

**PERFORMANCE WORK STATEMENT**

9 September 2003

**1. INTRODUCTION**

This proposed acquisition is to provide Command, Control, Communications, Computers, Intelligence, Surveillance and Reconnaissance (C4ISR) program support for the Department of Defense (DoD) and other Federal Government agencies. The MITRE C3I FFRDC will provide general systems engineering and integration (GSE&I) and task engineering support, and will provide core functions which consist of systems architecture planning and development, mission and threat analysis, operational requirements analysis and evaluation, and technical performance analysis and assessment. The work fills the need for systems engineering support to the numerous DoD and other Federal Government agencies in the field of C4ISR systems. The end items of this contract will be services and technical and financial reports. The level of proposed MITRE support is estimated in staff years identified as either Staff Years of Technical Effort (STE) for DOD ceiling work or technical staff years for non-ceiling/non-DOD work as approved by the Primary Sponsor, Assistant Secretary of Defense (Networks and Information Integration).

**1.0 SCOPE**

**1.1.1. Mission.** The work that the MITRE Corporation's C3I FFRDC shall perform for the DoD via the U.S. Army Communications-Electronics Command (CECOM) and the U.S. Air Force Electronic Systems Center (ESC) contracts is unique in that it comprises coordinated systems engineering and integration support to a wide variety of service and agency stakeholders involved with the development of C4ISR systems. The C3I FFRDC shall assist its users in planning and in creating the architectures, developing the strategies, executing the programs and implementing the interoperability measures necessary to realize the Department's vision of a single, integrated "system of systems" for joint and multi-national operations. In doing so, the C3I FFRDC is held "mission accountable" by its sponsors, the Assistant Secretary of Defense for (C3I) (ASD(NII)) and CECOM and ESC, for directing its work program towards achieving an integrated C4ISR capability while serving the immediate needs of the many individual programs it supports.

**1.1.2 Purpose.** The purpose of the C3I FFRDC is to enable the DoD to access the private sector's engineering expertise from an organization that (a) provides objective, independent, conflict-free advice and (b) functions as a trusted partner of the U.S. Government. The C3I FFRDC is a special institutional and business construct that helps link the government's needs to industry's capabilities, with the public's interest as its perspective.

**1.1.3 Scope.** The C3I FFRDC applies engineering disciplines and principles to DoD's C4ISR mission area. It provides support for DoD to (a) achieve the maximum possible capability, cost-effectiveness and interoperability of the current C4ISR system, (b) design and implement the C4ISR system of the future, and (c) protect DoD's information systems and their supporting infrastructure against hostile information operations.

## 2.0 Applicable Documents.

- Core Work Statement for the C3I FFRDC, dated January 1998
- DoD Sponsoring Agreement, dated 27 July 1999
- DD Form 254 dated 22 May 2003
- DoD 5220-22M, National Industrial Security Program Operating Manual (NISPOM)
- DoD 5220-22R, Industrial Security Regulation

## 3.0 REQUIREMENTS

**3.1 Core Work.** Core work for the C3I FFRDC is defined in the Core Work Statement as "that work which is consistent with the C3I FFRDC's (a) mission, purpose, and scope; (b) the core competencies and functions; and (c) the strategic relationship with the DoD." The core work functions are:

- 3.1.1 Architecture Development
- 3.1.2 Technical Strategy
- 3.1.3 Program Strategy
- 3.1.4 Program Execution

**3.1.1 Architecture Development.** Systems architecture planning and development includes tasks such as: broad concept studies, identification of systems opportunities, preparation of systems roadmaps, and supporting technology roadmaps. Particular emphasis is placed on system of systems approaches, interoperability, joint operations, and multinational operations. Reference designs are created for purposes of analysis and program planning. Integration management includes independent analysis and evaluation of the internal and external interfaces of systems. It encompasses analyses of the interaction among associated systems, including issues of performance and information security arising from these interactions.

**3.1.2 Technical Strategy.** Mission and threat analysis includes analysis of existing and potential missions as well as existing and potential threats to support the development of products and processes for operational use. It also includes independent analysis and exploitation of intelligence products, and the preparation of threat assessment packages tailored to life cycle needs. Technology requirements, applications, and research includes assessments of the state-of-the-art, the state-of-the-practice, and technological opportunities. Technology alternatives and assessments of technology risks are analyzed in relation to program needs and to the needs of the system of systems within which a program will fit. Specialized in-depth analysis of potential improvements in critical system technologies is conducted on a selective basis, making use of prototyping of hardware and/or software when necessary.

**3.1.3 Program Strategy.** Operational requirements analysis and evaluation include iterative requirements analysis and flow down (in close cooperation with the cognizant organization), matching program technical requirements with mission requirements (in the context of joint and multinational operations), resolution of conflicting requirements, and evaluation of the degree of mission accomplishment in either a simulated or planned operational environment. Acquisition planning, preparation, and evaluation includes support of the preparation of solicitation documents (source selection plan, request for proposal (RFP), statement of work, technical requirements, work breakdown structure (WBS), etc.) and provision of technical advisors to source selection. Specific activities include evaluation of proposals and required documentation submitted by a contractor or prospective contractor, as well as the identification and analysis of potential problems in order to assess risks associated with competing concepts or designs. Program systems engineering includes program planning, analysis and insight into subsystem and system design and integration, requirements flow down, design performance and cost trades. The C3I FFRDC shall restrict cost analysis to the level needed to accomplish design tradeoffs and evaluate alternative technical approaches in performance of its assigned role. Program strategy must consider cross-system integration among programs, lessons learned from other programs, and technology commonality. Independent analysis and evaluation of systems interfaces and functions may be required to assure system integrity and reliability.

**3.1.4 Program Execution.** Technical performance analysis and assessment includes the continuing verification of the anticipated and actual achievement of key technical parameters. Independent analysis/detection of design flaws and technology problems and identification of resolution alternatives, in light of a broad and deep knowledge of the entire mission area, are expected. Program, milestone, design, and readiness reviews include support for both formal and informal technical reviews, whether conducted incrementally or at major review points. This support includes reviews of deliverables, independent analysis as required, and reviews to assure that an item is ready either for testing or for production.

**3.2 Work Packages.** Mission activities will be accomplished within work packages that are defined by the core performance work statements (PWS). STE provides a standard measure for projecting DoD workload and funding requirements and is used to size and manage the work packages. A STE applies to employee and subcontracted professional labor performed by researchers, mathematicians, programmers, analysts, economists, scientists, engineers and others who perform professional-level technical work primarily in the fields of studies and analyses; system engineering and integration; systems planning; program and policy planning and analyses; and basic applied research. ASD(NII) allocates the designated ceiling to the major users of the C3I FFRDC. The STE work package allocations are then determined by the major users of the C3I FFRDC. Objectives, products, and milestones for these work packages will be specified in the individual PWS. MITRE will perform in accordance with the project specific PWS and will be monitored by the Government Project Leader.

### 3.3 Research and Integration.

Mission Oriented Investigation and Experimentation (MOIE) activities include research and integration of technology, architectures, tools, processes and systems that show promise for advanced C4ISR capabilities. The C3I FFRDC will conduct investigations and experimentation to understand, advance and integrate the underlying technologies into the transition of the Department's programs and operations.

The technology program component of MOIE is focused on applied research, enabling the C3I FFRDC to establish and maintain a high level of technical expertise in order to effectively perform technical functions for the customers as authorized by the ASD(NII). MOIE projects shall apply research techniques to address C4ISR mission deficiencies and improvements, conform to appropriate technical base mission area master plans, and address high-payoff technologies. This program helps to ensure that the C3I FFRDC maintains currency in the fields of expertise, maintains its objectivity and independence, preserves its familiarity with the needs of the sponsors, and provides a quick response capability.

The additional integration initiatives have two related areas of focus; an adjunct of the MOIE support is dedicated to the DoD-wide enterprise systems engineering function, and a set of complementary Service/Agency/Unified Combatant Command efforts are pathfinder links to enabling net-centric joint operations. The integration efforts support and extend the C3I FFRDC's crosscutting systems engineering capability to enhance its impact on the direct work program.

3.4 Performance Based Service Acquisition Survey. Each of the core work functions stated above will be assessed through the C3I FFRDC performance based service acquisition survey in the following areas of evaluation: meeting technical needs, project milestones and schedule responsiveness to change, project staffing, managing cost, and value of the C3I FFRDC.

## 4.0 CONTRACT DELIVERABLES

The reports identified below (4.1 – 4.3) are required as specified in the attached Contract Data Requirements List (CDRL) DD Form 1423. It is expected that the contract parties will periodically review the report distribution and format to assure that the management information needs of both parties are satisfied in the most cost efficient manner. Contractor formats should be substituted for government formats whenever they contain the required data elements or have been accepted by the government as a reasonable alternative to the Data Item Description (DID).

4.1 Contract Funds Status Report (CFSR), DI-MGMT-81468 (A001). The contractor shall prepare a CFSR in accordance with DI-MGMT-81468. The CFSR is designed to supply funding data about defense contracts to Program Managers: (a) updating and forecasting funds requirements, (b) planning and decision making on funding changes to contracts, (c) developing funds requirements and budget estimates in support of approved programs, (d) determining funds in excess of contract needs and available for deobligation, and (e) obtaining rough estimates of termination costs. Contractor formats

(e.g., Contract/Major User/Project Status Report (FRPRJ020)) shall be substituted for the CFSR format as long as they address required data elements.

**4.2 Cost/Schedule Status Reports (C/SSR), DI-MGMT-81467 (A002).** The contractor shall prepare status reports (project and/or contract) in accordance with DI-MGMT-81467. Contractor format is acceptable unless otherwise specified in the PWS. Reports should be sent electronically whenever possible. Examples of project-related status reports include:

- Project Status reports
- Trip reports
- Briefings and presentations

Examples of contract summary status reports include information related to the following:

- Status of Overhead and G&A expenditures
- Status of Capital and depreciation expenditures
- Audited Consolidated financial statements
- DoD C3I financial statements
- Sources and uses of funds data projection

**4.3 Technical Reports -- Study/Services, DI-MISC-80508A (A003).** The contractor shall prepare technical reports (project and/or contract) in accordance with DI-MISC-80508A. Contractor format is acceptable unless otherwise specified in the PWS. Reports should be sent electronically whenever possible. Examples of project-related technical reports include:

- Technical documentation
- Progress reports (draft, interim and/or final, as required)
- Letters, briefings and presentations
- Information reports
- Task assignment plans

Contract Technical Reports may include the Technology Program plans and accomplishments.

**4.3.1 Required Disclaimer.** All interim, draft, and final reports will contain the following statement on the title page:

"The view, opinions, and/or findings contained in this report are those of The MITRE Corporation and should not be construed as an official Government position, policy, or decision, unless designated by other documentation."

## 5.0 APPENDIXES (Necessary Directives)

**5.1 Directed Documents.** The DoD Management Plan for FFRDCs requires the primary sponsor of an FFRDC to define core work for the FFRDC. The DoD Sponsoring Agreement between the ASD(NII) and MITRE to operate the C3I FFRDC limits the C3I

FFRDC to performing only core work or non-core work as expressly identified in the DoD Sponsoring Agreement and approved by the ASD(NII).

- Core Work Statement for the C3I FFRDC, dated January 1998
- DoD Sponsoring Agreement, dated 27 July 1999

**5.2 Security.** DD Form 254, Department of Defense Contract Security Classification Specification, is included in this acquisition and will be part of the basic contract. In order to receive award, the contractor shall be required to have a facility cleared to the appropriate classification and also have the appropriate storage capabilities. The DD Form 254 is written to cover all possible security requirements. The contractor will be required to comply with DoD 5220-22M, National Industrial Security Program Operating Manual (NISPOM), and DoD 5220-22R Industrial Security Regulation. Contractor personnel performing ADP sensitive duties will be subject to investigative and assignment requirements IAW AR 380-67 and affiliated regulations.