

**STATEMENT OF OBJECTIVES**

**FOR**

**Maintenance Support Device – Version 2 (MSD-V2) System**

**VERSION 1.0**

**18 February 2004**

**Prepared for:**

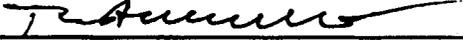
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**SUBMITTED BY:**  **DATE:** *18 Feb 04*

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## **1.0 Overall Objectives**

**1.1 Background** The Army's Integrated Family of Test Equipment (IFTE) is a Department of Defense standard for automatic test system. This Statement of Objectives (SOO) is for the at-platform member of the IFTE, which is named MSD-V2 system. It will be the fourth tester procured to meet the at-platform test requirement. The first generation was called the Contact Test Set (CTS). The next generation was called the Soldier's Portable On-System Repair Tool (SPORT). The third generation was called the Maintenance Support Device (MSD). The MSD-V2 system, like the CTS/SPORT/MSD, will be a man-portable, knowledge based test system used at all levels of maintenance as an augmentation to weapon systems' Built-In-Test/Built-In-Test-Equipment in the identification of failed Line Replaceable Units. The MSD-V2 system will interface with existing bus systems, perform as a delivery device for interactive electronic technical manuals and perform as a software loader/verifier. It will be operated in the same environment as its predecessors.

**1.2 Scope** The Offeror shall address in the Statement of Work the production, test, delivery, and maintenance of the MSD-V2 system. As an independent contractor, and not as an agent of the Government, the Offeror shall furnish all services, hardware, materials, facilities, and equipment required to accomplish the MSD-V2 program to include all technical, planning, management and manufacturing efforts.

## **2.0 Objectives**

### **2.1 Program Management Objectives**

Contractor program management system based on the integrated master plan and schedule supporting the delivery of accurate and timely schedule and performance information throughout the period of the contract.

Contractor lead, bi-monthly In-Process Reviews to facilitate a common understanding and agreement with the Government on MSD-V2 system requirements, and actions and schedules required to meet those requirements.

Contractor comprehensive configuration management system.

### **2.2 Engineering Objectives**

Contractor design to meet requirements of the MSD-V2 Kit and its accessories described in this Request for Proposal.

Contractor engineering services necessary to resolve problems arising from fielding, integration, operation, and maintenance of MSD-V2 system, and potential technology insertion.

Contractor failure reporting, analysis and corrective action reporting for all MSD-V2 system failures. The report shall be submitted to the Government within 15 working days after notice of an equipment malfunction or individual failure.

Contractor obtaining sufficient rights on software (except the operating system) to facilitate the development and testing of third party's applications to be used on the MSD-V2 system.

### **2.3 Production Objectives**

Contractor production capability to allow for the delivery of minimum 300 and maximum 900 each quantity of MSD V-2 Kits and accessories per month.

### **2.4 Logistics Objectives**

Contractor warranty program suitable to support end users of the MSD-V2 Kit and accessories for the operational life of the system. The warranty shall provide for technical and maintenance assistance through telephone, e-mail, and website and timely repair or replacement of hardware/software affected by defects in materiel and workmanship. (See Statement of Objectives, Attachment 1 Special Contract Requirements.)

### **2.5 Packaging**

Preservation, packing, and marking for shipment shall be in accordance with Section D of the solicitation document.

### **2.6 Special Contract Requirements**

See Statement of Objectives, Attachment 001 Special Contract Requirements.

**Statement of Objectives  
Attachment 001  
Special Contract Requirements**

**1 . Shipment of Production Items**

A. The Government will provide the shipping instructions to the Offeror with the specific quantities and accessories. Upon receipt of the shipping instructions, the Offeror shall perform necessary actions to ensure the proper operation of the Maintenance Support Device (MSD-V2) and associated accessories at no additional cost. The Government will pay the shipping costs associated with the delivery of the MSD-V2 systems to the final destinations.

B. Final destination of production units may not be known at the time of placement of orders on this contract. In those cases, production units shall be shipped in place and will remain in Government-bonded storage at the Offeror's facility at no additional cost until the Contracting Officer directs shipment to the gaining units/final destination. The Offeror shall place the MSD-V2 Kit transit case identification plate on the transit case during preparation for shipment to final destination per the Contracting Officer's shipping direction. The process of placing the label shall be at no additional cost.

C. Optional accessories listed in paragraphs 3.2.1.2.2 and 3.2.1.2.3 of the MSD-V2 System Performance Specification shall be over packed with the MSD-V2 Kit.

**2. Technical Direction Orders (TDOs) (Applicable to Engineering Service CLIN 0025 and 0026)**

A. Technical direction to perform effort under paragraph 2.2 of the MSD-V2 System Statement of Objectives (SOO) shall be given by means of TDOs issued with a delivery order. Each TDO shall establish the effort to be expended for its performance and the funds available which shall not be exceeded. The TDO shall specify tasks to be accomplished, estimated number of man-hours, performance milestones, funds available to accomplish task, as well as provide other direction that may be required to successfully achieve the objectives of the contract within the parameters established by the SOO.

B. A TDO shall not, in any event, alter or modify the scope or terms of the contract. It is expressly agreed that there shall be no increase in the estimated cost or time for performance of the contract as a result of an alteration or change to the contract that is derived from the language of a TDO.

C. A TDO will be signed and issued by the Contracting Officer and transmitted to the Offeror. The Offeror shall, within three (3) working days after receipt of the TDO, sign the TDO to indicate receipt of the TDO and return the signed TDO to the Contracting Officer. The names of Offeror personnel authorized to sign TDOs shall be furnished to the Contracting Officer.

D. A TDO may be modified, cancelled, or superseded anytime by issuance of a new TDO.

E. The TDO shall identify the applicable CLIN/SubCLIN (SLIN) under which the effort is to be performed for purposes of identifying the estimated cost of the individual effort. In no event shall the total number of labor hours and estimated cost issued under a series of TDOs exceed those labor hours and estimated costs set forth in the schedules, of the orders, for indefinite quantity engineering/technical services CLIN 0025 or CLIN 0026. The Offeror is to bill and shall be paid only for the actual man-hours expended for each effort, and not the total estimated man-hours set forth in the TDO.

### **3. Performance and Obsolescence**

Performance increases or parts change resulting from replacement of components due to obsolescence shall not result in any hardware or software price increase. New components shall be backward compatible to replaced, obsolete components. When changes are required due to obsolescence of any items on this contract, the Offeror shall submit Engineering Change Proposals (ECPs) in accordance with (IAW) DI-CMAN-80639C, Notice Of Revisions (NORs) IAW DI-CMAN-80642C, Request For Deviations (RFDs) IAW DI-CMAN-80640C, and/or Specification Change Notices (SCNs) IAW DI-CMAN-80643C to the Government for approvals, and also be responsible for implementations of the changes at no additional cost.

### **4. Expansion for Additional Capabilities**

A. The MSD-V2 and its accessories shall be expandable with existing technology. The expansion shall allow for new requirements to interface with the MSD-V2 system.

B. The MSD-V2 and its accessories shall allow for new technology insertion. Technology insertion is the modification, enhancement, or addition of products and services as such technology becomes available in the marketplace that will add value to products and services purchased under this contract. The Offeror shall submit an ECP IAW DI-CMAN-80639C, a NOR IAW DI-CMAN-80642C, a RFD IAW DI-CMAN-80640C, and/or a SCN IAW DI-CMAN-80643C to the Government for the modification, enhancement, or addition of products/capabilities when the change(s) results in a change to the MSD-V2 System Performance Specification numbered MIS-PRF-55010. The Government will acquire engineering services, to include the integration/interface of technology enhancements to the MSD-V2 system, as needed.

### **5. Serialization**

Plates or labels shall include serial numbers when required by the technical data or as specified elsewhere in this contract. When required, serial numbers shall start with "...00001" and continue consecutively for any single type of item procured by the same manufacturer on a particular contract number. Items produced after a change in configuration (i.e., ECP), or at the direction of the Government, shall be identified by the next number in the first digit of the serial number and continuing with the last number of the previous configuration, i.e., 00101, 10102, 20103, etc.

## **6. Duplication of Bootable Disk**

The Government will be authorized to duplicate bootable DVD/CD to be loaded on the MSD-V2 and installation instructions procured under this contract at no additional cost, even after the contract has expired.

## **7. Standalone Software and Documents**

The Offeror shall furnish one copy of each software/driver (as a standalone) that will be loaded on the MSD-V2 hard disk drive, IAW DI-MCCR-80700, Computer Software Product End Items. Ten copies of the manufactures' documents (operating instructions/specification) for each shall be provided IAW DI-TMSS-80527A, COTS Manual and Associated Supplemental Data.

## **8. User Manual**

The Offeror shall furnish two copies of the MSD-V2 Kit user manuals IAW DI-IPSC-81446, Computer Operation Manual (COM). The manual shall also contain a maintenance section which includes the field level maintenance and preventive maintenance, checks, and services. If the manual is impacted due to changes to hardware or software, two copies of the new manual shall be furnished.

## **9. Calibration**

The Offeror shall identify any items that require calibration, except for the Internal Combustion Engine (ICE) Interconnecting Box. The Offeror shall provide complete calibration procedures IAW DI-MISC-80652, Technical Information Report, and calibration software IAW DI-MCCR-80700, Computer Software Product End Items, with the exception of calibration standards, for each item identified as requiring calibration no later than 60 days after the Governmental approval of the First Article Test Report. Calibration procedures and software shall be targeted to existing Army calibration sets (i.e. Calibration Set 2000).

## **10. Software**

A. The Offeror shall obtain sufficient rights on software, except the operating system, such that the Government can duplicate at no additional cost. Any software, except the operating system, may be loaded on different computers by a third party to develop and test application to be used on the MSD-V2 system.

B. The registration of Windows<sup>®</sup> XP Professional operating system with Microsoft Corporation shall not be required.

C. The Offeror shall provide software required for hardware defined in sections 3.2.1.2 of the MSD-V2 System Performance Specification such that any third party developing application software shall not need assistance or information from the Offeror for any software development.

## **11. Quality System**

A. The Offeror shall establish and maintain a quality approach to satisfy contract or order requirements at no additional cost. The Offeror's quality approach shall be responsible for assuring and monitoring that all manufacturing operations and processes are accomplished under controlled conditions. Controlled conditions include documented work instructions (including workmanship), production equipment, special work environments, inspections and tests, work specifications, and approval or rejection criteria. The quality approach shall assure that all inspections and tests required to satisfy contract or order requirements are conducted.

B. The Offeror shall maintain and utilize all records required for effective operation of the quality approach at no additional cost. The quality approach shall ensure that these records are complete (including subcontractor records) and reliable through the end of all warranty periods, and make them available for Government review upon request.

C. The Offeror shall provide and maintain gages (including production tooling used for inspection purposes) and other measuring and testing equipment to assure that products conform to contract requirements at no additional cost. These devices shall be calibrated against certified measurement standards which are traceable back to national/international standards.

## **12. Acceptance**

A. The Offeror shall develop a plan and implement a product acceptance system that verifies all performance requirements and demonstrates compliance to all contractual requirements. The initial product acceptance system shall be validated and approved by formal notification from the Procuring Contracting Officer (PCO) prior to first article production at no additional cost. The PCO shall be notified of any changes subsequent to initial Government approval. All validations shall be conducted using a mutually agreeable validation concept. Revalidation of changes may be required.

B. Inspection and Government acceptance of all items produced under this contract shall be IAW the Government approved product acceptance system at no additional cost.

C. Only units manufactured using the same design or design as changed by Government-approved ECP, materials, procedures, processes, vendors and manufactured at the same location as the First Article units shall be presented for acceptance, unless prior approval is obtained from the PCO.

## **13. First Article Test**

A. The Offeror shall develop test plans and procedures for the First Article Test (FAT) Process. The Offeror shall prepare a FAT Plan (FATP) IAW DI-QCIC-81110, detailing the specific test requirements, precise test steps, test procedures, test equipment, test equipment/unit under test interface and test records to be used in documenting test data. Each test requirement shall be referenced to the contractual requirement. The FAT shall not commence prior to Government review and approval of the Offeror's FATP.

B. The PCO shall be notified in writing a minimum of 30 calendar days prior to commencing FAT, and shall be afforded the opportunity to witness FAT, or portions thereof, at the Government's discretion.

C. In the event of first article failure, the Offeror shall notify the PCO and shall prepare an Interim Test Report IAW DI-NDTI-80809B. The Government, at its option, may require a repeat of FAT to verify corrective action. Any such additional first article testing shall be performed by the Offeror at no additional cost.

D. Upon completion of FAT, the Offeror shall prepare a FAT Report (FATR) IAW DI-NDTI-80809B. The Offeror shall not proceed with production of additional hardware prior to Government approval of the FATR. Commercial product verification/testing and data generated by that testing may be proposed in lieu of any of the requirements of this contract. If approved by the Government, the proposed verification documentation may be substituted for the required verification/testing.

E. The general requirement for workmanship, cleaning and fabrication of electrical and electronic assemblies shall be IAW IPC/EIA J-STD-001C, Class 2, "Requirements for Soldered Electrical and Electronic Assemblies," cleanliness designator 22, or equivalent.

#### **14. Refurbishment of First Article Test Assets**

Upon receiving approval of the FATR, the Offeror shall refurbish all FAT assets into production quality assets at no additional cost.

#### **15. Data Record Keeping**

The Offeror shall maintain an accurate, current list of serial numbers for all items delivered on this contract at no additional cost. Dates of manufacture, warranty dates, shipping, substitutions, shop changes, etc. shall be included in this list and furnished to the Government upon request. The list shall be available for on-site inspection by the PCO or his representative at any time during the life of the contract. The Offeror shall also provide the MSD-V2 system inventory sold off to the Government minus those already directed shipping by PCO.

#### **16. Assistance with Documentations**

The Offeror shall assist the Government as necessary by providing guidance and information necessary to complete a request for an official military designator, official nomenclature, and provisioning technical documentations/drawings at no additional cost.

#### **17. Warranty**

A. The Offeror shall provide a 5-year warranty on the MSD-V2 Kit. The ICE Test Adapter Kit shall have a 1-year warranty. Other optional accessories shall be warranted by the Offeror in accordance with the manufacturer's standard warranty (warranty duration may vary) with a minimum of one year and not to exceed five years. The warranty start date for all items procured

under this contract shall be the day that the MSD-V2 Kit identification plate is placed on the MSD-V2 Kit transit case either with or without the ICE Test Adapter Kit.

B. Material shall be warranted to be free from systemic or latent defects and defects in material and workmanship, and in conformance to all contract requirements. Systemic defect coverage shall be provided for any design flaws. When a systemic defect is discovered, the Offeror shall recall all units affected and repair them at no cost to the Government. This coverage shall be invoked when the Government notifies the Offeror that a systemic defect exists including the basis for such a determination. In the event that systemic defect coverage is invoked, the Offeror shall prepare a corrective action plan. Upon Government approval of the plan, the Offeror shall take the designated corrective action and shall be liable for the cost thereof including the cost of preparing the plan. The corrective action shall provide for the repair, replacement, or retrofit of the warranted items on an inventory-wide or total asset basis. This remedy shall include redesign if redesign is required to meet the requirements of this warranty. The Offeror shall be the focal contact point for the Government and be responsible for processing all warranty actions to the appropriate warrantor.

C. Under this warranty agreement, all non-mission capable (i.e., malfunctioning/non-operational) assets procured by Product Manager, Test, Measurement, and Diagnostic Equipment (PM, TMDE) for the Government/Foreign Military Sales (FMS) shall be repaired or replaced within 72 hours from the time of receipt by the Offeror to the time turned over to carrier for return to the end-user, not including weekends and holidays. Assets returned to the Offeror for repair under warranty but exhibit a No Evidence of Failure condition shall also be covered as warranty repairs. The Offeror shall pay for all warranty repair and warranty related transportation costs.

D. Within 72 hours of receiving the assets and prior to taking any non-warranty repair actions, the Offeror shall coordinate with PM, TMDE designated personnel and the asset's owner. The Government will participate in the determination of an item considered out of warranty. After an agreement is made, the Offeror shall complete the repair within 72 hours upon Government approval. The Offeror shall pay for its costs spent from the time the asset's owner calls for repair to the time the asset is determined out of warranty and the shipping cost for the asset to the Offeror's facility if required. The asset's owner will pay for non-warranty repair actions, including shipping cost for asset to be returned.

E. Shipping time for CONUS shall not exceed 72 hours, not including weekends and holidays, to or from the Offeror's site once the failed/repaired asset is in the shipper's hand. Shipping time for OCONUS shall not exceed 168 hours, not including weekends and holidays, to or from the Offeror's site once the failed/repaired asset is in the shipper's hand.

F. The Offeror shall provide CONUS and OCONUS Toll-Free (800, 888, etc.) or collect telephone technical and maintenance assistance during regular business hours, not including weekends and holidays. The Offeror shall also provide assistance through e-mail with a unique account set up. The contractor shall not accept tasks nor perform any functions which result in a charge to the Government without written direction from the Contracting Officer.

G. The Government will provide the Offeror twenty-five MSD-V2 Kit First Article Test (FAT) assets to be used as a part of the repair program for OCONUS, excluding FMS customers. If the entire repair process, including the shipping time, has been determined by the Offeror to take longer than seventeen (17) days, the Offeror shall send these FAT assets immediately to temporarily replace the unserviceable in/out of warranty units from the assets' owners. Upon completion of the repairs, the Offeror shall make at least three attempts to get the loaned assets returned. The Offeror shall notify the Procuring Contracting Officer (PCO) if the loaned assets are not being returned. The Offeror shall pay all transportation costs relating to this effort.

H. The Offeror shall submit a warranty report quarterly via electronic mail IAW DI-SESS-81639. It shall consist of as a minimum the nomenclatures of the warranty items, their serial numbers, shipping durations for receiving and sending, dates for starting and completing the repair, costs of warranty repairs (no cost to Government), costs of non-warranty repairs, and the actual problems.

I. Exclusions:

a. The provisions of this warranty do not apply to:

- i. Items damaged in combat.
- ii. Items with faded or chipped paint, scratches, dents, nicks or any other cosmetic damage resulting from normal and customary use.
- iii. Items with defects which are beyond the control of, and not attributable to the Offeror. Such items are those which have been damaged through willful misconduct, accident, misuse, abuse, improper user installation or application, maintenance not executed in accordance with the applicable technical manuals, negligence in transportation, handling, or storage, catastrophic damage such as fire, flood or explosion, or an act of God.
- iv. Liability for loss.

J. The Government will not be responsible for any extension or delay in the scheduled deliveries or periods of performance under this contract as a result of the Offeror's obligation to repair or replace defective items. There shall not be any adjustment of the delivery schedule or periods of performance as a result of the repair or replacement of defective items unless provided for by a supplemental agreement, with adequate consideration to the Government, to this contract.

K. The Government's rights under this warranty will survive final payment.

L. This warranty shall not be voided by any Government performed repair of any warranted item when accomplished in accordance with the Offeror prepared/Government approved maintenance procedures. If the Offeror refuses or is unable to perform the procedures outlined in this warranty, the Government may elect to have the repair, replacement, or redesign performed by a third party or parties. The Government may elect to receive consideration from the Offeror to offset costs reasonably incurred by the Government in taking such action, or the Government may elect to equitably adjust the contract price.

## **18. Out of Scope**

The Offeror shall not accept tasks nor perform any functions which result in a charge to the Government without written direction from the Contracting Officer.

## **19. Website**

The Offeror shall provide information (e.g. questions and answers from help line calls, technical information which is essential to field users or IETM developers, or information which will enhance ease of use) appropriate for posting to a Government MSD-V2 website. The Government shall maintain this website. Information shall be provided via e-mail to PM, TMDE, DI-MISC-80652, Technical Information Report, as soon as it is available to the Offeror.