



S8.2-5 (Increment 6) Preliminary Design Review (PDR) Execution

Task Order 0017

8 February 2018, Rev 6

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THE FOLLOWING TASK ORDER (TO), NUMBER 0017, SHALL BE PERFORMED BY THE CONTRACTOR AS A TO UNDER MISSILE DEFENSE AGENCY (MDA) INDEFINITE DELIVERY/INDEFINITE QUANTITY (IDIQ) CONTRACT HQ0147-12-D-0003. IN CASE OF CONFLICT BETWEEN THIS STATEMENT OF WORK (SOW) AND THE BASIC IDIQ CONTRACT IN EFFECT AT TIME OF AWARD OF THIS TO, THE BASIC IDIQ HAS PRECEDENCE.

1.0 Task Description

The purpose of this TO is to assess changes required to Command and Control, Battle Management and Communications (C2BMC) Spiral 8.2 (S8.2) for Increment 6 to include: sensor management of the Long Range Discrimination Radar (LRDR); provide system track and discrimination data to Ground-Based Midcourse Defense (GMD); design and prototype initial algorithms; provide engineering support of the Government-provided interface definition for LRDR management and system track data to GMD (including development-lab to development-lab testing); and execution of a successful Preliminary Design Review (PDR) for C2BMC Spiral 8.2-5 (S8.2-5).

2.0 Background

The MDA is developing the Integrated Ballistic Missile Defense System (BMDS) to defend the forces and territories of the United States, its Allies, and Friends against all categories of ballistic missile threats. The BMDS will accomplish this mission by providing an integrated layered defense that employs sensors for threat detection, tracking, discrimination, battle management aids for real-time decision making in accordance with (IAW) defined doctrine during mission planning cycles, and weapons to engage threat targets in all phases of their flight. MDA will be deploying the LRDR in FY21 to support PACOM/NORTHCOM operations. This radar will be included in the C2BMC integrated sensor management architecture. The radar will primarily provide surveillance and discrimination data to C2BMC for Homeland Defense support of GMD. C2BMC will provide Ballistic Missile Defense (BMD) System Track (BST) data to GMD to include LRDR and new discrimination features and to include the results of any third party capabilities incorporated into this spiral as well as interface with GMD to support accurate LRDR tasking. The C2BMC Increment 6 Capability (S8.2-5) will be designed and developed IAW the Government-approved C2BMC Element Specification (CES). Major capabilities are summarized:

- Initial Integration of Long Range Discrimination Radar
- C2BMC Generation of BMD System Track (with System Level Discrimination Data Integration) for GMD Homeland Defense Engagements

- Active Sensor Bias Monitoring and Reporting Initial GMD Redesigned Kill Vehicle Integration
- Retain Existing Sensor Data Interfaces and Provide LRDR Data for Risk Reduction until directed to stop these interfaces
- Sea Based X-Band (SBX) Radar Forward-Based Discrimination
- Space Situational Awareness (SSA).

3.0 Program Management

The Contractor shall provide Program Management services to enable planning, developing, controlling, directing, monitoring, reporting, and managing in a manner consistent with TO requirements. Overall associated Program Management services are addressed under a separate task order.

All documentation created and maintained in a database or storage medium associated with this contract shall be delivered to the Government's Contracting Officer IAW the various Contract Deliverables Requirements List (CDRLs) associated with this contract. The Contractor shall submit all CDRL deliverables to the Government's Contracting Officer electronically, unless otherwise stated, with distribution method to the Government to be determined by the C2BMC Program Management Office. Therefore, all such data shall be in compliance with the terms and conditions of the contract.

3.1 Integrated Process and Product Development (IPPD)

The Contractor shall apply an IPPD approach in all technical/functional disciplines and requirements in a coordinated manner to meet established financial management, resource, cost, schedule, performance, and supportability requirements for the C2BMC system.

3.2 Contractor Integrated Performance Management

The Contractor shall prepare and use an integrated performance management system. The Contractor shall use a Department of Defense (DoD) validated Earned Value Management System (EVMS) that is linked to, and supported by, the Contractor's management processes and systems to include the Integrated Master Schedule (IMS), Contract Work Breakdown Structure (CWBS), change management, material management, procurement, cost estimating, and accounting.

3.3 Integrated Baseline Reviews (IBRs)

The Contractor shall support the Government Program Manager, Contracting Officer and his/her representatives in IBRs to evaluate the risks inherent in the performance measurement baseline for this TO. The totality of the baseline

will be reviewed and evaluated no less than annually by the Government. Each IBR will verify that the Contractor is using a reliable performance measurement baseline (to include the entire contract scope of work for this TO), is consistent with contract schedule requirements, and has adequate resources assigned.

3.4 Process Control

The Contractor shall maintain a set of operating documentation that provides management direction, policies and procedures, per established Contractor tools and procedures IAW existing Government processes.

3.5 Program Reviews

The Contractor shall support the planning, preparation, conduct, and preparation of minutes of program reviews. The Contractor shall support the IBR, quarterly Program Management Reviews (PMRs), Government-led Internal Configuration Control Board (ICCB), Operational Capability Baseline Working Group, System Engineering & Integration Council (SEIC), Integration Synchronization Group (ISG)/Integration Synchronization Center (ISC), Program Change Board (PCB), bi-weekly Joint Business Reviews, bi-weekly C2BMC S8.2-5 Product Integration Team (PIT), Interoperability Technical Analysis Group, Algorithm Collaboration Team (ACT), and other relevant meetings as requested by the Government and agreed to by the Contractor. The Contractor shall support C2BMC component immersion reviews with the Government to facilitate understanding and agreement with implementation approaches used for chosen technical efforts. The Contractor shall update program documentation based on the outcome of the reviews. The Contractor shall provide progress reports to the Government in monthly C2BMC Cost/Schedule Executive Round Table (C/SERTs). The Contractor shall support the Communications Connectivity Task Force to coordinate, implement and execute the BMDS end-to-end communications architecture.

3.6 Bill of Material (BOM)

The Contractor shall manage the BOM and control changes IAW program configuration control procedures for this TO.

3.7 Configuration Management (CM)

The Contractor shall ensure that controlled baselines are established, that changes to baselines are controlled, and that software, hardware, test tools, test software, databases, test data and documentation are consistent with the baseline. The Contractor shall ensure software and hardware CM activities in support of the C2BMC Program include identifying key software and hardware

