advanced War fighting Experiments (AWEs) and DA Battle Labs;
- d) Assess and make recommendations for M&S program policies, guidance, plans, and reports. This work shall include the following: providing services to facilitate Government efforts towards defining

and implementing policy, guidance and program management documents, to include modeling and simulation-related service plans;

- e) Provide programming, M&S services to optimize fleet investment decisions and documentation, in light of specified Army and DOD war fighting needs.

C.2.1.2.6 Trade-off Analyses: The Contractor shall perform and document system design requirement trade-off analyses when specified by an individual TO. The analysis may be for any system, subsystem, component or function requiring systems engineering.

C.2.1.2.7 System Software Development and Integration: The Contractor shall provide engineering services for the design, development, validation, integration and independent validation and verification (IV&V) of systems software for specified systems or subsystems and its associated current and projected future environment. These efforts shall include the following:

- a) System architectures and associated elements;
- b) Communications and interoperability;
- c) Software development plans;
- d) Software quality assurance;
- e) Software metrics and reviews;
- f) Software documentation, to include the following: software requirements specifications, system segment design documents, interface documents, and software manuals;
- g) Formal Qualification Testing (FQT) and stress testing;
- h) Independent Validation and Verification (IV&V);
- i) Central Processing Unit (CPU) processing and memory capacity and growth assessments.

C.2.1.2.8 Standardization: The Contractor shall perform the following:

- a) Prepare an overall standardization program plan for specified systems and subsystems. The standardization program plan shall optimize the commonality of parts, components, and subcomponents. The standardization program plan shall conform to the Army's Implementation Plan (AIP);
- b) Identify references to Military Specifications (MILSPECS) and Standards (STDs) for each TO that involves the creation, review, or

change of data, and shall recommend changes to equivalent commercial specifications and standards.

C.2.1.2.8.1 Specification and Standard Review: The Contractor shall identify references to MILSPECS and STDs and shall recommend changes to equivalent commercial specifications and standards, where equivalents are available. This work shall include the following: conversion of existing military specifications to performance specifications and the preparation of new specifications or standards from user documentation for specified systems.

C.2.1.2.9 Design for Survivability: The Contractor shall conduct analyses and studies of the overall survivability and countermeasures inherent to each systems design, to include applicable engineering change proposals. This work shall include the following: providing technical services to perform trade-off and cost studies, system engineering studies, test planning services, computer analysis, network analysis, and simulation services, and developing recommended survivability options for the Government's consideration. These services and analyses tasks shall include the following survivability and countermeasure areas, singly or in combination:

- a) Unplanned Stimuli Effects Analysis;
- b) Directed Energy Threat Analysis;
- c) Ballistic Protection Analysis;
- d) Compartment-Level Vulnerability Analysis;
- e) Optical, Radar/Millimeter Wave (MMW), Infrared, and Acoustic Signatures Analysis;
- f) Vehicle and Component Ballistic Shock Analysis;
- g) Nuclear Effects Survivability Analysis;
- h) Automatic Fire Extinguishing Systems Analysis;
- i) Computer, Communications and Electronics Analysis;
- j) Survivability, buoyancy and stability of floating bridge equipment and Army Watercraft Systems Analysis;
- k) Develop a security classification guide for systems with classified and confidential characteristics, such as add-on armor, and ballistic protection systems.

C.2.1.2.9.1 Nuclear, Biological, and Chemical (NBC) Analysis: The Contractor shall assess and make recommendations for system and platform designs that provide nuclear (residual), biological, and chemical protection and contamination detection, and survivability.

This work shall include planning and executing compliance audits of Contractors' preparation or execution of technical requirements. This work shall also include the following:

- a) Test planning and test monitoring, to include chemical and biological (CB) warfare agent simulations and surety materials;
- b) Review of CB tests, test documentation, test procedures, and data analysis;
- c) Assess system configuration (design) for crew NBC protection and detection and NBC contamination survivability;
- d) Perform trade-off analyses and proposed recommendations for system configurations;
- e) Prepare program and technical presentations, reports and waiver requests;
- f) Make recommendations regarding program coordination and program management;
- g) Assess software interface and compliance with configured Contractor system NBC items.

C.2.1.2.10 Human Factors Engineering: The Contractor shall perform human factors engineering analysis, simulation, testing, evaluation, documentation and reporting IAW MIL-HDBK-759B and MIL-STD-1472D. The Contractor shall evaluate the soldier machine interface for system operators and maintainers.

C.2.1.2.11 Safety Engineering: The Contractor shall perform health hazard, hazardous materials and other safety related analyses. The Contractor shall identify safety features of hardware, software and integrated systems design and the associated mitigating designs, procedures, precautions, training, engineering controls, equipment and protective procedures in order to achieve an acceptable risk. The Contractor shall conduct hazard evaluations, accident evaluations and reports, and prepare Safety Assessment Reports (SARs). The Contractor shall prepare System Safety Plans, Hazardous Material Management Plans and input to the system Manpower and Personnel Integration (MANPRINT) Management Plan. The Contractor shall participate in System Safety Working Groups and represent Safety engineering on other integrated product teams (IPT) and meetings.

C.2.1.2.12 Design for Producibility: The Contractor shall evaluate the inherent producibility of proposed technologies, designs and design changes, and identify and evaluate the associated issues and impacts on economic feasibility of production. The Contractor shall identify improvements in the design that would result in an economically producible design.

C.2.1.2.13 Configuration Management (CM): The Contractor shall operate and maintain a configuration management system for any design or system, hardware or software, assigned to the Contractor as a design agent, authority or custodian IAW MIL-HDBK-61A and MIL-STD-973. The Contractor shall prescribe and support CM activities for a customer, other organizations or projects. This work shall include the following:

- a) Define and implement a CM program and document it in the form of a CM Plan tailored to the quality, size, scope, stage of life cycle, nature, and complexity of the system or project subject to the plan. The CM plan shall address configuration identification, change control, configuration status accounting and configuration audits and verification. The Contractor shall perform any and all aspects of the CM Plan;
- b) Provide recommendations and analyses for the specified aspects of CM, to include, controlling of configuration for "as designed", "as approved", "as authorized" and "as supported" configuration baselines;
- c) Develop a CM process or configuration control procedures for the specified program consistent with MIL-HDBK-61A for CM guidance. The CM process shall be tailored to the quality, size, scope, stage of life cycle, nature, and complexity of the configuration item (CI) involved, whether the CI is developed at Government expense, or privately developed and offered for Government use, regardless of whether the CI is new or now in development, production, or operational inventory;
- d) Serve as the configuration baseline custodian and manage and maintain Technical Data Packages (TDPs). This work shall include, digitizing, updating, reviewing or validating drawings or other documents in a consistent electronic format, maintaining legacy technical data, and establishing virtual databases for customers.

C.2.1.2.14 Product Improvements: The Contractor shall provide evaluation expertise for potential improvements with respect to system or subsystem functionality and affordability. Potential improvements shall include the following: survivability, mobility, lethality, seaworthiness, protection, energy efficiency, Safety of Life at Sea (SOLAS) requirements, sustainability, performance, operating, cost reduction, and value engineering. Services shall include the following: providing personnel with demonstrated expertise in support of Modernization through Spares (MTS) and Operations and Support Cost Reduction (OSCR) initiatives, tradeoff analysis, cost benefit analysis or life cycle cost projections, or in the conduct of pilot projects and demonstrations relevant to fact based evaluation of such services.

C.2.1.2.14.1 Value Engineering (VE) and Operating and Support Cost Reduction (OSCR): The Contractor shall provide VE and OSCR program services. Tasks shall include the following: design, prototype, test,

trial fit, low rate production and identification of candidates for VE or OSCR and the associated analysis.

C.2.2 Product Assurance and Test Services

C.2.2.1 Test Services

C.2.2.1.1 Test Plans: The Contractor shall prepare, coordinate inputs, submit, and update project and program Test and Evaluation Master Plans (TEMPs) and related documents.

C.2.2.1.2 TIWG Participation: The Contractor shall attend and participate in Test Integration Work Group (TIWG) and Test Coordination Meetings.

C.2.2.1.3 Test Site Services: The Contractor shall provide specified technical and administrative services at both Government and Contractor test sites. Services to be provided shall include the following: daily monitoring of Government-Furnished office equipment, on-going testing, coordination activities, attending test meetings, coordinating visits and briefings, and providing daily test incidents and report summaries.

C.2.2.1.3.1 Test Incident Reports and Data: The Contractor shall collect, collate, and analyze Test Incident Reports (TIRs) prepared by both Government and Contractor test agencies. The Contractor shall schedule, attend, and participate in TIR review and closeout meetings. The Contractor shall monitor progress and report status of failure analysis to close-out.

C.2.2.1.3.2 On-Site Test Representatives: The Contractor shall perform surveillance of test activities through on-site representation. Surveillance shall include the following: monitoring the progress of tests, condition of test assets and test services equipment, availability of repair parts, status of equipment repair, and other similar test-related activities. The Contractor shall attend meetings or briefings and submit surveillance reports.

C.2.2.1.3.3 System Support Packages: The System Support Package shall include all required components for testing services and shall identify existing tools and test equipment used to perform testing services to include known Government tools and test equipment. The SSP shall consist of all items on the SSP Components List (SSPCL). The SSP requirements include repair parts, technical manuals, Basic Issue Items (BII) common and special tools, and test equipment. The Contractor shall assemble and ship (to include, packing, packaging, and transportation) the SSP to the specified test site. The Contractor may be required to track the initial delivery, consumption and replenishment of components and maintain control of the SSP.

C.2.2.1.3.3.1 SSP Components Lists (SSPCL): The Contractor shall prepare and provide a SSPCL that identifies the contents of the SSP

for each test site and the activity responsible for initial delivery, management and replenishment for each SSP item.

C.2.2.2 Quality Assurance (QA): The Contractor shall provide QA and quality engineering services. Efforts shall include the following: developing quality assurance requirements and quality assurance procedures, reviewing and analyzing weld procedures (for armor and vessel construction and repair), overseeing software quality processes and products, analyzing compliance, monitoring tests, reviewing Contractor quality assurance systems, and participating in quality audits and First Article and other tests. The Contractor shall review, analyze, and document findings from Quality Deficiency Reports identifying root cause and proper corrective actions.

C.2.2.3 Reliability, Availability, Maintainability (RAM) Program Services: The Contractor shall provide RAM services. Tasks shall include the following: analyzing data, reviewing and critiquing program plans, participating in conferences and meetings, auditing Contractor field failure analyses and corrective action programs, and researching alternative solutions for performance or reliability issues. These efforts shall include the following:

- a) Development or review of Reliability/Maintainability Program Plans;
- b) Conducting Failure Modes Effects and Criticality Analysis;
- c) Participating in the analysis of existing systems to formulate Operational Modes Summary Mission Profile and the associated RAM annexes;
- d) Generating RAM allocations to systems, subsystems and components;
- e) Creating and updating RAM predictions and growth curves based upon the Failure Mode, Effects, and Criticality Analysis (FMECA) and the results of testing and data searches;
- f) Conduct or support RAM scoring conferences;
- g) Conduct or support RAM management or RAM related segments of IPTs and program or project reviews;
- h) Failure Reporting Analysis and Corrective Action System (FRACAS) actions.

C.2.3 Logistics Management

C.2.3.1 Integrated Logistics Support (ILS) Management Services: The Contractor shall plan, manage, integrate and execute an ILS program for specified system or equipment. Tasks shall include the following: participation in engineering design reviews, participation in diagnostics strategy meetings, developing ILS assessments for specific elements of ILS, participation in ILS meetings, program reviews, and

other related meetings and events for the specified system, and preparing and maintaining a logistics support package.

C.2.3.1.1 ILS Management and Supportability IPT (SIPT) Support: The Contractor shall participate in and support ILS Management and SIPT activities. All ILS program requirements, tasks, and milestones shall be maintained by the Supportability IPT. The Contractor shall support the mission of the Product Support Manager and the ILS Manager.

C.2.3.1.1.1 Integrated Logistics Support Acquisition Documents: The Contractor shall research, prepare and recommend updates to Acquisition Strategy and Acquisition Plans for ILS. The Contractor shall prepare preliminary draft specified logistics acquisition documents as contained within the DoD 5000 series regulations, following the requirements of the applicable Army regulations and pamphlets, as these documents are identified by individual TOs.

C.2.3.1.1.2 Integrated Logistics Support Planning: The Contractor shall prepare and maintain the Life Cycle Sustainment Plan (LCSP) IAW AR-700-127. Services shall include describing the overall ILS program, including all ILS program requirements, tasks, and milestones.

C.2.3.1.1.2.1 ILS Elements: The Contractor shall provide the preliminary planning, analysis, financial management, a draft ILS Master Schedule, and associated work for the individual logistic support elements to acquire, field, and support assigned systems.

C.2.3.1.1.3 Manpower and Personnel Integration (MANPRINT) Program Support: The Contractor shall plan, manage, and support the MANPRINT effort to optimize total system performance, reduce life cycle costs and minimize risk of soldier loss or injury by ensuring a systematic consideration of the impact of materiel design on soldiers throughout the system life cycle for specified systems IAW AR602-2. The Contractor shall support all MANPRINT domains and prepare, manage and execute the System MANPRINT Management Plan (SMMP). The Contractor shall conduct and support user juries to ensure soldier input is captured as a part of the design process.

C.2.3.2 Supportability Analyses: The Contractor shall perform supportability analyses of specified systems or processes.

C.2.3.2.1 Supportability Influence on Design: The Contractor shall perform an analysis of an emerging or existing design to minimize the impact of the design on the system's logistics footprint. The Contractor shall formulate supportability characteristics for the design and other specifications for the system. Effective results from this analysis shall include the following:

- a) Minimize the use of external Test Measurement and Diagnostic Equipment (TMDE);

- b) Maximize the use of Built-In Test (BIT) and Built-In Test Equipment (BITE), subject to the specific governing specifications or standards listed in the Task Order Request for Proposal (RFP);
- c) Maximize forward replacement of components;
- d) Consider Operation and Support (O&S) costs, cost savings, and ease of maintenance;
- e) Emphasize commonality, modularity, and interchangeability of major components for systems designs, in order to simplify maintenance, logistics, and training burdens;
- f) Examine service alternatives to current designs or systems. Alternatives shall be fully documented and must show improvements in terms of operational availability or life cycle costs over current designs or systems.

C.2.3.2.2 Alternative Support Strategies: The Contractor shall examine other ILS, MANPRINT, Human Systems Integration (HSI) Program support alternatives. The Contractor shall perform analyses of alternatives. Analyses accomplished under this task shall include the following: modernization through spares and O&S cost reductions, tradeoff analysis, cost benefit analysis, life cycle cost projections, and other ILS, MANPRINT, HSI support alternatives. Alternatives selected to support the system(s) shall be documented in Logistics Management Information (LMI) for the system.

C.2.3.2.3 Level of Repair Analysis (LORA): The Contractor shall conduct LORA on specified Line Replaceable Units (LRU), ensuring consistent coherent support for the end item IAW MIL-HDBK-502.

C.2.3.2.3.1 Two Level Maintenance (TLM): The Contractor shall support activities necessary for the execution of the Army's TLM efforts. Activities shall require representation at reviews and meetings, preparation, updating and validation of maintenance data and reports, and logistics engineering and products to support TACOM equipment as specified. The results shall be documented in LMI. The Contractor shall review, analyze, and update data for specified TLM equipment. Efforts shall include the following: technical manuals and maintenance procedures, manpower requirements, provisioning, Repair Parts and Special Tools List (RPSTL), Maintenance Allocation Charts (MACs) and Manpower Requirements Criteria (MARC) reports.

C.2.3.2.4 Transportability Assessment: The Contractor shall analyze, design, develop, verify, integrate, and test specified systems to ensure capability of meeting transportability requirements. The Contractor shall conduct a transportability analysis to ensure that the specified system is transportable by highway, rail, marine, and air modes. The Contractor shall analyze, design, develop, verify, integrate, and test specified systems capable of meeting stated

transportability requirements. The analysis shall define the procedures and ensure the design is suitable to meet lifting and tie down requirements.

C.2.3.2.5 Facilities Assessment: The Contractor shall identify the need for facilities to support the equipment being sustained or developed. When an analysis indicates a need for facilities, either new or increased, the Contractor shall inform the Government. The Contractor shall provide the results of the assessment to include the design drivers and associated facilities recommendations.

C.2.3.2.6 Business Case Analysis (Performance Based Logistics (PBL)): The Contractor shall perform preliminary research supporting development of Government performance based logistics business case assessments and studies. Research and draft documentation shall be IAW current DOD and Army Regulatory guidance.

C.2.3.2.7 Logistics Studies: The Contractor shall perform analyses and studies to assess initiatives, readiness, field issues, acquisition logistics or other logistics studies to include the following:

C.2.3.2.7.1 Army Transformation, Velocity Management, Logistics Initiatives: The Contractor shall develop technical studies relative to Army Transformation, Velocity Management, and other logistics initiatives.

C.2.3.2.7.2 Condition Based Maintenance (CBM): The Contractor shall assess the CBM program and make recommendations for improving and executing it. The Contractor shall provide support to the implementation of CBM to include the following:

- a) Collecting and analyzing raw data and CBM test data;
- b) Interpreting the data and displaying it graphically for Government use;
- c) Calculating the return on investment;
- d) Identifying opportunities for CBM application;
- e) Identifying technologies to enhance application of CBM.

C.2.3.2.7.3 Delayed Desert Damage and Degradation (4D) Analysis: The Contractor shall coordinate the 4D program. The purpose of the 4D program is to determine the extent of sand ingestion and degradation due to increased operational tempo and environmental impacts from Operation Enduring Freedom and Operation Iraqi Freedom (OEF/OIF) deployments, and formulate actions to correct unique 4D damage.

C.2.3.2.8 Logistics Management Information (LMI): The Contractor shall develop, acquire and maintain LMI for specified equipment. The Contractor shall deliver LMI data that reflects the optimum logistic

support package requirements at the lowest cost of ownership to the Government. The data shall reflect the latest knowledge on the system to include the results of field feedback and testing.

C.2.3.2.8.1 Basis of Issue Plans (BOIP) Feeder Data/Data Interchange:

The Contractor shall prepare item documentation to include Basis of Issue Plans (BOIP) feeder data, and System Interchange documentation.

C.2.3.2.8.2 Manpower Requirements Criteria Program (MARC)/Manpower

Estimate Report (MER): The Contractor shall utilize LMI and determine and analyze mission-essential wartime requirements for manpower for specified systems. The Contractor shall submit proposed MARC changes in a report to the Government. Similarly, the Contractor shall prepare a Manpower Estimate Report (MER)

C.2.3.2.8.3 Maintenance Allocation Chart (MAC): The Contractor shall generate a MAC that shall be an output from LMI following the same order and treatment as system's technical manual. The Contractor shall also provide a maintenance task list from LMI that serves as the basis for the MAC.

C.2.3.3 Logistic Package Development and Maintenance: The Contractor shall plan, manage, develop and maintain the Logistics Support Package reflecting the LMI. The contents and maturity of the package shall be tailored to the needs of key program events to include, testing, fielding and training. The package shall be updated from logistics demonstrations and technical manual validations, design changes, and corrections identified by the field.

C.2.3.3.1 Technical Publication Development and Maintenance: The Contractor shall plan, prepare, validate, verify and maintain equipment publications, Electronic Technical Manuals (ETMs), Interactive Electronic Technical Manuals (IETMs) to include Repair Part Special Tool Lists (RPSTLs) supporting specified equipment, ensuring that they are technically accurate, effective, and reflect the results of supportability analyses reflected in LMI.

C.2.3.3.1.1 Technical Writing and Editing Service: The Contractor shall provide Technical Writing and Editing and publications production skills. The Contractor shall work directly with Government personnel, providing on-site functional service to customers.

C.2.3.3.1.2 Electronic Publishing Services: The Contractor shall manage publications content data and work flow management systems. Tasks shall include maintaining data security, data cleansing, data migration, and developing Desktop Publishing Instructions.

C.2.3.3.1.3 Extensible Markup Language (XML) Conversion: The Contractor shall manage and perform XML implementation and conversion efforts. Tasks shall include XML workstation coordination, setup and operation, and development of quality assurance procedures and documentation to enable Government review of vendor prepared XML tagged Technical Manuals and other documents.

C.2.3.3.1.4 Modification Work Orders (MWO) Development: The Contractor shall plan, manage, develop and validate MWO's and execute associated activities.

C.2.3.3.2 Provisioning: The Contractor shall perform tasks and actions required to provide the Government with a complete range of technical data necessary to ensure supply support for specified equipment. System technical data shall reflect the "as-built" and "as supported" configurations.

C.2.3.3.3 Test, Measurement and Diagnostic Equipment (TMDE): The Contractor shall identify and develop those TMDE support resources to include any augmentation to ensure the ability of the specified equipment to be effectively diagnosed and its maintenance verified. Maintenance concepts shall include the optimum use of accurate on-board or embedded diagnostic and prognostic capability to include BIT and BITE.

C.2.3.3.4 Packaging Development and Maintenance: The Contractor shall develop and maintain the appropriate performance-based and detailed packaging requirements that meet equipment and its support items protection and preservation needs, taking into account the environment in which the product will be stored and employed IAW MIL-STD-2073 and AP700-32. Tasks shall include the following: preservation, packaging, packing, marking and exercising efforts for specified TACOM LCMC equipment, both secondary and major end items. Tasks shall also include the following: design, development, fabrication and testing, and documenting of special packaging designs, and providing all packaging LMI data elements for all store, stock, and issue items of supply. The Contractor shall manage the Long Life Reusable Container Program, shelf life program, hazardous materiel packaging, National Maintenance Management packaging, and stock readiness program.

C.2.3.4 Logistic Package Validation and Verification: The Contractor shall validate the Systems Support Package, IAW AR 700-127 through static activities to include joint Government and Contractor logistics demonstration and TM validation, and capture and document the verification through dynamic efforts to include Government testing and active field usage. The Contractor shall analyze the results of the validation and verification activities and update the Logistics Support Package to correct errors, issues and shortcomings identified.

The Contractor shall plan, manage and support hands-on demonstrations to include logistics demonstrations, maintainability demonstrations, and technical manual validations and verifications. The Contractor shall evaluate the effectiveness of the Logistics Support Package through evaluation of the System Support Package utility during testing.

C.2.3.4.1 Materiel Fielding Planning: The Contractor shall provide fielding and training services CONUS and OCONUS. The Contractor shall provide support data analysis for materiel fielding to be reflected in the systems Materiel Fielding Plan. Support data analysis shall reflect a total package fielding approach with deliveries of the verified Logistic Support Package to include, technical manuals, New Equipment Training (NET), sustainment training, training devices, and all support items. The Contractor shall participate in New Materiel Introductory Briefings and reviews in response to the gaining commands Mission Support Plan.

C.2.3.4.2 Total Package Fielding (TPF): The Contractor shall manage Total Package Fielding (TPF) efforts for assigned systems. Activities shall require representation at reviews and meetings, development of integrated fielding plans, and directing TPF activities.

C.2.3.4.3 Training: The Contractor shall provide qualified instructors to conduct NET, sustainment, and institutional training. The Contractor shall conduct instructor and key personnel training, and provide re-useable training materials to include software and hardware training for mockup, simulators and development of training aids. Additional tasks shall include coordinating and facilitating training classes for the Government in various other areas related to this contract.

C.2.3.4.3.1 Training Support: The Contractor shall provide training support to ensure the Warfighter and technical support personnel are provided with adequate instruction, to include, applied exercises resulting in the attainment and retention of knowledge, skills and attitudes regarding logistical platforms, systems, and warfighting capabilities they maintain. Training support shall include the following:

- a) Administrative services to include, registering students for training, reserving space and facilities for training at sites identified within the TO, maintaining class rosters, maintaining attendance records, and generating training completion certificates;
- b) Technical and administrative services for conducting market surveys to identify available training courses, or sources for training, relevant to a particular training need identified within the TO;
- c) Technical services for developing and delivering training courses or modules, either in-person or by electronic delivery means, to include, video training modules or computer-based training. These

services may involve the development of training plans or course plans, development of specific training content, development of training aids to include, student guides or handbooks, development, assembly, and shipment or set-up of Training Equipment Sets, and the delivery of training at sites which may be either CONUS or OCONUS (including Foreign Military Sales) locations.

C.2.3.4.3.2 Training Development and Delivery: The Contractor shall develop and deliver training to include the following:

- a) Technical services for developing and delivering user and maintainer training in conjunction with the fielding of new hardware or new hardware modifications;
- b) Power Projection Training Programs of Instruction, to include the following: NET to consist of Program of Instructions (POI), the furnishing of Field Service Representative (FSR) trainers for initial operator and maintenance at specified CONUS or OCONUS locations and the furnishing of Power Projection Operations Mobile Training Teams.

C.2.3.4.4 Reserved.

C.2.3.4.5 Fleet Planning: The Contractor shall develop and maintain a Fleet Plan for specified systems or family of systems. The Contractor shall capture and maintain data and records for systems in development, population by configuration, fleet modernization strategy, and fielding schedules and priorities to formulate the plan. The Contractor shall apply data and records management and database architectural design and implementation with usage of program acquisition management to communicate the plan and recommendations for managing the fleet.

C.2.3.4.6 Automatic Identification Technologies (AIT): The Contractor shall perform the activities necessary for the successful execution of the AIT program. This shall include an understanding of the following: Policy and Strategy Creation, Systems Integration, Business Intelligence and Data Mining, development of UID/RFID legacy parts-marking strategies, Business Process Re-Engineering, Business Case Analysis and Automated Information Technology studies relating to Item Unique Identification (IUID) or Radio Frequency Identification (RFID) integration.

C.2.3.4.6.1 Item Unique Identification (IUID): The Contractor shall analyze and assess IUID planning for specified system(s). The Contractor shall develop plans for IUID applications to specific equipment to include marking techniques and locations. The Contractor shall provide a plan for durable tagging of assets that meets the requirements of MIL-STD 130, and then implement the plan to input the IUID data into a register for asset accountability. Any item with a warranty must have a useable tag through the warranty period.

C.2.3.4.6.2 Radio Frequency Identification (RFID): The Contractor shall analyze and assess planned use of RFIDs. The Contractor shall develop draft policies plans and guidelines for RFID applications. The Contractor shall apply this guidance to specific equipment to include marking techniques and locations, data capture, loading and utilization.

C.2.3.5 Field Support

C.2.3.5.1 Product Support Integrator (PSI): The Contractor shall serve as the Product Support Integrator providing a theater based Business Case Analysis (BCA) for optimal least cost assimilating support elements, to include, addressing the selection of appropriate PSPs, using small business entities, achieving supply chain efficiencies, and minimizing civilian contractors on the battlefield. The PSI shall ensure that the Product Support Provider (PSP) provides the parts supply management and application of support packages to enable world class end item maintenance. As the PSI, the Contractor shall follow the Performance Based Agreement to at a detailed level and adhere to the applicable Performance Based Logistics (PBL) criteria to support Contractor maintenance, repair, rebuild, and overhaul, to include the following: operational availability, operational reliability, cost per unit usage, logistics footprint and logistic response time.

C.2.3.5.1.1 PSI Performance Measurements: The Contractor shall make all reasonable effort that the PBL metrics identified in the Performance Based Agreement shall support these desired readiness and availability outcomes. The Contractor shall establish requirements and controls to ensure the PSP achieves the performance measures tailored by each field commander's identified unique circumstances.

C.2.3.5.1.2 PSI Deployment: The Contractor, functioning as the PSI, or their Product Support Provider (PSP), sub-contractor elements shall be required to deploy to appropriate CONUS and OCONUS locations to provide sustainment, to include maintenance, material and supply chain management and transportation, for all CLS supported items in a given theater.

C.2.3.5.2 Area of Responsibility (AOR) Operations and Logistics Readiness (OCONUS): The Contractor shall provide field support services, to be fully defined in the individual TO, in the AOR. The Contractor personnel shall be required to deploy in support of a combat, a field exercise, training event, media event or other hostile action in a CONUS or OCONUS location.

C.2.3.5.3 Liaison Officer (LNO) (CONUS or OCONUS): The Contractor shall perform the following:

- a) Observe and report activity, related to and specified in the individual TO, at locations specified. The Contractor shall provide

regular communication with the customer for the specified systems. This work may require the Contractor to perform tasks, to include, attending meetings, preparing and presenting logistics status briefings, and identifying and resolving programmatic and logistics issues that impact system availability and readiness;

- b) Furnish LNO services that provide integration of the specified systems into military units. This work may require the Contractor to perform tasks, to include, developing and managing a database to track the movement of equipment modifications and safety enhancements from vendor, Contractor, and depot locations to AoA Installations. This work shall also include the Contractor LNO personnel to maintain contact with the forward repair activity (FRA) and report problematic issues with Equipment Readiness. Contractor LNO personnel may be required to observe and report activity with specified systems to the COR, and ensure that total package fielding, RESET and installation of armor and safety enhancements are synchronized and accomplished;

C.2.3.5.4 Contractor Maintenance Teams: The Contractor shall establish, operate, support and maintain Contractor Maintenance Teams (CMTs) that will directly support the maintenance mission of the maintenance team. CMTs shall perform the following: operator and unit level maintenance to TM 10/20 standards, preset, reset and national level maintenance for selected units at Army installations or temporary locations, for specified systems or components.

C.2.3.5.5 Contractor Supply Support: The Contractor shall perform the following:

- a) The Contractor shall provide, materials, supplies and logistical support to develop, pack, ship, and store repair parts and kits to use in component repair and unit organic or other Government maintenance programs in the accomplishment of Unit Level through National Level maintenance, modification or rebuild;
- b) Fabricate, procure, ship, and assemble or disassemble items;
- c) Receive, classify, store and distribute repair parts, components and other items of supply;
- d) Work singly or in combination, as specified in individual TOs, to include the following: Strategic and Tactical Parts Kit Planning, Kit Account Management, Consumable repair parts, Recurring spare parts, Vendor Initiated Parts Re-supply (VIPR), and System Support Packages;
- e) Prepare and provide a SSP, and prepare and provide an SSPCL. The list shall include all required components for testing services and shall identify existing tools and test equipment used to perform testing services to include known Government tools and test

equipment. The SSP shall consist of all items on the SSPCL. The SSP requirements include repair parts, technical manuals, Basic Issue Items (BII) common and special tools, and test equipment. The Contractor shall assemble and ship the SSP to the specified test site, within the time specified in the task order, to include, packing, packaging, and transportation. The Contractor shall track the consumption of components and maintain control of the SSP.

C.2.3.5.6 Transportation of Assets (CONUS or OCONUS): The Contractor shall perform the following:

- a) Coordinate transportation of Government assets to ensure they arrive safely IAW the specified Government schedule;
- b) Coordinate transportation and supply support to permit rapid deployment and management of supplies and equipment;
- c) Provide logistics support planning, inventory and property planning, storage and accountability, and coordinate movement;
- d) Provide technical advice, assistance, guidance or operational support to identify and utilize existing regional or global resources, identify alternative capabilities and plan for effective integration of public and private sector support or resources, operation and maintenance of the infrastructures that support these activities. Services may include the operation of a vendor-managed inventory system, the operation of private or Government-owned warehouses, stockrooms, or other storage facilities, shipping and receiving, staging and storage, packing and crating and design, re-engineering, operation and maintenance of distribution and material handling equipment systems. This work may involve tasks related, but not limited to, the following: Standard Army Management Information Systems (STAMIS), supply and operating transformation, performance and command readiness, Distribution Management Stock Readiness, Configured Loads, Integrated Logistics Aerial Re-supply, Future transformational logistics, Packaging operations, SR, CL, ILAR, and Vendor Initiated Parts Re-supply (VIPR) transitions, deployment packages, material and property requirements planning, movement, storage and accountability systems, Logistics strategic planning services, Supply and Value Chain Management Services, Distribution and Transportation Logistics Services, Asset management and visibility, Unit Level Logistics Systems, Support of the Standard Army Retail Supply Systems, MACOM DRMS recovery program and Transportation Motor Pool Operation support.

C.2.3.5.7 Storage and Maintenance of Army Prepositioned Materiel: The Contractor shall provide technical services for war reserve equipment related to Storage and Maintenance of Army Prepositioned Materiel. The Contractor shall provide services including preservation and exercising requirements, Care Of Supplies In Storage, and other

preventive or corrective maintenance and the associated logistic support.

C.2.3.5.8 Equipment Modifications: The Contractor shall manage specified equipment modifications and execute associated activities to include the following:

- a) In-Progress Review (IPR);
- b) Conduct New Material Introduction Briefs (NMIB);
- c) Kit development, installation procedures, publication updates, and Specific TMDE as required;
- d) Kit procurement;
- e) Kit storage (Logistics Distribution Center configured with Computer Software support for Logistic Automation);
- f) Kit distribution (Scheduling & Shipment/Site Coordination;
- g) Kit application;
- h) MWO application management and tracking in a Multi-functional Data Provide application team resources;
- i) Train application teams;
- j) Schedule and deploy application teams;
- k) Schedule and deploy inspection teams;
- l) Tracking and reporting applications into the Modification Management Information System (MMIS);
- m) Provide Individual and Key Personnel maintenance training to equipment user and maintainers.

C.2.3.6 System Readiness: The Contractor shall perform program management and operational support services focused on system readiness, to include, analyzing, developing, automating and submitting operational plans for approval by the U.S. Government. The Contractor shall implement procedures and provide program coordination, interface, monitor, research, administration, business rules, document support, support analysis, formulation of logistics topics, initiatives and strategic plans and technical operational and manpower support, for programs, to include the following:

- a) Logistical support and analysis to Resource Management (RM) and budget execution logistical support;

- b)** Operating contractor maintenance facilities at military installations;
- c)** MACOM Transformation Campaign Plan (TCP)
- d)** Attendance and participation at Maintenance Summits;
- e)** Development of Logistics reengineering advertisement, educational, and presentational materials;
- f)** Items Managed List (IML);
- g)** Army Campaign Plan (ACP);
- h)** Logistics doctrine and structure (DA/AMC/CASCOM);
- i)** Strategic Readiness System (SRS);
- j)** Army Balanced Score Card (BSC);
- k)** Data Based Commitment Accounting System (DCAS);
- l)** Fiscal management, management and funds tracking procedures;
- m)** Equipment Readiness Posture;
- n)** Readiness Integrated Database (RIDB);
- o)** Inspection of unit logistical procedures;
- p)** Operational logistical libraries;
- q)** Standard Army Management Information Systems (STAMIS);
- r)** MACOM Logistics Systems. DS-RX Program
- s)** Corps/Theater Automated Data Processing Service;

- t)** CTASC-II;
- u)** Standard Army Retail Supply System (SARSS);
- v)** Standard Property Book System Redesign (SPBS-R);
- w)** Property Book Unit Supply System Enhanced (PBUSE);
- x)** Logistical Total Army Authorization Document System (LOGTAADS);
- y)** Requisition Validation (REQVAL);
- z)** Organizational Clothing and Individual Equipment (OCIE);
- aa)** Command Asset Visibility Equipment Redistribution;
- bb)** System (CAVERS) or similar system from LOGSA;
- cc)** Distribution Execution System (DES);
- dd)** Modified Table of Equipment (MTOE);
- ee)** MACOM Readiness Distribution Program (RDP);
- ff)** Logistical Support Planning;
- gg)** Logistic Business Process Reengineering and Functional Process Improvement Support;
- hh)** Army Watercraft Inspection Reporting System (WIRS);
- ii)** Army Watercraft Inspection Branch (WIB);
- jj)** Corrosion Prevention and Control (CPAC);
- kk)** Deployment Logistics Support;

- ll) Deployment Asset Visibility;
- mm) Ashore and Afloat Brigade Inspection Readiness;
- nn) Army Maintenance Management;
- oo) Acquisition Logistics;
- pp) Global Pre-positioned Stocks Software Database;
- qq) Program/Project Management Support;
- rr) Logistical redesign and restructuring;
- ss) Army Transformation Campaign Plan (TCP);
- tt) Local or remote conferences and video-teleconferences;
- uu) Transformation/ACP logistics strategy;
- vv) Transportation, field services, maintenance, medical supply operations.

C.2.3.6.1 Sustainment Issues - Technical Resolution: The Contractor shall analyze systems and develop technical solutions to sustainment issues. Tasks shall include the following: trade-off-studies, effectiveness analyses, risk management, configuration management, interface management, data management, performance measurements, technical review, requirements analysis, engineering analysis of hardware and software configuration, and functional analysis. Additional tasks shall include but not be limited to transforming architecture (functional to physical), defining alternative system concepts, configuration items and system elements, selecting preferred product and process solutions, and define or refining physical interfaces. The Contractor shall develop, review, and provide deficiency reports, deviation from specifications, and engineering change proposals based upon analysis of field issues.

C.2.3.6.2 Obsolescence Management and Technical Data Services: The Contract shall provide services necessary for the successful execution of an Obsolescence Management Plan, by providing solutions to extend product life cycles of Government specified systems and products. Tasks shall include reverse engineering, technical services, and acquisition engineering. The Contractor shall not compromise

compliance with survivability, mobility, lethality, standardization, and Nuclear (residual), Biological, and Chemical protection and detection, contamination, survivability, and life support requirements.

C.2.3.7 Command Wide Logistics Enterprise System Support: The Contractor shall support the design, development, deployment, training and maintenance, of enterprise logistics management systems used by or developed to support fixed base logistics operations. Tasks shall include the following:

- a) Fielding and deployment of enterprise systems, to include, GCSS-A, GFEBs and LMP increments to include migration of legacy data;
- b) Establishment of network connectivity for remote locations at Government and off-installation sites;
- c) Installation and IOC of computer hardware and communications equipment;
- d) Database administration;
- e) Recurring software maintenance of Government owned applications;
- f) Adapting and incorporating COTS software for specified purposes;
- g) Building interfaces with STAMIS and other Government applications and databases;
- h) Assisting Government agencies in the conduct of business rule compliance audits;
- i) Developing logistics planning tools to support operations, deployment, and training requirements;
- j) Developing specialized "ad hoc" reports;
- k) Financial tracking;
- l) Modifying and enhancing the specified current application(s) to meet changing business rules for the supported commands.

C.2.3.7.1 Logistics Management Program (LMP): The Contractor shall support LMP, its processes, in all phases, to include the following: maturation, business process development, data cleansing, testing and training efforts.

C.2.3.7.2 Common Logistics Operating Environment (CLOE): The Contractor shall assess, evaluate and recommend actions required to implement CLOE-related policy and guidance. The Contractor shall assist in identifying and interpreting the CLOE technical and

operational standards to identify critical systems (Hardware (HD) or Software (SW)) requiring improvements to become CLOE compliant. The Contractor shall identify efficient interface mechanisms that can apply toward horizontal integration across platforms. The Contractor shall assist in developing, certifying, fielding and sustaining enabled products.

C.2.3.7.3 Logistical Training Support: The Contractor shall provide logistical training support in system operations and any logistical program, to include the following: supply and value chain management, property and inventory management, distribution and transportation management, and maintenance of equipment and facilities

C.2.3.8 Security Assistance (SA) Support: The Contractor shall support the case management or weapons systems interface for Foreign Military Sales (FMS). The Contractor shall coordinate with the designated officials identified in the Letter of Acceptance (LOA) in Foreign Military Sales Case Management to develop and maintain FMS Case Management and International Cooperative Agreements. These efforts shall include the following: formulation of position papers on foreign interests, information papers, licensing and commercial lease actions, drafting of special release actions, case pricing, configuration alternatives, total fielding packages, training, technology transfer research, coordination of visits by foreign nationals, and drafting Memoranda of Understanding (MOU).

C.2.3.8.1 FMS Research and Analysis: The Contractor shall perform research and analysis tasks which may include reviewing the foreign customers' Letters of Request (LOR) and developing a list of required items to be placed on a Letter of Offer and Acceptance (LOA) in response to the LOR in accordance with the Total Package Approach (TPA) concept, as defined in the LOA. The Contractor shall provide Logistical Research and Analysis points of contact (POCs) to field questions concerning materiel support and training. This work shall involve tasks to include, providing requirements-determination support, beginning with general weapon questions received from FMS customers through development of the materiel requirements list to be placed on an LOA. The Contractor may maintain generic Materiel Requirements Lists to be used to develop specific requirements lists for FMS customers.

C.2.3.8.2 FMS Meetings and Conferences: The Contractor shall participate in meetings and conferences, with representatives of industry, other military and federal agencies, and foreign countries. The Contractor shall perform tasks such as summarizing and evaluating the results of these meetings and conferences, preparing responses to action items, and making recommendations to the Case Managers, Weapons System Managers (WSM) and Project Managers.

C.2.3.8.3 FMS Technical Case Management and Closure: The Contractor shall perform FMS Technical Case Management and Closure tasks in accordance with the specified FMS Case delivery schedules. The

Contractor shall interface with Government Case Managers, who are responsible for providing the full range of case management duties in support of SA and FMS customers for assigned programs, beginning with the signed LOA and ending with final delivery to country.

C.2.4 Information Management and Technology

C.2.4.1 Software Management: The Contractor shall manage software, and develop draft guidance, plans, and reports. This work shall include the following: making assessments, developing recommendations, and providing technical services for implementing software management programs, documents and reports in the following functional areas:

- a) Software metrics;
- b) Software re-use;
- c) Software engineering;
- d) Domain analysis and management;
- e) Information technology;
- f) DOD Information Assurance Certification and Accreditation Process (DIACAP) Reviews;
- g) Certification of Networthiness (CoN).

C.2.4.2 Database Development: The Contractor shall research pertinent programmatic, strategic, and technical information databases throughout the U.S. Army and DoD services in order to preclude development of customer-unique databases. In those instances when an existing capability does not meet the customer's requirements, such as, servicing existing and planned system acquisition programs, reducing program life cycle costs, or implementing logistical services management, the Contractor shall modify an existing, or create a customer unique, data base.

C.2.4.3 Database Management: The Contractor shall provide data and records management and services for database architectural design, development, population, implementation and usage in support of customer requirements to include the following: program acquisition management, fleet modernization, fleet fielding activities and user feedback databases.

C.2.4.4 Information Technology Opportunities: The Contractor shall provide technical consultation services regarding the potential use of existing or emerging information technology capabilities and resources, and the potential expansion and upgrade of existing resources to effectively accomplish specified mission requirements.

C.2.4.5 Office Automation and Network Services: The Contractor shall provide services in the areas of web-site services, office automation, network administration, and computer systems administration. Tasks shall include the following: troubleshoot network access problems (to include both hardware and software), develop, implement, update, and maintain web-sites, web content, or network features and software programs, setting up new computers, modify existing computers, to include, boards, cards, mice, printers, and installing software, provide expert advice to Government users software programs and perform administrative duties related to computers, digital personal devices and aids, printers, network and systems management, to include attendance at meetings or conferences, and maintaining a database of hardware and software products.

C.2.4.6 Integrated Business Environment (IBE) and Integrated Data Environment (IDE): The Contractor shall perform services that support the implementation of IBE and IDE initiatives. The Contractor shall provide services for the development, coordination, and implementation, to include training, of IBE/IDE and related standards, specifications, implementation and migration plans, that shall include the following:

- a) Services for business process reengineering activities;
- b) Services for electronic commerce;
- c) Services for servers utilizing Oracle and other standard databases, to include, as a minimum: indexing, maintenance and system management and administrator functions;
- d) Functional and technical services for legacy, current, and new software applications and initiatives to include the following: AKO - Army Knowledge On-line, Windchill, Lotus Notes, Automated Configuration Management System (ACMS), Milestone Tracking System (MTS), Business Management System (BMS), Electronic Document Library, Production Database System, Web based initiative - web pages, Sharepoint, E-cabinet, Acquisition Professional (AcqPro), Standard Procurement System (SPS), Multi user ECP Automated Review System (MEARS), Logistic Modernization Program (LMP) and Army Portfolio Management System (APMS);
- e) Functional and technical services for integrated database development, implementation, and maintenance, to include, database management and web based collaboration;
- f) Participation in Government and privately sponsored meetings and events concerning IBE/IDE related issues;
- g) Development and delivery of files in hard-copy, electronic, or digital form, as computer data files, format, and media;

- h)** Establishment, modification, and maintenance of security systems, to include enforcement of data protection and integrity standards in accordance with DOD-5200.28 and DOD-5220.22-M. To include tasks, such as, the following: establishing controls, such as control passwords and log-on IDs for authorized personnel, to prevent unauthorized access and incorporating a system application that verifies user authorization at each access attempt. This also may involve the identification system security vulnerabilities, and development, modification, and implementation of disaster recovery plans;
- i)** Ensure that specified Government websites, software, and computer hardware, to include, SharePoint, Windchill, and other collaborative sites built, are Section 508 of the Rehabilitation Act (29 U.S.C. 794 d), as amended by the Workforce Investment Act of 1998 (P.L. 105-220), August 7, 1998 compliant;
- j)** Conduct tradeoffs, studies, and analyses to service, develop, implement or modify the specified IBE and IDE approach. The status of those studies shall be reviewed at appropriate program reviews, and the results of the reviews shall be documented as part of the detailed design. Examples of such studies include improved alternate data generation and delivery modes, infrastructure compatibility and recommended upgrades, digital data delivery versus access, analysis of telecommunication alternatives, and functional integration cost and benefits studies;
- k)** The Contractor's approach shall include an IBE and IDE architecture that shall drive the IBE and IDE design and implementation. In addition to maintaining the capacity to retrieve data from legacy systems, the IBE and IDE architecture shall allow for the interface with program office information systems. These external interfaces must evolve to meet the specified IBE and IDE needs;
- l)** Develop and implement procedures for establishing and administering user accounts for the IBE and IDE. The Contractor shall provide browser-based access to Contractor developed or Contractor owned applications;
- m)** Develop, maintain, and implement a training program to ensure that users are able to operate within the IBE and IDE, and to understand their roles and responsibilities within the IBE and IDE processes. Unless otherwise specified within an individual TO, the training program will be designed to enable a new user to effectively use the IBE and IDE to accomplish his or her job within thirty (30) days of joining the program. This may involve tasks, such as, conducting an analysis of the training needs of the target audience and the most cost effective media to use for training purposes in order to facilitate an integrated development process. The Contractor shall maximize the use of preliminary training documents and training sessions to ensure the finalized training services package meets the

needs of the user audience. The Contractor shall use electronic training technologies such as video teleconferencing, long distance, and computer-based training, to enhance the effectiveness of training materials, as well as the course contents.

C.2.5 Program Management

C.2.5.1 Program Management Support: The Contractor shall perform program management support activities, to include, technical and administrative support for program reviews, milestone decision events, cost/benefits analysis, cost estimating, industrial capability and competition analysis, and development and update of the acquisition planning and accomplishment documentation.

C.2.5.2 Acquisition Management Support

C.2.5.2.1 Better Buying Power: The Contractor shall perform the following better buying power initiative related support tasks IAW the following:

- a) Make assessments, perform reviews, and develop recommendations regarding the impacts to specified Army programs resulting from current or pending Acquisition Streamlining Laws, resulting regulations, policy, and implementing guidance. This work may require the Contractor to develop methodology, assess and document potential savings or cost avoidance associated with Federal Acquisition Streamlining initiatives;
- b) Services may include modernization through spares, Operation and Support (O & S) cost reductions, tradeoff analyses, and cost benefit analysis or life cycle cost projections.

C.2.5.2.2 Market Research (MR) and Market Investigation (MI): The Contractor shall conduct MR activities, to include the following: Market Surveillance (MS) and Market Investigations (MI). These MR activities shall include surveillance of the market for those areas that are identified in the individual TO. Surveillance shall include searches on the internet, review of trade magazines, attendance at trade shows, and Contractor site visits. Investigation shall include the preparation and conduct of surveys for formal MI's as well as analysis of any User and Contractor Questionnaire survey responses in accordance with DOD regulations and policy.

C.2.5.3 Program Management Integration and Support: The Contractor shall provide Program Management and other services to enable the full program execution. The Contractor shall integrate appropriate technical, analytical, logistics, business management, and program support for the engineering, design, prototyping, production, fabrication and manufacturing, assembly, integration, technical data and configuration management, test and qualification, training support, production, and sustainment of specified systems, subsystems and components throughout the product life cycle. These efforts shall

include development of Work Breakdown Structures (WBSs), Integrated Management Plans and Integrated Program Summaries.

C.2.5.4 Production Planning and Analyses: IAW Production Planning and Analyses, the Contractor shall provide the following:

- a) Provide production planning and analysis services, that shall include developing alternative and multi-facility production schedules, review of Government contractor progress and reporting against production efforts, reviewing production rates of Government Contractors, reporting and tracking of Defective Government-Furnished Material (DGFM), and monitoring production baseline delivery schedules and industrial base and mobilization studies. The Contractor shall assess industrial base production capabilities and surge capabilities, identifying any potential problems in that area.
- b) Plan, manage and conduct production readiness reviews to properly evaluate the risks associated with the entry or re-entry into production, manufacturing and overhaul program;
- c) Provide management review and evaluation support in the form of service surveillance, performance audits, financial statement audits to determine program efficacy of other Contractors or the Government. Services shall include: Provide performance and financial audit, management consulting services, oversight responsibilities for management related reviews, quality assurance and performance review, quality assurance and quality auditing, planning performance review, logistics verification and validation and quality assurance and compliance and maintenance of QA and inspection.

C.2.5.5 Materiel Release Services: The Contractor shall prepare release packages IAW Army regulations, coordinate timely receipt of documentation, and present status briefings.

C.2.6 Internal Operations Support and Administrative Services

C.2.6.1 Administrative Services: As specified in the individual TO, the Contractor shall provide the following:

- a) Prepare briefing charts, suggest and coordinate the planning of Government activities, to include meetings and trips, develop and implement database programs to track and report on activities and projects. These tasks require a working knowledge of the current business software programs, to include, Microsoft Office, Lotus Smartsuite, and Windows, or equivalent programs;
- b) Track suspense actions using an automated tracking database, and update and maintain the program office web page and web pages for individual acquisitions of that office.

C.2.6.2 Training: As specified in the individual TO, the Contractor shall provide the following:

- a) Coordinate training classes for the Government that shall include the following: administrative services, to include, registering students for training, scheduling training sessions and reserving space and facilities for training at sites identified in the individual TO, develop class rosters, maintain attendance records, and generate training completion certificates. The Contractor shall provide technical and administrative services for conducting market surveys to identify available training courses, and sources for training, relevant to a particular training need identified in the individual TO.
- b) Develop and deliver training. This task shall involve services, to include the following: technical services for developing or delivering training courses or modules, either in-person or by electronic delivery means, to include, video training modules or computer-based training on subjects identified in the individual TO. These services shall involve the development of training plans and course plans, development of specific training content, development of training aids, to include, student guides or handbooks, and the delivery of training at sites specified. The Contractor shall provide technical services for developing and delivering training to orient users on how to operate within a new or updated IBE and IDE, to include, understanding their roles and responsibilities within the IBE and IDE.

C.2.6.3 Transformation Strategy: The Contractor shall provide technical support for the establishment, modification, and execution of Governmental or Army dictated transformational strategies, to include the following: performing synchronization of all transformation activities that combine strategic planning, change management, strategic communications, continuous improvement, campaign planning, and quality management, to include, transition transformation to sustainment.

C.2.6.3.1 Strategic Planning Activities: The Contractor shall support strategic planning analyses and activities to ensure that functional business areas, people, laboratories, technical thrusts and organizational areas of responsibility align to the corporate vision and mission, as specified in the individual TO.

C.2.6.3.2 Strategic Internal (Corporate) and External Communication Plans: The Contractor shall provide technical support for the establishment and execution of strategic corporate communications (internal and external) roadmap, to include, support to public affairs officials and outreach activities with targeted strategies designed to reach key stakeholders and customers. This work shall include the following: identifying strategic communications opportunities, developing branding strategies and developing and maintaining

communication in multiple media formats.

C.2.6.3.3 Change Management: The Contractor shall provide technical support to enable organizational change, that shall include, evaluating organizational progress towards meeting strategic goals, and performance of continuous improvement and other change management activities, to include, specialized leadership and change management training, workforce training processes, and organizational development support.

C.2.6.3.4 Lean Six Sigma and Continuous Improvement Strategy: The Contractor shall provide technical support for the development and execution of continuous improvement concepts and strategies. This work may involve tasks, to include, providing certified Lean, Lean Six Sigma (LSS), and Design for Lean / Lean Six Sigma (DFSS/DFLSS) expertise (Black Belt and Master Black Belt) in business and manufacturing processes. This will include providing personnel experienced in continuous business improvement methodologies, in order to provide personnel, training, and coaching or advisory assistance needed to support Lean, Lean Six Sigma, Design for Lean / Lean Six Sigma activities to include the ad hoc use of specific tools, improvement methods, or statistical methods, and Design of Experiments as specified in the individual TO.

C.2.6.3.4.1 Process Improvements: The Contractor shall provide services for the successful execution of customer's process improvement efforts. The Contractor shall support defining process improvement implementation strategy and tactics, and in identifying specific, achievable benefits, and associated metrics. This work shall involve tasks, to include, developing and providing instruction, performing consultation planning, leading projects, facilitating process improvement events, advising on the effectiveness of implementation, and validating benefits. The Contractor shall provide statistical analyses of data sets and graphical presentations of findings.

C.2.6.3.5 Base Realignment and Closure (BRAC) Studies: The Contractor shall provide support to data gathering and consolidation and analysis of data leading to draft reports necessary to allow Government BRAC assigned officials to finalize the analysis and resultant reporting which will lead to decision reporting.

C.2.6.3.6 Quality Management Strategy: The Contractor shall provide technical support for the development and establishment of a quality management system, using the Malcolm Baldrige Award criteria (http://www.nist.gov/baldrige/publications/business_nonprofit_criteria.cfm) as the standard.

C.2.7 Industrial Base Operations

The Contractor shall provide all personnel, equipment, materials and employee supervision for non-personal services necessary to perform the following support in the areas of manufacturing, maintenance, logistics and general supply for a designated Industrial Base Operation. The work to be performed, as specified in the individual TO, may include the following:

- a) Operation and management of a supply support-type activity receiving, storing and shipping supplies in support of the Army's operations;
- b) Inventory, inspection, repair, overhaul, modification, refurbishment, maintenance, testing, corrosion control, painting, preservation, packaging, download, upload, and RESET of various types of equipment;
- c) Production and manufacturing engineering, tool and fixture design, translation of technical data into routes, bill of materials work standards, and work instructions and other manufacturing and shop floor support functions;
- d) Kit building, refurbishing and modification of specified equipment, Care of Supplies in Storage (COSIS), and general logistical and supply management functions.

C.2.7.1 Supply Support Activity The Contractor shall provide personnel responsible for the management, supervision, and operation of a Supply Support Activity responsible for receiving and issuing supplies and equipment.

C.2.7.1.1 Shipping, Receiving and Warehousing: The Contractor shall be responsible for the receipt, inspection, maintenance, inventory, condition code classification, storage, and shipment of equipment and supplies.

C.2.7.1.2 Inventory Management: The Contractor shall perform documented inventories, and pack and prepare equipment for shipment that is controlled by and directed for shipment by various U.S. Army commands.

C.2.7.1.3 Supply Management: The Contractor shall provide supply management functions required to support all classes of supply, to include, hazardous and non-hazardous material.

C.2.7.2 Maintenance Operations: The Contractor shall perform Maintenance Operations to include the following:

C.2.7.2.1 Depot Level Maintenance: The Contractor shall perform depot-level maintenance of military equipment, which shall be done IAW Depot Maintenance Work Requirements (DMWR), National Maintenance Work

Requirements (NMWR), TM 10/20 Standards, contractual Performance Work Statement (PWS), Shop Work Instructions (SWI) and specifications.

C.2.7.2.2 Below Depot Maintenance: The Contractor shall provide , as specified in the individual TO, mechanical repair, general logistics functions, and other supply and light maintenance missions to meet funded program timelines to include RESET efforts. This is required for organizational Direct Support (DS) and limited General Support (GS) technical inspection, maintenance and repair of specified equipment end items and related support items, and up-grades, to include, support for equipment returned from other locations.

C.2.7.2.3 TM 10/20 Reset: The Contractor shall RESET (RESET is performed on equipment that is returned from the field after being deployed) and repair equipment to standards outlined in the equipment's 10 and 20 level TMs.

C.2.7.2.4 Preventive Maintenance Checks and Services (PMCS): The Contractor shall service equipment IAW equipment Preventive Maintenance Checks and Services (PMCS) requirements outlined in the operators' 10 level TM for each piece of equipment and replace broken or out of tolerance parts that are identified during the inspection phase.

C.2.7.3 Work Standards: The Contractor shall perform work IAW established and accepted industry practices, Army regulatory guidance, local Letters of Instruction (LOI), Standard Operating Procedures (SOPs) and Work Execution Orders (WEOs) to include any environmental cleanup.

C.2.7.3.1 Work Instructions: The Contractor shall prepare draft work instruction procedures that comply with the technical instructions provided and contained in the applicable TMs, Regulatory Guidance, LOIs, SOPs, SOW or WEOs IAW best commercial practices for the work effort being performed.

C.2.7.4 Quality Standards: The Contractor shall be certified to ISO 9000 or ISO 9001 and employ those standards to the following:

C.2.7.4.1 Quality Control Plan (QCP): The Contractor shall develop and implement a QCP as part of the Quality Management System Standard of the ISO certification. This QCP shall detail responsibilities for performance of work, accountability for all Government Furnished Equipment (GFE), compliance with Government furnished technical manuals, and conformance with Depot rules and policies.

C.2.7.4.2 Inspection and Documentation: The Contractor shall execute certification that work has been accomplished, and shall complete and maintain accurate inspection work sheets which identify time expended to accomplish the work. DA Form 2404 will be used for initial inspection and to track work accomplished.

C.2.7.4.3 Final Acceptance: Systems manufactured, overhauled, repaired, or reset by the Contractor shall pass a final acceptance inspection conducted by Depot/Arsenal Quality Assurance Inspectors. This acceptance inspection will be performed against customer specifications and best commercial practices. Inspection results will be documented and become a part of the contractor's performance record.

C.2.7.4.4 Standard Practices: The Contractor shall apply standard Army practices and procedures applicable to the depot and arsenal work requirements and effective Program Management, Quality, Safety, ISO Compliance and Control processes and procedures to be observed and reported to the PCO for acceptance IAW the QASP. All Contractor personnel shall have the expertise and competence level necessary to complete assigned work tasks IAW the best commercial practices and work directives provided for the specified equipment or identified work effort.

C.2.7.5 Occupational Safety

C.2.7.5.1 Nonstandard Personal Protective Equipment: The Contractor shall provide assigned personnel with the appropriate safety boots and prescription safety glasses at the Contractor's expense. The Contractor will enforce the use of all required Personal Protective Equipment (PPE) by its employees working at the depots and arsenals or IAW the individual TO.

C.2.7.5.2 Workplace Safety and Health: The Contractor shall use the following:

- a) The criteria in 29 CFR 1910, and OSHA standards, to evaluate exposure to hazardous chemical, biological, and physical agents. Where OSHA Permissible Exposure Limits (PELs) exist, the Contractor shall use them;
- b) National Consensus Standards (NCS) for all depot and arsenal workplaces;
- c) Department of Army standards, if no PEL exists and if Department of Army standards are more stringent than NCS or OSHA standards;
- d) Where neither OSHA nor American Conference of Governmental Industrial Hygienists applies, and no military-unique standards exist, the Contractor shall use an applicable standard from one of the following sources: National Institute for Occupational Safety and Health, U.S. Department of Transportation, Chemical/Substance Manufacture, American Society of Heating, Refrigerating and Air Conditioning Engineering and American National Standards Institute

C.2.7.5.3 Local Regulations: The Contractor's personnel performing work at the depots and arsenals shall be familiar with and comply with

all local safety and fire prevention regulations that can be obtained by contacting the local safety office.

C.2.7.5.4 Accident Reporting: The Contractor shall immediately report to the PCO and COR, all available facts relating to each instance of damage to Government property and material or injury to Contractor personnel.

C.2.7.5.5 Accident Investigations: If the Government elects to conduct an investigation of an accident, the Contractor shall cooperate fully with Government personnel until the investigation is completed.

C.2.7.6 Contractor Management Accountability: The Contractor shall perform supervisory and management functions to include the following:

- a) Direct supervision and oversight of all Contractor personnel;
- b) The establishment and enforcement of internal business standard operating procedures (SOP) or business practices outlining the responsibilities and methods for performance of work;
- c) Accountability of all GFE and government furnished material (GFM) and compliance with government furnished technical manuals.

C.2.7.7 Work Conditions: The Contractor shall be aware that work conditions may vary. Personnel may be required to work inside heated and unheated buildings or trailers, inside vehicles within heated and unheated buildings, and in outdoor environments, which may be damp, hot, cold, or drafty.

C.2.7.8 Logbook Documentation: The Contractor shall complete and maintain all logbook forms. A logbook contains all of the forms listed below. The Contractor shall complete only the forms that apply to the specific work being performed, which will be specified in the individual TO. The forms within the logbook may include: DD Form 314, Preventive Maintenance Schedule & Record, DA Form 2408-5, Equipment Modification Record, DA Form 2408-9, Equipment Control Record, DA Form 2408-14, Uncorrected Fault Record, DA Form 2408-20, Oil Analysis Log, and DA Form 2409, Equipment Maintenance Log.