

# **C2BMC Spiral Capability Development Contract**

**Test and Integration** 

Task Order Number 0015

May 5, 2016

Award

<u>1 abie o</u> 1.0	Took Doe	<u>s</u> scription	3
2.0		and	
3.0		Management	
3.1	Integrated Process and Product Development (IPPD)		
3.2	Program Planning Database		4
3.3	Contra	ctor Integrated Performance Management	4
3.4	Process	s Control	4
3.5	5 Program Reviews		4
3.6	Bill of	Materials Management	5
4.0	System T	est, Wargames and Exercises	5
4.1	System	Testing	5
4.	1.1 Sur	pport Test Resourcing	5
	4.1.1.1	Future Spiral Tests	5
	4.1.1.2	C2BMC Planner	5
4.	1.2 Sys	stem Test Strategic Planning and Strategic Objectives Development	6
4.	1.3 Pha	ases of BMDS Flight Test	6
4.	1.4 Pha	ases of BMDS Ground Test	8
4.2	System	Test Integration Oversight	9
4.3	System	Test Coordination of Planning, Execution, and Analysis	10
4.4	BMDS	Wargames/Exercises	10
4.5	Experi	mentation Test Events	11
4.6	Targets	s of Opportunity	11
4.7	Genera	l Requirements for Testing	11
4.8	Build N	Management Oversight	12
4.9	Modeli	ng & Simulation (M&S)	12
4.10	Certific	cation Data Package (CDP)	12
4.11	Interna	tional Events	12
5.0	Period of	Performance (POP):	12
6.0	Travel		
7.0	Deliverables		
8.0 9.0		e List	
10.0		nent Furnished Equipment and Government Furnished Services s and Abbreviations	

The Following Task Order Number 0015, shall be performed by the Contractor as a Task Order (TO) under Missile Defense Agency (MDA) Indefinite Delivery/Indefinite Quantity (IDIQ) Contract HQ0147-12-D-0003. In case of conflict, the Statement of Work (SOW) in effect in the basic IDIQ contract at time of award of this TO shall have precedence.

### 1.0 Task Description

This task order conveys the prime Contractor requirements to support Command and Control, Battle Management and Communications (C2BMC) participation and support (System Under Test (SUT) and Offline) of the Ballistic Missile Defense System (BMDS) Level testing as baselined through the Integrated Master Test Plan (IMTP) process and selected Real World Events (RWE) and other Targets of Opportunity (TOO). Requirements, configuration and data collection germane to each BMDS test event are well defined in the Test Resource Mission Planning Tool [TRMP-T(C)] and shall be adjudicated between the Government and the Contractor.

### 2.0 Background

The Contractor requirements in Section 4 below are intended to provide all the support necessary for C2BMC Element testing across the spectrum of testing for Hardware-in-the-Loop (HWIL)/Ground Test, System Pre-Mission Tests (SPMT) and System post Flight Reconstruction (SPFR); Early Integration and Integrated Ground Tests (GTI); Distributed Ground Tests (GTD), Flight Tests, Wargames and Exercises, Experimentation Testing, International Ballistic Missile Defense events, and TOOs.

The MDA publishes the Integrated Master Assessment Plan (IMAP) and the IMTP on a bi-annual basis. The IMAP provides the Assessment Requirements (ARs) needed to support system Operational Assessment and Technical Assessment of the BMDS, and the IMTP provides the system-test objectives and test configuration guidance for Test Campaigns involving C2BMC and the BMDS. The IMTP is the Government planning document for the test baseline schedule, resourcing, and execution of the BMDS test program and details the C2BMC system-level test support and test participation requirements.

### 3.0 Program Management

The Contractor shall provide Program Management services to assist the Government in planning, controlling, directing, monitoring, reporting, and managing this TO.

All documentation created and maintained in a database or storage medium associated with this Task Order shall be delivered to the Government by the various Contract Data Requirements List (CDRLs) associated with this Task Order. All deliverables (CDRLs) shall be submitted to the Government electronically, unless otherwise stated, with distribution method to the Government to be determined by the C2BMC Program Management Office.

The Contractor shall support the Government during a Failure Review Board (FRB) process to determine root cause and ensure timely corrective action for critical failures.

### 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 effort to meet established financial management, resource, cost, schedule, performance, and supportability requirements for the C2BMC system.

### 3.2 Program Planning Database (PPD)

The Contractor shall provide effective implementation of a Program Planning Database (PPD) that will contain schedule data for C2BMC involvement in the MDA IMTP. The Contractor shall maintain a comprehensive PPD in order to provide rapid responses to real or potential change in requirements. The PPD will be utilized by the Contractor to provide critical path and float analysis for the life of the Task Order. The Contractor shall maintain and provide schedule management metrics along with the PPD.

### 3.3 Contractor Integrated Performance Management

The Contractor shall prepare and utilize, in the performance of this TO, an integrated performance management system. The TO performance baseline shall be linked to and supported by the Contractor's management processes and systems that will contain schedule data for C2BMC involvement in the MDA IMTP, Contract Work Breakdown Structure (CWBS), change management, material management, procurement, cost estimating, and accounting. Financial reporting for this TO shall be accomplished through the DI-FNCL-81537 Funds and Labor Hour Expenditure Report (CDRL A140).

### 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 in accordance with (IAW) existing Government processes.

### 3.5 Program Reviews

The Contractor shall support the planning, preparation, and conduct of program reviews. The Contractor shall support the Program Management Reviews (PMR), Government Internal Configuration Control Board (ICCB), Integration Synchronization Group (ISG)/Integration Synchronization Center (ISC), Program Change Board (PCB), and other relevant meetings as requested and/or agreed upon by the Government.

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 results of these reviews shall include updating project documentation based on the outcome of the reviews. The Contractor shall provide progress reports to the Government in semi-annual PMRs.

### 3.6 Bill of Materials Management

The Contractor shall manage the Bill of Materials (BOM) and control changes IAW program configuration control procedures for this task order. The Contractor shall monitor new material requirements and identify when changes are required to BOM line items to meet baseline program requirements.

### 4.0 System Test, Wargames and Exercises

#### 4.1 System Testing

The Contractor shall conduct System Test and Integration in accordance with Sections 5.1, System Testing, 5.3, Contractor Support to Government Ground Test and 5.4, Contractor Support to Government Flight Test of the Base Indefinite Delivery/Indefinite Quantity Contract SOW for Spiral 8.2 except as modified or amplified below.

# 4.1.1 Support Test Resourcing

The Contractor shall support BMDS Flight and Ground Test Events, Experimentation Test Events, Wargames and Exercises, International Ballistic Missile Defense events, and TOOs with C2BMC participation, in accordance with the latest approved IMTP Revision or with MDA C2BMC Director for Test or MDA C2BMC Deputy Director for Test direction as resourced by the Program Manager, approved C2BMC Test Baseline Schedule, and consistent with the level-of-effort nature of this Task Order. The MDA C2BMC Director for Test or MDA C2BMC Deputy Director for Test will provide written direction to the Contractor specifying the actual level of Contractor support expected and needed for each particular Event. If no written direction is provided, the Contractor shall provide support at the level defined in the TRMP-T (C) database for the event. Changes may occur after the planning phase at the Government's discretion.

### 4.1.1.1 Future Spiral Tests

The Contractor shall contribute to requirements development, execution, and analysis of system-level tests with C2BMC Offline to collect data for future C2BMC software builds. The Contractor shall execute the testing as indicated in Spiral Capability Verification Plan (SCVP) or defined in the IMTP when approved through C2BMC System Test & Integration Board (CSTIB) and ICCB. The Contractor shall seek opportunities for Spiral Testing for an early look at the software. The Contractor shall ensure that C2BMC is in "receive only" test configuration with the C2BMC suite and completely isolated so as not to affect the SUT.

### 4.1.1.2 C2BMC Planner

The Contractor shall include the use of the C2BMC Planner in the planning, execution, and analysis of system and element tests, Wargames and Exercises.

### 4.1.2 System Test Objectives and Assessment Requirements Development

The Contractor shall support the design and development of Assessment Requirements (ARs) to populate the IMAP Assessment Configuration Sheets (ACSs), and Test Objectives to populate the IMTP Test Configuration Sheets (TCSs) for the Program to obtain Capability Declaration.

#### The Contractor shall:

- 1. Support the design and development of the IMTP and IMAP with respect to C2BMC Program participation, objectives and requirements.
- 2. Support development and review of the Assessment Execution Plan (AXP) and ARs in the IMAP to efficiently capture the set of assessment needs and assessment conditions for C2BMC Spiral capability decisions (Operational Capability Baseline (OCB) and Technical Capability Declaration (TCD). Components of the AR development include: Assessment Configuration Sheets (ACSs), Assessment Objectives (AOs), Assessment Sub-Objectives (ASOs), Measures & Metrics, Critical Assessment Conditions (CACs), Key Test Points (KTPs), and Assessment Scorecards.
- 3. Support the IMAP Rapid Scenario Prototyping (RaSP) process; develop, document and prioritize scenario conditions and measures for data collection of assessment requirements for C2BMC spiral capability declaration.
- 4. Support the CSTIB process to develop C2BMC test objectives for BMD System- Level testing.
- 5. Support all Phases of Ground and Flight Test in accordance with the latest approved BMDS Test Concept of Operations (CONOPS) and the IMTP.
- 6. Support Integrated Product Teams (IPT) such as the Assessment IPT (AIPT) as required/requested by Government.

#### 4.1.3 Phases of BMDS Flight Test

The Contractor shall support the Phases of Flight Test per the currently-signed MDA Flight Test CONOPS, IMTP and all future updates, based upon direction provided by the Government.

### Phase 1 - Requirements and Planning, the Contractor shall:

- 1. Support the development and review of BMDS System Test Objectives as they apply to C2BMC.
- 2. Support initial Test Risk Assessment, as required.
- 3. Review and refine the Test Baseline Test Architecture.
- 4. Identify the initial BMDS Discrepancy Reports (BDR(s)) and System Modification Request (SMR(s)) List.
- Develop the draft C2BMC Event Execution Plan as per the Data Accession List (DAL).
- 6. Identify Data Requirements.
- 7. Support Requirements and Planning Phase Reviews, as required.

8. Identify specific items from the Universal Documentation System (UDS) for the Operations Requirements (OR) Document.

### Phase 2 - Readiness, the Contractor shall:

- 1. Review Test Cases to ensure the design supports the system test objectives.
- Review Test Architecture to ensure design shall support approved test objectives and provide maximum operational realism given laboratory limitations.
- Review Operations Task Link message (OPTASKlink) for Test Event, Air Defense System Integrator (ADSI) Routing tables, Joint Range Extension (JRE) Routing, and Track Forwarding Tables, and Communication Connectivity Matrices products.
- 4. Execute data management task to support pre-mission analysis.
- 5. Support Pre-Mission Planning and Testing and Pre-Mission Analysis.
- 6. Support BDRs adjudication.
- 7. Complete Certification Data Package (CDP), as required in Section 4.10, Certification Data Package. (CDRL A060)
- 8. Support Pre-and-Post-Flight Test movement, deployment, and retrograde of C2BMC Test Equipment assets.
- 9. Support the completion of the Event Execution Plan.
- 10. Review the Analysis Execution Plan (AEP) and provide comments to the BC Event Analysis Lead (EAL).
- 11. Support the EAL to develop a BC Event Analysis Plan.
- 12. Support update to the Test Risk Assessment, as required.
- 13. Support update to the Mission Assurance Assessment.
- 14. Support the EAL in the development of the C2BMC list of all system adjustable parameters to include all site specific parameters and the current values for the SUT.
- Support the EAL with analysis of both Digital (M&S Based) and HWIL SPMTs data to support the pre-test Mission Analysis Review (MAR) as required.
- 16. Support the EAL with anomaly resolution, root cause analysis, and FRBs, as required to address any issues with Digital (M&S Based) and HWIL SPMTs.
- 17. Support additional Readiness Phase Reviews, as required.

#### **Phase 3 - Execution,** the Contractor shall:

- Support Mission Execution.
- 2. Support Mission Analysis.
- 3. Execute Data Management Tasks in accordance with the Event Execution Plan.
- 4. Provide Anomaly resolution and investigation / Root Cause Analysis / disposition of BDRs.
- 5. Support update to Test Risk Assessment, as required.
- 6. Provide post-execution reconfiguration of the test architecture as required.
- 7. Support Execution status reporting.

- 8. Supply BC System Test Analysis Team (BSTAT) with access to various Spiral 8.2 analysis tools as required.
- 9. Support Execution Phase Reviews, as required.

# Phase 4 - Test Analysis and Reporting, the Contractor shall:

- Support Post Test Reporting.
- 2. Support Post Test Data Management tasks in accordance with the Event Execution Plan.
- 3. Support Post Test Analysis in accordance with the BC Event Analysis Plan.
- 4. Support anomaly resolution, root cause analysis, and FRBs, as required.
- 5. Support Test Analysis and Reporting Phase Reviews as required through the completion of the Mission Data Review (MDR).
- 6. Develop the Event Execution Report as per the DAL.
- 7. Develop the Event Analysis Report as per the DAL.
- 8. Provide inputs to Lessons Learned database as per the DAL.
- 9. Support Test Analysis and Reporting Phase Reviews, as required.

#### 4.1.4 Phases of BMDS Ground Test:

The Contractor shall support the Phases of BMDS Ground Test per the currently-signed MDA Ground Test CONOPS, IMTP and future updates, based upon direction provided by the Government.

### Phase 1 – Requirements and Scenarios, the Contractor shall:

- 1. Support the development of BMDS Test Objectives as they apply to C2BMC.
- 2. Support Scenario Design, development, and certification processes to include but not limited to participating in the RaSP, Scenario Design Reviews (SDR) and Test Case Development Working Groups, and support review of the Scenario Matrix (SM), Scenario Description Document (ScDD) and Test Case Description Document (TCDD) documents when requested by the Government. The Contractor Functional Areas shall collaborate to develop and prioritize KTPs, and optimize scenario development and design to ensure adequate performance to support testing requirements.
- 3. Review the Test Objectives Memoranda (TO Memo) and scenarios to ensure C2BMC related test objectives are achievable.
- 4. Support initial Test Risk Assessment, as required.
- 5. Review and refine the Test Baseline Architecture.
- 6. Identify Data Requirements.
- 7. Support Requirements and Scenarios Reviews, as required.

### **Phase 2 – Planning and Integration,** the Contractor shall:

- Refine Baseline Architecture Development.
- 2. Support the development of the draft C2BMC Event Execution Plan.
- 3. Review TCDD and support development of SRM settings.
- Support update to the Test Risk Assessment, including BDR assessment, as required.

- Review Test Cases to ensure design supports approved test objectives and configuration, and provides maximum operational realism given laboratory limitations.
- 6. Execute data management task to support pre-mission analysis.
- 7. Complete Certification Data Package (CDRL A060), as required.
- 8. Review the AEP to include the AXP, and provide comments to the EAL
- 9. Support Pre-Mission Testing (i.e. Full Architecture Testing (FAT), Test Case Integration (TCI), and Event Architecture Certification (EAC).
- 10. Support the development of the BC Event Analysis Plan.
- 11. Support the development of the C2BMC system adjustable parameters to include all site specific parameters and the current values for the SUT.
- 12. Support anomaly resolution, root cause analysis, BDRs, and FRBs, as required.
- 13. Support Planning and Integration Reviews, as required.

### **Phase 3 – Execution,** the Contractor shall:

- 1. Support Mission Execution (Dry-Runs (DR) and Runs for Record (RFR)) and post execution cybersecurity testing period for GTD Events.
- 2. Support Mission Analysis.
- 3. Execute Data Management tasks in accordance with the Event Execution Plan.
- 4. Provide input to Event Daily Status Report (DSR), as required.
- 5. Provide post-execution reconfiguration of the test architecture, as required.
- 6. Support update to Test Risk Assessment, as required.
- 7. Support anomaly resolution, root cause analysis, BDRs, and FRBs, as required.
- 8. Supply BSTAT with access to various Spiral 8.2 analysis tools as required.
- 9. Support Execution Reviews, as required.

### Phase 4 – Test Analysis, the Contractor shall:

- Support Post Test Reporting.
- 2. Execute Post Test Data Management tasks in accordance with the Event Execution Plan.
- 3. Support anomaly resolution, root cause analysis, BDRs, and FRBs, as required.
- 4. Support Test Analysis and Reporting Phase Reviews as required through the completion of the MDR.
- 5. Develop the Event Execution Report as per the DAL.
- 6. Develop the Event Analysis Report as per the DAL.
- 7. Provide inputs to Lessons Learned database as per the DAL.
- 8. Support Test Analysis Reviews, as required.

### 4.2 System Test Integration Oversight

The Contractor shall integrate C2BMC software, hardware, and networks into Element and System-Level Test Architectures, and operational sites. The Contractor shall test the Architecture to ensure it is properly configured and ready for System Testing and/or operational deployment. The Contractor shall provide plans and procedures prior to system testing in order to assess the

adequacy of the testing to be performed utilizing approaches and concepts similar to those outlined in IEEE/EIA 12207 as guidance.

# 4.3 System Test Coordination

The Contractor shall:

- 1. Define and maintain the Data Item Descriptions.
- 2. Provide BDR support, as required.
- 3. Support anomaly resolution, root cause analysis, BDRs, and FRBs, as required.
- 4. Develop a test approach in coordination with MDA/BC.
- Support the provisioning of C2BMC test data at the MDA Mission Data Distribution Center (MDDC) and Analysis server for Post-Test Analysis Review.
- 6. Provide read-only access to the S8.2 relational database, ATOMS & ALDD Relational Database for Verification, Analysis, Reporting and Collection (AARDVARC) containing data from S8.2 requirements verification testing (post Test Readiness Review (TRR)) as well as data from all S8.2 test events to MDA/BC.
- 7. Provide Government access to all actual S8.2 log files and Adaptable Toolkit for Open Messaging Services (ATOMS) Journals from all test events (HWIL, Pairwise, SPMT, GTC, GTX, GTI, GTD, Flight Test, and Experimentation).
- 8. Provide parsers necessary to convert raw ATOMS Journals to human readable text (ASCII files).

### 4.4 BMDS Wargames/Exercises

The Contractor shall provide Integration and Exercise Execution per Government direction. The Contractor shall:

- 1. Support Wargames and Exercises where C2BMC is emulated.
- Participate in Wargames and BMD conferences as directed per C2BMC Exercise Lead.
- Integrate and test C2BMC Exercises to validate Warfighter concepts, Tactics, Techniques and Procedures (TTPs) and C2BMC suitability to execute the event.
- 4. Support Exercises in accordance with the C2BMC Test Baseline, IMTP, and Integrated Master Wargames and Exercises Plan (IMWEP).
- 5. Support the review of Exercise Objectives Memorandum (EOM) by working groups and approval forms.
- Support Scenario Design Working Groups, and other exercise related Working Groups with a minimum of BC element-specific exercise objectives and architectures.
- 7. Follow the Wargames and Exercises coordination process established by the Government, to include supplying information to the C2BMC Lead in support of an Event Sheet briefing for all Wargames and Exercises to be presented at the C2BMC Event Status Review and producing a Final Report to close out all discoveries and Lessons Learned from the event.
- 8. Provide accurate record keeping of all related documents.

- Provide analysis for Wargames and Exercises as directed by C2BMC Government Leadership.
- Provide a concise schedule of support to include personnel management for planning conferences, integration and execution periods and projected travel requirements.

### 4.5 Experimentation Test Events

The Contractor shall support Test events per the IMTP, future updates, and based upon direction provided by the Government. The Contractor shall:

- Review and provide inputs into the BMDS TO Memos, Approved Test Configuration (ATC), Data Handling Plan (DHP), Analysis Execution Plan (AEP), and Integrated Data Management Plan (IDMP).
- 2. Provide inputs into the MDA Director for Test (DT) developed test execution checklists.
- 3. Develop Lab-specific test objectives and architectures.
- 4. Develop Lab-specific Test and Analysis Test Plans.
- 5. Provide experiment integration support.
- 6. Provide HWIL support.
- 7. Support X-Lab unique test requirements.
- 8. Provide Predictive Analysis as needed to support the test activity (i.e. Monte Carlo Predictions and Analyses).
- Provide M&S inputs as required in support of the Experimentation Lab (X-Lab) pre-mission and post-test analysis activities.
- 10. Collect and deliver data to MDDC as defined in the IDMP.
- 11. Contribute to Flash Report, QLB, MDR & TAR (TAR as required).
- 12. Provide Lab-specific Analysis Report.
- 13. Provide analysis for anomaly resolution, as required.
- 14. Support Experimentation Reviews, as required.

# 4.6 Targets of Opportunity

The Contractor shall perform System Test analysis on selected BMDS and/or Department of Defense (DoD) TOOs, as required.

### 4.7 General Requirements for Element to Element Testing

The Contractor shall:

- 1. Provide Element to Element and BMDS-Level Integration Test/Integration support.
- 2. Include Simulation-Based Testing, Element Pair-Wise Testing, Performance Testing, System Testing and Wargames/Exercises.

#### 4.8 Build Management Oversight

The Contractor shall provide the Government Build Management oversight to the Spiral information needed to maintain the C2BMC Test Articles (e.g., Mission Node, Element Node, User Node, Network Interfaces, BMDS Communications Network (BCN) functionality in deployable communications) in the C2BMC Testbed. The

Contractor shall ensure changes are identified and published to the MDA C2BMC Testbed Infrastructure Team.

# 4.9 Modeling & Simulation (M&S)

The Contractor shall provide M&S support as required by the IMTP, C2BMC Test Baseline, Phases of Flight Test, Phases of Ground Test, and System Test analysis, and Experimentation Test requirements per Section 4.1.3, 4.1.4, and 4.5 contained in this Task Order. The Contractor shall develop scenarios for Experimentation Test predictive and/or post-test analysis.

### 4.10 Certification Data Package (CDP)

The Contractor shall establish and maintain a process that furnishes a CDP to the Government. The CDP shall be provided in Events where C2BMC is in the SUT using the operational system or as directed by the Government to address special or unplanned situations not defined in the Test Configuration Sheets.

The Contractor shall make all information documented in each event unique CDP available at the request of the Government and provide technical assistance / facilitator for the Government pre-event SUT audits at the various locations that may be participating in any particular event. The Contractor shall store a copy of each CDP in a configuration controlled environment. (CDRL A060)

### 4.11 International Events

The Contractor shall support International Events based upon direction provided by the Government regarding the appropriate amount of support and Phase to begin the planning efforts for each event. The Contractor shall:

- Provide an Event Mission Director (EMD) to coordinate support with the C2BMC Event Lead.
- 2. Provide accurate architecture drawings when requested.
- 3. Provide Element to Element and BMDS-Level Integration Test/Integration support.
- 4. Provide analysis for anomaly resolution.
- 5. Provide supporting documentation and/or analysis results for Quick Look Briefings and inputs to final reports.

### 5.0 Period of Performance (POP):

The Period of Performance is 1 July 2016 – 30 June 2018

#### 6.0 Travel

The Contractor shall travel, with approval from the Government, as necessary to participate in meetings, conferences, program reviews, technical interchanges, and test events to accomplish the work described in this task order.

# 7.0 <u>Deliverables</u>

4.

The following Contract Data Requirements List (CDRL) identifies the required deliverables for this task order. Copies of the CDRLs can be found in the base IDIQ Award, Exhibit A.

CDRL#	CDRL Title
A060	Certification Data Package (CDP)
A140	Funds and Labor Hour Expenditure Report

# 8.0 Document Reference List

Reference documents applicable to this Task Order are identified in the base IDIQ contract Statement of Work Section 2.0 (Attachment 1). Use the most updated versions of all documents.

<b>Document Number</b>	<b>Document Name</b>	Date of Issuance
IMTP v17.1	Integrated Master Test Plan	March 17, 2016
IMAP v15.3	Integrated Master Assessment Plan	December 15, 2015
IEEE/EIA 12207	Systems & Software Engineering – Software Life Cycle Processes	April15, 2011

# 9.0 Government Furnished Equipment & Government Furnished Services

All GFx associated to this Task Order is identified in the base IDIQ contract, Attachment

### 10.0 Acronyms and Abbreviations

AARDVARC ATOMS & ALDD Relational Database for Verification, Analysis,

Reporting and Collection

A&SE Architecture and System Engineering
ACS Assessment Configuration Sheet
ADSI Air Defense System Integrator

AEP Analysis Execution Plan

AIPT Assessment Integrated Product Team

AO Assessment Objective
AR Assessment Requirements
ASO Assessment Sub-Objective
ATC Approved Test Configuration

ATOMS Adaptable Toolkit for Open Messaging Services

AXP Assessment Execution Plan

BC C2BMC

BCM BMDS C2BMC Model

BCN BMDS Communications Network
BDR BMDS Discrepancy Report
BMDS Ballistic Missile Defense System

BOM Bill of Material

BSTAT BC System Test Analysis Team CAC Critical Assessment Condition

C2BMC Command and Control, Battle Management, and Communications

CDE Countdown Exercise
CDP Certification Data Package
CDRL Contract Data Requirements List

CCMD Combatant Command CONOPS Concept of Operations

CSTIB C2BMC System Test & Integration Board
CTB-TE C2BMC Testbed – Test Environment
CVA Capability, Verification and Analysis
CWBS Contract Work Breakdown Structure

DAL Data Accession List
DE MDA Engineering

DESi Discrete Event Simulation

DHP Data Handling Plan
DID Data Item Description
DM Data Management
DoD Department of Defense

DR Dry Runs

DSR Daily Status Reports
DT Director for Test

EAC Event Architecture Certification

EAL Event Analysis Lead
EAM Event Analysis Manager
EAP Event Analysis Plan
EAS Event Analysis Lead

EBM Engineering Benchmark Test

EMD Event Mission Director

EOM Exercise Objectives Memorandum

FAT Full Architecture Testing

FCL Fire Control Loop

FRACAS Failure Reporting Analysis and Corrective Action System

FRB Failure Review Board
GTC Checkout Ground Tests
GTD Distributed Ground Tests
GTI Integrated Ground Tests
GTX Focused Ground Tests
HWIL Hardware-in-the-Loop

IATF Information Assurance Technical Framework

IAW In Accordance With

ICCB Internal Configuration Control Board

ICD Interface Control Document

IDIQ Indefinite Delivery/Indefinite Quantity
IDMP Integrated Data Management Plan

IETT Integrated Event Test Team

IMAP Integrated Master Assessment Plan

IMPIntegrated Master PlanIMSIntegrated Master ScheduleIMTPIntegrated Master Test Plan

IMWEP Integrated Master Wargames and Exercises Plan

I&T Integration and Test

IPPD Integrated Process and Product Development

IPT Integrated Product Team

ISC Integration Synchronization Center ISG Integrated Synchronization Group

JELC Joint Event Life Cycle JRE Joint Range Extension

KTP Key Test Points LOS Levels of Support

MDA Missile Defense Agency

MDANet MDA Network

MDDC MDA Mission Data Distribution Center

MDR Mission Data Review

MRWG Mission Readiness Working Group

M&S Modeling and Simulation

OCB Operational Capability Baseline
O&S Operations and Sustainment

OPS Operations

OPTASKlink Operations Task Link
OR Operations Requirement
PCB Program Change Board

PCO Procurement Contracting Officer

PLANEX Planning Exercises

PMR Program Management Review

POP Period of Performance
QLB Quick Look Brief

RaSP Rapid Scenario Prototyping

RFR Runs For Record

ROM Rough Order Magnitude RWE Real World Events

ScDD Scenario Description Document
SCVP Spiral Capability Verification Plan
SDF Segment Development Facility
SDR Scenario Design Review
SCED System Engineering Plan

SEP System Engineering Plan SLV System Level Validation SMR System Modification Request

SOW Statement of Work

SPFR System Post-Flight Reconstruction

SPMT System Pre-Mission Test

SSCD Spiral Software Content Description

SUT System Under Test
TAR Test Analysis Report
TBS Test Baseline Schedule

TCD Technical Capability Declaration
TCDD Test Case Description Document

TCI Test Case Integration TCS Test Configuration Sheet

TO Task Order

TO Memo Test Objectives Memorandum

TOO Target of Opportunity

TRMP-T (C) Test Resource Mission Planning-Tool (Classified)

TRR Test Readiness Review

TTPs Tactics, Techniques and Procedures
UDS Universal Documentation System
X-LAB Experimentation Laboratory