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**Exhibit R-2, RDT&E Budget Item Justification:** PB 2013 Missile Defense Agency **DATE:** February 2012

<b>APPROPRIATION/BUDGET ACTIVITY</b> 0400: <i>Research, Development, Test &amp; Evaluation, Defense-Wide</i> BA 4: <i>Advanced Component Development &amp; Prototypes (ACD&amp;P)</i>	<b>R-1 ITEM NOMENCLATURE</b> PE 0603914C: <i>Ballistic Missile Defense Test</i>
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COST (\$ in Millions)	FY 2011	FY 2012	FY 2013 Base	FY 2013 OCO	FY 2013 Total	FY 2014	FY 2015	FY 2016	FY 2017	Cost To Complete	Total Cost
Total Program Element	-	487.699	454.400	-	454.400	420.357	446.542	373.395	421.632	Continuing	Continuing
MT04: <i>BMDS Test Program</i>	-	455.310	431.847	-	431.847	402.236	428.299	358.786	404.119	Continuing	Continuing
MX04: <i>BMD Test Development Support</i>	-	32.389	-	-	-	-	-	-	-	0.000	32.389
MD40: <i>Program Wide Support</i>	-	-	22.553	-	22.553	18.121	18.243	14.609	17.513	Continuing	Continuing

**Note**

BMD Test Program, Budget Project MT04, was previously captured in PE 0603888C BMD Test and Targets (Budget Project MD04).

BMD Test Development Support, Budget Project MX04, was captured in PE 0603896C (Budget Project MD01 for FY 2011 and Budget Project MX01 in FY 2013)

Program Wide Support, Budget Project MD40, was previously captured in PE 0603888C BMD Test and Targets (Budget Project MD40) for FY 2011 and PE 0603890C BMD Enabling (Budget Project MD40) for FY 2012. Starting in FY 2013, a portion of Program Wide Support (Budget Project MD40) transfers in from BMD Test and Targets PE 0603888C (Budget Project MD40).

**A. Mission Description and Budget Item Justification**

As part of the total Ballistic Missile Defense System (BMDS), the Test Program Element (PE) brings the BMDS element capabilities together for an integrated system-level test approach. Based on the Systems Engineering assessments of realistic threat scenarios, test events demonstrate capability of the evolving integrated and layered missile defense system in a simultaneous test and operations environment. The Missile Defense Agency (MDA), in collaboration with its IMTP stakeholders: Combatant Commands; Service Operational Test Agencies (OTA); Director, Operational Test & Evaluation (DOT&E); and Director, Developmental Test and Evaluation (DT&E), employs a systematic review of BMDS testing that establishes a convention for setting test objectives that go beyond simply exercising newly delivered elements of the system. The BMDS Test Program establishes and documents in the Integrated Master Test Plan (IMTP) the test requirements for the BMDS developed by Systems Engineering with specific focus on collecting the data needed for the verification, validation and accreditation (VV&A) of the BMDS models and simulations (M&S). The BMDS performance evaluation strategy is to develop models and simulations (M&S) of the BMDS and compare predictions to empirical data collected through comprehensive flight and ground testing to validate accuracy. Systems Engineering develops Critical Engagement Conditions (CECs) and Empirical Measurement Events (EMEs), which are the conditions and events which define or describe the data to be obtained from flight and ground tests in order to anchor M&S. CECs and EMEs are utilized to design a test to further advance the understanding and confidence of the M&S tool set that will be used to evaluate all possible engagements. MDA testing is based on an integrated developmental and operational test program. The MDA Test Program is based on a commitment to deploy technology that is proven, cost-effective, and adaptable to an evolving security environment. This PE also provides funding to the OTA, which are active in all phases of test planning, execution and post-test analysis, to include the development of the IMTP.

BMDS Test Program Functions:

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<b>APPROPRIATION/BUDGET ACTIVITY</b> 0400: <i>Research, Development, Test &amp; Evaluation, Defense-Wide</i> BA 4: <i>Advanced Component Development &amp; Prototypes (ACD&amp;P)</i>	<b>R-1 ITEM NOMENCLATURE</b> PE 0603914C: <i>Ballistic Missile Defense Test</i>
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- Directs the testing required to verify, validate, and accredit (VV&A) MDA`s models and simulation (M&S).
- Plans tests according to BMDS and Element objectives.
- Develops MDA test policy.
- Executes BMDS ground and flight tests.
- Ensures appropriate data is collected at the necessary fidelity.
- Collects data for BMDS analysis and manages MDA data centers.
- Provides BMDS and Element performance results for IMTP stakeholders.
- Provides final target system integration, target mission logistics and launch execution for BMDS test target systems.
- Provides test infrastructure and resources for flight and ground tests.

Major Test Program Goals:

- Direct planning, execution, analyses, and reporting of BMDS test events to support system verification.
- Improve test execution and discipline for on-time, successful testing.
- Integrate Element test processes into BMDS processes.
- Develop Element lessons learned and best practices to support BMDS test design.
- Provide required infrastructure and environmental compliance for robust BMDS testing.
- Ensure test readiness, realism, and accuracy and improve test execution quality.

MD40 Program-Wide Support (PWS) consists of essential non-headquarters management costs in support of the MDA functions and activities across the entire Ballistic Missile Defense System (BMDS).

<b>B. Program Change Summary (\$ in Millions)</b>	<b><u>FY 2011</u></b>	<b><u>FY 2012</u></b>	<b><u>FY 2013 Base</u></b>	<b><u>FY 2013 OCO</u></b>	<b><u>FY 2013 Total</u></b>
Previous President's Budget	-	-	-	-	-
Current President's Budget	-	487.699	454.400	-	454.400
Total Adjustments	-	487.699	454.400	-	454.400
• Congressional General Reductions	-	-0.683			
• Congressional Directed Reductions	-	-			
• Congressional Rescissions	-	-			
• Congressional Adds	-	-			
• Congressional Directed Transfers	-	488.382			
• Reprogrammings	-	-			
• SBIR/STTR Transfer	-	-			
• Other Adjustment	-	-	454.400	-	454.400

**Change Summary Explanation**

FY 2012 reflects congressional transfer from PE 0603888C (Consolidated Appropriation Act of FY 2012 (Public Law 112-74)).

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**Exhibit R-2, RDT&E Budget Item Justification:** PB 2013 Missile Defense Agency **DATE:** February 2012

**APPROPRIATION/BUDGET ACTIVITY**  
0400: *Research, Development, Test & Evaluation, Defense-Wide*  
BA 4: *Advanced Component Development & Prototypes (ACD&P)*

**R-1 ITEM NOMENCLATURE**  
PE 0603914C: *Ballistic Missile Defense Test*

FY 2013 increase of \$22.553 million dollars reflects the transfer of Program Wide Support from BMD Test and Targets PE 0603888C (Budget Project MD40) per the Congressional Appropriation Act of FY 2012 (Public Law 112-74).

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**Exhibit R-2A, RDT&E Project Justification:** PB 2013 Missile Defense Agency **DATE:** February 2012

<b>APPROPRIATION/BUDGET ACTIVITY</b> 0400: <i>Research, Development, Test &amp; Evaluation, Defense-Wide</i> BA 4: <i>Advanced Component Development &amp; Prototypes (ACD&amp;P)</i>	<b>R-1 ITEM NOMENCLATURE</b> PE 0603914C: <i>Ballistic Missile Defense Test</i>	<b>PROJECT</b> MT04: <i>BMDS Test Program</i>
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COST (\$ in Millions)	FY 2011	FY 2012	FY 2013 Base	FY 2013 OCO	FY 2013 Total	FY 2014	FY 2015	FY 2016	FY 2017	Cost To Complete	Total Cost
MT04: <i>BMDS Test Program</i>	-	455.310	431.847	-	431.847	402.236	428.299	358.786	404.119	Continuing	Continuing
Quantity of RDT&E Articles	0	0	0		0	0	0	0	0		

**Note**

Previously in PE 0603888C BMDS Test and Targets (Budget Project MD04).

**A. Mission Description and Budget Item Justification**

The Test Program provides consolidated Missile Defense Agency (MDA) capabilities and resources to support the management and execution of Ballistic Missile Defense System (BMDS) and Element-level testing. With the evolution of the BMDS, testing requirements have expanded beyond those of the individual Elements to include testing of BMDS Critical Engagement Conditions (CEC) and Empirical Measurement Events (EME) to enable Independent Verification and Validation (IV&V) of modeling and simulations (M&S).

The MDA Test Program is responsible for all BMDS testing and relies on BMDS Systems Engineering to provide the system test objectives to define the test architecture by developing, updating, coordinating, and assessing the Integrated Master Test Plan (IMTP). The MDA Test Program plans and executes BMDS test events and develops the necessary test policy, test plans, and test infrastructure to conduct an effective test program. The goals of this budgetary objective are sustain and improve a robust testing program and to enhance M&S efforts to provide, in conjunction with flight and ground testing, confidence to the Combatant Commanders that the missile defense system works.

Activities are grouped into five major areas: 1) Program Planning and Operations; 2) Flight Test; 3) Ground Test; 4) Test Resources; and 5) Engineering Test Analysis.

**B. Accomplishments/Planned Programs (\$ in Millions, Article Quantities in Each)**

	FY 2011	FY 2012	FY 2013
<b>Title:</b> Program Planning and Operations	-	116.937	115.295
<b>Articles:</b>	0	0	0
<b>Description:</b> See Description Below			
<b>FY 2011 Accomplishments:</b> Previously in PE 0603888C BMDS Test and Targets (Budget Project MD04).			
<b>FY 2012 Plans:</b> -Develop, update, and coordinate the Integrated Master Test Plan (IMTP). -Identify and resolve Operational Test Agency (OTA) issues. -Update and maintain the classified Test Resources Mission Planning Tool (TRMP-T) data base.			

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<b>Exhibit R-2A, RDT&amp;E Project Justification:</b> PB 2013 Missile Defense Agency		<b>DATE:</b> February 2012		
<b>APPROPRIATION/BUDGET ACTIVITY</b> 0400: <i>Research, Development, Test &amp; Evaluation, Defense-Wide</i> BA 4: <i>Advanced Component Development &amp; Prototypes (ACD&amp;P)</i>	<b>R-1 ITEM NOMENCLATURE</b> PE 0603914C: <i>Ballistic Missile Defense Test</i>	<b>PROJECT</b> MT04: <i>BMDS Test Program</i>		
<b>B. Accomplishments/Planned Programs (\$ in Millions, Article Quantities in Each)</b>		<b>FY 2011</b>	<b>FY 2012</b>	<b>FY 2013</b>
<p>-Develop and maintain hardware and software to support Truth Data Requirements Documents, Truth Data Packages, Integrated Data Management Plans (IDMPs), Data Handling Plans (DHPs), Information Assurance (IA) documentation , on-site truth-quick-look product development, and data planning and management; library operations; test planning and resource de-confliction; test operations support; and pre- and post-test analysis.</p> <p>-Manage the MDA Data Center Program and its library, operations, and infrastructure providing centralized data management, archival, and distribution services.</p> <p>-Perform as Information Assurance (IA) manager for test data management networks and infrastructure.</p> <p>-Develop and implement test policy, standards, directives, and procedures for creating unified BMD test processes.</p> <p>-Coordinate budget planning and execution activities as well as manpower activities.</p> <p><b>FY 2013 Plans:</b></p> <p>-Develop, update, and coordinate the Integrated Master Test Plan (IMTP).</p> <p>-Identify and resolve Operational Test Agency (OTA) issues.</p> <p>-Update and maintain the classified Test Resources Mission Planning Tool (TRMP-T) data base.</p> <p>-Develop and maintain hardware and software to support Truth Data Requirements Documents, Truth Data Packages, Integrated Data Management Plans (IDMPs), Data Handling Plans (DHPs), Information Assurance (IA) documentation , on-site truth-quick-look product development, and data planning and management; library operations; test planning and resource de-confliction; test operations support; and pre- and post-test analysis.</p> <p>-Manage the MDA Data Center Program and its library, operations, and infrastructure providing centralized data management, archival, and distribution services.</p> <p>-Perform as Information Assurance (IA) manager for test data management networks and infrastructure.</p> <p>-Develop and implement test policy, standards, directives, and procedures for creating unified BMD test processes.</p> <p>-Coordinate budget planning and execution activities as well as manpower activities.</p>				
<b>Title:</b> Flight Test		-	116.407	86.397
	<b>Articles:</b>	0	0	0
<b>Description:</b> See Description Below				
<b>FY 2011 Accomplishments:</b> Previously in PE 0603888C BMDS Test and Targets (Budget Project MD04).				
<b>FY 2012 Plans:</b> -Complete test planning for BMDS Flight Test events as shown in Exhibit R-4 Schedule. -Identify and execute focused investments in the BMDS test infrastructure.				

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<b>B. Accomplishments/Planned Programs (\$ in Millions, Article Quantities in Each)</b>		<b>FY 2011</b>	<b>FY 2012</b>	<b>FY 2013</b>
<p>-Conduct mission planning and range coordination activities, execute target missions, collect and analyze target system data, provide communications security equipment and management.</p> <p>-Train and resource System Mission Managers to lead Integrated Event Test Team mission management and readiness activities across all five test event phases for System and Element flight test and contingency operations.</p> <p>-Identify, monitor and develop burn down plans for target system mission risks for all FY2013 BMDS missions as defined in the IMTP.</p> <p><b>FY 2013 Plans:</b></p> <p>-Complete test planning for BMDS Flight Test events as shown in Exhibit R-4 Schedule.</p> <p>-Identify and execute focused investments in the BMDS test infrastructure.</p> <p>-Conduct mission planning and range coordination activities, execute target missions, collect and analyze target system data, provide communications security equipment and management.</p> <p>-Train and resource System Mission Managers to lead Integrated Event Test Team mission management and readiness activities across all five test event phases for System and Element flight test and contingency operations.</p> <p>-Identify, monitor and develop burn down plans for target system mission risks for all FY2013 BMDS missions as defined in the IMTP.</p>				
<p><b>Title:</b> Ground Test</p> <p align="right"><b>Articles:</b></p> <p><b>Description:</b> See Description Below</p> <p><b>FY 2011 Accomplishments:</b> Previously in PE 0603888C BMDS Test and Targets (Budget Project MD04).</p> <p><b>FY 2012 Plans:</b></p> <p>-Complete test planning for BMDS Ground Test events in the Exhibit R-4 schedule.</p> <p>-Complete hardware and software benchmark testing and truth driver and framework integration for GTI-04e (BMDS Integrated Ground Test).</p> <p>-Continue development of a dedicated regional test bed and communication nodes</p> <p>-Deliver system-level and test specific execution, mission assurance, logistics execution, communications support, and test equipment.</p> <p>-Deliver ground test planning designs, scenarios, feasibility assessments, test architectures, and test configurations.</p> <p><b>FY 2013 Plans:</b></p> <p>-Complete test planning for BMDS Ground Test events in the Exhibit R-4 schedule.</p>		-	24.001	21.890
		0	0	0

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<b>B. Accomplishments/Planned Programs (\$ in Millions, Article Quantities in Each)</b>		<b>FY 2011</b>	<b>FY 2012</b>	<b>FY 2013</b>
<ul style="list-style-type: none"> <li>-Complete hardware and software benchmark testing and truth driver and framework integration for GTI-04e (BMDS Integrated Ground Test).</li> <li>-Continue development of a dedicated regional test bed and communication nodes</li> <li>-Deliver system-level and test specific execution, mission assurance, logistics execution, communications support, and test equipment.</li> <li>-Deliver ground test planning designs, scenarios, feasibility assessments, test architectures, and test configurations.</li> </ul>				
<p><b>Title:</b> Test Resources</p> <p><b>Description:</b> See Description Below</p> <p><b>FY 2011 Accomplishments:</b> Previously in PE 0603888C BMDS Test and Targets (Budget Project MD04).</p> <p><b>FY 2012 Plans:</b></p> <ul style="list-style-type: none"> <li>-Develop, maintain, and upgrade as needed MDA unique range facilities and instrumentation.</li> <li>-Support all MDA-sponsored BMDS flight and ground testing conducted in FY 2012 with the full complement of ranges and test infrastructure assets.</li> <li>-Test Resource Managers (TRMs) will continue to complement test execution teams by overseeing scheduling, funding, and management of test resource assets.</li> <li>-The Pacific Range Support Team will continue to provide efficient planning, coordination, and management of range resources and infrastructure for BMDS Flight Testing throughout the Pacific Test Bed.</li> <li>-Maintain and upgrade MDA unique ground test facilities to support all BMDS developmental program hardware and software testing. These facilities provide hardware in the loop (HWIL) capability, threat signature measurement capability, and sensor calibration standards.</li> <li>-Maintain and upgrade MDA unique ground test facilities to support Ballistic Missile Defense System (BMDS) level ground tests, including basic ground test control as well as some Element representations.</li> <li>-Continue development of a second suite of HWIL equipment including the acquisition of additional hardware and digital element representations to support concurrent ground testing of current BMDS capability and that under development.</li> <li>-Add hardware and digital element representations to support expansion of the existing HWIL capability as the BMDS evolves. Continue sustainment and development of the Kinetic HWIL facility to support next generation scene development efforts.</li> </ul> <p><b>FY 2013 Plans:</b></p> <ul style="list-style-type: none"> <li>-Perform Airborne Sensors (ABS) engine overhauls to support Ballistic Missile Defense System (BMDS) level flight tests</li> </ul>		<p><b>Articles:</b></p> <p>-</p> <p>0</p>	<p>160.563</p> <p>0</p>	<p>169.257</p> <p>0</p>

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<b>B. Accomplishments/Planned Programs (\$ in Millions, Article Quantities in Each)</b>	<b>FY 2011</b>	<b>FY 2012</b>	<b>FY 2013</b>
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-Develop, maintain, and upgrade as needed MDA unique range facilities and instrumentation to include test data collection and dissemination, target characterization and discrimination, and multi-spectral event imagery.

-Support all MDA-sponsored BMDS flight and ground testing conducted in FY 2013 with the full complement of ranges and test infrastructure assets.

-Test Resource Managers (TRMs) will continue to complement test execution teams by overseeing scheduling, funding, and management of test resource assets.

-The Pacific Range Support Team will continue to provide efficient planning, coordination, and management of range resources and infrastructure for BMDS Flight Testing throughout the Pacific Test Bed.

-Maintain and upgrade MDA unique ground test facilities to support all BMDS developmental program hardware and software testing. These facilities provide hardware in the loop (HWIL) capability, threat signature measurement capability, and sensor calibration standards.

-Maintain and upgrade MDA unique ground test facilities to support Ballistic Missile Defense System (BMDS) level ground tests, including basic ground test control as well as some Element representations.

-Continue development of a second suite of HWIL equipment including the acquisition of additional hardware and digital element representations to support concurrent ground testing of current BMDS capability and that under development.

-Add hardware and digital element representations to support expansion of the existing HWIL capability as the BMDS evolves. Continue sustainment and development of the Kinetic HWIL facility to support next generation scene development efforts.

-Maintain and upgrade MDA unique flight test instrumentation to support Ballistic Missile Defense System (BMDS) level flight tests.

<b>Title:</b> Engineering and Test Analysis	-	30.147	39.008
<b>Articles:</b>	0	0	0

**Description:** See Description Below

**FY 2011 Accomplishments:**  
For FY 2011, refer to 0603890, Budget Project MD24.

**FY 2012 Plans:**

- Perform System-level analysis and interoperability analysis on BMDS test events listed in the Integrated Master Test Plan (IMTP).
- Develop Analysis Execution Plans (AEP) and final Test Analysis Reports (TAR) for BMDS test events listed in the IMTP.
- Lead Joint Analysis Teams (JAT) for BMDS test events listed in the IMTP.
- Develop, deliver, and brief Quick Look Brief (QLB), Executive QLB (EQLB), Mission Data Review (MDR), and Executive MDR (EMDR) for BMDS test events listed in the IMTP.
- Incorporate software changes to Modular Analysis and Reporting Suite (MARS) to enhance analyst efficiency and capability.
- Continue to populate the MARS Analysis Database with most current test data to support analysis and capability assessments.

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<b>B. Accomplishments/Planned Programs (\$ in Millions, Article Quantities in Each)</b>		<b>FY 2011</b>	<b>FY 2012</b>	<b>FY 2013</b>
<ul style="list-style-type: none"> <li>-Provide SE&amp;I test configuration management, risk assessment, and anomaly and test incident report review, assessment and closure to enable execution of the ground and flight test program and support data gathering for MDS hardware/software reliability improvements.</li> <li>-Allocate and track Critical Engagement Condition (CEC) and Empirical Measurement Events (EME) data requirements and sufficiency for ground and flight tests in accordance with the IMTP.</li> <li>-Define test objectives and evaluation criteria for all System level test events.</li> <li>-Design and certify scenarios for ground test events to meet required data collection and satisfy Systems Engineering &amp; Integration -(SE&amp;I), Operational Test Agencies (OTA) and Warfighter objectives.</li> <li>-Produce threat data required to enable Ballistic Missile Defense System Ground Tests, Ballistic Missile Defense System</li> <li>-Use models and simulations (M&amp;S) for pre-test assessment and post-test review and M&amp;S updates.</li> <li>-Performance Assessment, as documented in the Ballistic Missile Defense System IMTP.</li> </ul> <p><b>FY 2013 Plans:</b></p> <ul style="list-style-type: none"> <li>-Perform System-level analysis and interoperability analysis on BMDS test events listed in the Integrated Master Test Plan (IMTP).</li> <li>-Develop Analysis Execution Plans (AEP) and final Test Analysis Reports (TAR) for BMDS test events listed in the IMTP. Lead Joint Analysis Teams (JAT) for BMDS test events listed in the IMTP.</li> <li>-Develop, deliver, and brief Quick Look Brief (QLB), Executive QLB (EQLB), Mission Data Review (MDR), and Executive MDR (EMDR) for BMDS test events listed in the IMTP.</li> <li>-Incorporate software changes to Modular Analysis and Reporting Suite (MARS) to enhance analyst efficiency and capability.</li> <li>-Continue to populate the MARS Analysis Database with most current test data to support analysis and capability assessments.</li> <li>-Provide SE&amp;I test configuration management, risk assessment, and anomaly and test incident report review, assessment and closure to enable execution of the ground and flight test program and support data gathering for BMDS hardware/software reliability improvements.</li> <li>-Allocate and track Critical Engagement Condition (CEC) and Empirical Measurement Events (EME) data requirements and sufficiency for ground and flight tests in accordance with the IMTP.</li> <li>-Define test objectives and evaluation criteria for all System level test events.</li> <li>-Design and certify scenarios for ground test events to meet required data collection and satisfy Systems Engineering &amp; Integration -(SE&amp;I), Operational Test Agencies (OTA) and Warfighter objectives.</li> <li>-Produce threat data required to enable Ballistic Missile Defense System Ground Tests, Ballistic Missile Defense System</li> <li>-Use models and simulations (M&amp;S) for pre-test assessment and post-test review and M&amp;S updates.</li> <li>-Performance Assessment, as documented in the Ballistic Missile Defense System IMTP.</li> </ul>				
<b>Title:</b> Fielding and Integration		-	7.255	-
<b>Articles:</b>		0	0	0

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<b>APPROPRIATION/BUDGET ACTIVITY</b> 0400: <i>Research, Development, Test &amp; Evaluation, Defense-Wide</i> BA 4: <i>Advanced Component Development &amp; Prototypes (ACD&amp;P)</i>	<b>R-1 ITEM NOMENCLATURE</b> PE 0603914C: <i>Ballistic Missile Defense Test</i>	<b>PROJECT</b> MT04: <i>BMDS Test Program</i>
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<b>B. Accomplishments/Planned Programs (\$ in Millions, Article Quantities in Each)</b>	<b>FY 2011</b>	<b>FY 2012</b>	<b>FY 2013</b>
<b>Description:</b> See Description Below			
<b>FY 2011 Accomplishments:</b> Previously in PE 0603888C BMDS Test and Targets (Budget Project MD04).			
<b>FY 2012 Plans:</b> -Continue Ballistic Missile Defense System (BMDS) integration planning and capability delivery execution. -Manage BMDS Schedule Baseline. -Update BMDS Baseline documentation. -Continue to execute the BMDS Change Management process.			
<b>FY 2013 Plans:</b> Refer to Budget Project MD40 Program-Wide Support (PWS)			
<b>Accomplishments/Planned Programs Subtotals</b>	-	455.310	431.847

**C. Other Program Funding Summary (\$ in Millions)**

<u>Line Item</u>	<u>FY 2011</u>	<u>FY 2012</u>	<u>FY 2013</u> <u>Base</u>	<u>FY 2013</u> <u>OCO</u>	<u>FY 2013</u> <u>Total</u>	<u>FY 2014</u>	<u>FY 2015</u>	<u>FY 2016</u>	<u>FY 2017</u>	<u>Cost To</u> <u>Complete</u>	<u>Total Cost</u>
• 0603888C: <i>Ballistic Missile Defense Test &amp; Targets</i>	999.068	85.569	0.000		0.000	0.000	0.000	0.000	0.000	0.000	1,084.637
• 0603890C: <i>BMD Enabling Programs</i>	401.113	415.048	362.711		362.711	339.197	373.346	395.350	394.085	Continuing	Continuing

**D. Acquisition Strategy**

The Directorate for Test acquisition strategy is consistent with the Missile Defense Agency (MDA) capabilities based acquisition strategy that emphasizes testing, evolutionary acquisition, and knowledge based funding. The Directorate for Test directs a team of various internal staff (government and scientific, engineering and technical assistance support), executing agents, including DoD agencies, Service Organizations, Laboratories and Program Offices, a Federally Funded Research and Development Center (FFRDC), and other MDA programs to execute the various diverse efforts within the Ballistic Missile Defense System (BMDS) test program through competition. When a specific effort/activity being conducted, acquired, or maintained, requires the use of an executing agent, the acquisition strategy that conforms to their respective headquarters regulations are used. This combination of organizations forms an integrated team to accomplish the necessary testing for BMDS.

The Missile Defense Agency Integrated Master Test Plan (IMTP) establishes and documents the test requirements for the Ballistic Missile Defense System (BMDS) with the specific focus on collecting the data needed for the Verification, Validation, and Accreditation (VV&A) of the BMDS Models and Simulations (M&S). This

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**Exhibit R-2A, RDT&E Project Justification:** PB 2013 Missile Defense Agency **DATE:** February 2012

<b>APPROPRIATION/BUDGET ACTIVITY</b>	<b>R-1 ITEM NOMENCLATURE</b>	<b>PROJECT</b>
0400: <i>Research, Development, Test &amp; Evaluation, Defense-Wide</i> BA 4: <i>Advanced Component Development &amp; Prototypes (ACD&amp;P)</i>	PE 0603914C: <i>Ballistic Missile Defense Test</i>	MT04: <i>BMDS Test Program</i>

paradigm uses critical factor analysis to drive test design, planning, and execution for accrediting M&S, which is used to validate and assess system performance. With this test approach, MDA will establish confidence that the M&S used to evaluate the BMDS represents real world behavior, thereby enabling simulation-based performance assessment to verify system functionality.

**E. Performance Metrics**

N/A

**UNCLASSIFIED**

**Exhibit R-3, RDT&E Project Cost Analysis:** PB 2013 Missile Defense Agency **DATE:** February 2012

<b>APPROPRIATION/BUDGET ACTIVITY</b> 0400: <i>Research, Development, Test &amp; Evaluation, Defense-Wide</i> BA 4: <i>Advanced Component Development &amp; Prototypes (ACD&amp;P)</i>	<b>R-1 ITEM NOMENCLATURE</b> PE 0603914C: <i>Ballistic Missile Defense Test</i>	<b>PROJECT</b> MT04: <i>BMDS Test Program</i>
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<b>Product Development (\$ in Millions)</b>				FY 2012		FY 2013 Base		FY 2013 OCO		FY 2013 Total			
Cost Category Item	Contract Method & Type	Performing Activity & Location	Total Prior Years Cost	Cost	Award Date	Cost	Award Date	Cost	Award Date	Cost	Cost To Complete	Total Cost	Target Value of Contract
<b>Subtotal</b>			-	-		-		-		-	0.000	0.000	0.000

**Remarks**  
N/A

<b>Support (\$ in Millions)</b>				FY 2012		FY 2013 Base		FY 2013 OCO		FY 2013 Total			
Cost Category Item	Contract Method & Type	Performing Activity & Location	Total Prior Years Cost	Cost	Award Date	Cost	Award Date	Cost	Award Date	Cost	Cost To Complete	Total Cost	Target Value of Contract
<b>Subtotal</b>			-	-		-		-		-	0.000	0.000	0.000

**Remarks**  
N/A

<b>Test and Evaluation (\$ in Millions)</b>				FY 2012		FY 2013 Base		FY 2013 OCO		FY 2013 Total			
Cost Category Item	Contract Method & Type	Performing Activity & Location	Total Prior Years Cost	Cost	Award Date	Cost	Award Date	Cost	Award Date	Cost	Cost To Complete	Total Cost	Target Value of Contract
Program Planning and Operations Test Functional Management Office	MIPR	NA:MDA/MiDAESS/AL/VA/CO/MA	-	74.757		71.720		-		71.720	Continuing	Continuing	Continuing
Program Planning and Operations Operational Test Agency	MIPR	NA:OTA/NJ	-	15.130		15.510		-		15.510	Continuing	Continuing	Continuing
Program Planning and Operations Lab Analysis Infrastructure	MIPR	NA:AL/CA	-	13.353		15.256		-		15.256	Continuing	Continuing	Continuing
Program Planning and Operations IMTP Planning and Data Management Tools	MIPR	NA:AL	-	13.697		12.809		-		12.809	Continuing	Continuing	Continuing
Flight Test IMTP Flight Testing	MIPR	NA:AL/CA/HI	-	92.555		64.253		-		64.253	Continuing	Continuing	Continuing

**UNCLASSIFIED**

**Exhibit R-3, RDT&E Project Cost Analysis: PB 2013 Missile Defense Agency** **DATE:** February 2012

<b>APPROPRIATION/BUDGET ACTIVITY</b> 0400: <i>Research, Development, Test &amp; Evaluation, Defense-Wide</i> BA 4: <i>Advanced Component Development &amp; Prototypes (ACD&amp;P)</i>	<b>R-1 ITEM NOMENCLATURE</b> PE 0603914C: <i>Ballistic Missile Defense Test</i>	<b>PROJECT</b> MT04: <i>BMDS Test Program</i>
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<b>Test and Evaluation (\$ in Millions)</b>				<b>FY 2012</b>		<b>FY 2013 Base</b>		<b>FY 2013 OCO</b>		<b>FY 2013 Total</b>			
<b>Cost Category Item</b>	<b>Contract Method &amp; Type</b>	<b>Performing Activity &amp; Location</b>	<b>Total Prior Years Cost</b>	<b>Cost</b>	<b>Award Date</b>	<b>Cost</b>	<b>Award Date</b>	<b>Cost</b>	<b>Award Date</b>	<b>Cost</b>	<b>Cost To Complete</b>	<b>Total Cost</b>	<b>Target Value of Contract</b>
Flight Test Support to Flight Testing	C/CPAF	NA:AL	-	23.852		22.144		-		22.144	Continuing	Continuing	Continuing
Ground Test IMTP Ground Testing	MIPR	NA:AL/CO	-	10.153		7.491		-		7.491	Continuing	Continuing	Continuing
Ground Test Support to Ground Testing	MIPR	NA:AL/CO	-	13.848		14.399		-		14.399	Continuing	Continuing	Continuing
Test Resources Flight Test Ranges	MIPR	NA:NAWC/WSMR/AK/AK/CA/HI/MD/NM/TN/VA	-	16.123		18.490		-		18.490	Continuing	Continuing	Continuing
Test Resources Flight Test Instrumentation	MIPR	NA:NRL/NAWC/CA/MD/NCR/NM	-	21.791		26.300		-		26.300	Continuing	Continuing	Continuing
Test Resources Flight Test Improvements	MIPR	NA:NAWC/MARAD/WSMR/CA/HI/NCR/NM	-	13.380		1.288		-		1.288	Continuing	Continuing	Continuing
Test Resources Sea Based Mobile Assets	MIPR	NA:MARAD/NAWC/Hanscom AFB/SMDC/AL/CA/MD/NCR/NM	-	15.742		23.752		-		23.752	Continuing	Continuing	Continuing
Test Resources Airborne Optics Mobile Assets	Reqn	NA:L3/AL	-	25.460		22.605		-		22.605	Continuing	Continuing	Continuing
Test Resources Core GT Labs and HWILS	Reqn	NA:Colsa/SMC/AL	-	37.147		38.524		-		38.524	Continuing	Continuing	Continuing
Test Resources Core GT Communication Support	MIPR	NA:SMDC/SPAWAR/AL/CA	-	3.770		3.830		-		3.830	Continuing	Continuing	Continuing
Test Resources Second String	Reqn	NA:Colsa/Boeing/NG/AL/CO	-	9.400		11.400		-		11.400	Continuing	Continuing	Continuing
Test Resources Current String	MIPR	NA:SPAWAR/AMRDEC/AL/CA/NM/TN	-	6.500		12.100		-		12.100	Continuing	Continuing	Continuing
Test Resources Support to Test Resources	MIPR	NA:MiDAESS/AL	-	11.250		10.968		-		10.968	Continuing	Continuing	Continuing
Engineering and Test Analysis Threat Engineering	MIPR	NA:NJ/CO/MD/VA	-	1.235		0.626		-		0.626	Continuing	Continuing	Continuing
Engineering and Test Analysis DEV IMTP Engineering	MIPR	NA:SMDC/AL	-	11.528		15.304		-		15.304	Continuing	Continuing	Continuing

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**Exhibit R-3, RDT&E Project Cost Analysis:** PB 2013 Missile Defense Agency **DATE:** February 2012

<b>APPROPRIATION/BUDGET ACTIVITY</b> 0400: <i>Research, Development, Test &amp; Evaluation, Defense-Wide</i> BA 4: <i>Advanced Component Development &amp; Prototypes (ACD&amp;P)</i>	<b>R-1 ITEM NOMENCLATURE</b> PE 0603914C: <i>Ballistic Missile Defense Test</i>	<b>PROJECT</b> MT04: <i>BMDS Test Program</i>
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<b>Test and Evaluation (\$ in Millions)</b>				<b>FY 2012</b>		<b>FY 2013 Base</b>		<b>FY 2013 OCO</b>		<b>FY 2013 Total</b>			
<b>Cost Category Item</b>	<b>Contract Method &amp; Type</b>	<b>Performing Activity &amp; Location</b>	<b>Total Prior Years Cost</b>	<b>Cost</b>	<b>Award Date</b>	<b>Cost</b>	<b>Award Date</b>	<b>Cost</b>	<b>Award Date</b>	<b>Cost</b>	<b>Cost To Complete</b>	<b>Total Cost</b>	<b>Target Value of Contract</b>
Engineering and Test Analysis Joint Analysis Team IMTP	MIPR	NA:AL/VA	-	17.384		23.078		-		23.078	Continuing	Continuing	Continuing
Fielding and Integration Support Contracts	C/CPAF	NA:Computer Sciences Corp./Falls Church, VA	-	7.255		-		-		-	Continuing	Continuing	Continuing
<b>Subtotal</b>			-	455.310		431.847		-		431.847			

**Remarks**  
N/A

<b>Management Services (\$ in Millions)</b>				<b>FY 2012</b>		<b>FY 2013 Base</b>		<b>FY 2013 OCO</b>		<b>FY 2013 Total</b>			
<b>Cost Category Item</b>	<b>Contract Method &amp; Type</b>	<b>Performing Activity &amp; Location</b>	<b>Total Prior Years Cost</b>	<b>Cost</b>	<b>Award Date</b>	<b>Cost</b>	<b>Award Date</b>	<b>Cost</b>	<b>Award Date</b>	<b>Cost</b>	<b>Cost To Complete</b>	<b>Total Cost</b>	<b>Target Value of Contract</b>
<b>Subtotal</b>			-	-		-		-		-	0.000	0.000	0.000

**Remarks**  
N/A

<b>Project Cost Totals</b>	<b>Total Prior Years Cost</b>	<b>FY 2012</b>	<b>FY 2013 Base</b>	<b>FY 2013 OCO</b>	<b>FY 2013 Total</b>	<b>Cost To Complete</b>	<b>Total Cost</b>	<b>Target Value of Contract</b>
	-	455.310	431.847	-	431.847			

**Remarks**  
NA

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<b>Exhibit R-4, RDT&amp;E Schedule Profile:</b> PB 2013 Missile Defense Agency		<b>DATE:</b> February 2012
<b>APPROPRIATION/BUDGET ACTIVITY</b> 0400: <i>Research, Development, Test &amp; Evaluation, Defense-Wide</i> BA 4: <i>Advanced Component Development &amp; Prototypes (ACD&amp;P)</i>	<b>R-1 ITEM NOMENCLATURE</b> PE 0603914C: <i>Ballistic Missile Defense Test</i>	<b>PROJECT</b> MT04: <i>BMDS Test Program</i>

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<b>Exhibit R-4, RDT&amp;E Schedule Profile:</b> PB 2013 Missile Defense Agency		<b>DATE:</b> February 2012
<b>APPROPRIATION/BUDGET ACTIVITY</b> 0400: <i>Research, Development, Test &amp; Evaluation, Defense-Wide</i> BA 4: <i>Advanced Component Development &amp; Prototypes (ACD&amp;P)</i>	<b>R-1 ITEM NOMENCLATURE</b> PE 0603914C: <i>Ballistic Missile Defense Test</i>	<b>PROJECT</b> MT04: <i>BMDS Test Program</i>

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<b>Exhibit R-4, RDT&amp;E Schedule Profile:</b> PB 2013 Missile Defense Agency		<b>DATE:</b> February 2012
<b>APPROPRIATION/BUDGET ACTIVITY</b> 0400: <i>Research, Development, Test &amp; Evaluation, Defense-Wide</i> BA 4: <i>Advanced Component Development &amp; Prototypes (ACD&amp;P)</i>	<b>R-1 ITEM NOMENCLATURE</b> PE 0603914C: <i>Ballistic Missile Defense Test</i>	<b>PROJECT</b> MT04: <i>BMDS Test Program</i>

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<b>Exhibit R-4, RDT&amp;E Schedule Profile:</b> PB 2013 Missile Defense Agency		<b>DATE:</b> February 2012
<b>APPROPRIATION/BUDGET ACTIVITY</b> 0400: <i>Research, Development, Test &amp; Evaluation, Defense-Wide</i> BA 4: <i>Advanced Component Development &amp; Prototypes (ACD&amp;P)</i>	<b>R-1 ITEM NOMENCLATURE</b> PE 0603914C: <i>Ballistic Missile Defense Test</i>	<b>PROJECT</b> MT04: <i>BMDS Test Program</i>

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**Exhibit R-4A, RDT&E Schedule Details:** PB 2013 Missile Defense Agency **DATE:** February 2012

<b>APPROPRIATION/BUDGET ACTIVITY</b> 0400: <i>Research, Development, Test &amp; Evaluation, Defense-Wide</i> BA 4: <i>Advanced Component Development &amp; Prototypes (ACD&amp;P)</i>	<b>R-1 ITEM NOMENCLATURE</b> PE 0603914C: <i>Ballistic Missile Defense Test</i>	<b>PROJECT</b> MT04: <i>BMDS Test Program</i>
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Schedule Details

Events	Start		End	
	Quarter	Year	Quarter	Year
FTP-05 (PATRIOT Intercept Flight Test)	1	2012	1	2012
FTT-12 (THAAD Intercept Flight Test) (IOT&E)	1	2012	1	2012
Arrow Flight Test - FY 2012	2	2012	2	2012
Fast Eagle (HWIL) 2	3	2012	3	2012
GTX-04e (BMDS Focused Ground Test)	2	2012	2	2012
FTM-16 E2a (Aegis Intercept Flight Test)	3	2012	3	2012
GM CTV-01 (GM Flight Test)	3	2012	3	2012
FTM-18 (Aegis Intercept Flight Test)	3	2012	3	2012
FTG-06b (GM Intercept Flight Test)	4	2012	4	2012
FTM-19 (Aegis Intercept Flight Test)	4	2012	4	2012
FTI-01 (FTO-01 Risk Reduction Flight Test)	4	2012	4	2012
GTI-04e EUCOM/CENTCOM (BMDS Integrated HWIL Ground Test)	4	2012	4	2012
FTP-06 (PATRIOT Intercept Flight Test)	4	2012	4	2012
FTP-07 (PATRIOT Intercept Flight Test)	4	2012	4	2012
GTI-04e EUCOM/CENTCOM (BMDS Integrated HWIL Ground Test) OT	4	2012	4	2012
GTD-04e EUCOM (BMDS Distributed Ground Test) OT	1	2013	1	2013
Israeli Cooperative Intercept Flight Test - FY 2013	1	2013	4	2013
GTD-04e CENTCOM (BMDS Distributed Ground Test) OT	2	2013	2	2013
FTM-21 E2 (Aegis Simulated Intercept Flight Test)	3	2013	3	2013
GTI-04e NORTHCOM/PACOM (BMDS Integrated HWIL Ground Test)	3	2013	3	2013
FTM-21 E3 (Aegis Intercept Flight Test) (Salvo)	3	2013	3	2013
FTM-22 E2 (Aegis Intercept Flight Test)	3	2013	3	2013

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**Exhibit R-4A, RDT&E Schedule Details:** PB 2013 Missile Defense Agency **DATE:** February 2012

<b>APPROPRIATION/BUDGET ACTIVITY</b> 0400: <i>Research, Development, Test &amp; Evaluation, Defense-Wide</i> BA 4: <i>Advanced Component Development &amp; Prototypes (ACD&amp;P)</i>	<b>R-1 ITEM NOMENCLATURE</b> PE 0603914C: <i>Ballistic Missile Defense Test</i>	<b>PROJECT</b> MT04: <i>BMDS Test Program</i>
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Events	Start		End	
	Quarter	Year	Quarter	Year
FTO-01 (Aegis/THAAD/Patriot Multiple Engagement Flight Test)	3	2013	3	2013
FTM-21 E1 (Aegis Simulated Intercept Flight Test)	3	2013	3	2013
GTD-04e NORTHCOM/PACOM (BMDS Distributed Ground Test) OT	4	2013	4	2013
FTP-08 (PATRIOT Intercept Flight Test)	4	2013	4	2013
GTI-04e NORTHCOM/PACOM (BMDS Integrated HWIL Ground Test) OT	4	2013	4	2013
Israeli Cooperative Intercept Flight Test - FY 2014	1	2014	4	2014
WFTP-04e (Ground Test) (Warfighter Trial Period)	1	2014	1	2014
SCDPTV-01 (Aegis Flight Test)	1	2014	1	2014
FTX-14 (Aegis Simulated Intercept Flight Test)	1	2014	1	2014
GDEx-04e (Ground Test) (Warfighter Exercise)	1	2014	1	2014
AA CTV-01 (Aegis Ashore Flight Test)	2	2014	2	2014
FTG-08 (GM Intercept Flight Test)	3	2014	3	2014
GTX-06a (BMDS Focused Ground Test)	3	2014	3	2014
FTM-20 E1 (Aegis Intercept Flight Test)	3	2014	3	2014
FTT-11a (THAAD Intercept Flight Test)	4	2014	4	2014
FTM-24 (Aegis Intercept Flight Test)	4	2014	4	2014
AA FTM-02 (Aegis Ashore Intercept Flight Test)	4	2014	4	2014
AA FTM-01 (Aegis Ashore Intercept Flight Test)	4	2014	4	2014
GTI-06a (BMDS Integrated HWIL Ground Test)	1	2015	1	2015
GTI-06a (BMDS Integrated HWIL Ground Test) OT	1	2015	1	2015
FTM-25 E1 (Aegis Intercept Flight Test)	1	2015	1	2015
Israeli Cooperative Intercept Flight Test - FY2015	1	2015	4	2015
FTX-19 (Aegis SBT Simulated Intercept Flight Test)	1	2015	1	2015
GTD-06a CENTCOM (BMDS Distributed Ground Test)	2	2015	2	2015
GTD-06a EUCOM (BMDS Distributed Ground Test) OT	2	2015	2	2015

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**Exhibit R-4A, RDT&E Schedule Details:** PB 2013 Missile Defense Agency **DATE:** February 2012

<b>APPROPRIATION/BUDGET ACTIVITY</b> 0400: <i>Research, Development, Test &amp; Evaluation, Defense-Wide</i> BA 4: <i>Advanced Component Development &amp; Prototypes (ACD&amp;P)</i>	<b>R-1 ITEM NOMENCLATURE</b> PE 0603914C: <i>Ballistic Missile Defense Test</i>	<b>PROJECT</b> MT04: <i>BMDS Test Program</i>
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Events	Start		End	
	Quarter	Year	Quarter	Year
GTD-06a EUCOM (BMDS Distributed Ground Test)	2	2015	2	2015
GDEx-06a (Ground Test) (Warfighter Exercise)	2	2015	2	2015
WFTP-06a (Ground Test) (Warfighter Trial Period)	2	2015	2	2015
SCDCTV-01 (Aegis Flight Test)	2	2015	2	2015
GTI-06 (BMDS Integrated HWIL Ground Test) (OT)	3	2015	3	2015
FTM-30 (Aegis Intercept Flight Test)	3	2015	3	2015
GTD-06a CENTCOM (BMDS Distributed Ground Test) OT	3	2015	3	2015
FTX-10 (Cobra Dane Flight Test)	3	2015	3	2015
GTD-06a NORTHCOM/PACOM (BMDS Distributed Ground Test)	3	2015	3	2015
GTD-06a NORTHCOM/PACOM (BMDS Distributed Ground Test) OT	3	2015	3	2015
GTI-06 (BMDS Integrated HWIL Ground Test)	3	2015	3	2015
FTO-02 (GM/AA/Aegis/THAAD/Patriot Multiple Engagement Flight Test)	4	2015	4	2015
WFTP-06 (Ground Test) (Warfighter Trial Period)	4	2015	4	2015
GDEx-06 (Ground Test) (Warfighter Exercise)	4	2015	4	2015
GTI-ISR-16 (BMDS Integrated HWIL Ground Test)	4	2015	4	2015
SCDCTV-02 (Aegis Flight Test)	4	2015	4	2015
FTG-11 (GM Intercept Flight Test) (Salvo)	4	2015	4	2015
GTX-06b (BMDS Ground Test)	1	2016	1	2016
Israeli Cooperative Intercept Flight Test - FY 2016 (1)	1	2016	4	2016
SFTM-1 E2 (Aegis Intercept Flight Test)	3	2016	3	2016
SFTM-1 E1 (Aegis Simulated Intercept Flight Test)	3	2016	3	2016
FTM-26 E1 (Aegis Flight Test)	3	2016	3	2016
GTI-06b (BMDS Integrated HWIL Ground Test) OT	3	2016	3	2016
GTI-06b (BMDS Integrated HWIL Ground Test)	3	2016	3	2016
FTG-13 (GM Intercept Flight Test) (OT)	4	2016	4	2016

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**Exhibit R-4A, RDT&E Schedule Details:** PB 2013 Missile Defense Agency **DATE:** February 2012

<b>APPROPRIATION/BUDGET ACTIVITY</b> 0400: <i>Research, Development, Test &amp; Evaluation, Defense-Wide</i> BA 4: <i>Advanced Component Development &amp; Prototypes (ACD&amp;P)</i>	<b>R-1 ITEM NOMENCLATURE</b> PE 0603914C: <i>Ballistic Missile Defense Test</i>	<b>PROJECT</b> MT04: <i>BMDS Test Program</i>
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Events	Start		End	
	Quarter	Year	Quarter	Year
GTD-06b CENTCOM (BMDS Distributed Ground Test) OT	4	2016	4	2016
GTD-06b CENTCOM (BMDS Distributed Ground Test)	4	2016	4	2016
GTD-06b EUCOM (BMDS Distributed Ground Test) OT	4	2016	4	2016
GTD-06b EUCOM (BMDS Distributed Ground Test)	4	2016	4	2016
WFTP-06b (Ground Test) (Warfighter Trial Period)	4	2016	4	2016
GDEx-06b (Ground Test) (Warfighter Exercise)	4	2016	4	2016
Israeli Cooperative Intercept Flight Test - FY 2016 (2)	1	2017	4	2017
SFTM-2 (Aegis Intercept Flight Test)	1	2017	1	2017
GTD-06b NORTHCOM/PACOM (BMDS Distributed Ground Test)	1	2017	1	2017
GTD-06b NORTHCOM/PACOM (BMDS Distributed Ground Test) OT	1	2017	1	2017
FTX-20 (Aegis SBT Flight Test)	1	2017	1	2017
FTT-15 (THAAD Intercept Flight Test)	2	2017	2	2017
GTX-07a (BMDS Focused Ground Test)	3	2017	3	2017
FTG-15 (GM Intercept Flight Test) (NTD)	4	2017	4	2017
GTX-07b (BMDS Focused Ground Test)	4	2017	4	2017

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**Exhibit R-2A, RDT&E Project Justification:** PB 2013 Missile Defense Agency **DATE:** February 2012

<b>APPROPRIATION/BUDGET ACTIVITY</b> 0400: <i>Research, Development, Test &amp; Evaluation, Defense-Wide</i> BA 4: <i>Advanced Component Development &amp; Prototypes (ACD&amp;P)</i>	<b>R-1 ITEM NOMENCLATURE</b> PE 0603914C: <i>Ballistic Missile Defense Test</i>	<b>PROJECT</b> MX04: <i>BMD Test Development Support</i>
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COST (\$ in Millions)	FY 2011	FY 2012	FY 2013 Base	FY 2013 OCO	FY 2013 Total	FY 2014	FY 2015	FY 2016	FY 2017	Cost To Complete	Total Cost
MX04: <i>BMD Test Development Support</i>	-	32.389	-	-	-	-	-	-	-	0.000	32.389
Quantity of RDT&E Articles	0	0	0		0	0	0	0	0		

**Note**

For FY 2011, refer to PE 0603896C, Budget Project MD01. For FY 2013, refer to PE0603896C, Budget Project MX01.

**A. Mission Description and Budget Item Justification**

The Ballistic Missile Defense System (BMDS) Concurrent Test, Training, and Operations (CTTO) effort provides for comprehensive, in-place, geographically dispersed upgrades, testing, training, and sustainment while maintaining operational readiness across the complete BMDS Enterprise. This CTTO capability will enable simultaneous cross-element training events in the field during BMDS incremental and spiral development testing and sustained operational readiness conditions without degrading protection capability. The BMDS CTTO capability is formally documented as a requirement in the Warfighter's Prioritized Capabilities List (PCL) and Modifications Requirement List (MRL).

**B. Accomplishments/Planned Programs (\$ in Millions, Article Quantities in Each)**

	FY 2011	FY 2012	FY 2013
<b>Title:</b> Concurrent Test, Training, and operations	-	32.389	-
<b>Articles:</b>	0	0	0
<b>Description:</b> See Description Below			
<b>FY 2011 Accomplishments:</b> For FY 2011, refer to PE 0603896C, Budget Project MD01.			
<b>FY 2012 Plans:</b> -Continue integration of element delivered implementations. -Monitor and coordinate the execution of Agency Modeling and Simulation development efforts; key dependencies for the successful execution of Concurrent Test, Training, and Operations (CTTO). -Operate and sustain Distributed Multi-Echelon System (DMETS) training and exercise suites and associated hardware and software at 80 hours per week. -Continue providing BMD training events across the Unified Combatant Commands while maintaining the existing architecture. -Continue to upgrade Distributed Multi-Echelon System (DMETS) to mirror the deployed systems. Includes technical refresh. Expand training enhancements (e.g.dynamic scenarios emulating enemy mobile launchers, constructive (manned) element simulations, and initial crew assessment tools) and cross mission training.			

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**Exhibit R-2A, RDT&E Project Justification:** PB 2013 Missile Defense Agency **DATE:** February 2012

<b>APPROPRIATION/BUDGET ACTIVITY</b> 0400: <i>Research, Development, Test &amp; Evaluation, Defense-Wide</i> BA 4: <i>Advanced Component Development &amp; Prototypes (ACD&amp;P)</i>	<b>R-1 ITEM NOMENCLATURE</b> PE 0603914C: <i>Ballistic Missile Defense Test</i>	<b>PROJECT</b> MX04: <i>BMD Test Development Support</i>
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<b>B. Accomplishments/Planned Programs (\$ in Millions, Article Quantities in Each)</b>	<b>FY 2011</b>	<b>FY 2012</b>	<b>FY 2013</b>
-Implement and Deploy distributed regional training solutions.			
<b>FY 2013 Plans:</b> For FY 2013, refer to PE0603896C, Budget Project MX01.			
<b>Accomplishments/Planned Programs Subtotals</b>	-	32.389	-

**C. Other Program Funding Summary (\$ in Millions)**

<u>Line Item</u>	<u>FY 2011</u>	<u>FY 2012</u>	<u>FY 2013</u> <u>Base</u>	<u>FY 2013</u> <u>OCO</u>	<u>FY 2013</u> <u>Total</u>	<u>FY 2014</u>	<u>FY 2015</u>	<u>FY 2016</u>	<u>FY 2017</u>	<u>Cost To</u> <u>Complete</u>	<u>Total Cost</u>
• 0603896C: <i>Ballistic Missile Defense Command and Control, Battle Management &amp; Communication</i>	454.440	363.640	366.552		366.552	376.116	383.055	358.431	364.725	Continuing	Continuing

**D. Acquisition Strategy**

The Concurrent Test, Training, and Operations (CTTO) systems design and acquisition will follow the MDA's capability-based acquisition strategy that emphasizes fielding capabilities that address particular threats. The design and development of the BMDS CTTO capability is a collaborative effort. The government is the task manager to integrate the technical effort and manage the contracting efforts. The government, using existing competitively awarded contract structures, established a CTTO Project Office; determined BMDS CTTO requirements and standardization; determined BMDS Core Protocol and Standards; upgrades, technology insertion points, and synchronize BMDS Element level activities; training exercises and events and capabilities. The long term acquisition strategy is to normalize CTTO requirements into existing contract structures. The intent is to develop a fully capable CTTO capability that provides comprehensive, in-place, geographically dispersed test, training, and evaluation of the complete BMDS. The CTTO approach supports evolutionary development, continuously building upon demonstrated capabilities to advance the BMDS capabilities.

**E. Performance Metrics**

N/A

**UNCLASSIFIED**

**Exhibit R-3, RDT&E Project Cost Analysis:** PB 2013 Missile Defense Agency **DATE:** February 2012

<b>APPROPRIATION/BUDGET ACTIVITY</b> 0400: <i>Research, Development, Test &amp; Evaluation, Defense-Wide</i> BA 4: <i>Advanced Component Development &amp; Prototypes (ACD&amp;P)</i>	<b>R-1 ITEM NOMENCLATURE</b> PE 0603914C: <i>Ballistic Missile Defense Test</i>	<b>PROJECT</b> MX04: <i>BMD Test Development Support</i>
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<b>Product Development (\$ in Millions)</b>				FY 2012		FY 2013 Base		FY 2013 OCO		FY 2013 Total	Cost To Complete	Total Cost	Target Value of Contract
Cost Category Item	Contract Method & Type	Performing Activity & Location	Total Prior Years Cost	Cost	Award Date	Cost	Award Date	Cost	Award Date	Cost			
<b>Subtotal</b>			-	-		-		-		-	0.000	0.000	0.000

**Remarks**

N/A

<b>Support (\$ in Millions)</b>				FY 2012		FY 2013 Base		FY 2013 OCO		FY 2013 Total	Cost To Complete	Total Cost	Target Value of Contract
Cost Category Item	Contract Method & Type	Performing Activity & Location	Total Prior Years Cost	Cost	Award Date	Cost	Award Date	Cost	Award Date	Cost			
<b>Subtotal</b>			-	-		-		-		-	0.000	0.000	0.000

**Remarks**

N/A

<b>Test and Evaluation (\$ in Millions)</b>				FY 2012		FY 2013 Base		FY 2013 OCO		FY 2013 Total	Cost To Complete	Total Cost	Target Value of Contract
Cost Category Item	Contract Method & Type	Performing Activity & Location	Total Prior Years Cost	Cost	Award Date	Cost	Award Date	Cost	Award Date	Cost			
Concurrent Test, Training, and operations Concurrent Test, Training and Operations DMETS	C/CPAF	Various:Various	-	8.309		-		-		-	Continuing	Continuing	Continuing
Concurrent Test, Training, and operations Concurrent Test, Training and Operations Test/ Training Enhancements	C/CPAF	Various:Various	-	23.432		-		-		-	Continuing	Continuing	Continuing
Concurrent Test, Training, and operations Concurrent Test, Training and Operations FFRDC	SS/FFP	MITRE:Various	-	0.648		-		-		-	Continuing	Continuing	Continuing
<b>Subtotal</b>			-	32.389		-		-		-			

**UNCLASSIFIED**

**Exhibit R-3, RDT&E Project Cost Analysis:** PB 2013 Missile Defense Agency **DATE:** February 2012

<b>APPROPRIATION/BUDGET ACTIVITY</b> 0400: <i>Research, Development, Test &amp; Evaluation, Defense-Wide</i> BA 4: <i>Advanced Component Development &amp; Prototypes (ACD&amp;P)</i>	<b>R-1 ITEM NOMENCLATURE</b> PE 0603914C: <i>Ballistic Missile Defense Test</i>	<b>PROJECT</b> MX04: <i>BMD Test Development Support</i>
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Test and Evaluation (\$ in Millions)				FY 2012		FY 2013 Base		FY 2013 OCO		FY 2013 Total	Cost To Complete	Total Cost	Target Value of Contract
Cost Category Item	Contract Method & Type	Performing Activity & Location	Total Prior Years Cost	Cost	Award Date	Cost	Award Date	Cost	Award Date	Cost			

**Remarks**  
N/A

Management Services (\$ in Millions)				FY 2012		FY 2013 Base		FY 2013 OCO		FY 2013 Total	Cost To Complete	Total Cost	Target Value of Contract
Cost Category Item	Contract Method & Type	Performing Activity & Location	Total Prior Years Cost	Cost	Award Date	Cost	Award Date	Cost	Award Date	Cost			
<b>Subtotal</b>			-	-		-		-		-	0.000	0.000	0.000

**Remarks**  
N/A

	Total Prior Years Cost	FY 2012		FY 2013 Base		FY 2013 OCO		FY 2013 Total	Cost To Complete	Total Cost	Target Value of Contract
		Cost	Award Date	Cost	Award Date	Cost	Award Date	Cost			
<b>Project Cost Totals</b>		-		32.389		-		-			

**Remarks**  
NA

**UNCLASSIFIED**

**Exhibit R-2A, RDT&E Project Justification:** PB 2013 Missile Defense Agency **DATE:** February 2012

<b>APPROPRIATION/BUDGET ACTIVITY</b> 0400: <i>Research, Development, Test &amp; Evaluation, Defense-Wide</i> BA 4: <i>Advanced Component Development &amp; Prototypes (ACD&amp;P)</i>	<b>R-1 ITEM NOMENCLATURE</b> PE 0603914C: <i>Ballistic Missile Defense Test</i>	<b>PROJECT</b> MD40: <i>Program Wide Support</i>
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COST (\$ in Millions)	FY 2011	FY 2012	FY 2013 Base	FY 2013 OCO	FY 2013 Total	FY 2014	FY 2015	FY 2016	FY 2017	Cost To Complete	Total Cost
MD40: <i>Program Wide Support</i>	-	-	22.553	-	22.553	18.121	18.243	14.609	17.513	Continuing	Continuing
Quantity of RDT&E Articles	0	0	0		0	0	0	0	0		

**Note**

Program Wide Support was previously captured in BMD Test and Targets PE 0603888C (Budget Project MD40) for FY 2011 and BMD Enabling PE 0603890C (Budget Project MD40) for FY 2012.

**A. Mission Description and Budget Item Justification**

Program-Wide Support (PWS) consists of essential non-headquarters management costs in support of MDA functions and activities across the entire Ballistic Missile Defense System (BMDS). Includes Government Civilians, Advisory and Assistance Services, and Federally Funded Research and Development contracts (FFRDC) providing integrity and oversight of the BMDS as well as, supporting MDA in enabling the development and evaluation of technologies that will respond to the changing threat. In addition, includes Global Deployment personnel and support performing deployment site preparation and activation. Other costs included provide facility capabilities for MDA Executing Agent locations (with the exception of Federal Office Building 2 after FY 2011), such as physical and technical security, legal services, travel and agency training, office and equipment leases, rents and utilities, data and unified communications support, supplies and maintenance, logistics and central property management of equipment, and similar operating expenses. Also includes legal settlements, and foreign currency fluctuations on a limited number of foreign contracts.

In keeping with congressional intent, PWS is allocated on a pro-rata basis and therefore, fluctuates by year based on the total MDA budget.

**B. Accomplishments/Planned Programs (\$ in Millions, Article Quantities in Each)**

	FY 2011	FY 2012	FY 2013
<b>Title:</b> Civilian Salaries and Support	-	-	22.553
<b>Articles:</b>	0	0	0
<b>Description:</b> See Description Below			
<b>FY 2011 Accomplishments:</b> Refer to BMD Test and Targets PE 0603888C Budget Project MD40			
<b>FY 2012 Plans:</b> Refer to BMD Enabling PE 0603890C Budget Project MD40.			
<b>FY 2013 Plans:</b> See paragraph A, Mission Description and Justification.			
<b>Accomplishments/Planned Programs Subtotals</b>	-	-	22.553

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<b>Exhibit R-2A, RDT&amp;E Project Justification:</b> PB 2013 Missile Defense Agency		<b>DATE:</b> February 2012
<b>APPROPRIATION/BUDGET ACTIVITY</b> 0400: <i>Research, Development, Test &amp; Evaluation, Defense-Wide</i> BA 4: <i>Advanced Component Development &amp; Prototypes (ACD&amp;P)</i>	<b>R-1 ITEM NOMENCLATURE</b> PE 0603914C: <i>Ballistic Missile Defense Test</i>	<b>PROJECT</b> MD40: <i>Program Wide Support</i>

**C. Other Program Funding Summary (\$ in Millions)**

N/A

**D. Acquisition Strategy**

N/A

**E. Performance Metrics**

N/A