

Statement of Work  
for  
Mobile After Action Review (MAAR) and Mobile Production Unit (MPU)  
End of Life Replacement  
at the Joint Readiness Training Center (JRTC)



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**REVISION AND CHANGE RECORD**

<b>REVISION HISTORY</b>	<b>DATE</b>	<b>Change</b>	<b>Originators</b>
Initial	19 April 2016		C. Wienk

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**Statement of Work  
for  
Mobile After Action Review (MAAR) and Mobile Production Unit (MPU)  
End of Life Replacement  
at the Joint Readiness Training Center (JRTC)**

## **1.0 SCOPE**

This Statement of Work (SOW) defines the efforts required for the replacement of components within the Mobile Production Center (MPC) at the Joint Readiness Training Center (JRTC), Fort Polk, Louisiana. A MPC is comprised of a Mobile After Action Review (MAAR) Theater, a Mobile Production Unit (MPU) with a Retractable Power Tower with Antenna, and a Towed Generator which powers the total MPC. This SOW will provide for the lifecycle replacement of the MAAR, MPU, and the Retractable Automated Tower.

### **1.1 Background**

The MAAR provides seating for 30 personnel with presentation, communication, and recording equipment. The MPU provides an editing station with all associated audio, video, and digital control/interface equipment to support the creation, presentation, and the recording of the AAR. It also provides high side Core Instrumentation System (CIS) Training and Analysis Facilities (TAF) Workstation for Situational Awareness (SA). The trailer is mounted with a generator and an on-board fuel supply tank provides all electrical power required for the MPC, MAAR, and the Retractable Power Tower. The Tower Mounted Antenna provides Microwave capability to communicate with CIS. In addition, the MPU is available to connect to Fiber Optics Nodes (FON) where available. Each system is completely self-sufficient with integral lighting, electrical power distribution, and Heating, Ventilation & Air Conditioning (HVAC).

The current MPCs has the capability to communicate to the CIS located in Building 1560. The current MPCs equipment has the capability to operate with the CIS and other infrastructures using any of the fiber-optic access sites, any Forward Operation Bases (FOB) that have fiber, and the current provided microwave capability. The current MPCs has the capability: 1) to prepare, present, record and print functionality as performed the same way as they are in the fixed AAR theaters; 2) transmit data, audio and video information between the CIS and MPU via both fiber optic cable and microwave system; and 3) are full mobility to AAR sites throughout the JRTC Instrumentation System (JRTC-IS) maneuver area.

The Government is looking to procure two (2) sets of MAAR/MPUs.

It is noted that the Government plans on the utilization of the Government developed and owned control system/software as identified in PRF-PT-672 vice the development of a new software system.

## 2.0 APPLICABLE DOCUMENTS

The following documents of issue shown on the document summary list form a part of this SOW to the extent specified herein. In the event of a conflict between documents referenced herein (section 2) and the contents of this SOW (section 3), the contents of the SOW shall be the governing requirement.

### 2.1 Department of Defense Standards

Number	Title	Link
MIL-STD-130N	Identification Marking of U.S. Military Property	<a href="http://www.assistdocs.com/">http://www.assistdocs.com/</a>
MIL-STD-822E	System Safety	<a href="http://www.assistdocs.com/">http://www.assistdocs.com/</a>
MIL-STD-1472F	Department Of Defense Design Criteria Standard: Human Engineering	<a href="http://www.assistdocs.com/">http://www.assistdocs.com/</a>
MIL-STD-3100A	Technical Data Packages	<a href="http://www.assistdocs.com/">http://www.assistdocs.com/</a>

### 2.2 Other Government Documents, Drawings, Handbooks, and Publications

Number	Name	Access/Link
AR 25-2	Information Assurance	<a href="http://www.apd.army.mil/">http://www.apd.army.mil/</a>
AR 380-5	Department of Army Information Security Program	<a href="http://www.apd.army.mil/">http://www.apd.army.mil/</a>
DODD 8500.1	Cybersecurity	<a href="http://www.dtic.mil/whs/directives/">http://www.dtic.mil/whs/directives/</a>
DODD 8570.01	Certification Requirements	<a href="http://www.dtic.mil/whs/directives/">http://www.dtic.mil/whs/directives/</a>
DODI 8582.01	Security of Unclassified DoD Information on Nod-DoD Information Systems	<a href="http://www.dtic.mil/whs/directives/">http://www.dtic.mil/whs/directives/</a>
DODI 8510.01	Risk Management Framework (RMF) for DoD Information Technology (IT)	<a href="http://www.dtic.mil/whs/directives/">http://www.dtic.mil/whs/directives/</a>
PEOSTRI	Basic Accreditation Manual (BAM), Version 5	<a href="https://www.lt2portal.org/">https://www.lt2portal.org/</a>

PEOSTRI	PM TRADE Configuration Management Procedures	<a href="https://www.lt2portal.org/">https://www.lt2portal.org/</a>
PRF-PT-672	Performance Specification for Mobile After Action Review (MAAR) and Mobile Production Unit (MPU) End of Life Replacement at the Joint Readiness Training Center (JRTC)	<a href="https://www.lt2portal.org/">https://www.lt2portal.org/</a>
CNSSI 1253	Committee on National Security Systems Instruction	<a href="http://csrc.nist.gov/publications/PubsSPs.html">http://csrc.nist.gov/publications/PubsSPs.html</a>
NIST SP 800-53	Security and Privacy Controls for Federal Information Systems and Organizations	<a href="http://csrc.nist.gov/publications/PubsSPs.html">http://csrc.nist.gov/publications/PubsSPs.html</a>

If access to the LT2 portal is required, please follow the registration link on the LT2 portal homepage and follow-on instructions and procedures.

### 3.0 REQUIREMENTS

#### 3.1 Overview

The contractor shall procure and acquire materials (hardware and software), install, configure, integrate, test and verify performance, and document the MPC baseline in fulfillment of the requirements defined in PRF-PT-672. This effort is for the oversight, engineering, and management of the design, integration, fabrication, installation, verification, testing, training, and logistics elements for this effort. This include all activities to integrate and assemble the hardware and software to achieve a fully functional system, with all support systems, that performs and operates in accordance with the requirements of the defined in PRF-PT-672. The Government plans on the utilization of the Government developed and owned control system/software as identified in PRF-PT-672 vice the development of a new software system.

#### 3.2 Program Management

The contractor shall provide the overall management and administrative support to ensure that the requirements of the SOW and all of the requirement of PRF-PT-672 are satisfied. The contractor shall define and monitor metrics and Technical Performance Measures (TPMs) to evaluate the performance of each critical technical and management process and conformance of the evolving products with contract requirements. The contractor shall provide documented program status and accomplishments, upcoming activities, identified issues and their resolution; a program Integrated Master Schedule (IMS), and any other relevant items in periodic reports. The contractor shall implement, manage, update, and maintain the program in accordance with

(IAW) the timelines defined in the IMS. All information delivered or presented at program reviews shall originate from the IMS and shall contain all critical events and exit criteria, accomplishments, predecessor and successor events, and their dependencies. The IMS shall address total program activities including activities performed by subcontractors. The IMS shall identify critical path to be used to assess project progress, schedule risk and corrective actions required to mitigate risk. IMS will be part of the Monthly Report.

(DI-MGMT-80227) Contractor's Progress, Status and Management Report

### **3.2.1 Associated Contractor Agreements (ACAs)**

The contractor shall implement ACAs with the Consolidated Program Management (CPM) Next Post Deployment Software Support (PDSS) contractor for exchanging data, support for software and hardware, receiving technical support, and working interface issues to achieve a fully functional system, with all support systems, that perform and operate in conjunction with existing JRTC-IS. ACAs shall be maintained to achieve interoperability and common component goals, as applicable.

### **3.3 Financial Management**

The contractor shall plan, budget, schedule, and control resources allocated to meet requirements of the contract. The contractor shall document and track status of all appropriated funds associated with the contract to include payments, cancellations and invoices against each contract line item and sub-line item.

### **3.4 Meetings and Technical Reviews**

The contractor shall plan, host and conduct meetings and technical reviews as defined herein. All meeting and technical reviews shall occur at a timeframe in the program recommended by the contractor and approved by the Government. The contractor shall document the results of the meetings/reviews, including any resulting action items and update briefing charts.

(DI-ADMN-81505) Report, Records of Meeting/Minutes

(DI-ADMN-81373) Presentation Material

#### **3.4.1 Post Award Conference**

A post award conference shall be held at the contractor's facility within 15 - 20 days after contract award. The conference shall introduce key Integrated Product Team (IPT) participants with emphasis on top level management of the program, identify points of contact and discuss both parties understanding of the scope of work, agree on metrics that shall be used as management indicators, identify the partnering approach, and other contract issues.

#### **3.4.2 System Functional Review (SFR)**

The contractor shall conduct a SFR to demonstrate the technology/design of the MPC. The SFR shall be a formal technical review of the basic design approach. The SFR will assess the system functionality, and determine if the equipment meets the functional requirements of PRF-PT-672.

The SFR shall cover the progress and technical adequacy of the selected design approach. The SFR shall allow the Government to evaluate the technical risk associated with the selected design approach. The SFR shall include an initial design, subsystem block and functional diagram, concept and theory of operation, design standards and drawings, and logistical considerations (including training and manuals). The SFR shall be conducted at JRTC Fort Polk, LA and shall be conducted 45 days after the Post Award Conference.

### **3.4.3 System Verification Review (SVR)**

The contractor shall a conduct a SVR of the MPC to ensure that the replacement subcomponent equipment can proceed into procurement and deployment within cost, schedule, risk, and other system constraints. The SVR shall be conducted at JRTC Fort Polk, LA. The SVR shall be conducted 60 days after approval of the SFR. The SVR will establish and verify the final product performance. The results of the SVR for the specified MAAR equipment life cycle replacement shall be documented in the meeting minutes. The purpose of the System Verification Review is to present the following:

The SVR shall include:

- a. Results of internal technical design reviews
- b. Results of technical interchange meetings (local and remote)
- c. Required software integration/modification, if software is required.

The SVR shall ensure:

- a. Each subcomponent is sufficiently mature to meet Technology Readiness Level 9.
- b. The program schedule is executable within the anticipated cost and technical risks
- c. Program risks are known and manageable
- d. The detailed hardware and software design (if software is applicable), and interfaces are described
- e. Electrical Design satisfies electrical design standards, best practices, and safety requirements
- f. Mechanical Design satisfies mechanical design standards, best practices, and safety requirements
- g. Design documentation reflects that the system requirements are understood
- h. Component selection versus logistical tradeoffs have been conducted
- i. Life Cycle Cost estimates have been addressed to the maximum extent possible for a Final Design
- j. Design information on firmware is provided (if applicable) as design artifacts
- k. The program is properly staffed.
- l. The procurement process is in place to procure component hardware and software (as applicable)

#### **3.4.4 Integrated Product Team (IPT) Meetings**

The contractor shall plan and conduct the monthly IPT meeting via telephone. The contractor shall address the full spectrum of program management concerns including program management, program status, schedule, program risk (cost, schedule and performance), system engineering/design, testing, and review and track action items.

#### **3.4.5 Test Integration Working Groups (TIWGs)**

The contractor shall plan and participate in TIWGs as part of the monthly IPT meetings to support the following:

- a. Assist in managing the system test and evaluation process throughout the system.
- b. Develop and document the test and evaluation strategy and test incident(s) classification/scoring criteria.
- c. Ensure that the test and evaluation of the system is planned and conducted to sufficiently verify all the requirements and stress the system in its represented environment.

### **3.5 Systems Engineering (SE)**

The contractor shall provide an overall system engineering approach and activities necessary to maintain the allocated baseline and to deploy a complete and functional system. System engineering includes all planning, organizing, and control to ensure that the operational needs and requirements are delineated as functional requirements. The contractor shall include into the Systems Engineering process considerations for supportability, maintenance concepts, obsolescence, and total ownership cost management (reduction). The system engineering approach shall be one of an incremental build when applicable. Each build shall add functionality to the previous build, so that the final build shall be one that is tested and verified at acceptance testing. Systems integration includes the integration of technical components, organizational components, and verification (final acceptance testing). The development of these systems shall include all necessary safety, reliability/maintainability engineering, Manpower and Personnel Integration (MANPRINT), pollution prevention, and human factor considerations. The contractor shall employ a quality engineering program to measure and track key processes and establish metrics and process control systems.

#### **3.5.1 Hardware and Software Integration**

The contractor shall perform all activities to integrate and assemble the hardware and software to achieve a fully functional system in accordance with the requirements in PRF-PT-672, with all support systems, to seamlessly integrate with the existing JRTC-IS without degrading current capabilities. The contractor shall verify the complete integration of the hardware and software of each hardware and software subsystem and the overall system through the utilization of formalized test procedures.

#### **3.5.2 Software and Hardware Configuration Control**

The contractor shall adhere to the Project Manager Training Devices (PM TRADE) Configuration Management (CM) Procedure. The contractor shall obtain approval of the

Government IPT prior to committing to use any version of any COTS product. The contractor shall ensure that all Commercial-Off-The-Shelf (COTS) products included in the system deliverable configuration are commercially supported for a period of not less than two years after Government acceptance.

### **3.5.3 Engineering Change Proposals (ECP)**

The contractor shall document and the IPT shall review all changes to established baselines and all changes to the requirements (other than the functional baseline), including changes to the statement of work, Contract Data Requirements List (CDRL), and the contract schedule. In coordination with the government, the contractor shall hold a requirements review on all proposed routine changes prior to the submittal of the engineering change proposal in order to clarify requirements, format and content. Depending upon the criticality of the proposed changes, this review may take the form of a teleconference, a formal meeting at a government facility, or a formal meeting at the contractor's facility. Minutes shall be a historical record to allay any miscommunications and noted in the Monthly Report. The contractor shall develop an Engineering Release Record (ERR) for each approved ECP.

(DI-CMAN-80639C) Engineering Change Proposal

(DI-SAFT-80103B) Engineering Change Proposal System Safety

(DI-CMAN-80463C) Engineering Release Record

### **3.5.4 Requirements Traceability**

The contractor shall track and account for all requirements (including derived requirements) through the use of a requirement traceability matrix. The requirements traceability database shall provide traceability from PRF-PT-672 to the system test procedure. The contractor shall maintain and update the requirements traceability database throughout the contract. The requirement traceability matrix will be part of the SFR and SVR.

### **3.5.5 Standardization**

The contractor shall influence the system design to achieve maximum subsystem, component and repair parts commonality. The contractor shall minimize equipment and parts proliferation through a standardization effort. The standardization effort shall include coordination with the IPT(s) and Life Cycle Contractor Support (LCCS) to maximize use of parts already in the inventory or to determine that the existing logistics support resources will benefit from the items chosen for the system.

### **3.5.6 Spectrum**

Any system radiating on a military installation shall be required to obtain DoD approval. The contractor shall provide and implement a technical solution including the identification of required spectrum and plan to obtain that spectrum to meet training objectives. The contractor shall provide all information required to support the Spectrum Certification Process. The contractor shall support the Application for Equipment Frequency Allocation (DD-1494) and other applicable Spectrum Approval Documents to be used by the Government to determine whether or not the proposed system will interfere with other existing systems. The system must

be already be approved by US Spectrum authority. This will require the contractor to provide an approved JF12/1494 for JRTC/Fort Polk Operational Area prior to government acceptance.

### **(DI-MISC-81174 Frequency Allocation Data)**

#### **3.6 Quality Assurance (QA)**

The contractor shall implement a QA program using industry-accepted best practices that comply with ISO 9001 and Software QA (SQA) in accordance with the contractor's internal SQA processes to ensure the system requirements are met. The contractor shall utilize measurement points that will provide maximum visibility into processes. The contractor shall select the proper methods to analyze these processes to continuously improve the system.

#### **3.7 Safety Assessment and Health Hazard Analysis**

The contractor shall utilize a safety process to identify, evaluate, document and eliminate or control hazards throughout the systems life cycle. The safety process shall impose management controls in order to eliminate any hazards or reduce the associated risk of a system or equipment hazard to a level that is acceptable to the Government. The contractor shall ensure the components are safe for personnel to transport, install, operate, maintain, support and dispose of. The contractor shall identify hazards, assess the risk, track hazards, mitigate hazards, verify corrective actions have been implemented and verify hazards have been eliminated or reduced to acceptable risk levels. The system shall not present any uncontrolled MIL-STD-822E, Category I, probability A-D, Category II, probability A-C, or Category III, probability A-B safety hazard throughout the life cycle of the system. The system shall not incorporate any asbestos or suspended glass fiber materials. The system shall preclude exposure of personnel or the environment to excessive levels of toxic, carcinogenic, or otherwise hazardous materials as defined by the Occupational Safety and Health Administration (OSHA), Environmental Protection Agency (EPA), or the Department of Transportation (DOT). Polyvinylchloride (PVC) shall not be used in crew compartments or confined spaces. The contractor shall provide the Safety Assessment and Health Hazard Report.

(DI-SAFT-80106B) Health Hazard Assessment Report

(DI-SAFT-80102B) Safety Assessment Report (SAR)

#### **3.8 Risk Management Framework /Cybersecurity**

The contractor shall integrate Cybersecurity into their programmatic processes, document decisions, specify and track requirements, document certification efforts, identify possible solutions, and maintain operational systems security in accordance with (IAW) DoDI 8500.01, DoDI 8510.01, CNSSI 1253, NIST SP 800-53, DoDI 8582.01, AR 25-2, and the PEO STRI Basic Accreditation Manual (BAM). The contractor shall support migration from existing DoD Information Assurance Certification and Accreditation Process (DIACAP) accreditations to performing accreditations under the Risk Management Framework (RMF) in accordance with (IAW) 8500.01 and DoDI 8510.01. The use of classified data must be addressed in accordance with AR 380-5. The contractor shall deliver the system in an acceptable state of Information

Assurance Vulnerability Alert (IAVA) and Security Technical Implementation Guide (STIG) compliance. All personnel performing Cybersecurity functions shall be trained and certified in accordance with DoDD 8570.01. The contractor shall secure all unclassified DoD information on Non-DoD information systems in accordance with DoDI 8582.01.

(DI-MISC-80711A) Scientific and Technical Reports

### **3.9 Test and Evaluation**

The contractor shall plan, coordinate, establish and implement a test and evaluation program. The contractor shall develop and establish a Test Program and Test Procedure that covers all testing aspects, that when conducted, shall verify that each system and component meet the required as defined by the SOW and the PRF-PT-672. The contractor shall prepare acceptance test plans for Government approval. The contractor shall prepare test plans and procedures for use in conducting any Government-Witnessed Test(s). If the contractor chooses to perform phased deliveries, the contractor shall prepare a test plan and procedures for each phased delivery. The contractor shall also prepare and maintain a cross-reference of all requirements to the verification procedures that will be used to determine successful compliance.

The contractor shall identify support resources and infrastructure necessary for test(s) and evaluation activities. If the contractor requires Government support or assets for a test(s), the contractor shall submit a request for approval to the Government at least 120 days prior to the start of test(s). The contractor shall host a Test Readiness Review (TRR) prior to the start of any Government-Witnessed Test(s). The contractor shall document the results of all test(s).

(DI-NDTI-80566A) Test Plan

(DI-NDTI-80603A) Test Procedure

(DI-NDTI-80809) Test/Inspection Report

#### **3.9.1 Test Readiness Review (TRR)**

The TRR shall occur before any Government Witnessed Testing begins, and shall normally last not more than one day. Prior to the start of test event, the contractor shall present evidence that documentation is complete, the system is ready, prior test(s) were successful or open issues have been addressed. There shall be reasonable confidence that the system to be tested can satisfactorily pass the test. This review shall determine what actions are required to ensure resources, training, and test hardware will be in place to support the successful conduct of the test, and to ensure that test, documentation, design maturity and configuration, and data systems has been adequately addressed. The contractor shall address the following key issues at the TRR prior to the start of testing to ensure that the system(s) and all test resources are ready to be tested:

- a. Test procedures have been delivered, reviewed, and accepted by the Government.
- b. Pre-Test prediction and informal test indicate testing will confirm performance.
- c. Test schedule and test activities.
- d. Roles and responsibilities of all test participants are defined and agreed to.
- e. All required test resources (people, facilities, test articles, test instrumentation) have been identified and are available to support required tests.

The contractor shall document action items and coordinate and track resolutions for each item until closure.

(DI-ADMN-81505) Report, Records of Meeting/Minutes

### **3.9.2 Test Events**

#### **3.9.2.1 In Plant Test**

The contractor shall conduct an In-Plant Test before shipping at the contractor facility with Government witness participation. This event shall verify that MPC meets all requirements specified in PRF-PT-672 which do not include connection to CIS and Ft Polk infrastructures for testing.

#### **3.9.2.2. Onsite Test**

After shipping and installation, the contractor shall conduct Onsite Government Witnessed Test. This event shall verify that MPC meets all requirements specified in PRF-PT-672.

#### **3.9.2.3 Final Acceptance/Physical Configuration Audit (PCA)**

Final acceptance of the MPC will not be provided until completion of two (2) rotations (without incident(s) – the failure to transmit an AAR from the MPU to MAAR and/or CIS). The contractor shall provide the necessary technical personnel to support the two (2) rotational exercises. The contractor shall conduct a PCA with Government after completion of the two (2) rotations.

### **3.9.3 Test Discrepancies**

The contractor shall utilize a suspense system to ensure timeliness of analysis and corrective action of each test discrepancy. Government concurrence is required prior to the closeout of a discrepancy.

#### **3.9.3.1 Test Discrepancy Processing**

The contractor shall document, in a Corrective Action Report (CAR) which shall cross reference to the Government Test Incident Report (TIR), a detailed description defining the changes made to the equipment, hardware, and software to correct each discrepancy. Each discrepancy correction that modifies or changes any baseline shall be documented and resolved per the PM TRADE configuration management procedure (Reference PM TRADE Configuration Management Procedure). Discrepancies ready for recheck shall normally accumulate into sufficient quantities to permit at the most cost effective method of testing, based on Government approval. The contractor shall document in the Test/Inspection Report.

### **3.10 Logistics**

The contractor shall conduct engineering analyses to establish quantitative and qualitative supportability design guidelines. The contractor shall conduct trade studies, evaluate design and support alternatives, and establish system supportability preliminary design configurations consistent with system readiness and availability and life cycle cost goals. The contractor shall coordinate with existing LCCS Team using ACAs, develop initial fielding plans for the system

and verify that the maintenance actions and support structure are aligned with the maintenance concept.

### **3.10.1 Logistics Support Analysis**

The contractor shall identify support resources and infrastructure necessary for test and evaluation activities. The contractor shall analyze existing LCCS support structures and develop and define an optimized support infrastructure for production and deployment. The recommended support resources shall be sufficient to allow another contractor with comparable skills to assume operation, maintenance, and support of the system and sustain the system availability requirement. The contractor shall only use the form, fit, function, and interface requirements in the performance specifications for provisioning, training and maintenance planning.

### **3.10.2 Supportability Analysis and Logistics Management Information**

The contractor shall conduct repair level analyses, develop diagnostic, preventative maintenance and repair procedures, conduct facilities analyses, refine hardware and software maintenance and support concepts, and identify support resource requirements including required spares and support equipment. Using Source, Maintenance and Recoverability (SM&R) Codes, the contractor shall develop a listing of which items should be repaired and which should be discarded and the level of maintenance at which the repair should be performed with the associated cost. The contractor shall document the following in a database:

- a. All input data and their corresponding value and source of the data.
- b. Operational scenario modeled, assumptions made, constraints assumed, and non-economic factors imposed.
- c. Maintenance alternatives considered.
- d. Analytical method and models used to perform the economic evaluations.
- e. Discussion of the sensitivity evaluation performed and results obtained.

(DI-SESS-81758) Logistics Product Data

(DI-SESS-81759) Logistics Product Data Summaries

Annex to Exhibit A - Logistics Product Data

### **3.10.3 Initial Spare and Repair Parts**

The contractor shall recommend the range and quantity of spare and repair parts needed to initially support each fielded system. The contractor recommendations shall include consideration for the support concept for the system, essentiality of the component, price, lead times, and failure factors. The contractor shall combine procurement/production of selected spares with identical items procured/produced for installation on the primary equipment when ordered by the Government. Configuration control shall be maintained for on-order spares as well as for items to be installed on the primary system to ensure that appropriate spares are delivered.

### **3.10.4 Tools and Test Equipment**

The contractor shall identify all tools and test equipment required for the repair and use of the system. This shall include any unique items required to inspect, test, calibrate, service, repair, or overhaul the system or its constituent components. The contractor shall identify any deficiencies between the tools and test equipment required for support of the system and those available at the intended fielding sites.

### **3.10.5 Configuration Management**

The contractor shall implement an internal configuration management system for identification, control, configuration status accounting, and auditing of all configuration documentation, hardware, and software representing or comprising the product.

### **3.10.6 Product Definition Data (PDD)**

In accordance with MIL-STD-31000A, the contractor shall develop, produce, and maintain product definition data (PDD) that accurately depicts the final product. The PDD is the technical description of items adequate for supporting an acquisition strategy, production, engineering, RMF, and logistics support. The PDD shall disclose complete design, RMF, logistics, manufacturing requirements, and the means of measuring compliance with the requirements. Piece part information (drawings, computer aided design files and meta data.) and associated lists shall provide the necessary design, engineering, RMF, manufacturing, and quality assurance requirements information necessary to enable the procurement or manufacture of an interchangeable item that duplicates the physical, RMF, and performance characteristics of the original product, without additional design engineering effort or recourse to the original design activity. The contractor shall produce and maintain documentation for all electrical assemblies and subassemblies in such a manner to ensure their functional integration without recourse to Special Test Equipment (STE) or installation of the assemblies or subassemblies into a next higher assembly. Utilizing the established logistic repair procedures, the contractor shall identify the higher level components and assemblies to be repetitively procured as spare components and assemblies or which may be procured independently.

(DI-SESS-81000B) Product Drawings and Associated List  
Annex to Exhibit B Technical Data Package Option Selection Worksheet

### **3.10.7 Configuration Verification**

The contractor shall verify and audit the system configuration information to ensure that requirement attributes are met and accurately documented. The contractor shall verify system attributes through a systematic comparison with the associated results of system tests, analyses, inspections, demonstrations, or simulation models. The contractor shall maintain surveillance over the configuration management process to ensure that it is being followed and remains in compliance with requirements.

(DI-SESS-81646) Configuration Audit Plan

### **3.10.8 Unique Identification (UID) of Tangible Items**

The contractor shall coordinate among the IPT members to determine items requiring unique identification including embedded subassemblies, components and parts, and identify the UID to be used for each item. The contractor shall provide unique item identification, or a DoD recognized unique identification equivalent, for all identified items delivered. UID marking design for each item shall be both machine readable and human readable in accordance with MIL-STD-130N, paragraph 5.2.

(NOTE: For more guidance, <http://www.acq.osd.mil/dpap/pdi/uid/index.html> and Defense Acquisition Guidebook, Chapter 4, systems engineering UID considerations.)

(DI-MGMT-81804A) Unique Identification (IUID) Marking and Verification Report

### **3.10.9 Maintenance Concept**

The contractor shall develop a maintenance concept that consists of two levels of maintenance; Field and Sustainment. Field Maintenance, also known as on-system maintenance, repairs and returns equipment to the operator or user. Field Maintenance shall include that maintenance considered to be operator level, and direct support. Field Maintenance consists of preventative maintenance daily readiness check and services, adjustments to controls and other maintenance that can be accomplished by the operator or trained technician with the aid of special tools, support equipment, additional training knowledge or skills, either on site or at a LCCS maintenance facility. It includes system activation, adjusting and aligning to specific parameters, troubleshooting, removal and replacement of failed components. Sustainment Maintenance, also known as off-system maintenance, primarily repairs and returns equipment and components to the supply systems Sustainment Maintenance consists of off-site maintenance capabilities conducted at the LCCS contractor or a designated contractor facility. It includes the use of designated repair points operated by the LCCS contractor, original manufacturers and vendors, in order to overhaul, rebuild, replace or calibrate failed equipment.

### **3.10.10 Technical Publications**

The contractor shall describe each operation and maintenance task in detail and in logical, systematic steps for the work to be accomplished. The operations and maintenance instructions shall accurately provide the technician with all the information needed to keep the equipment operational. It shall provide system and subsystem oriented instructions for installation, operation, maintenance, and testing. All tools, test equipment and consumable items required to accomplish any maintenance or installation shall be identified just prior to and as part of the task. Government furnished material, government technical manuals or government-approved commercial operation and maintenance manuals shall be used as references for system and subsystem maintenance. All government technical manuals and COTS manuals shall be reviewed to ensure changes, updates, revisions, or supplementation is not required to reflect the components actually being installed. All publications shall reflect the configuration of fielded hardware as documented in the product baseline. The contractor shall prepare Operator's Manuals that provide instructions suitable for use by the intended audience of the system. The Operator's Manual shall also include operator maintenance tasks such as preventive maintenance checks and services, inspection, lubrication, adjustment, and operator level repair and

replacement tasks as needed. The contractor shall identify and document maintenance tasks for both levels of the maintenance concept. The contractor shall identify all required spare parts, consumables, tools, and test/support equipment associated with each task and identify the level of maintenance which each task shall be performed.

(MIL-STD-40051-2B) Operator Manual for Page Based Technical Information

(MIL-STD-40051-2B) Maintenance Manual for Page Based Technical Information

(See Annex to Exhibit C) Requirement matrix for Page Based Operator and Maintenance Manuals

(DI-TMSS-80527C) Commercial Off The Shelf Manuals & Associated Supplemental Data

### **3.10.10.1 Publications In-Process Reviews (IPR)**

The contractor shall host and co-chair publication reviews to ensure the technical publications are being prepared according to contracts. Each IPR shall be scheduled to coincide with a system level program reviews defined in the integrated master plan. The contractor shall act on reported decisions and discrepancies resulting from or associated with each IPR. Each review shall include a review of incorporated corrections or comments from previous IPRs prior to proceeding with the current IPR. If any IPT member identifies previous IPR comments that are not included in the technical publications, the IPR shall be considered incomplete.

### **3.10.10.2 Validation**

Validation shall be accomplished on all technical publications, changes, supplemental data, and revisions thereto. Publications shall be validated by the contractor prior to start of government acceptance testing. A technical publication shall not be ready for validation or verification until the following conditions have been fulfilled:

- a. Engineering technical review has been completed.
- b. Information, illustrations and parts lists reflect correct configurations of the system and equipment, to include all engineering changes. Engineering drawings should be up to date and in approved format.
- c. Procedural instructions are readily understandable by the intended user and adequate to perform all operations and maintenance functions.
- d. All procedures have been performed to assure accuracy and performance requirements.
- e. Adequacy of data is checked to ensure that it supports the approved maintenance and support plan.
- f. Hardware of the proper configuration is available for the validation and verification effort.
- g. All safety hazards identified in the safety assessment report are resolved and identified within the text as cautions or warnings necessary to protect the equipment or personnel as appropriate.
- h. The use of any hazardous material has been identified.

(DI-TMSS-81819A) Technical Manual Validation Certificate

### **3.10.11 Verification**

Publications shall be verified by the Government prior to acceptance of the system. The contractor shall assist the PEO STRI IPT members to verify the Technical Manuals (TM) are accurate. The IPT may choose to perform verification concurrently with the validation effort. Correction of discrepancies and changes resulting from training, testing and reviews shall be incorporated into the TM. The contractor shall provide system equipment, technical and engineering support and facilities as required to aide in the performance of verification effort. The contractor shall incorporate all comments from compliance-reviews, technical accuracy reviews and verification reviews into final submission of TM. Verification shall be rescheduled if more than 15 percent of the manual requires corrections.

(DI-TMSS-81821) Technical Manual Verification Incorporation Certificate

### **3.10.12 New Equipment Training (NET)**

After installation, verification, and acceptance of the system, the contractor shall provide NET training to the receiving organizations. This training shall be a self-contained course and provide detailed operational and maintenance knowledge of the system. A Training Support Package shall be provided to assist in “Train the Trainer” activities. The contractor shall develop and provide system operation and maintenance familiarization training through a combination of classroom, written instructions, and hands-on operation. The contractor shall analyze, and prepare all training courseware including program of instruction lesson plans, practical exercises, and a train-the-trainer package to accommodate new equipment training, sustainment training, and training of testers and evaluators. The contractor shall have available draft training materials for each design increment prior to starting the system level Test and Evaluation (T&E). The contractor shall conduct training for key test personnel prior to starting Tests and Evaluations. The contractor shall develop a complete and exportable training support package that integrates training products, materials, and other pertinent information necessary to train the system. The contractor shall design and develop this training support package using instructional systems design processes. For commercial and Non-Developmental Items (NDI) courses, existing materials shall be utilized.

(DI-PSSS-81523C) Training Conduct Support Document

(DI-ILSS-80872) Training Materials

#### **3.10.12.1 Operator Training**

The contractor shall plan, develop, conduct, and document the completion of the initial operator course. The course shall provide comprehensive training for operator(s) in the concepts, skills, and aptitude to efficiently operate the system. The course shall provide familiarization with simulator operating techniques and shall emphasize the utilization of the instructor facility, its functions, and controls. The course shall address the physical and functional descriptions and operation of the equipment including features, advantages, and configurations. In addition, the contractor shall develop and provide operator and maintenance training with respect to the nature, personnel, and criticality of the protective mechanisms in place to secure the assets. This shall include the methods, skills, use and mechanisms to maintain the level of security. The training shall be geared toward the audience and their roles and responsibilities with respect to

the system's operation and maintenance (i.e., system administrator, network administrator, hardware maintain, etc.).

### **3.10.12.2 Maintenance Training**

The contractor shall plan, develop, conduct, and document the completion of the initial maintainer course for the initial cadre of maintenance personnel prior to government acceptance. The course shall provide comprehensive training for maintainers in the concepts, skills, and aptitude to efficiently operate the system. This course shall consist of instruction in troubleshooting and maintenance, diagnostics to fault isolation, calibration, adjustments, remove and replace procedures, use of built in test, and repair that is beyond operator level maintenance. After completion of the course all personnel shall be capable of operating, maintaining and troubleshooting to the lowest replacement part level.

### **3.10.12.3 Class Size**

For each individual to receive the greatest benefit from the training, maximum class size shall be five (5) trainees. The contractor shall conduct three (3) training sessions at Fort Polk, LA.

### **3.10.12.4 Course Completion Criteria**

The contractor shall develop criterion and performance feedback evaluation reports. The contractor shall provide these reports and student capability assessments to those individuals who complete the subject course.

(DI-SESS-81524B) Training Evaluation Document

### **3.10.13 Interim Life Cycle Contractor Support**

The contractor shall provide logistics and operational support to the PEO STRI Life Cycle Support contractor at the location for a period of ninety (90) days after Government Acceptance(s). These efforts shall include the updating of software components (commercial or developed) with the latest product line baseline description; resolve interface conflicts, errors and problems; and to oversee repair to damages and degradations caused by normal wear and tear on the system. The logistic considerations (with supporting documentation) should address the product line, and how it would be best supported, given the possible variations within the product line.

## **3.11 Antiterrorism (AT)/Operations Security (OPSEC)**

### **3.11.1 AT Level 1 Training**

All contractor employees, to include subcontractor employees, requiring access Army installations, facilities and controlled access areas shall complete AT Level I awareness training in accordance with AR381-12 within thirty (30) calendar days after contract start date or effective date of incorporation of this requirement into the contract, whichever is applicable. The contractor shall submit certificates of completion for each affected Contractor employee and subcontractor employee, to the Contracting Officer Representative (COR) or to the contracting officer, if a COR is not assigned, within thirty (30) calendar days after completion of training by all employees and Subcontractor personnel. AT level I awareness training is available at the following website: <http://jko.jten.mil>.

### **3.11.2 Access and General Protection Policy and Procedures for Contractor Requiring Common Access Card (CAC)**

Contractor and all associated subcontractors employees shall provide all information required for background checks to meet installation access requirements to be accomplished by installation Provost Marshal Office, Director of Emergency Services or Security Office. Contractor workforce must comply with all personal identity verification requirements (FAR clause 52.204-9, Personal Identity Verification of Contractor Personnel) as directed by DOD, HQDA and/or local policy. In addition to the changes otherwise authorized by the changes clause of this contract, should the Force Protection Condition at any individual facility or installation change, the Government may require changes in contractor security matters or processes.

Before CAC issuance, the contractor employee requires, at a minimum, a favorably adjudicated National Agency Check with Inquiries (NACI) or an equivalent or higher investigation in accordance with Army Directive 2014-05. The contractor employee will be issued a CAC only if duties involve one of the following: (1) Both physical access to a DOD facility and access, via logon, to DOD networks on-site or remotely; (2) Remote access, via logon, to a DOD network using DOD -approved remote access procedures; or (3) Physical access to multiple DOD facilities or multiple non- DOD federally controlled facilities on behalf of the DOD on a recurring basis for a period of 6 months or more. At the discretion of the sponsoring activity, an initial CAC may be issued based on a favorable review of the FBI fingerprint check and a successfully scheduled NACI at the Office of Personnel Management.

### **3.11.3 WATCH Training**

The contractor and all associated subcontractors shall brief all employees on the local iWATCH Program (training standards provided by the requiring activity AT Office). This local developed training will be used to inform employees of the types of behavior to watch for and instruct employees to report suspicious activity to the COR. This training shall be completed within 30 calendar days of contract award and within thirty (30) calendar days of new employees commencing performance with the results reported to the COR no later than sixty (60) calendar days after contract award.

### **3.11.4 Army Training Certification Tracking System (ATCTS) Registration for Contractor Employees Who Require Access to Government Information Systems**

All contractor employees with access to a Government information system must be registered in the ATCTS at commencement of services, and must successfully complete the DOD Information Assurance Awareness prior to access to the IS and then annually thereafter.

### **3.11.5 OPSEC Program**

The contractor shall develop an OPSEC Standing Operating Procedure (SOP)/Plan within 90 calendar days of contract award, to be reviewed and approved by the responsible Government OPSEC Officer. This plan will include a process to identify critical information, where it is located, who is responsible for it, how to protect it and why it needs to be protected. The contractor shall implement OPSEC measures as ordered by the commander. In addition, the

contractor shall have an identified certified Level II OPSEC coordinator per AR 530-1.

### **3.11.6 Requirement for OPSEC Training**

Per AR 530-1, Operations Security, new contractor employees must complete Level I OPSEC training within thirty (30) calendar days of their reporting for duty. All contractor employees must complete annual OPSEC awareness training. The contract shall ensure all applicable employees have completed OPSCE initial training and annual refresher training and shall certify that their work force has completed the training through the submission of completion certificates(s) to the COR within 30 30 days of arrival on the installation. OSPEC training can be accomplished at the Defense Security Services website at:  
<http://cdsetrain.dtic.mil/opsec/index.htm>.

### **3.11.7 Cybersecurity/Information Technology (IT) Training**

All contractor employees and associated subcontractor employees must complete the DOD cybersecurity awareness training before issuance of network access and annually thereafter. All contractor employees working cybersecurity/IT functions must comply with DOD and Army training requirements in DODD 8570.01, DOD 8570.01-M and AR 25-2 within six (6) months of employment. Cybersecurity/Information Technology (IT) training can be accomplished at <https://ia.signal.army.mil/dodiaa/default.asp>

### **3.11.8 Cybersecurity/Information Cybersecurity/IT Certification**

Per DOD 8570.01-M , Defense Federal Acquisition Regulation Supplement (DFARS) 252.239.7001 and AR 25-2, the contractor employees supporting Cybersecurity/IT functions shall be appropriately certified upon contract award. The baseline certification as stipulated in DOD 8570.01-M must be completed upon contract award.

### **3.11.9 Handling or Access to Classified Information**

Contractor shall comply with FAR 52.204-2, Security Requirements. This clause involves access to information classified “Confidential,” “Secret,” or “Top Secret”. The contractor shall comply with (1) The Security Agreement (DD Form 441), including the National Industrial Security Program Operating Manual (DOD 5220.22-M) and (2) any revisions to DOD 5220.22- M.

### **3.11.10 Threat Awareness Reporting Program (TARP)**

For all contractors with security clearances, per AR 381-12 Threat Awareness and Reporting Program (TARP), contractor employees must receive annual TARP training by a counterintelligence agent or other trainer as specified in 2-4b.

## **3.12 Computer Hardware, Enterprise Software Solutions (CHESS) Program**

The contractor shall comply with the Army’s Computer Hardware, Enterprise Software Solutions (CHESS) program. Under PEO Enterprise Information’s Systems (EIS), the CHESS program is the mandatory source for commercial IT purchases. CHESS contracts provide IT products and services that comply with Network Command (NETCOM,) Army and DoD policy and standards.

Purchasers of commercial hardware and software must satisfy their IT requirements by utilizing CHES contracts and DoD Enterprise Software Initiative agreements first, regardless of dollar value. Any purchase made outside of CHES contracts requires a waiver. A complete list of CHES contracts and the on-line waiver process can be found at <https://chess.army.mil>.

### **3.13 Contractor Manpower Reporting Application (CMRA)**

The contractor shall report ALL contractor labor hours (including subcontractor labor hours) required for performance of services under this contract for the MAAR and MPU End of Life Replacement at JRTC program 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/>. Reporting inputs will be for labor executed during the period of performance during each Government Fiscal Year (FY) which runs October 1 through 30 September. While inputs may be reported any time during the FY, all data shall be reported no later than October 31 of each calendar year. Contractors can find User Guides, Frequently Asked Questions and may direct questions to the help desk at <http://www.ecmra.mil/>.