AMENDMENT OF SOLICITATION/MODIFICATION OF CONTRACT

1. Contract ID Code	Page 1 Of 19
Cost Plus Fixed Fee	

2. Amendment/Modification No.	3. Effective Date	4. Requisition/Purchase Req No.	5. Project No. (If applicable)
P00022	2013NOV04	SEE SCHEDULE	

6. Issued By Code W56HZV

U.S. ARMY CONTRACTING COMMAND
RAINA HAYNES
WARREN, MICHIGAN 48397-5000
HTTP://CONTRACTING.TACOM.ARMY.MIL

EMAIL: RAINA.O.HAYNES@US.ARMY.MIL

7. Administered By (If other than Item 6) Code S0107A

DCMA HUNTSVILLE
1040 RESEARCH BLVD, SUITE 100
MADISON AL 35758-2040

8. Name And Address Of Contractor (No., Street, City, County, State and Zip Code)

DRS TEST & ENERGY MANAGEMENT, LLC
110 WYNN DR NW
HUNTSVILLE, AL 35805-1957

Code 24290 | Facility Code

☐ **9A. Amendment Of Solicitation No.**

9B. Dated (See Item 11)

☒ **10A. Modification Of Contract/Order No.**
W56HZV-12-C-0199

10B. Dated (See Item 13)
2012APR13

11. THIS ITEM ONLY APPLIES TO AMENDMENTS OF SOLICITATIONS

☐ **The above numbered solicitation is amended as set forth in item 14. The hour and date specified for receipt of Offers**
☐ **is extended,** ☐ **is not extended.**

Offers must acknowledge receipt of this amendment prior to the hour and date specified in the solicitation or as amended by one of the following methods: (a) By completing items 8 and 15, and returning _____ copies of the amendments: (b) By acknowledging receipt of this amendment on each copy of the offer submitted; or (c) By separate letter or telegram which includes a reference to the solicitation and amendment numbers. FAILURE OF YOUR ACKNOWLEDGMENT TO BE RECEIVED AT THE PLACE DESIGNATED FOR THE RECEIPT OF OFFERS PRIOR TO THE HOUR AND DATE SPECIFIED MAY RESULT IN REJECTION OF YOUR OFFER. If by virtue of this amendment you desire to change an offer already submitted, such change may be made by telegram or letter, provided each telegram or letter makes reference to the solicitation and this amendment, and is received prior to the opening hour and date specified.

12. Accounting And Appropriation Data (If required)

NO CHANGE TO OBLIGATION DATA

13. THIS ITEM ONLY APPLIES TO MODIFICATIONS OF CONTRACTS/ORDERS
It Modifies The Contract/Order No. As Described In Item 14.

☐ **A. This Change Order is Issued Pursuant To: The Changes Set Forth In Item 14 Are Made In The Contract/Order No. In Item 10A.**

☐ **B. The Above Numbered Contract/Order Is Modified To Reflect The Administrative Changes (such as changes in paying office, appropriation data, etc.) Set Forth In Item 14, Pursuant To The Authority of FAR 43.103(b).**

☒ **C. This Supplemental Agreement Is Entered Into Pursuant To Authority Of:** Mutual Agreement of the Parties

☐ **D. Other (Specify type of modification and authority)**

E. IMPORTANT: Contractor ☐ **is not,** ☒ **is required to sign this document and return _____ copies to the Issuing Office.**

14. Description Of Amendment/Modification (Organized by UCF section headings, including solicitation/contract subject matter where feasible.)

SEE SECOND PAGE FOR DESCRIPTION

Except as provided herein, all terms and conditions of the document referenced in item 9A or 10A, as heretofore changed, remains unchanged and in full force and effect.

15A. Name And Title Of Signer (Type or print)		16A. Name And Title Of Contracting Officer (Type or print)	
		LISA BEHNKE LISA.BEHNKE@US.ARMY.MIL (586)282-4502	
15B. Contractor/Offeror _____ (Signature of person authorized to sign)	15C. Date Signed	16B. United States Of America By /SIGNED/ (Signature of Contracting Officer)	16C. Date Signed 2013NOV04

SECTION A - SUPPLEMENTAL INFORMATION

Buyer Name: RAINA HAYNES
Buyer Office Symbol/Telephone Number: CCTA-AHP-D/(586)282-7267
Type of Contract: Cost Plus Fixed Fee
Kind of Contract: Service Contracts
Type of Business: Large Business Performing in U.S.
Surveillance Criticality Designator: B
Weapon System: Tank, M1 Abrams Family of Vehicles

*** End of Narrative A0000 ***

Contract: W56HZV-12-C-0199
Modification: P00022
Amount of Action: $0.00
Total Contract Value: $20,601,742.70

1. Contract W56HZV-12-C-0199 modification P00022 is a bilateral supplemental agreement.

2. The purpose of this modification is to incorporate Government Furnished Property as follows:

NSN	NOMENCLATURE	QTY	UNIT PRICE	TOTAL PRICE
5998-21-920-2730	Circuit Card Assembly	2	$9,662.77	$19,325.54
5998-01-499-7959	Circuit Card Assembly	2	$9,662.77	$19,325.54

GFM will be shipped to DRS, DODAAC CKOUB9.

3. Section C Scope of Work has been updated with the following:

a. Paragraph 1: Change, added Chassis Modernization/Embedded Diagnostics (CM/ED).

b. Paragraph 2: Change, added Letter j. CM/ED.

c. Added Paragraph 3.1.3.1 "Technical Supporting Requirements"
The contractor is hereby authorized to repair the CM/ED components to a Condition Code A asset (Issuable without qualification) as long as the cost of repair is equal to or less than 80% of unit cost. The contractor shall provide the COR with schedule details as to when the asset will be returned to service prior to initiating the repair effort. If the cost of repair is determined to be greater than 80% of unit cost, the contractor shall estimate the repair cost associated with the unserviceable material and shall submit cost and schedule to repair the hardware and return it to Government Stocks. The contractor shall submit the proposal to the Government within 30 days of receipt of the material. The contractor shall supply engineering service and support to platforms that incorporate CM/ED. The contractor shall be responsible for all aspects of Systems Engineering to include design, drawings and ECP submissions for both hardware and software.

d. Paragraph 3.9.1: Change, Updated CDRL A021 to CDRL A005.

e. Paragraph 3.10: Change, Updated CDRL A022 to CDRL A021.

4. As a result of this action the contract value remains unchanged.

5. Except as specified above, all other terms, conditions, and specification of W56HZV-12-C-0199 remains unchanged and in full force and effect.

*** END OF NARRATIVE A0020 ***

SECTION C - DESCRIPTION/SPECIFICATIONS/WORK STATEMENT

Abrams Systems Technical Support Services Scope of Work (SOW) for Direct Support Electrical System Test Set (DSESTS), Software Loader/Verifier (SL/V), CAP, Embedded Diagnostics (ED), and Chassis Modernization / Embedded Diagnostics (CM/ED)

1. SCOPE

The purpose of this SOW is to describe all tasks required to update, modify, repair, and field the Bradley and Abrams Diagnostic Systems software and associated hardware on a recurring basis. Diagnostics Systems include Direct Support Electrical Systems Test Set (DSESTS), Software Loader/Verifier (SL/V), CAP, Embedded Diagnostics (ED), and Chassis Modernization/Embedded Diagnostics (CM/ED). The purpose of this effort is to develop, update and deliver qualified test measurement diagnostics software and hardware for the Bradley and Abrams M1 Tank Family of Vehicles (FoV) to the Foreign Military Sales (FMS), PM Armor Brigade Combat Team (ABCT), U.S. Army, and U.S. Marine Corps customers. Development of Diagnostic System updates is a multifaceted and multi-disciplined effort requiring specialized personnel and software processes. The United State Marine Corps (USMC) Abrams M1A1 Embedded Diagnostics (ED) Program is completing the installation of ED on the USMC fleet, and continuing software engineering service support is required in order to maintain weapon system self-diagnostics capabilities. All effort within this SOW is required to support sustainment and production of highly reliable and stable Bradley and Abrams M1 Tank system monitoring and fault diagnosis software and hardware integrated with Interactive Electronic Technical Manuals (IETMs). The intent is to provide defense services necessary for training, maintenance, repair, and sustainment functions for the Abrams M1 FoV. This is a cost plus fixed fee and cost plus fixed fee level-of-effort basic engineering services contract with identified objectives and task requirements managed at the work breakdown structure (WBS) level. All task requirements have performance criteria and an applicable WBS dictionary.

2. WORK DIRECTIVES

All contractor requirements are contained in customer-specific Work Directives (WD). The customers are as follows:

a. Foreign Military Sales Customer Egypt
b. Foreign Military Sales Customer Australia
c. Foreign Military Sales Customer Kuwait
d. Foreign Military Sales Customer Iraq
e. Foreign Military Sales Customer Kingdom of Saudi Arabia (KSA)
f. PM ABCT-DSESTS
g. USMC-DSESTS
h. USMC-ED
i. PM ABCT-ED
j. PM ABCT CM/ED

3. REQUIREMENTS

3.1 PROGRAM MANAGEMENT

The contractor, as an independent contractor and not an agent of the USG, shall furnish all the labor, services, personnel, travel, equipment, property management, data management, and materials required to accomplish the work efforts as set forth in the Work Directives. Submission of all program, costs, technical data, and documents shall be provided to the Contracting Officer Representative (COR) by the contractor. All requests for deviation from the requirements or performance standards shall be submitted by the contractor to COR for processing and final approval by the Contracting Officer prior to execution by the contractor.

3.1.1 COST ESTIMATION

The contractor shall generate and provide Rough Order of Magnitude (ROM) estimates at receipt of a request for ROM from the Contracting Officer. The ROM shall include cost estimates, hours, and schedule impacts that support successful accomplishment of objective task requirements provided by the specific FMS customer. Contractor format is acceptable. Performance shall be measured by contractors completeness and timely submittal of ROM data as mutually agreed to by the COR and contractor.

3.1.2 DOCUMENT PROCESSING

The administrative costs for producing, copying, shipping, and handling of the contract program, technical documentation, and data in the required quantities shall be included in the cost of this effort and not separately priced.

3.1.3 PROGRAM AND TECHNICAL MANAGEMENT SUPPORTING REQUIREMENTS

The contractor (Program Manager or Program Engineer) may attend the Bradley and Abrams Project Manager Heavy Brigade Team (PM ABCT), Prime Vehicle Integrator (OEM), and other vehicle system or program reviews, at the approval of the COR. The purpose of the contractor

attendance is primarily for programmatic and technical informational exchanges related to fielded or in process diagnostics system updates.

3.1.3.1 TECHNICAL SUPPORTING REQUIREMENTS

The contractor is hereby authorized to repair the CM/ED components to a Condition Code A asset (Issuable without qualification) as long as the cost of repair is equal to or less than 80% of unit cost. The contractor shall provide the COR with schedule details as to when the asset will be returned to service prior to initiating the repair effort. If the cost of repair is determined to be greater than 80% of unit cost, the contractor shall estimate the repair cost associated with the unserviceable material and shall submit cost and schedule to repair the hardware and return it to Government Stocks. The contractor shall submit the proposal to the Government within 30 days of receipt of the material.
The contractor shall supply engineering service and support to platforms that incorporate CM/ED. The contractor shall be responsible for all aspects of Systems Engineering to include design, drawings and ECP submissions for both hardware and software.

3.1.4 WORK DIRECTIVE DIRECTIONS

The USG will prepare and furnish proposal work directives. The contractor shall have a single, centralized point of contact for each specific Work Directive. The proposed WD will be written with the purpose of providing the contracting officer a suitable document that shall enable the contractor to perform specific tasks with associated periods of performance.

3.2 LOGISTICS SUPPORT

The contractor shall provide Integrated Logistics Support (ILS), provisioning, technical manual, and LSA support as specified in the Work Directives.

3.3 FIELD SERVICE REPRESENTATIVES

The contractor shall provide Field Service Representatives (FSRs) in support of M1 Abrams Embedded Diagnostics Systems, SL/V, CAP and DSESTS, that have been approved by the COR. The FSR level of work activities shall include system inspection, troubleshooting, maintenance, repair, failure reporting, data collection, and training at all locations. This includes FSR support of FMS Abrams embedded diagnostics system testing and fielding events. All travel shall be in accordance Joint Travel Regulations (JTR). While deployed OCONUS or CONUS, the FSR shall serve as a liaison for Abrams regarding the maintenance and serviceability of M1 Abrams Diagnostic Systems. The contractor shall provide FSR support to the Bradley MFT at FT. Hood.

3.3.1 FSR SUPPORT REQUEST (OCONUS)

An FSR request from the COR for OCONUS field services requires a minimum of forty-five (45) calendar days to process mandatory country specific clearances and complete obligatory training. The contractor shall promptly initiate OCONUS FSR support processing within three (3) working days from receipt of the COR request. Contractor shall inform the COR of the dates started and completed for all OCONUS processing steps.

3.3.1.1 FSR SUPPORT REQUEST (CONUS)

The contractor shall provide Embedded Diagnostics FSR support and availability within twenty-four (24) hours of COR request for CONUS duty.

3.3.2 FSR PERFORMANCE MEASUREMENT

Contractor performance is measured by timely response of FSR support requests, deployment ready from request date, performance of field services work, FSR input into the Asset Management System (AMS) database (ED only), and reviewing After Action Reports from the unit supported. The contractor shall summarize FSR activities in Monthly Cost Performance and Status Reports CDRL A001 and provide detailed trip reports to the COR CDRL A002.

3.4 TRAINING

The contractor shall provide training packages and services to the FMS customers as required and described by the WD. The training packages shall be translated into other languages (i.e. Arabic) if required by the WD.

3.5 MEETINGS AND REVIEWS

3.5.1 START OF WORK MEETING

The contractor shall conduct a start of work meeting within thirty (30) calendar days after contract award. This meeting between the USG and contractor shall facilitate review of the contract WBS tasks, schedules, In-Process Review (IPR) dates, completion dates, and

required resources needed to accomplish each WD requirement within the period of performance to support the DSESTS, SL/V, CAP, and ED updates. The contractor shall provide electronic copies of minutes and action items to all attendees within seven (7) calendar days after conducting meeting in accordance with CDRL A007.Performance shall be measured by meeting preparation and material content, execution, recording of minutes and management action items to closure.

3.5.2 IN-PROGRESS REVIEW (IPR)

The contractor shall conduct monthly In-Progress Reviews (IPR) during the contract period of performance. The IPR shall be performed in conjunction with monthly deliverable dates. The IPR shall provide the COR a status of all deliverables, the ability to perform selected Quality Assurance Surveillance Plan (QASP) inspections, discussions on any impacts to the contract, and the contractor efforts in development of DSESTS, SL/V, CAP, and ED updates in accordance with CDRL A007 in the following areas:

a. Hardware design incorporations (component and system testing and qualification, engineering changes).
b. Preliminary and critical designs (architectural, functional, logical and detail).
c. Software development status.
d. Maintenance planning (reliability and maintenance task analysis).
e. Support equipment (on/off platform devices and interconnecting items).
f. Facilities (equipment, testing instruments, and SIL use).
g. Technical data (system requirement documents, performance specifications, interface control documents, engineering drawings, and IETMs).
h. Training support packages (related changes).
i. ILS data (provisioning, cataloging, packaging, handling, shipping and transportation, and logistics support analysis).
j. Configuration and data management (status of engineering change proposal, notice of revision, specification change notice, engineering release record).
k. Associated document deliverables.
l. External coordination activities.
m. Issues or existing problems.
n. Risks (project, process and product) and mitigation plans.
o. Schedule review.

3.5.2.1 PROGRAM MANAGEMENT REVIEW

The contractor shall conduct a Program Management Review (PMR) in conjunction with PM HBCT PMR. The contractor shall provide an advanced copy of the PMR presentation materials to the COR at least seven (7) calendar days prior to conducting the review. The USG will provide the contractor a PMR date at least forty-five (45) calendar days in advance. The COR will provide a list of proposed personnel to attend PMR at least fourteen calendar days in advance. The contractor shall record minutes and manage action items of the reviews and provide electronic copies in contractor format to all attendees within seven (7) calendar days after conducting the reviews in accordance with CDRL A007. Performance shall be measured by the contractors meeting preparation and material content with regard to PMR items, and timely submission of the aforementioned presentation material, meeting minutes and action items. The PMR review shall consist of overall program status that includes:

a. Contract performance
b. Technical management
c. Configuration and data management
d. Field service support, including FSR activities
e. Field problem reports, both internal and AMS submissions
f. Quality processes, plans and audits
g. Risks and mitigation plans
h. Other deliverables

3.5.2.2 TEST READINESS REVIEW

The Test Readiness Review (TRR) forty-five (45) days prior to scheduled USG verification or DSESTS, SL/V, CAP, and ED software release and associated data packages. The contractor shall provide minutes CDRL A007 of the TRR within seven (7) days following the completion of the review. The contractor shall provide the COR necessary data (data Sets 1 and 2, as shown in subsequent paragraphs) for processing Safety Release and Confirmation Testing by the US Army Test and Evaluation Center plus required documentation and data essential CDRL A009 for USG preparation of Embedded Diagnostics system verification.

Data Set 1 to APG at the start of DRS Software Quality Assurance (SQA) Verification:

a. Software pre-release production representative software (i.e. the same software that DRS is entering into SQA verification)
b. Install/uninstall instructions with technical notes identifying the version if applicable and Hardware changes if any (i.e. Sidecar V3.1) Plain Language Description (PLD)-final
c. Safety Assessment Report (SAR)-final
d. Test & Evaluation (T&E) Verification Test Records (VTR) completed from T&E testing and Operational Verification Procedure

Data Set 2 to APG at the end of DRS SQA Verification:

The contractor shall provide a copy of the SQA VTR spreadsheet (completed) to the COR. The COR shall forward a copy to the APG along with a brief summary of SQA testing for safety release.

3.6 CONTRACTOR CM PROCESSES

The contractor shall provide the demonstration of its established configuration and data management processes applied in the performance of DSESTS, SL/V, CAP, and ED configuration management and planning, configuration identification, configuration change management, configuration status accounting, configuration verification, audit, and controlled storage. The contractor shall provide the COR a listing of configuration management activities on a quarterly basis in the form of a configuration status accounting report (CSAR) CDRL A017.

3.7 ENGINEERING CHANGES PROPOSALS

3.7.1 CHANGE CLASSIFICATION AND NOTIFICATION

The contractor shall submit engineering change proposals (ECP) for all Class l changes affecting form, fit, and function to hardware and software configuration items in accordance with CDRL A008. Class l changes are a product of approved Diagnostics System requirements as approved by COR and PCO. The contractor is responsible and accountable to inform the COR of any Class l change that affects an applicable FMS Diagnostic System prior to implementation. The contractor shall use MIL-HDBK-61A (SE) as guidance for Class I and II criteria.

3.7.2 ENGINEERING CHANGE PROCESSING

The contractor shall process all Class l engineering changes using the US Army Multi-Engineering Change Proposal and Review System (MEARS) that automatically incorporates DoD standardized configuration management forms in a web-based electronic format. The COR will approve other delivery methods requested by the contractor as necessary. The USG will provide the contractor with necessary MEARS training and system access permissions. The contractor shall implement Class II level changes in accordance with its established change management practices and processes.

3.7.3 SUPPORTING CHANGE DOCUMENTATION

The contractor shall provide sufficient documentation within MEARS to support a complete and thorough USG review of each Class l ECP submission that fully addresses technical, product assurance, logistics (support analysis, provisioning and packaging data), cost, and schedule impacts related to change implementations. Applicable Notice of Revision (NOR), Specification Change Document (SCN), Engineering Release Record (ERR) and Request for Deviation (RFD) forms shall be submitted simultaneously or in sequence of change processing. Class l ECP approval and implementation can only be approved by the Contracting Officer.

3.8 TECHNICAL DATA

The contractor shall provide to the COR, a technical data ledger (CDRL A010) in the contractor format (as jointly agreed-to-during the Start of Work meeting) using a Microsoft Excel spreadsheet that lists all engineering drawings, models, associated parts lists for M1A1 Abrams Embedded Diagnostics Systems (all related ED parts, components, assemblies, and computer software applications integrated), DRS hull integration kit component for EMU, DRS portion for the ED support kit, Sidecar Fact Based Maintenance Function (FBMF)Integration Items, and M1A1 Abrams ED System Integration Laboratory (SIL). The contractor shall deliver this Technical Data Ledge electronically on a quarterly basis during IPR.

3.8.1 ENGINEERING DRAWING AND RELATED DOCUMENTATION PRACTICES

The contractor shall deliver product data, engineering drawings and associated lists documentation IAW American Society of Mechanical Engineers industry standard Y14.100, Engineering Drawing Practices (includes binding first tier publications). Technical data shall be delivered in Adobe Acrobat image portable document format (PDF). The contractor shall deliver product data-engineering drawings to the USG for review and approval.

3.8.2 PART, DRAWING AND DOCUMENT NUMBER AND CAGE ASSIGNMENT
The contractor shall assign US Army Ordinance Part Numbers (AOPN) and Commercial and Government Entity (CAGE) numbers to all engineering drawings (including source control data), software documentation, and related technical data and documents created under Government funding. The COR will provide to the contractor AOPNs for the CAGE 19200 (ARDEC-Picatinny) assigned to ED System configuration items and AOPNs for CAGE 19207 (TACOM-Warren) assigned to ED System Integrated Laboratory (SIL) configuration items during the Start of Work meeting or as needed. Technical documentation generated under Government funding by the contractor shall be provided at receipt of

Government request.

3.8.3 CONTRACT INFORMATION ON TECHNICAL DATA

The contractor shall affix the contract number that funded initial generation or contract number approving change adaption (e.g. ECP) of technical data within drawing and document borders, or as close as practical to the title block. The contract number will be inseparable and not incorporated within any contractor proprietary legend.

3.8.4 DATA RIGHTS

Unless otherwise asserted, all data developed in the performance of the work developing the M1 Abrams Embedded Diagnostic System (all related ED parts, components, assemblies, and computer software applications), ED Support Kit, Abrams Engine Memory Unit Cables and Sidecar Fact Based Maintenance Function (FBMF) Integration Items, and M1A1 Abrams ED SIL, and updates shall be available with USG unlimited rights as described in DFARS clauses 252.227.7013 and 252.227.7014. All data shall have assigned DoD Technical Distribution Statement and Export Control Notice required by DoD Directives 5230.9, 5230.24, 5230.25.
Enclosure 1 (Security, Marking and Legends)
provides contractor information in application of this requirement.

3.9 GOVERNMENT FURNISHED EQUIPMENT (GFE)

3.9.1 GFE MAINTENANCE AND SERVICES

The contractor shall be responsible for maintenance and services of assigned Government Furnished Equipment (GFE) in accordance with applicable contract clauses and vehicle M1A1 Abrams Maintenance Manual TM 9-2350-264-23-1/2 standards commensurate with available special tools, test measurement and diagnostics equipment, support equipment, and necessary repair parts as identified in repair parts and special tools lists. The USG will supply items required to maintain and service GFE vehicles and the related Systems Integration Laboratory (SIL) upon contractor notification of needed items. As the GFE is required it will be added to each Work Directive for accountability. The Work Directive will also call out the period of performance for the GFE. When the GFE is required, the contractor shall contact and coordinate with the COR a minimum of forty-five (45) calendar days prior to need date. The GFE will be clearly identified in each work directive. The contractor shall use contractor format to document the performance of GFE maintenance and services (CDRL A005) as follows:

a. The contractors shall identify GFE serviceability and inform the COR within (3) working days of finding any faults(s) rendering of GFE partially or completely inoperable.

b. The contractor shall identify GFE serviceability problems and inform the COR within three (3) working days of finding any faults(s) rending GFE partially or completely inoperable.

c. The contractor shall use US Army Oil Program (AOAP) services in performance of periodic oil and fluids analysis. The AOAP Office at Redstone Arsenal, Huntsville, AL is the only authorized analysis laboratory. The contractor shall submit all oil and fluid samples to AOAP. Prior to any complete drain and flush activity directed by AOAP notification. Upon receipt of COR concurrence, the contractor shall confirm replenishments (service items) are available and proceed with directive requirements. Contractor shall notify the COR upon completion of service within two (2) working days.

d. The contractor shall contact and coordinate with the COR a minimum of forty-five (45) calendar days prior to need date for all special tools and test equipment required in M1A1 Abrams maintenance manuals in the performance of specific vehicle services (e.g. Borescope and Recoil exercise). These tasks shall be performed by personnel with calibrated instruments/equipment.

3.9.1.1 M1A1 SYSTEM INTEGRATION LABORATORY USE

The contractor shall establish a formal procedure for tracking M1A1 Abrams ED SIL Operational Use Cases. The approved SIL User Guide provides operation, safety and other important requirements that each user shall read prior to SIL use. The contractor shall request COR approval for other parties interested (e.g. contractor interdepartmental programs, partnering contractors or DoD Agencies) in usages by forwarding a SIL Request NLT fourteen (14) calendar days prior to required date. SIL use for other than Embedded Diagnostics can only be approved by the COR and on a noninterference basis to the COR M1A1 ED program. The SIL Request shall include:

a. Date of Request
b. Purpose
c. Organization and Individual Name(s) Requested
d. Contract to be charged
e. Dates and Time Duration Required
f. SIL Configuration Status
g. required SIL Modification (hardware and software and support equipment)
h. Use Case Technical Documentation and Test Plan (submit documents)
i. Authenticated agreement statement to repair and replace at no-cost to the USG M1A1 Abrams Embedded Diagnostics STS contract, any SIL

configuration (hardware and software) item determined out-of-service or broken as result of SIL Operation by user (respective of usage timeframe)

A SIL Completion Report shall be submitted to COR documenting actual SIL in-use times and SIL Operational status three (3) days after completed use.

3.9.1.2 SIL MAINTENANCE AND SERVICES

The contractor shall maintain the SIL in accordance with M1A1 Abrams ED SIL Users Guide Maintenance Section. The contractor shall inform COR within twenty-four (24) hours of finding ANY SIL GFE, contractor purchased items, or fabricated part in a deficient state. The contractor shall provide the COR with a Quarterly M1A1 ED SIL Operation, Usage and Maintenance Status Register. The register shall contain the following information mutually agreed to between contractors and COR at Start of Work Meeting: Date/Time, in/out, Total Hours, Project, operator, Tasks Performed, Documented issues.

3.9.2 If an Abrams M1 vehicle is required as GFE, this contract will rely on Contract W56HZV-11-C-0219, until contract end for the assigned vehicle to that contract on a non-interference basis. When contract W56HZV-11-C-0219 has ended, all required GFE will be transferred to contract W56HZV-12-C-0199. All costs for maintenance and services for the vehicle will be evidenced in the work directive. If parts are required to repair the vehicle during this period of performance, each FMS customer will be responsible to furnish the GFE to the contractor.

3.9.3 This contract will provide funding support to the Systems Integrated Laboratory (SIL) when it is called out in the work directive. The SIL will be used on a non-interference basis. The work directive will follow this procedure:

Date of Request
Purpose
Organization and Individual Name
Dates and time duration required

3.9.4 REPAIR OR UPGRADE OF COMPONENTS

The contractor shall provide the supplies and services necessary to perform repairs or upgrades on M1 Abrams diagnostic hardware components for FMS customers. Incoming components to be repaired or upgraded shall be identified by NSN, part number, nomenclature, quantity, serial number, document number, unit Army Master Data File (AMDF) price, and unit Maintenance Expenditure Limit (MEL). The MEL is the unit ceiling price for funding purposes based on 60% of the unit AMDF price and total ceiling amount (estimated total cost of repair or upgrade inclusive of all rate application) for each part being repaired or upgraded. Components shall be repaired or upgraded in accordance with paragraphs found elsewhere in this section.

The freight forwarder will deliver all components for repair or upgrade to the contractors repair facility. Upon completion of the repair or upgrade, the contractor shall notify the Freight Forwarder via Notice of Availability (NOA). The freight forwarder will then be responsible for picking up the component at the repair facility and transporting it to the FMS country. All components shall be sent and returned under the same transportation control number. NOA content shall:

a. Specify repaired components that are ready for pick-up (include reference to Contract number, CLIN, and total dollar value of all repaired components).

b. Include a description of each shipping container (e.g., crate, box, carton), weight of each shipping container (e.g., 200 lbs.), dimensions of each shipping container (e.g., 23 x 19 x 11), and cube of each shipping container (e.g., 2.38). Each shipping container shall include a listing of contents (e.g., document number, NSN, P/N, serial number, repair value, and nomenclature of each repaired component).

c. Include an attachment detailing the contents of the total shipment (e.g., document number, NSN, P/N, serial number, repair value, and nomenclature of each repaired component). The freight forwarder shall then be responsible for transportation, coordination, and costs associated with picking up the component(s) at the Contractor repair facility specified in the NOA and transporting them to a specific customer. All components shall be sent and returned under the same transportation control number (document number). NOA shall also include a Freight Forwarder Ship-to address and a customer Mark FOR address, contact the COR for this information.

The contractor shall apply for and maintain an Export License for the following countries:

Australia
Egypt
Iraq
Kuwait
Saudi Arabia

The Export License shall facilitate emergency shipments to and from each FMS country in the event a Freight Forwarder cannot be used.

Contractor shall begin the Export License application process within forty-five (45) calendar days of contract award.

3.9.4.1 Phase I Inspection/Test/Proposal Preparation:

Only assets the COR has approved for inspection shall be inducted into inspection. The contractor shall inspect and test unserviceable components. The contractor shall perform the necessary diagnostics test(s) or inspection required for component(s) submitted for repair/rework using the most current technical data and technical publications available to determine the nature and extent of failure. Based on the results of the inspection, the Contracting Officers Representative (COR) will provide repair or rework or disposition instruction. The contractor shall provide an inspection report identifying the hours and cost required to repair the item CDRL A003.

3.9.4.2 The contractor shall inspect and test individual components IAW applicable drawings and acceptance test requirements for each item. Other tests may be performed that are necessary to ascertain the nature and extent of the damage or failed component. Once inspection is complete, the contractor shall notify the COR of the results identifying elements of cost to repair or rework the asset and also provide a period of completion (i.e. number of days after receipt of order) CDRL A003.

3.9.4.3 Phase II Repair/Rework:

Upon notification of completed inspection, the Government will assess the contractors proposed repair of the component. Within one (1) week of receipt of the inspection report, unless additional time is requested, the Government will approve the contractor to proceed with the repair or rework; or the Government will submit disposition instructions for the component(s) to the contractor.

3.9.4.4 The contractor shall not proceed with the repair or rework or disposition of any component without funding and authorization from the PCO.

3.9.4.5 The contractor shall complete (turnaround) the repair or rework of each authorized and funded component within the timeframe indentified in the contractors initial inspection. Turnaround time is defined as the length of time from contract award to repair completion and acceptance by the Government.

3.9.4.6 Repair or rework shall be limited to the work required to restore the current functionality and structural capability of the component. It shall not normally include cosmetic reworks unless they are necessary to ensure proper functionality (i.e. correct interpretation of dials, knobs, switches). In those cases where specifications permit and its economically feasible to do so, removed parts which are normally classified consumable may be repaired instead of replaced provided repair costs do not exceed the cost of a new part. Repaired components shall be to vehicle prime item product fabrication specification (latest configuration including applicable upgrade) and may be subject to verification at the discretion of the U.S. Government PCO. Contractor repair procedures shall follow U.S. Army Maintenance and Inspection Procedures, applicable technical manuals, and Depot Maintenance Work Requirements (DMWRs), if available. Unless otherwise directed by the PCO, the contractor shall repair the item to condition code A (fully serviceable condition) in the current configuration. PCO may randomly request vendor test documentation to validate serviceable condition of component.

3.9.5 REQUEST FOR DEVIATION (RFD)

In the event of a proposed departure from (a non-conformance with) the contractually specified configuration documentation for specific number of units or for a specified period of time, the contractor shall prepare an RFD in accordance with CDRL A004 / Data Item Description (DID) DI-CMAN-80640.

3.9.6 PACKAGING AND MARKING

Packaging processes utilized for the Repair & Return Program (e.g., preservation and packing) shall support OCONUS shipment and long term storage. For return shipments to country, the contractor shall package the repaired or upgraded asset based on the following priority:

1) In its reusable container.
2) In accordance with the requirements of the available Packaging Data Sheet (PDS) or Special Packaging Instruction (SPI) for the item.
3) In accordance with MIL-STD 2073-1D.

3.9.7 Shop Replaceable Units (SRU) SPECIAL PACKAGING REQUIREMENTS

SRUs shall be cushioned and wrapped in approved Electrostatic Discharge (ESD) materials (e.g. wrapping Foam - MIL-PRF-81705). Items should first be cushioned with the approved ESD materials to prevent the SRU from puncturing the barrier bag and compromising the ESD protective barrier during handling. Tape should be designed to be used in an ESD sensitive environment.

Unit shall be packed in an approved ESD heat-sealed bag. Place item in a MIL-PRF-81705 barrier Water/Vapor proof bag and heat seal. Unit shall be packed in Fast Pack with convoluted anti-static cushioning (different sizes). Electrostatic discharge (ESD) sensitive caution labels and other protective labels shall be applied in accordance with MIL-STD-129 as
follows:

1) ESD Protection
2) Fragility Protection
3) Water/Vapor proof Protection
Circuit cards SRUs are to be packaged individually in ESD, water and vapor proof heat sealed bags and then put in Fast Pack with sufficient cushioning material in preparation for final shipment. The contractor shall mark material for shipment and storage in accordance with MIL-STD 129P, Change 4 dated 19 Sep 2007.Final shipments are to be packed in wooden crates to prevent components from being crushed while in transit.

3.9.8 REPORTS

The contractor shall prepare and submit each calendar quarter (every three months e.g., January through March) a Receipts, Inventory, Adjustments, and Shipments (RIAS) report in accordance with DID OT-11-RIAS-0196/CDRL A005 format or in other format as agreed to between the PCO and contractor prior to award. Reports shall be submitted within seven (7) calendar days from last day of calendar quarter. In the event R&R components are received that: 1. Are not on contract, 2. Are not listed in the contract (i.e., serial number discrepancies etc.), or 3. Do not agree with shipping documents, the contractor shall notify the PCO and the identified FMS customer official in writing with regard to the discrepancy. Discrepancies, if any, at a minimum shall be reported NLT the 30th of each calendar month. A disposition response for the discrepant part shall be provided through the PCO on a best effort basis, but not later than 30 calendar days from date of contractor notification.

3.10 DIMINISHING MANUFACTURING SOURCES AND MATERIAL OR OBSOLESCENCE SHORTAGES

The contractor shall manage, track, and process Diagnostic Systems component and part obsolescence in accordance with contractor practices and industry EIA Engineering Bulletin GEB1, Diminishing Manufacturing Sources and Material Shortages (DMSMS) Management Practices. The contractor shall notify the COR of instances that may have a material effect on the Diagnostics Systems or future requirements. DMSMS performance is measured by the COR receipt of contractor Source DATA for forecasting DMSMS-Obsolescence Report. This semi-annual report, starting with the contract award date, shall list all M1A1 Abrams Embedded Diagnostics System or System Integration Laboratory (SIL) components and parts determined to be an obsolescence condition or forecasted to be obsolete within the next six (6) months. M1A1 Abrams ED System specific DMSMS data shall be forwarded by the COR to the Armor Brigade Combat Team (ABCT) PM Abrams-OEM Obsolescence IPT for assessment and coordination prior to executing any course of action. The contractor shall submit to the COR the following information for each DMSMS Report CDRL A021.

a. M1A1 ED and SIL LRU level: E-BOM Data Fields for OEM, OEM CAGE, OEM Part Number, Known Alternate Part Numbers, Revision Level, Firmware Version, Reference Designator or Next Higher assembly, Nomenclature, Quantity used in System, NSNs and Reason for DMSMS.

b. M1A1 ED and SIL SRU level: E-BOM Data Fields for OEM/SCD Piece-Part Reference Designator or Next Higher Assembly, OEM/SCD Piece-Part Nomenclature, OEM/SCD Piece Quantity on LRU, OEM/SCD Piece Part Revision level, OEM/SCD Piece Part Firmware Version, Actual Vendor Piece Part Numbers, Actual Vendor Piece Part CAGE, Known Alternate Piece Part Numbers &CAGES, NSNs, and Reason for DMSMS.

3.11 DELIVERABLES PROGRAM MASTER SCHEDULE

The contractor shall generate and provide an initial Program Master Schedule (PMS) in .pdf format to the USG in accordance with CDRL A009. The schedule shall be briefed and included in Start of Working meeting materials. Thereafter, the contractor shall provide for updates to be made available to the USG.

As a cost savings measure, the contractor is required to submit electronically formatted contract deliverables, using the secured PEO-GCS eBusiness Portal Embedded Diagnostics Workspace website to the maximum extent possible. Access to the PEO-GCS eBusiness Portal shall be requested by the contractor and coordinated by the COR. The contractor shall deliver digital M1A1 Abrams Embedded Diagnostics Executive Program and Source Code Software products via electronic CD-ROM media format.

3.11.1 COST PERFORMANCE AND STATUS REPORTS (CPSR)

The contractor shall generate and submit a Monthly Cost Performance and Status Reports (CPSR) CDRL A001. This includes a report of past, current, and planned programmatic and technical efforts in the designated CPSR sections. The status report shall be submitted electronically to the USG Contracting Officer and the COR on or before the twentieth (20) calendar day after the end of each month. Performance shall be measured by the contractors timely submission and complete disclosure of the required information for the respective report period at the IPR.

3.11.2 TRIP REPORTS

The contractor shall submit a trip report, in contractor format, for each traveler supporting the FMS Embedded Diagnostics program that expends contract hours away from the contractor main facility. At a minimum, trip reports shall include purpose, dates, locations, interface coordination, activities performed, results, and assigned actions. Trip reports shall be submitted to USG COR within fourteen (14) working days after trip completion. Contractor FSRs are included in this requirement, however, FSR support durations longer than

one (1) month require submittal of an electronic monthly trip report which shall be presented to the COR at the following IPR. All travel shall be in accordance Joint Travel Regulations (JTR) CDRL A002.

3.12 DSESTS, CAP, AND SL/V REQUIREMENTS AND PERFORMANCE STANDARDS

The contractor shall notify the PCO and COR of all software and or hardware problems identified from various sources.
The contractor shall review and evaluate reported DSESTS, CAP, and SL/V issues and field problems to include SRU and Line Replaceable Units (LRU) obsolescence issues. Investigate and analyze field failures and submit recommendations to COR for resolution to include ROM cost estimate and schedule. The contractor shall maintain a data base that identifies all hardware and software issues that impact the operational availability of FMS assets. Issues that are considered routine and maintenance shall be implemented and incorporated into the next release. The contractor shall notify the PCO and COR within 48 hours of discovery of issues that fall within the catastrophic, critical or marginal categories (IAW the attached Decision Safety Matrix. The contractor shall prepare and develop interim and final fixes, along with a fielding plan within 80 hours of the same discovery. Final corrective actions shall take place after COR approval. The contractor shall field DSESTS hardware and software updates in accordance with a contractor developed and Government program manager approved schedule. All hardware and software updates must be backward compatible. Updates shall occur as required by the customer in the WD. All changes in content or schedule require COR concurrence. The contractor shall field CAP, and SL/V hardware and software updates in accordance with a contractor developed and Government program manager approved schedule. All hardware and software updates must be backward compatible. Updates shall occur as required by the customer in the Work Directive. All changes in content or schedule require COR concurrence. The contractor shall provide DSESTS, CAP, and SL/V maintenance support as required in the Work Directive.

3.12.1 VALIDATION AND VERIFICATION

The contractor shall conduct validation and verification of the DSESTS, CAP, and SL/V hardware and software change packages, and prepare required documentation to include Technical Manual updates and Provisioning Master Record updates in accordance with CDRL A006 The contractor shall identify and process all hardware, software and ILS impacts as the result of proposed ECP changes. The contractor shall maintain the configuration management of Executive Software changes required for Test Program Set (TPS) development.

3.12.1.1 The contractor shall provide technical support software validation at locations other than DRS when dictated by LRU availability or upon COR request. The contractor shall provide updates to the DSESTS Computer Based Training as required by the Work Directive. Computer Based Training is an English language training tool. The contractor shall deliver software packages and releases to the program management office as directed in the WD. The package release shall include the application software along with a Plain Language Description (PLD). The PLD shall be in .pdf format and shall contain a description of all changes and their associated impacts to the operator. The contractor shall provide Engineering Releases and interim releases of DSESTS, CAP, and SL/V updates to the USG for use in validation efforts at contractor and field locations on an exception basis. Engineering releases shall be controlled by the contractor and shall not be issued to fielded units.

3.12.2 PERFORMANCE STANDARD

All software and hardware updates shall be initiated subject to COR approval, and be fielded in accordance with Government approved program schedules and distribution requirements lists. Emergency interim software fixes, inclusive of a fielding plan, shall be developed within 80 hours of discovery with field implementation of fix within 30 calendar days of discovery.

3.12.3 ACCEPTABLE QUALITY LEVEL

All updates and corrections must be fielded on schedule, as measured by the Government Quality Assurance Surveillance Plan (QASP) and the Monthly Cost Performance and Status Reports (CPSR) CDRL A001. If updates or corrections are fielded late (excluding Government caused delays to fielding), weekly reports shall be required in accordance with CDRL A001.

3.13 EMBEDDED DIAGNOSTICS PROGRAM REQUIREMENTS AND PERFORMANCE STANDARDS

3.13.1 FREQUENCY OF EMBEDDED DIAGNOSTICS SOFTWARE UPDATES

Currently three versions of Embedded Diagnostics are in development or fielded to support the FMS customers. There is one version to support US Army and one to support USMC, FMS, US Army Customer Vehicle ED Part Number:
#1) Egypt M1A1 1299253
#2) Australia and Iraq M1A1ED, M1A1SA 12992484
#3) Kingdom of Saudi Arabia (KSA) M1A2S P/N TBD
#4) US Army 8750015
#5) USMC XM1E1

In order to provide the optimal benefit to the FMS customers, ED updates shall be in conjunction with US Army ED updates. The contractor shall complete efforts to produce Embedded Diagnostics software program updates in accordance with release cycles. All M1 Abrams Embedded Diagnostics system changes shall incorporate vetted requirements approved by the COR. M1A1 Embedded Diagnostics Executive Program and Source Code Software update release shall be submitted to the COR within seven (7) days after Safety Confirmation is completed (CDRL A014).

3.13.1.1 QUALITY OF EMBEDDED DIAGNOSTICS SOFTWARE

The contractor shall maintain fault monitoring and diagnosing program software capable of detecting and isolating 100% of integrated or appliqu\'e9 Embedded Diagnostics System electrical and electronic components; respective of the vehicle system faults associated with line replacements units (LRU) shop replacements units (SRU). The Embedded Diagnostics System shall achieve 90% GO first pass per contractor software quality assurance (SQA) M1A1 Abrams Embedded Diagnostics verification tests.

3.13.1.2 TESTABILITY AND DIAGNOSTICS

The contractor maintenance of M1A1 Abrams ED program software shall achieve the following requirements. Each shall be demonstrated to the USG COR concurrently, as applicable, during the respective embedded diagnostics sustainment project phases using Windows XP OS and Windows 7 OS, MSD V2, MSD V3 and USMC toughbook:
a. Testability and BIT (built-in-test) concept is defined with the US Army Armor and Ordnance approved operation concept and the maintenance concept for all levels of maintenance.
b. Design analyses (e.g., fault tree, failure modes, effects and criticality) have been used to determine test point requirements and fault ambiguity group sizes as directed by the USG COR.
c. System anomalies and intermittent situations are analyzed for possible changes to the BIT and testability design, thresholds, tolerances and filtering as applicable.
d. BIT, diagnostics indications and false alarms are analyzed for corrective action.
e. Technical literature IETMs are fully integrated and tested (contractor validation and USG verification) for field maintenance operations.
f. Embedded diagnostics software program operation is fully stand alone requiring no contractor or FSR involvement for either installation, uninstall (for development community only), or manipulation.
g. Level of repair and testability analysis is completed for each configuration item for each maintenance level to identify the optimum mix of BIT/diagnostics, semi-automatic test equipment and general-purpose test equipment.
h. Preliminary BIT/testability analysis is completed by preliminary design review. Detailed BIT/testability analysis is completed by critical design review.
i. Effectiveness of BIT/testability is validated with tests.
j. Failure of the BIT/diagnostics circuitry does not precipitate other hardware/software failures.
k. BIT/diagnostics filtering is applied to minimize false alarms.

3.13.1.3 SIDECAR TESTABILITY AND ANALYSIS

The contractor shall conduct test and analysis on sidecars returned to the contractor facility to achieve the following:
a. No evidence of failure analysis to ensure that fully functional sidecars are not being turned as unserviceable.
b. Failure analysis to determine the cause of failure.
c. Reparable analysis to determine if it is economical for the government to repair the sidecars.

3.13.1.4 JOINT M1A1 ABRAMS IETM SUSTAINMENT COMMUNITY
The contractor shall work jointly with the M1A1 Abrams vehicle systems integrator (OEM) in sustainment of M1A1 Abrams ED IETMs required to be integrated with the system level maintenance work packages.

3.13.1.5 LEGACY EMBEDDED DIAGNOSTICS IADS IETM UPDATES
The contractor shall continue M1A1 IETM updates in legacy authoring IADS format. The contractor shall enhance M1A1 ED System IETM update using the technical source data provided by either the M1A1 OEM or USG.

3.13.1.6 EMBEDDED DIAGNOSTICS TWO LEVEL MAINTENANCE TECHNICAL MANUALS
The contractor shall only develop and render M1A1 Abrams IETM maintenance tasks in US Army-approved Two Level Maintenance (TLM) requirements. All Abrams Embedded Diagnostics maintenance procedures shall employ TLM practices that require remove and replace (R/R) procedures at the LRU level for current M1A1 Abrams non-line replaceable module (LRM) component designs and non-self diagnosing LRUs. Updates to ED shall continue to provide the capability and use of US Army LOGSA approved sustainment troubleshooting procedures and SRU R/R maintenance tasks that enable the M1A1 embedded diagnostics system the capability of SRU fault detection and isolation that prescribe the respective LRU R/R maintenances task requirements. The contractor shall suppress all SRU R/R maintenance tasks in M1A1 Abrams Embedded Diagnostics Program Software.

3.13.2 EMERGING ABRAMS VEHICLE HEALTH MANAGEMENT SYSTEM (VHMS) REQUIREMENTS

The contractor shall support emerging PM HBCT Abrams VHMS strategies and program objectives by automating, recording and transmitting of M1A1 Abrams SA real-time assessment vehicle and component health condition as appropriately captured by embedded sensors, test program set measurements, and diagnostics processing to enable condition based maintenance reporting through certified DoD information systems. M1A1 Abrams ED baseline configuration changes to incorporate future VHMS integrations will only be authorized under approved USG engineering change proposals and requisite contract funding prior to contractor execution.

3.13.3 EMBEDDED DIAGNOSTICS SYSTEM TECHNICAL REPORT STUDIES (WHITEPAPER FOR FEASIBILITY STUDY)

The contractor shall generate and deliver technical report studies in the following format:
a. Title Page: Identifies the report by providing the contract number, project name, descriptive title, task number, date of report, security classification, and export control and distribution statement information.

b. Section I Table of Contents, Introduction and Summary: Includes a brief statement of study purpose and results obtained from the analytic effort.

c. Section II Body: Includes a complete and detailed description of the analytic activities, methods, assumptions, facts, and results which led to the conclusions stated in Section I. This section also includes rank and priority recommendations for resolutions or alternate system approaches (as applicable).

d. Section III Reference Artifacts: Includes concept documents, alternative system approaches, trade-off material items or design solutions, technical data, and proposed performance or product specifications.

3.13.3.1 REPORT STUDIES PERFORMANCE MEASUREMENT
Contractor performance is measured by timely submittal and accuracy of analysis data and supporting documentation. The COR will stipulate at request, a date required for contractor delivery of each Whitepaper or Feasibility Study. The contractor shall prepare Feasibility Study documents that conform to the format described in this SOW.

3.13.4 PROBLEM REPORTS AND DATABASE MANAGEMENT

3.13.4.1 FIELD PROBLEM REPORTS

The contractor shall process all submitted field hardware and software problem reports through contractor established databases and procedures, and shall interface and participate in problem resolution task workflows within the US Army PM HBCT Asset Management System (AMS). The Government will provide necessary AMS access, training, and related administrative assistance. Additionally, the contractor shall summarize and enumerate open and closed ED field problem reports as part of COR meetings.

3.13.4.2 MANAGING FIELD PROBLEM REPORTS

The contractor shall propagate all ED System field problem information and document files into AMS data fields. The AMS data fields may be tailored between contractor and USG to best suit the ED System problem report data exchanges. The contractor shall enter field problem priority and category types and other data defined by AMS descriptions and rules. In the AMS, the contractor shall perform data entries to annotate required information, conduct communication exchanges with USG and OEM SMEs, submit problem investigation and root cause analysis results, input completed corrective actions, enter suggestive courses of actions that include cost and schedule impacts, and all that is necessary to status field problem report resolutions. The contractor shall conduct problem investigation and root cause analysis (technical studies report) tasks as requested by COR. Corrective actions requiring hardware or software design changes in form, fit, function, and interface characteristics shall be approved by the COR prior to implementation.

3.13.4.3 FIELD PROBLEM REPORT REVIEW BOARD MEETINGS

The contractor shall participate with the Government in all OEM Quarterly Field Problem Report Review Board Meetings, as approved by the COR.

3.13.4.4 CONTRACTOR SOFTWARE AND HARDWARE PROBLEM REPORT MANAGEMENT

The contractor shall maintain a database of open and closed software problem reports (SPR). The contractor shall provide a report of all open problem reports (CDRL A012) in contractor format to the COR on a quarterly basis, following the start of work.

a. Software Problems: Software problem reports derived from internal or field problem sources shall be prioritized and maintained in a contractor established problem report database identified by Safety, Critical, Routine, and Maintenance. Any corrective action requiring Class l changes in software design, affecting form (language and media), fit (interfaces, interconnects and forces integral grouping), or function (performance requirements) characteristics shall be reviewed at COR meetings for planned engineering change and approval by the customer.

b. Hardware Problems: Hardware problem reports derived from internal contractor sources or registered field problems requiring Class l changes affecting form, fit or function shall be reviewed at COR meetings for planned engineering change and approval by the customer.

3.13.5 PRODUCT QUALITY DEFICIENCY REPORT PROCESSING

3.13.5.1 WARRANTY PRODUCTS

The contractor shall use its established product quality deficiency management system to perform processing, control, investigations,

and provide corrective actions for Product Quality Deficiency Reports (PQDR) to ensure compliance with respective contractual and warranty requirements.

3.13.5.2 OUT OF WARRANTY PRODUCTS

The contractor shall determine and verify M1 ED related deficiency reports from field sources or PQDR reports as warranty or out of warranty items and report to the USG COR through AMS. The contractor shall establish and maintain contact and coordination with respective US Army PQDR points of contact as identified in the report received and communicate the activities being sought out through PM HBCT AMS workflow. The contractor shall obtain COR approval prior to conducting any root cause and corrective action technical study.

3.13.5.3 SUPPORT FOR TRANSITION TO SUSTAINMENT

The contractor shall provide technical support to the Software Support Activity (SSA) (TARDEC) in transitioning a portion of the technical tasks for software sustainment. Support activities shall include:
a. Provide copies of the latest M1A1 ED source executables to the SSA.
b. Respond to questions about the M1A1 ED from the SSA.
c. Provide information that will allow the SSA to duplicate the software sustainment environment used by the contractor. This applies to any modifications, such as macros, scripts, and add-ons to the contractors software sustainment environment, including to Microsoft Visual Studio 2008 Professional; Microsoft Visual Studio .NET 2003; National Instruments LabWindows CVI 2009; and AutoIT V3.

3.13.5.4 ADDITIONAL EMBEDDED DIAGNOSTICS TECHNICAL DELIVERABLES

The contractors shall deliver and maintain the items below CDRL A014. Technical documentation is categorized as an UPDATE to previously USG funded Embedded Diagnostics Program documentation and data or NEW document generation and data. Other data items generated by the contractor under USG contract but not listed below are to be maintained under contractor control until COR provides disposition instructions.

a. (UPDATE) Contractor Quality Plan Frequency and Date: Initial at contract Start of Work Meeting; updates at contractor process or procedure changes.
b. (NEW) ED Project Management Plan: Initial at SOW meeting; updates at contractor process and procedure updates.
c. (UPDATE) System Requirements Document (SRD) for M1A1 Abrams Embedded diagnostics Variants. Includes: indices, annexes, and compliance verification matrices: Draft at SOW meeting; release at 30 days after USG validation tests.
d. (UPDATE) Plain Language Description (PLD)/Software Version Description (SVD) Frequency and Date: at Data Set 1 submission to APG.
e. (NEW) ED test procedures and records: USG Validation Summary Report (USVSR): 10 working days after USG Validation/Verification completed.
g.(UPDATE) Safety Assessment Report (SAR) for Embedded Diagnostics Hardware and Software Component/System Implementations or Updates Frequency and Date: Per the schedule to support the APG Safety Release activities.
h.(UPDATE) Embedded Diagnostics Software Installation/Uninstall Procedures (system restore capability for development community only) and Operational Verification Procedure. Installation requirement applies to programming updates of Full Diagnostics into TMDE MSD, health check into Diagnostics Processors, and Fact Based Maintenance Function into Sidecar. Frequency and Date: Per the schedule to support the APG Safety Release activities.
i.(UPDATE) M1A1 Abrams Embedded Diagnostics Training Support Package (All Variants) Frequency and Date: One delivery before: date will be decided at SOW Final: date will be decided at SOW.
j.(UPDATE) Technical Data Packages. M1A1 Abrams Embedded Diagnostics System (all related ED parts, components, assemblies, and computer software applications integrated), DRS hull integration kit component for the EMU, DRS portion for the ED support kit, Sidecar Fact Based Maintenance Function (FBMF) Integration Items, and M1A1 Abrams ED System Integration Laboratory (SIL). Frequency and Date: As Required for ECP, and for Gov Requests.
k. (UPDATE) ED System Software Specific Data Items delivered with each ED Release: Software Installation Drawing, Source Control Drawing for Embedded Diagnostics Executive Software and Sidecar FMBF.
l.(UPDATE) SIL Technical Documentation and Software in Support of SIL Development, Design, Test, Integration and Acceptance Frequency and Date: As Required for ECP, and for Gov Requests.

3.13.5.5 INTERACTIVE ELECTRONIC TECHNICAL MANUALS (IETM SUSTAINMENT)

3.13.5.5.1 JOINT M1A1 ABRAMS IETM SUSTAINMENT COMMUNITY

The contractor shall work jointly with the M1A1 Abrams vehicle systems integrator (OEM) in sustainment of M1A1 Abrams ED IETMs required to be integrated with the system level maintenance work packages.
3.13.5.5.2 LEGACY EMBEDDED DIAGNOSTICS IADS IETM UPDATES

The contractor shall continue M1A1 ED IETM updates in legacy authoring IADS format. The contractor shall enhance M1A1 ED System IETM update using the technical source data provided by either the M1A1 OEM or USG.
3.13.5.5.3 EMBEDDED DIAGNOSTICS TWO-LEVEL MAINTENANCE TECHNICAL MANUALS

The contractor shall develop and render M1A1 Abrams IETM maintenance tasks in US Army-approved Two Level Maintenance (TLM) requirements. All Abrams Embedded Diagnostics maintenance procedures shall employ TLM practices that require remove and replace (R/R) procedures at the LRU level for current M1A1 Abrams non-line replaceable module (LRM) component designs and non-self diagnosing LRUs. Updates to ED shall continue to provide the capability and use of US Army LOGSA approved sustainment troubleshooting procedures and SRU R/R maintenance tasks that enable the M1A1 embedded diagnostics system the capability of SRU fault detection and isolation that prescribe the respective LRU R/R maintenances task requirements. Nonetheless, the contractor shall ensure the field maintainers cannot access all SRU R/R maintenance tasks in M1A1 Abrams Embedded Diagnostics Program Software.

3 ACRONYMS
AMS Asset Management System
AOPN Army Ordinance Part Number
CAD Computer Aided Design
CAP Combined Application Platform
CM Configuration Management
CM/ED Chassis Modernization/Embedded Diagnostics
COR Contracting Officer Representative
CSAR Configuration Status Accounting Information Report
CSPR Cost Performance and Status Report
DSESTS Direct Support Electrical System Test Set
ECP Engineering Change Proposal
ED Embedded Diagnostics
ERR Engineering Release Record
FBMF Fact Based Maintenance Function
FMS Foreign Military Sales
FoV Family of Vehicles
FSR Field Service Representative
IETM Interactive Electrical Technical Manuals
ILS Integrated Logistics Support
IPR In-Progress Review
JTR Joint Travel Regulations
MEARS Multi-Engineering Change Proposal and Review System
MEL Maintenance Expenditure Limit
NOA Notice of Availability
NOR Notice of Revision
P/N Part Number
PCO Procuring Contracting Officer
PDF Portable Document Format
PDS Packaging Data Sheet
PLD Plain Language Description
PM ABCT Program Management Armor Brigade Combat Team
PMR Program Management Review
PMS Program Master Schedule
PQDR Product Quality Deficiency Report
QASP Quality Assurance Surveillance Plan
RFD Request for Deviation
RIAS Receipts, Inventory, Adjustments, and Shipments
ROM Rough Order of Magnitude
SCN Specification Change Document
SIL System Integration Lab
SL/V Software Loader/Verifier
SOW Scope of Work
SPI Special Packaging Instruction
TPS Test Program Set
USMC United States Marine Corp
USG United States Government
WBS Work Breakdown Structure
WD Work Directive

ENCLOSURE 1
Security, Export Control and Data Rights Legends and Markings
All data shall be marked according to the requirements listed below.

EXPORT CONTROL:

Applies to all program and technical data (CAGES 19200/19207)
WARNING: THIS DOCUMENT CONTAINS TECHNICAL DATA WHOSE EXPORT IS RESTRICTED BY THE ARMS EXPORT CONTROL ACT (TITLE 22, U.S.C., SEC 2751,ET SEQ). OR THE EXPORT ADMINISTRATION ACT OF 1979, AS AMENDED, TITLE 50, U.S.C., APP. 2401 ET SEQ.VIOLATIONS OF THESE EXPORT LAWS ARE SUBJECT TO SEVERE CRIMINAL PENALTIES, DISSEMINATE IN ACCORDANCE WITH PROVISIONS OF DOD DIRECTIVE 5230.25.

TECHNICAL DISTRIBUTION STATEMENTS:
IAW DEPARTMENT OF DEFENSE DIRECTIVE NUMBER 5230.24, MAR 18, 1987
Applies to CAGE 19207 SIL Electrical and Mechanical Drawings and associated program and technical documentation and data DISTRIBUTION STATEMENT D. DISTRIBUTION AUTHORIZED TO THE DEPARTMENT OF DEFENSE AND U.S. DOD CONTRACTORS ONLY; ADMINISTRATIVE OR OPERATIONAL USE; 28 JUL 08. OTHER REQUESTS SHALL BE REFERRED TO THE U.S. ARMY TANK-AUTOMOTIVE AND ARMAMENTS COMMAND, ABRAMS PROGRAM MANAGER, ATTN: SFAE-GCS-HBCT-AB, WARREN, MI 48397-5000. Applies to CAGE 19207 SIL software technical documentation and data DISTRIBUTION STATEMENT D. DISTRIBUTION AUTHORIZED TO THE DEPARTMENT OF DEFENSE AND U.S. DOD CONTRACTORS ONLY; SOFTWARE DOCUMENTATION; 28 JUL 08. OTHER REQUESTS SHALL BE REFERRED TO THE U.S. ARMY TANK-AUTOMOTIVE AND ARMAMENTS COMMAND, ABRAMS PROGRAM MANAGER, ATTN: SFAE-GCSHBCT- AB, WARREN, MI 48397-5000 Applies to CAGE 19200 ED technical documentation and data (hardware and software)
DISTRIBTION STATEMENT D. DISTRIBUTION AUTHORIZED TO THE DEPARTMENT OF DEFENSE AND U.S. DOD CONTRACTORS ONLY; ADMINISTRATIVE OR OPERATIONAL USE; 14 APR 09. OTHER REQUESTS SHALL BE REFERRED TO THE U.S. ARMY ARDEC, PICATINNY, NJ, 07806-5000 ATTN: RDARWSF-D. DATA RIGHTS AND RESTRICTIONS: UNLIMETED, UNLESS ASSERTED AND ACCEPTED BY USG INTELLECTUAL PROPERTY COPYRIGHTS AND PATENTS: NONE ALLOWED
DATA RIGHTS AND RESTRICTIONS: Unlimited, unless asserted and accepted by USG.
INTELLECTUAL PROPERTY COPYRIGHTS AND PATENTS: None allowed

USMC M1A1 Direct Support Electrical Systems Test Set (DSESTS)
Performance Work Statement for CLINs 7000BA and 7000BB

4. Introduction:

The USMC currently possesses 31 sets of M1A1 Direct Support Electrical Systems Test Set (DSESTS) plus Spare General Purpose Interface Assemblies (GPIAs) and Cable Cases of M1A1 Support equipment fielded at various USMC locations. DRS-TEM is the contractor for the development, manufacturing, and sustainment of the DSESTS support group equipment, which is used to troubleshoot various M1A1 Line Replaceable Units (LRUs) and Service Replaceable Units (SRUs) and to reprogram the Computer Electronic Unit (CEU) and the Digital Electronic Controller Unit (DCEU) J7. The Global War on Terrorism (GWOT) and Operation Iraq Freedom has posed additional wear and tear on the USMCs DSESTS support group equipment as a result of USMC PM Tank maintaining combat readiness. This funded SOW will sustain operating forces and continue to allow forward deployed units the ability to maintain the M1A1 Tank in mission ready status. A USMC PM Tank M1A1 Contractor Logistical Support (CLS) contract with DRS-TEM will contribute to the USMCs M1A1 vehicle fleet being maintained at the highest readiness level possible.

5. Scope

DRS-TEM shall provide facilities, personnel, material, training, analysis, technical engineering support, supply support, and resources to provide contractor logistical support to all USMC users of M1A1 DSESTS equipment. DRS-TEM shall keep the test equipment mission capable while maintaining the configuration of the Stock List-3 (SL-3) and documenting any discrepancies.

6. Applicable Document/References:

The contractor shall submit a performance cost report and a Contractor Logistics Report (CLS) on a monthly basis in contractor format. The contractor shall also submit trip reports after a site visit.

7. Requirements/Performance Standards:

7.1 On Site Limited Technical Inspection (LTI)

7.1.1 Requirement: The contractor shall establish a nine month inspection cycle in which they shall visit the listed USMC facilities and perform limited technical inspections and certification in order to identify operational status and repair requirements. This schedule will be approved by USMC PM Tank and using units 60 days prior to scheduled visits. Appendix A outlines asset locations and the tentative LTI schedule.

In accordance with the nine month certification cycle specified by the contractor, certification of the GPIA will be performed by the contractor in accordance with USMC TI-4733-15/1X. The contractor must be certified ISO 9000, ANSI 2540, or NAVLAP in order to perform and charge the USMC for this service. The contractor shall provide certifications to the Government (MARCORSYSCOM) via formal corporate letterhead correspondence to substantiate such certification. In order for the contractor to perform the specified certification, the contractor is authorized to procure a FLUKE multi-meter.

7.1.2 Performance Standard: Contractor shall establish a nine month inspection cycle in which they shall visit the USMC M1A1 DSESTS sites. Sixty days prior to scheduled visit, field service representative(s) (FSR(s)) shall deliver a schedule of visits to the PM Tanks

Tools & Test Project Officer using units. All conflicts and issues with scheduling visits will be resolved in a timely and expeditious manner.

7.1.3 Acceptable Quality Level: Ensure fleet readiness and missions are not impacted by unserviceable M1A1 DSESTS.

7.2 Software Updates

7.2.1 Requirement: The contractor shall incorporate all applicable updates required to the M1A1 DSESTS to maintain compatibility between the CSFM DSESTS and the current USMC M1A1 configuration. Software updates shall utilize current U.S. Army DSPS levels as baseline, which may or may not contain unique USMC applicable software updates. USMC PM Tank and PCO shall be notified of any software discrepancies as these will be handled on a case by case basis. These tasks are to be performed in conjunction with the LTI schedule.
The contractor shall provide technical engineering support in an effort to determine and cost impacts as a result of compatibility issues that may arise due to the USMC and US Army maintaining different DSESTS configurations.

7.2.2 Performance Standard: The contractor shall notify PM Tanks of any software compatibility issues between the USMC M1A1 DSESTS and the Army CSFM DSESTS configurations and suggest potential solutions.

7.2.3 Acceptable Quality Level: Shall meet approval by PM Tanks DSESTS Manager by the contractor providing any software discrepancies and potential solutions to PM Tanks DSESTS Manager.

7.3 Component Repairs

7.3.1 Requirement: DRS TEM may use obsolete components where applicable to repair and maintain required DSESTS assets for exchange and fielding to units. In addition, DRS TEM may make a written request for material and/or service purchases to support the repair of the units DSESTS equipment and GFE assets. Approval for such purchases requires written authorization from the COR.

7.3.2 Performance Standard: The contractor shall maintain traceability of all of the USMCs returned components. The contractor shall also complete an initial evaluation to identify operational status and repair requirements.

7.3.3 Acceptable Quality Level: The contractor shall ensure fleet readiness and missions are not impacted by unserviceable M1A1 DSESTS.

7.4 CONUS and OCONUS SUPPORT

7.4.1 Requirement: The contractor shall provide technical support to the CONUS USMC M1A1 CSFM DSESTS user community throughout the year. The technical support shall consist of telephone and email communications between the USMC users and the contractor point of contact in order to resolve technical problems that may arise by the users. The contractor shall provide to USMC support a toll free telephone number and email address to be used during specified hours of operation provided by the contractor. The contractor shall travel to the USMC user location in the event the technical issues cannot be resolved by other means.

The contractor is not required to provide on-site CLS support to OCONUS locations under this SOW. The contractor is authorized to ship DSESTS equipment required to support OCONUS locations through PM Tank at Quantico for forwarding to the end user.

7.4.2 Performance Standard: FSR (s) shall provide technical support to US Marines, depots, and other locations that are equipped with M1A1 Direct Support Electrical System Test Sets. All issues shall be resolved in a timely and expeditious manner.

7.4.3 Acceptable Quality Level: The contractor shall ensure fleet readiness and missions are not impacted by unserviceable M1A1 DSESTS.

7.5 User Training

7.5.1 Requirement: The contractor personnel shall conduct in depth DSESTS training sessions for Marines, and civilians, specifically USMC M1A1 DSESTS operators during each facility visit. In depth training shall provide knowledge on the USMC M1A1 DSESTS equipment, all diagnostic informational tools, and updates on new and existing Test Program Sets (TPSs) and any changes to the Automated Test Equipment. The contractor shall make all efforts available to coordinate with each unit to ensure the necessary training materials are available prior to arrival and maximum participation of the using units is accomplished. Training shall consist of a minimum of one day instruction with a maximum of 3-5 students per set in 2 each 4 hour sessions with a maximum of 10 students per visit per unit. Training shall consist of theory of operation and hands-on operation.

7.5.2 Performance Standard: trainees shall achieve a level of understanding required to perform their mission as USMC M1A1 DSESTS operators and maintainers. The standard shall be measured via an end of the course student survey (See attached customer survey)
At each training course, the contractor shall provide each unit with 1 training CD per student that is compatible with any standard computer, as well as any other training materials that may be needed for the units to conduct follow on training. The training CDs shall be standard Army base Computer Based Training CDs with no specific USMC applications.

7.5.3 Acceptable Quality Level: No more that 2 negative surveys submitted at the completion of each training event. If more than 2 are received, the contractor shall take action to make the appropriate fixes as needed such that the problem is not repeated in subsequent

training. Action shall be coordinated with COR.

7.6 The contractor shall provide support for DSESTS Shelter System (DSS). The contractor shall provide the same level of support for DSS as outlined in appendix A and Para 4.1 for DSESTS (W52H09-06-G-0001 Delivery Order BR08) in regards to onsite visits, inspection, reporting and other technical support outlined. The contractor shall provide repair support on as required basis and allocate funding to requisition, ship and coordination of long lead repair parts and components necessary to return the DSS assembly to a mission ready status.

7.7 Deliverables:

7.8 Requirement: The contractor shall submit a Monthly Equipment Status Reports on the status and location of all USMC M1A1 CSFM DSESTS in accordance with CDRL A019, Attachment 0002. The contractor shall also submit a Performance Cost Report detailing the budget, current period hours consumed, cumulative actual, material dollars consumed, and associated funds spent in accordance with Attachment 0002, CDRL A001.

The contractor shall submit Trip Reports identifying the condition of USMC M1A1 CSFM DSESTS upon arrival at a USMC facility, repairs performed and final condition upon departure. These reports shall be turned in within 60 days of completion of site visit. These reports shall also include any recommendations regarding improvements necessary to maintain the USMC readiness level in accordance with Attachment 0002,
CDRL A002.

7.9 Performance Standard: The contractor shall submit Monthly Equipment Status reports and Performance Cost reports to the COR and PM Tanks DSESTS Manager by the 10th of each month. The contractor shall also submit Trip Reports to the DSESTS manager within 60 days of completion of site visit.

7.10 Acceptable Quality: Shall meet approval by Product Manager (PdM) Tanks DSESTS Manager.

7.11 Schedule:

The contractor shall review Appendix A in conjunction with the COR and develop specific dates for onsite visits. This shall be accomplished within 60 days of contract award. If a schedule change is in the best interest of the unit visited and in the availability of contractor personnel to execute the statement of work, the schedule will be changed.

7.12 Required Travel: See Appendix A

7.13 GFP/E/M/I:

7.14 Requirement: The contractor shall maintain at their facility three fully functional and SL-3 complete DSESTS, provided by USMC in accordance with the SL3-09375A, excluding the Mobile Expansible Container Configuration (MEEC). Two sets will be utilized for operation readiness spares for the MEFI (west coast)/ MEFII (east coast) assets. The other set will be utilized as a Queen to facilitate repairs of DSESTS unserviceable and TPS validations in the event a SLV component of the DSESTS is in need of higher echelon maintenance that cannot be performed at the using unit. This will allow the contractor to exchange the SLV deficiency with minimal equipment downtime to the using units. When authorized by PM Tank, all replacement SLV components provided by the contractor to the using unit shall be delivered within seven to ten business days CONUS only. The contractor is not responsible for retrograde to the unserviceable SLV component from the using unit. PM Tank will publish guidelines from the using units to define retrograde of the unserviceable/obsolete SL-V components and exchange procedures. The contractor is not responsible for completeness of the unserviceable SLV component received from the using unit. Discrepancies relating to incomplete SLV components are shipping instructions from using units which shall be reported to and resolved by PM Tank. The contractor is authorized to maintain additional obsolete equipment at its facility at the written direction of COR.

DRS-TEM shall maintain spare USMC Power Supplies NSN 6130-01-475-9999 (Smiths Industries/Aerospace Avionics) or NSN 6130-01-531-9927 (XANTRAX) and fielded models of Panasonic Tough Book laptop computers. These will be used for exchange with unserviceable equipment at the using units. The contractor shall not be responsible for the warranty or repair of any of these power supplies, laptop computers, or their associated cables.

PM Tank is to provide three field service representatives (FSRs) with CAC ID cards to facilitate on-site support for the USMC end users. PM Tank will also provide DRS-TEM with a @usmc.mil email address to facilitate global support to the USMC DSESTS end users that will be retrieved by both PM Tank and DRS-TEMs FSRs.

DRS-TEM has the approval of PM Tank to transfer all GFE/GFM currently being managed by DRS-TEM under W52H09-06-G-0001-Order BR08 and W56HZV-12-C-0347 to the new contract.

7.15 Performance Standard: Equipment shall be maintained via the use of existing technical manuals, shop tools, Government furnished equipment, and parts as needed to maintain the components. Contractor shall identify all components that need repair and identify those components and/or parts necessary to bring the component back to a condition code B meaning that it is 100% operational but not

cosmetically perfect.

7.16 Acceptable Quality Level: Shall meet approval by PM Tanks DSESTS Manager by providing status of components and by identifying what is needed to repair the components.

7.17 Contractor Manpower Reporting (CMR):
The Office of the Assistant Secretary of the Army (Manpower and Reserve Affairs) operates and maintains a secure Army data collection site where the contractor shall report ALL contractor manpower (including subcontractor manpower) required for performance of this contract. The contractor is required to completely fill in all the information in the format using the following web address: *HYPERLINK"https://contractormanpower.army.pentagon.mil"https://contractormanpower.army.pentagon.mil. The required information includes:

(1)Contracting office, Contracting Officer, Contracting Officers Technical Representative;
(2)Contract number, including task and delivery order number;
(3)Beginning and ending dates covered by the reporting period;
(4)Contractor names, address, phone number, e-mail address, and identity of contractors employee entering data;
(5)Estimated direct labor hours (including sub-contractor hours);
(6)Estimated direct labor dollars paid this reporting period (including sub- contractor dollars;
(7)Total payments (including sub-contractors);
(8)Predominant Federal Service Code (FSC) reflecting services provided by contractor (and separate predominant FSC for each subcontractor if using a different FSC);
(9)Estimated data collection cost;
(10)Organizational title associated with the Unit Identification Code (UIC) for the Army Requiring Activity (the Army Requiring Activity must provide the contractor with its UIC for the purposes of reporting this information);
(11)Locations where contractor and sub-contractors perform the work (specified by zip code in the United States and nearest city, country, when in an overseas location, using standardized nomenclature provided on website);
(12)Presence of deployment or contingency contract language; and
(13)Number of contractor and sub-contractor employees deployed in theater this reporting period (by country).

As part of this submission, the contractor shall also provide the estimated total cost, if any, incurred to comply with this reporting requirement. Reporting period will be the period of performance not to exceed 12 months ending 30 September of each government fiscal year and must be reported by 31 October of each calendar year. Contractors may use a direct XML data transfer to the database server or fill in the fields on the web site. XML direct transfer is a format for transferring files from a contractors system to the secure web site without the need for separate data entries for each required data element. The specific formats for the XML direct transfer may be downloaded from the web site.

7.18 Period of Performance (POP):
The POP for this effort shall be a minimum twenty-four months.

*** END OF NARRATIVE C0001 ***