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Exhibit R-2, RDT&E Budget Item Justification: PB 2014 Missile Defense Agency **DATE:** April 2013

APPROPRIATION/BUDGET ACTIVITY 0400: <i>Research, Development, Test & Evaluation, Defense-Wide</i> BA 4: <i>Advanced Component Development & Prototypes (ACD&P)</i>	R-1 ITEM NOMENCLATURE PE 0603892C: <i>AEGIS BMD</i>
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COST (\$ in Millions)	All Prior Years	FY 2012	FY 2013 [#]	FY 2014 Base	FY 2014 OCO ^{##}	FY 2014 Total	FY 2015	FY 2016	FY 2017	FY 2018	Cost To Complete	Total Cost
Total Program Element	3,942.817	1,139.019	992.407	937.056	-	937.056	987.729	1,074.941	880.468	876.685	Continuing	Continuing
MD09: <i>Aegis BMD</i>	3,942.817	1,094.395	775.978	726.109	-	726.109	777.584	872.289	646.214	593.369	Continuing	Continuing
MC09: <i>Cyber Operations</i>	-	0.000	0.000	0.260	-	0.260	0.264	0.269	0.273	0.281	Continuing	Continuing
MT09: <i>Aegis BMD Test</i>	-	0.000	150.291	137.373	-	137.373	117.521	82.152	116.380	159.295	Continuing	Continuing
MX09: <i>Aegis BMD Development Support</i>	-	4.427	15.588	23.963	-	23.963	44.883	67.185	73.515	82.641	Continuing	Continuing
MD40: <i>Program-Wide Support</i>	-	40.197	50.550	49.351	-	49.351	47.477	53.046	44.086	41.099	Continuing	Continuing

[#] FY 2013 Program is from the FY 2013 President's Budget, submitted February 2012

^{##} The FY 2014 OCO Request will be submitted at a later date

Note

Funding in the All Prior Years column represents a summary of Prior Years Total Costs for active contracts, Military Interdepartmental Purchase Requests, and civilian salaries on the R-3.

A. Mission Description and Budget Item Justification

The Aegis Ballistic Missile Defense (Aegis BMD) mission is to deliver an enduring, operationally effective and supportable Ballistic Missile Defense capability to defend the nation, deployed forces, friends and allies, and to increase this capability by delivering evolutionary improvements as part of Ballistic Missile Defense System (BMDS) upgrades. The Aegis BMD element of the BMDS capitalizes upon and evolves from the existing U.S. Navy Aegis Weapons System (AWS) and Standard Missile (SM) infrastructures. Aegis BMD provides a forward-deployable, mobile capability to detect and track Ballistic Missiles of all ranges, and the ability to destroy Short-Range Ballistic Missiles (SRBM), Medium-Range Ballistic Missiles (MRBM), and Intermediate-Range Ballistic Missiles (IRBM) in the midcourse phase of flight, Intercontinental Ballistic Missiles (ICBMs) in early phase of flight and shorter range missile in terminal phase. Aegis BMD also provides a Long Range Surveillance and Track (LRS&T) capability to the BMDS. Upgrades to both the Aegis BMD Weapon System and the Standard Missile-3 (SM-3) configuration enable Aegis BMD to provide effective, supportable defensive capability against longer range, more sophisticated threats and an enduring Aegis Ashore defensive capability.

Aegis BMD provides/will provide several capabilities in support of the objective to defend allies and deployed forces from intermediate threats:

Aegis BMD 4.0:

-Aegis BMD 4.0 and the SM-3 Block IB missile improve Aegis BMD's ability to engage longer range, more sophisticated ballistic missiles that may deploy countermeasures and are launched in larger raid sizes. Aegis Ballistic Missile Defense (BMD) sensor improvements include the AN/SPY-1 radar's signal processor and the Standard Missile-3 (SM-3) Block IB kinetic warhead's (KW) two-color infra-red (IR) seeker. The Aegis BMD Signal Processor provides a real-time discrimination and characterization capability. The two-color seeker with an Advanced Signal Processor improves sensitivity for longer range targets, high speed processing for

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

R-1 ITEM NOMENCLATURE
PE 0603892C: *AEGIS BMD*

multiple targets and improved performance against more sophisticated threats. Besides the two-color IR seeker, the SM-3 Block IB Kinetic Warhead (KW) divert engine system has been upgraded over the SM-3 Block IA. The new divert engine, the Throttleable Divert and Attitude Control System (TDACS), provides more flexible divert to maneuver the Kill Vehicle (KV) to intercept. MDA anticipates Aegis BMD 4.0 to be assessed as operationally suitable and effective the 4th quarter of FY 2013.

Deploying FY 2014:

-Aegis BMD 5.0 - Integrates Aegis BMD 4.0.1 capability into the Navy-developed Open Architecture (OA) computing environment. This change is necessary for Aegis BMD to remain compatible with Navy as ship modernization plans are executed. Improves human-systems interface through display enhancements; eliminates the need for a separate computing system specific to the BMD mission; enables more ships to serve in the BMD mission; supports the BMDS Integrated Build D; and provides the basis for Aegis Ashore.

Deploying in the Future:

- Aegis BMD 5.0. Capability upgrade (CU) - Enhances Aegis BMD 5.0 by restoring the terminal defense layer, increasing raid size and expanding the threat set by FY 2015.
- Aegis BMD computer program baseline and missile system modifications necessary to place Aegis BMD capability on land (Aegis Ashore) will take place by FY 2014.
- SM-3 Block IIA - Aegis BMD and the Japan Ministry of Defense (JMOD) have undertaken an SM-3 Cooperative Development (SCD) program, which consists of a spiral upgrade to a 21-inch diameter SM-3 missile (SM-3 Block IIA). Missile development will be covered under the SCD project prior to the SM-3 Block IIA incorporation into the Aegis BMD 5.1 upgrade to the Aegis BMD system. The design will be completed by FY 2018; Initial Production by FY 2018; and production by FY 2020.
- Aegis BMD 5.1- Integrates the SM-3 Block IIA missile and future missiles. It will provide an improved terminal defense capability in an Open Architecture (OA) environment. The SM-3 Block IIA missile will expand available battlespace and include Intermediate Range Ballistic Missile (IRBM) and selected longer-range threats, and when combined with additional weapon system modifications, will enable an Engage-on-Remote (EoR) capability. SM-3 Block IIA and Aegis BMD 5.1 will further extend Aegis BMDs range capability by capitalizing on globally-deployed BMDS sensor assets. The certification and deployment will take place by FY 2018.

BMD Systems Engineering:

Missile Defense Agency (MDA) Systems Engineering integrates element development and Integrated Master Test Plan (IMTP) work to optimize the capability of the BMDS. Modeling and simulation (M&S) activities support all phases of Aegis BMD's development, including development of Aegis Weapon System (AWS) and SM-3 variants, flight test missions, ground tests, war games, exercises, and performance assessment. Models and simulations are tailored to the specific need of a component in its current phase of development, ranging from low-to-medium fidelity analysis supporting concept definition studies, to high-fidelity models used to support engineering development, or testing and are integrated into the BMD Digital Simulations Architecture.

Proving Missile Defense:

Working with the Services' Operational Test Agencies (OTA), with the support of the Director of Operational Test and Evaluation (DOT&E), Missile Defense Agency (MDA) has developed a test program to improve confidence in missile defense capabilities under development and ensure the capabilities transferred to the war fighter are operationally effective, and suitable.

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APPROPRIATION/BUDGET ACTIVITY 0400: <i>Research, Development, Test & Evaluation, Defense-Wide</i> BA 4: <i>Advanced Component Development & Prototypes (ACD&P)</i>	R-1 ITEM NOMENCLATURE PE 0603892C: <i>AEGIS BMD</i>
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As part of the Agency's rigorous test program, System Pre-Flight predictions provide confidence in test execution by predicting element performance and exercising element interfaces. System Post Flight Reconstruction replicates the Ballistic Missile Defense System (BMDS) configuration and actual environmental conditions and target dynamics observed in flight to anchor modeling and simulation results. Testing includes SM-3 intercept using Space Tracking and Surveillance System (STSS) as a remote sensor.

The Integrated Master Test Plan (IMTP) is event-oriented and extends until the collection of all identified data is completed to ensure adequate data is collected to support Verification, Validation, and Accreditation (VV&A) for Missile Defense Modeling and Simulation (M&S).

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. Program Change Summary (\$ in Millions)	FY 2012	FY 2013	FY 2014 Base	FY 2014 OCO	FY 2014 Total
Previous President's Budget	988.928	992.407	960.870	-	960.870
Current President's Budget	1,139.019	992.407	937.056	-	937.056
Total Adjustments	150.091	0.000	-23.814	-	-23.814
• Congressional General Reductions	0.000	0.000			
• Congressional Directed Reductions	0.000	0.000			
• Congressional Rescissions	0.000	0.000			
• Congressional Adds	0.000	0.000			
• Congressional Directed Transfers	0.000	0.000			
• Reprogrammings	150.091	0.000			
• SBIR/STTR Transfer	0.000	0.000			
• Other Adjustment	0.000	0.000	-23.814	-	-23.814

Change Summary Explanation

FY 2014 funding was adjusted to align with current Department of Defense priorities.

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APPROPRIATION/BUDGET ACTIVITY 0400: <i>Research, Development, Test & Evaluation, Defense-Wide</i> BA 4: <i>Advanced Component Development & Prototypes (ACD&P)</i>	R-1 ITEM NOMENCLATURE PE 0603892C: <i>AEGIS BMD</i>	PROJECT MD09: <i>Aegis BMD</i>
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COST (\$ in Millions)	All Prior Years	FY 2012	FY 2013 [#]	FY 2014 Base	FY 2014 OCO ^{##}	FY 2014 Total	FY 2015	FY 2016	FY 2017	FY 2018	Cost To Complete	Total Cost
MD09: <i>Aegis BMD</i>	3,942.817	1,094.395	775.978	726.109	-	726.109	777.584	872.289	646.214	593.369	Continuing	Continuing
Quantity of RDT&E Articles		4	4	1		1	0	0	0	0		

[#] FY 2013 Program is from the FY 2013 President's Budget, submitted February 2012

^{##} The FY 2014 OCO Request will be submitted at a later date

Note

Funding in the All Prior Years column represents a summary of Prior Years Total Costs for active contracts, Military Interdepartmental Purchase Requests, and civilian salaries on the R-3.

A. Mission Description and Budget Item Justification

Aegis Ballistic Missile Defense (BMD) continues development of a sea-based BMD capability in project MD09, in support of the Missile Defense Agency's mission to protect the homeland, deployed forces, friends and allies from ballistic missile threats of all ranges and in all stages of flight. Aegis BMD efforts will primarily fall into two categories of BMD initiatives:

Enhance Missile Defense to Defend Deployed Forces, Allies and Friends Against Theater Threats:

- By FY 2014 Aegis BMD 4.0 will improve radar tracking accuracy and Radio Frequency (RF) discrimination and increased raid capacity using Aegis BMD Signal Processor (BSP).
- SM-3 Block IB improved kinetic warhead by FY 2014.
- Aegis BMD 5.0 integrates BMD capability into the Navy's Aegis Modernization Program by FY 2015.
- Aegis BMD 5.0 Capability Upgrade (CU) expands threat set and further increased the raid size, adds improved terminal defense capability by FY 2015.
- By FY 2018 the Aegis BMD 5.1 implementation of Standard Missile-3 (SM-3) Block IIA tactical capability will take place.
- BMD shipset installations aboard US Navy Cruisers and Destroyers are an ongoing effort.
- By FY 2014 the adaptation of Aegis BMD for use on land (Aegis Ashore) will take place.

Prove Missile Defense Works:

- Aegis BMD element-level testing.
- Participation in BMD System ground tests.
- Element Modeling & Simulation.

Aegis Ballistic Missile Defense (BMD) 3.6.1 provides midcourse defense against Short Range Ballistic missile (SRBM), Medium Range Ballistic Missile (MRBM) and Intermediate Range Ballistic Missile (IRBMs) using the Standard Missile (SM-3) Block IA and terminal defense against SRBM with SM-2 Block IV Missile. This configuration is deployed today supporting Combatant Commanders (COCOM) needs. It is a key element of U.S. regional missile defenses for the defense of deployed

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<p>forces, allies, and partners in Europe, the Asia-Pacific, and the Middle East. Planned efforts include increasing the number of ships to 24 and continued integration with other elements of the Ballistic Missile Defense System (BMDS.)</p> <p>Aegis BMD 4.0 and SM-3 Blk IB address more sophisticated and evolving threats. The ship receives a new signal processor that increases radar resolution to provide more accurate and discriminated track information and triples the possible number of simultaneous ballistic missile engagements over Aegis BMD 3.6.1. The SM-3 receives a new kinetic warhead that includes a 2 color seeker, throttleable engine and upgraded signal processor.</p> <p>Other capability enhancements include functionality to support BMDS integrated Builds C and D:</p> <ul style="list-style-type: none">-Improvements in BMDS Command and Command and Control, Battle Management and Communications (C2BMC) to ensure future BMDS remote sensor enhancements and the resulting discrimination capabilities are able to be communicated, correlated, and acted upon. Improved engagement coordination capability with Terminal High Altitude Area Defense (THAAD) and Patriot to conserve upper tier missiles, including Patriot upper tier debris mitigation.-Analysis for planned upgrades to the SM-3 missile to expand battlespace and improve discrimination, divert, and probability of mission success.-Supports BMDS Integrated Build C functionality: In Aegis BMD, this functionality includes deliberate and crisis Ballistic Missile Defense planning, Warfighter situational awareness, and the initial capability to control Regional BMD engagement between local assets and near-term improvements to threat discrimination.-Supports Integrated BMDS Build D functionality: In Aegis BMD, this functionality includes the Aegis BMD System (4.0 and Standard Missile (SM-3 Block IB)) that provides significant improvements to both Radio Frequency (RF) and Infrared (IR) discrimination allowing for engagement of complex threats. Additional improvements to Aegis increase its ability to launch SM-3 interceptors on BMD System remote sensor data and improve Aegis coordination with the THAAD and Patriot weapon systems. <p>-Approved additions to integrated Build D support initial Aegis BMD Ashore with control of engagement debris and refinements to BMD engagement coordination.</p> <p>Aegis BMD 5.0 will integrate Aegis BMD 4.0 capability into the Navy-developed Open Architecture (OA) computing environment. This change is necessary for Aegis BMD to remain compatible with Navy as Navy ship modernization plans are executed. This change will improve human-systems interface through display enhancements and eliminate the need for a separate computing system specific to the BMD mission. This will also enable more ships to serve as candidates for the BMD mission. Aegis BMD 5.0 will support the BMDS Integrated Build D and provide the basis for Aegis Ashore.</p> <p>Aegis BMD 5.0 Capability Upgrade (CU) will enhance Aegis BMD 5.0 by restoring the terminal defense layer with the SM-6, increasing the maximum number of SM-3's inflight simultaneously and expanding the threat set to include those for Phased Adaptive Approach (PAA) Phase II for defense of Europe and support of deployed forces, friends and allies and to increase this capability by delivering evolutionary improvements as part of (BMDS) upgrades.</p> <p>Aegis Ballistic Missile Defense (BMD) 5.1 will integrate the Standard Missile-3 (SM-3) Block IIA missile and provide improved terminal defense capability. It will also incorporate the following Weapon System improvements:</p> <ul style="list-style-type: none">-An Aegis BMD module in Navy's Open Architecture computer program.-Defeat a wide variety of ballistic missiles: Short Range Ballistic Missile (SRBMs), Medium Range Ballistic Missile (MRBMs), and Intermediate Range Ballistic Missile (IRBMs).		

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- Increased battlespace with the SM-3 Block IIA.
- Engage on Remote (EoR) engagements allows use active and passive off board sensor information to launch and guide the SM-3 to final intercept. EoR engagements will use more of the SM-3's kinematic envelope expanding battlespace, will increase the theoretical number of threats engaged over previous baselines both matching communications upgrades and make the overall architecture more resilient to adversary attempts to penetrate the Ballistic Missile Defense System (BMDS.)
- Enhanced conventional discrimination.
- Increased BMDS interoperability.
- Enhanced Sea-Based Terminal capability.

The Standard Missile-3 Block IIB (SM-3 IIB) is considered a key element to expanding the battle space by adding an additional layer to our homeland defense against Intercontinental Ballistic Missiles (ICBM) from the Middle East. The goals of the program are to develop an operational, hit-to-kill missile fielded in the 2024 timeframe to counter first generation ICBMs targeted at the U.S. homeland early in-flight. It will serve as the first tier of the layered defense of the U.S. Homeland. The SM-3 IIB missile will also provide a large defended area against regional, intermediate range ballistic missiles. The SM-3 IIB will be integrated into the Aegis Ballistic Missile Defense (BMD) 5.1 Weapon System using Engage on Remote, leveraging the BMD distributed Command, Control, Communications, Computers, Intelligence, Surveillance, Reconnaissance (C4ISR) network. The near term goal of the program is to reduce technical and programmatic risk by developing and testing key component technologies that increase the speed of the missile and provide flexible energy management to engage targeted ballistic missiles early in their trajectory. Missile Defense Agency (MDA) is also working with three industry teams to evaluate a wide range of missile concepts, up to 27" in diameter, while balancing technical, cost and performance parameters. The SM-3 IIB contributions to the Prioritized Capability List include: Joint Engagement Sequence (aerospace) (raid capacity), and Prevent Attack (advanced ballistic missile threats).

Aegis BMD supports an autonomous engagement against SRBMs and MRBMs without requiring external cueing. It supports an engagement against SRBMs and MRBMs using data from other BMDS elements and external sensors. Aegis BMD will also provide target track data to support Ground-based Interceptor Launch and Engagement against Intercontinental Ballistic Missiles (ICBMs).

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

	FY 2012	FY 2013	FY 2014
<p>Title: Aegis Ballistic Missile Defense (BMD) 4.0 Development</p> <p style="text-align: right;">Articles:</p> <p>Description: See Description below.</p> <p>FY 2012 Accomplishments:</p> <ul style="list-style-type: none"> - Prepared for and conducted BMDS Flight and Ground Test events as reflected in the IMTP and the Exhibit R-4 schedule. - Prepared and delivered certification safety report. - Prepared and delivered letter data package for FTM-16E2A, FTM-18 and FTM-19. - Received Weapon Systems Explosive Safety Review Board (WSESRB) concurrence to deploy Aegis 4.0.1.0, 4.0.1.1, and 4.0.2. <p>FY 2013 Plans:</p> <ul style="list-style-type: none"> - Conduct Threat Adaptation Update. 	84.969 0	115.367 0	106.550 0

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APPROPRIATION/BUDGET ACTIVITY 0400: <i>Research, Development, Test & Evaluation, Defense-Wide</i> BA 4: <i>Advanced Component Development & Prototypes (ACD&P)</i>		R-1 ITEM NOMENCLATURE PE 0603892C: <i>AEGIS BMD</i>		PROJECT MD09: <i>Aegis BMD</i>
B. Accomplishments/Planned Programs (\$ in Millions, Article Quantities in Each)		FY 2012	FY 2013	FY 2014
<ul style="list-style-type: none"> - Update 4.0 Computer Program Based upon flight test results. - Prepare for and conduct BMDS Flight and Ground Test events as reflected in the IMTP and the Exhibit R-4 schedule. - Continue Command and Control Processor (C2P)/Common Data Link Monitoring System (CDLMS) V3.7 installations. - Continue deployment of Global Command and Control System Maritime (GCCS-M) 4.0.3.5 on BMD platforms. <p>FY 2014 Plans:</p> <ul style="list-style-type: none"> - Prepare for and conduct Ballistic Missile Defense System (BMDS) Flight and Ground Test events as reflected in the Integrated Master Test Plan (IMTP) and the Exhibit R-4 schedule. <p>The decrease from FY 2013 to FY 2014, is due to Aegis BMD 4.0 nearing the end of the development phase and transitioning to fielding.</p>				
<p>Title: Aegis Ballistic Missile Defense (BMD) 5.0 Development</p> <p>Description: See Description below.</p> <p>FY 2012 Accomplishments:</p> <ul style="list-style-type: none"> - Conducted Multi-Mission Signal Processor Radar Exercise. - Conducted the Test Readiness Review (TRR) #1, as part of the roadmap to demo in anticipation of Aegis Modernization (ACB-12). - Prepared for Mission Readiness Assessment #1. - Prepared for Aegis Modernization (ACB-12) demonstration, which is an Anti-Air Warfare (AAW) and BMD functionality test. - Completed BMD integration into ACB-12 to include full BMD functionality. - Conducted testing to prove full functionality of BMD components. - Conducted Prime Item Development Specs (PIDS)/Critical Item Development Specs (CIDS) testing. Starting system level specification verification. <p>FY 2013 Plans:</p> <ul style="list-style-type: none"> - Conduct testing to verify full functionality of BMD Components. - Continue Prime Item Description Specs (PIDS)/Critical Items Description Specs (CIDS) testing. - Continue System Level Specification Verification. - Prepare for and conduct BMDS Flight and Ground Test events as reflected in the IMTP and the Exhibit R-4 schedule. <p>FY 2014 Plans:</p> <ul style="list-style-type: none"> - Conduct a Mission Readiness Assessment (MRA). - Conduct BMDS Flight and Ground Test events as reflected in the IMTP and the R-4 Exhibit. 		185.609	239.912	153.777
Articles:		0	0	0

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B. Accomplishments/Planned Programs (\$ in Millions, Article Quantities in Each)	FY 2012	FY 2013	FY 2014
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FY 2014 decrease is due to Removal of Baseline 4 Cruiser`s, consolidation of 5.0/5.0 Capability Upgrade (CU) into one baseline, and current phase of program development.

Title: Aegis Ballistic Missile Defense (BMD) 5.1 Development	86.718	183.553	239.357
Articles:	0	0	0

Description: See Description below.

- FY 2012 Accomplishments:**
- Conducted System Requirements Review (SRR) #2 to finalize Aegis BMD 5.1 Baseline Element Capability Specification (ECS) requirements
 - Continued systems engineering and analysis to develop the Aegis BMD 5.1 A-Spec, B1/B2-Spec, B5-Spec, and Interface requirements.
 - Conducted System Design Review (SDR) #1 to finalize the Baseline A-Spec requirements needed to support the BMD 5.1 SM-3 Cooperative Development (SCD) configuration for the SCD Flight Tests.
 - Conducted preparations for SDR #2 which will finalize the Baseline A-Spec requirements for the BMD 5.1 Capability to include EoR and BMDS integration, and will finalize the B1/B2-Spec requirements needed to support the BMD 5.1 SCD configuration for the SCD Flight Tests.
 - Continued analysis and design of AWS/Vertical Launch System (VLS)/Missile interfaces and specifications.
 - Prepared for and conducted VLS SRR.
 - Conducted VLS systems engineering, analysis, and design activities in support of VLS SDR.
 - Continued analysis and systems engineering for development of Aegis BMD 5.1 Engage on Remote (EoR), and BMDS integration.
 - Conducted system-level performance analysis in preparation for the SCD Critical design Review (CDR), using updated surrogate BMD 5.1 AWS data.
 - Prepared for and conducted VLS SDR.

- FY 2013 Plans:**
- Continue systems engineering and analysis to complete the Aegis BMD 5.1 A-Spec.
 - Complete preparation for and execute BMD 5.1 SDR #2 complete SDR #2 data package and conduct Navy Review Team (NRT) review.
 - Initiate and systems engineering and analysis to develop the Aegis BMD 5.1 B1, B2, and B5-Specs
 - Initiate preparation for the BMD 5.1 PDR.
 - Continue analysis and systems engineering for development of Aegis BMD 5.1 EoR, and BMDS integration.
 - Complete system-level performance analysis in preparation for the SCD CDR, using updated surrogate BMD 5.1 AWS data.

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APPROPRIATION/BUDGET ACTIVITY 0400: <i>Research, Development, Test & Evaluation, Defense-Wide</i> BA 4: <i>Advanced Component Development & Prototypes (ACD&P)</i>		R-1 ITEM NOMENCLATURE PE 0603892C: <i>AEGIS BMD</i>		PROJECT MD09: <i>Aegis BMD</i>
B. Accomplishments/Planned Programs (\$ in Millions, Article Quantities in Each)		FY 2012	FY 2013	FY 2014
<ul style="list-style-type: none"> - Complete analysis and design of AWS/VLS/Missile interfaces and specifications. - Complete Vertical launch system (VLS) systems engineering, analysis, and design activities in support of VLS Preliminary Design Review (PDR). - Prepare for and conduct VLS PDR. - Initiate VLS systems engineering, analysis, and design activities in support of VLS CDR. <p>FY 2014 Plans:</p> <ul style="list-style-type: none"> - Complete preparations for Preliminary Design Review (PDR) which will finalize the Baseline Prime Item Development Specifications (PIDS/B1) and Critical Item Development Specifications (CIDS/B2) requirements for the BMD 5.1 Capability to include Engage on Remote (EoR) and BMDS integration, and will finalize the Computer Program Requirements Specifications (CPRS/B5) needed to support the BMD 5.1 Standard Missile-3 Cooperative Development (SCD) configuration for the SCD Flight Tests. - Conduct BMD 5.1 Preliminary Design Review (PDR) complete PDR data package and conduct Navy Review Team (NRT) review. - Commence software development for the BMD 5.1 Standard Missile-3 Cooperative Development Program (SCD) configuration for the SCD Flight Tests. - Conduct preparations for Critical Design Review (CDR) which will finalize the Baseline B5-Spec requirements for the of Ballistic Missile Defense (BMD) 5.1 Capability to include EoR and BMDS integration.-Complete development of BMD 5.1 ECS and A-Spec requirements needed to adapt BMD 5.1 for the Aegis Ashore configuration. - Conduct development of BMD 5.1 B1/B2-Spec requirements needed to adapt BMD 5.1 for the Aegis Ashore configuration. - Prepare for and conduct Vertical Launch System Critical Design Review. <p>FY 2014 increase is due to initiating software development and test for Organic and Launch on Remote (LoR), and completing critical detailed design for Engage on Remote (EoR).</p>				
Title: Standard Missile-3 (SM-3) Block IB Development		259.003	79.790	45.449
		Articles: 0	0	0
Description: See Description below.				
FY 2012 Accomplishments:				
<ul style="list-style-type: none"> - Began increasing production and tooling for production line rate increase from 2 to 4 per month. - Prepared for and conducted BMDS Flight and Ground Test events as reflected in the IMTP and the Exhibit R-4 schedule, including successful lethal intercept of target with a SM-3 IB missile in FTM-16E2A and FTM-18. - Completed additional SM-3 Blk IB ground test (Hazard Assessment Test (HAT), Quals, and Design Verification Testing (DVT)). 				

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APPROPRIATION/BUDGET ACTIVITY 0400: <i>Research, Development, Test & Evaluation, Defense-Wide</i> BA 4: <i>Advanced Component Development & Prototypes (ACD&P)</i>		R-1 ITEM NOMENCLATURE PE 0603892C: <i>AEGIS BMD</i>		PROJECT MD09: <i>Aegis BMD</i>
B. Accomplishments/Planned Programs (\$ in Millions, Article Quantities in Each)		FY 2012	FY 2013	FY 2014
<p>- Completed Manufacturing Readiness Review for the SM-3 IB Missile.</p> <p>FY 2013 Plans:</p> <ul style="list-style-type: none"> - Continue production line rate increase from 2 to 4 per month. - Prepare for and conduct BMDS Flight and Ground Test events as reflected in the IMTP and the Exhibit R-4 schedule. - Complete IB Update. - Support Production decisions for Lot #2 and beyond (4Q FY 2013). - Conduct Aegis BMD Flight Test Mission including SM-3 intercept using Space Tracking and Surveillance System (STSS) as a remote sensor. <p>FY 2014 Plans:</p> <ul style="list-style-type: none"> - Complete IB Update for 5.0 Capability Upgrade (CU) and other threats. - Prepare for and conduct Ballistic Missile Defense System (BMDS) flight test as reflected in the Integrated Master Test Plan (IMTP) and the exhibit R-4 schedule. <p>The decrease from FY 2013 to FY 2014, is due to SM-3 Block IB nearing the end of the development phase and transitioning to fielding.</p>				
<p>Title: Aegis Ballistic Missile Defense (BMD) Testing</p> <p align="right">Articles:</p> <p>Description: See Description below.</p> <p>FY 2012 Accomplishments:</p> <ul style="list-style-type: none"> - Supported Aegis BMD-specific modeling and simulation of predicted system performance for testing. - Completed test planning for FY 2013 Aegis flight test missions: prepare target, develop models and simulations, and ready the range for test. - Participated in Target of Opportunity (TOO) testing. - Prepared for and conduct BMDS Flight and Ground Test events as reflected in the IMTP and the Exhibit R-4 schedule. - Participated in BMD special technology experiments. <p>FY 2013 Plans: Funding moved to MT09.</p> <p>FY 2014 Plans: N/A</p>		72.922	0.000	0.000
		0	0	0
Title: Fielding - Aegis Weapon System (AWS)		113.930	86.648	108.400

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Exhibit R-2A, RDT&E Project Justification: PB 2014 Missile Defense Agency		DATE: April 2013		
APPROPRIATION/BUDGET ACTIVITY 0400: <i>Research, Development, Test & Evaluation, Defense-Wide</i> BA 4: <i>Advanced Component Development & Prototypes (ACD&P)</i>		R-1 ITEM NOMENCLATURE PE 0603892C: <i>AEGIS BMD</i>		PROJECT MD09: <i>Aegis BMD</i>
B. Accomplishments/Planned Programs (\$ in Millions, Article Quantities in Each)		FY 2012	FY 2013	FY 2014
Articles:		4	4	1
Description: See Description below.				
FY 2012 Accomplishments: - Installed one (1) BMD 3.6.1 shipset. - Procured two (2) BMD 4.0 equipped shipsets. - Installed two (2) BMD 4.0 equipped shipsets. - Procured two (2) BMD 5.0 equipped shipsets. - Installed one (1) BMD 5.0 equipped shipset.				
FY 2013 Plans: - Install one (1) BMD 3.6.1 shipset. - Procure two (2) BMD 4.0.1 shipsets. - Install two (2) BMD 4.0.1 shipsets. - Procure two (2) BMD 5.0 shipsets. - Install two (2) BMD 5.0 shipsets.				
FY 2014 Plans: - Install three (3) Ballistic Missile Defense (BMD) 4.0 shipsets. - Purchase one (1) BMD 5.1 shipset. - Install one (1) BMD 5.0 shipset.				
Title: SM-3 Manufacturing		81.453	0.000	0.000
Articles:		0	0	0
Description: See Description below.				
FY 2012 Accomplishments: - Delivered seven (7) of twenty four (24) SM-3 Blk IB missiles. - Continued manufacturing the remainder of twenty four (24) SM-3 Blk IB missiles that began in FY 2011 for delivery in FY 2013.				
FY 2013 Plans: Deliver remaining nine (9) of twenty-four (24) SM-3 Blk-IB missiles that began in FY 2011.				
FY 2014 Plans: N/A				
Title: SM-3 Production Support		46.039	0.000	0.000

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Exhibit R-2A, RDT&E Project Justification: PB 2014 Missile Defense Agency		DATE: April 2013		
APPROPRIATION/BUDGET ACTIVITY 0400: <i>Research, Development, Test & Evaluation, Defense-Wide</i> BA 4: <i>Advanced Component Development & Prototypes (ACD&P)</i>	R-1 ITEM NOMENCLATURE PE 0603892C: <i>AEGIS BMD</i>	PROJECT MD09: <i>Aegis BMD</i>		
B. Accomplishments/Planned Programs (\$ in Millions, Article Quantities in Each)		FY 2012	FY 2013	FY 2014
<i>Articles:</i>		0	0	0
Description: See Description below.				
FY 2012 Accomplishments: - Continued to monitor performance of SM-3 Blk IA & IB. - Monitored obsolete material replacement effort. - Designed alternatives for obsolete material replacement efforts. - Conducted ground tests for lot qualification of components. - Prepared for and conduct BMDs Flight and Ground Test events as reflected in the IMTP and the Exhibit R-4 schedule. - Provided in-service engineering support for SM-3 Blk IA missiles.				
FY 2013 Plans: Funds for SM-3 Production Support are reported in Program Element 0208866C.				
FY 2014 Plans: N/A				
Title: Fleet Integration		11.111	4.967	5.931
<i>Articles:</i>		0	0	0
Description: See Description below.				
FY 2012 Accomplishments: - Provided leadership and engineering/technical support to conduct Aegis Combat Systems Assessments, i.e. Quality Assurance Program. - Provided In-service Engineering support to Aegis BMD: Weapon System. - Responded to Fleet issues related to Aegis BMD operations and BMD events. - Provided reach back analytical support to Combat Commanders (COCOMs) for real world operations. - Provided maintenance and update of Force on Force Modeling and Simulation. - Identified and resolved BMD specific material issues with maintenance, engineering and operability. - Responded to BMD readiness issues with maintenance, engineering and operability. - Responded to BMD readiness issues related to Aegis BMD capability, introduction, and employment. - Provided engineering/technical guidance for issues related to the training continuum supporting Aegis BMD capabilities. - Responded to Global Force Management planning initiatives for the allocation of Aegis BMD assets. - Provided logistics support (including technical manuals, spares, and Reliability, Maintainability, and Availability analysis and products) for Aegis BMD: Weapon System.				

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Exhibit R-2A, RDT&E Project Justification: PB 2014 Missile Defense Agency		DATE: April 2013		
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B. Accomplishments/Planned Programs (\$ in Millions, Article Quantities in Each)		FY 2012	FY 2013	FY 2014
<p>- Provided training simulation infrastructure and scenarios supporting introduction of additional Phased Adaptive Approach threats and introduction of Aegis BMD 4.0.1 Baseline.</p> <p>FY 2013 Plans:</p> <ul style="list-style-type: none"> - Provide In-service Engineering support to Aegis BMD: Weapon System and (VLS). - Provide leadership and engineering/technical support to conduct Aegis Combat Systems Assessments. - Respond to Fleet issues related to Aegis BMD installations, BMD operations and BMD events. - Provide reach back analytical support to COCOMs for real world operations. - Provide maintenance and update of Force on Force Modeling and Simulation. <p>FY 2014 Plans:</p> <ul style="list-style-type: none"> - Provide leadership and engineering/technical support to conduct Aegis BMD Combat Systems Readiness Assessment - Provide In-service Engineering support to Aegis Ballistic Missile Defense (ABMD) Weapon system and Vertical Launch System (VLS) - Identify and resolve BMD specific material issues with maintenance, engineering and operability. - Respond to BMD readiness issues with maintenance, engineering and operability. - Respond to BMD readiness issues related to Aegis BMD capability, introduction, and employment. - Provide Management and oversight of ABMD Sustainment program. <p>The FY 2013 to FY 2014 increase is due to an increase in the number of operational SM-3s and BMD capable Ships.</p>				
<p>Title: Modeling & Simulation HWIL Framework, Simulations, Models</p> <p align="right">Articles:</p> <p>Description: See Description below.</p> <p>FY 2012 Accomplishments:</p> <ul style="list-style-type: none"> - Completed deployment and integration of BMDS Hardware-In-The-Loop (HWIL) stimulation framework Single Stimulation Framework (SSF) with Elements for BMDS ground, flight tests and training. - Implemented upgrades to the BMDS HWIL SSF that support execution of increasingly more complex BMDS ground test campaigns that collect data to assess reliability and identify necessary reliability improvements. - Demonstrated the SSF successfully transitioned legacy Missile Defense System Exerciser (MDSE) HWIL framework capabilities to support COCOM and MDA exercises. - Provided SSF support to HWIL Post Flight Reconstruction activities. - Conducted BMDS HWIL SSF V&V and data analysis for BMDS ground tests and demos. - Provided for SSF field sustainment, maintenance and product support. 		50.709 0	38.947 0	39.444 0

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Exhibit R-2A, RDT&E Project Justification: PB 2014 Missile Defense Agency		DATE: April 2013		
APPROPRIATION/BUDGET ACTIVITY 0400: <i>Research, Development, Test & Evaluation, Defense-Wide</i> BA 4: <i>Advanced Component Development & Prototypes (ACD&P)</i>		R-1 ITEM NOMENCLATURE PE 0603892C: <i>AEGIS BMD</i>		PROJECT MD09: <i>Aegis BMD</i>
B. Accomplishments/Planned Programs (\$ in Millions, Article Quantities in Each)				FY 2012
<ul style="list-style-type: none"> - Integrated the SSF with updated MDA and non-MDA Element HWIL and digital models (e.g., Open system architecture Models (OSMs)), as the capabilities are integrated into the BMDS architecture. - Continued Event Execution Control System (EECS) capability development for the BMDS Concurrent Test, Training and Operations (CTTO) implementation. - Began deployment and integration of SSF Objective Hardware for MDA Elements and a Releasable configuration for Allied and Coalition partners. - Began deployment and installation of SSF software on necessary hardware platforms (funded by MDA/DTR) to support a 2nd parallel test string (Ground Test assets only). - Demonstrated initial Open Architecture (OA) redesign capabilities. - Demonstrated improved Instantaneous Object Processing capabilities. - Began development of Real Time, scaled Real Time, non Real Time operational modes. <p>FY 2013 Plans:</p> <ul style="list-style-type: none"> - Demonstrate the SSF has incorporated MDSE framework capabilities to support MDA exercises. - Provide Single Stimulation Framework (SSF) support to Post Flight Reconstruction activities. - Continue integration of the SSF with the DSA into the OSF. - Continue Optimistic Sensor Model (OSM) integration into SSF. - Provide for SSF sustainment, maintenance and product support. - Integrate the BMDS HWIL SSF with additional MDA and non-MDA Elements, as they are integrated into the BMDS architecture. - Continue Event Execution Control System (EECS) capability development for the BMDS Concurrent Test, Training and Operations (CTTO) implementation. - Begin deployment and integration of BMDS HWIL SSF Objective Hardware for MDA Elements and a Releasable configuration for Allied and Coalition partners. - Begin installation of BMDS HWIL SSF software capability (funded by MDA/DESH) and necessary hardware/ maintenance (funded by MDA/DTR) to support a 2nd parallel test string (Ground Test assets only). - Demonstrate initial OA redesign capabilities. - Demonstrate improved Instantaneous Object Processing capabilities. - Begin development of Real Time, scaled Real Time, non Real Time operational modes. <p>FY 2014 Plans:</p> <ul style="list-style-type: none"> - Maintain Single Stimulation Framework (SSF) support to Post Flight Reconstruction activities. - Continue Optimistic Sensor Model (OSM) integration into SSF. - Continue deployment and integration of BMDS Hardware-in-the-loop (HWIL) SSF Objective Hardware for MDA Elements and a Releasable configuration for Allied and Coalition partners. - Continue integration of the SSF with the DSA into the Objective Simulation Framework (OSF). 				FY 2013
				FY 2014

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Exhibit R-2A, RDT&E Project Justification: PB 2014 Missile Defense Agency		DATE: April 2013		
APPROPRIATION/BUDGET ACTIVITY 0400: <i>Research, Development, Test & Evaluation, Defense-Wide</i> BA 4: <i>Advanced Component Development & Prototypes (ACD&P)</i>		R-1 ITEM NOMENCLATURE PE 0603892C: <i>AEGIS BMD</i>		PROJECT MD09: <i>Aegis BMD</i>
B. Accomplishments/Planned Programs (\$ in Millions, Article Quantities in Each)		FY 2012	FY 2013	FY 2014
<ul style="list-style-type: none"> - Deliver the OSF Version 1.0 to begin the transition of HWIL capabilities. - Deliver improved debris and phenomenology modeling capabilities to support Aegis 4.0 and future baselines. - Incorporate advanced Modeling and Simulation (M&S) capabilities into the next version of the OSF for Aegis Ballistic Missile Defense (BMD) for tracking, discrimination, engagement and associated upper tier mitigation for Phased Adaptive Approach (PAA) III. - Maintain BMDS HWIL SSF software capability and necessary hardware/ maintenance to support ground testing. - Continue SSF sustainment, maintenance and product support. 				
<p>Title: BMDS Level Testing</p> <p align="right">Articles:</p> <p>Description: See Description below.</p> <p>FY 2012 Accomplishments:</p> <ul style="list-style-type: none"> - Prepared for and conducted BMDS Flight and Ground Test events as reflected in the IMTP and the Exhibit R-4 schedule. <p>FY 2013 Plans: Funding moved to MT09.</p> <p>FY 2014 Plans: N/A</p>		53.473 0	0.000 0	0.000 0
<p>Title: Systems Engineering & Integration</p> <p align="right">Articles:</p> <p>Description: See Description below.</p> <p>FY 2012 Accomplishments:</p> <ul style="list-style-type: none"> - Produced all the threat data required to enable Ballistic Missile Defense System (BMDS) Ground Tests, Flight Tests, Ballistic Missile Defense System Performance Assessment, war games and exercises as documented in the BMDS Integrated Master Test Plan. - Produced parametric threat space and scenario data for Element and Component design and assessment for Ballistic Missile Defense System in accordance to the Phased Adaptive Approach (PAA). - Validated that Ballistic Missile Defense System test targets are threat representative. - Conducted threat systems engineering to support future systems design related to PAA III/IV. <p>FY 2013 Plans:</p> <ul style="list-style-type: none"> - Continue support to the Combat Systems Engineering Development Site (CSEDS) for Aegis BMD system development. 		31.822 0	10.307 0	10.491 0

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APPROPRIATION/BUDGET ACTIVITY 0400: <i>Research, Development, Test & Evaluation, Defense-Wide</i> BA 4: <i>Advanced Component Development & Prototypes (ACD&P)</i>		R-1 ITEM NOMENCLATURE PE 0603892C: <i>AEGIS BMD</i>		PROJECT MD09: <i>Aegis BMD</i>
B. Accomplishments/Planned Programs (\$ in Millions, Article Quantities in Each)		FY 2012	FY 2013	FY 2014
<ul style="list-style-type: none"> - Continue to produce all the threat data required to enable Ballistic Missile Defense System Ground Tests, Flight Tests, Ballistic Missile Defense System Performance Assessment, war games and exercises as documented in the BMDS Integrated Master Test Plan. - Continue to produce parametric threat space and scenario data for Element and Component design and assessment for Ballistic Missile Defense System in accordance to the Phased Adaptive Approach. - Continue to validate that Ballistic Missile Defense System test targets are threat representative. - Continue threat systems engineering work to support future systems design. <p>FY 2014 Plans:</p> <ul style="list-style-type: none"> - Continue support to the Combat Systems Engineering Development Site (CSEDS) for Aegis BMD system development. - Provide threat data required for BMDS Ground Tests, Flight Tests, Performance Assessment, war games and exercises as documented in the BMDS Integrated Master Test Plan. - Continue to produce parametric threat space and scenario data for Element and Component design and assessment for Ballistic. 				
<p>Title: M&S Digital Framework, Simulation, Models</p> <p>Description: See Description below.</p> <p>FY 2012 Accomplishments:</p> <ul style="list-style-type: none"> - Integrated, tested, functionally qualified, and delivered end-to-end BMDS simulations supporting various uses: - Performance Assessment Simulation (utilizing Element-provided high-resolution models) to support future full-envelope BMDS Performance Assessment events. - Conducted and performed Digital Simulation (utilizing Element-provided medium-resolution models) to support Warfighter Exercises, Warfighter Training, Element spiral development, and Ground Test campaign. <p>FY 2013 Plans:</p> <ul style="list-style-type: none"> - Integrate, test, functionally qualify, and deliver end-to-end BMDS simulations supporting various uses: - Performance Assessment Simulation (utilizing DSA, MDST, and Element-provided high-resolution models) to support full-envelope BMDS - Performance Assessment events. - Real-time Digital Simulation (utilizing DSA, MDST, and Element-provided medium-resolution models) to support Warfighter Exercises, Warfighter Training, Element spiral development, and Ground Test campaign. <p>FY 2014 Plans:</p> <ul style="list-style-type: none"> - Incorporate advanced Modeling and Simulation (M&S) capabilities into the next version of the Objective Simulation Framework (OSF) for Aegis Ballistic Missile Defense (BMD) for tracking, discrimination, engagement and associated upper tier mitigation to satisfy Phased Adaptive Approach (PAA) Phase II/III needs in BMDS Performance Assessment test venues. 		<p>2.112</p> <p>Articles: 0</p>	<p>4.916</p> <p>0</p>	<p>4.983</p> <p>0</p>

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Exhibit R-2A, RDT&E Project Justification: PB 2014 Missile Defense Agency		DATE: April 2013		
APPROPRIATION/BUDGET ACTIVITY 0400: <i>Research, Development, Test & Evaluation, Defense-Wide</i> BA 4: <i>Advanced Component Development & Prototypes (ACD&P)</i>		R-1 ITEM NOMENCLATURE PE 0603892C: <i>AEGIS BMD</i>		PROJECT MD09: <i>Aegis BMD</i>
B. Accomplishments/Planned Programs (\$ in Millions, Article Quantities in Each)		FY 2012	FY 2013	FY 2014
-Begin the transition of real-time digital simulations to the OSF to support Warfighter Exercises, Warfighter Training, Element spiral development, and Ground Test campaigns.				
Title: M&S VV&A and Test Operations		14.525	11.571	11.727
Description: See Description below.		0	0	0
FY 2012 Accomplishments:				
<ul style="list-style-type: none"> - Provided integrated system level Verification, Validation and Accreditation (VV&A) of BMDS Model and Simulation (M&S) events, to include Technical Assessment, Performance Assessment, Ground Tests that support BMDS fielding decisions, and COCOM exercises and training. - Developed an integrated VV&A event Plans and Reports for events as reflected in the IMTP and the Exhibit R-4 schedule. - Planned and specified HWIL system post-flight reconstructions and pre-mission testing events so as to optimize the body of evidence and analysis supporting system-level BMDS accreditation perform all system-level VV&A associated with these events as reflected in the IMTP and the Exhibit R-4 schedule. - Worked closely with Elements, Test Community, System Engineering, and Operational Test Agency (OTA) to ensure M&S for each event meets intended uses and objectives, and has proper VV&A documentation and evidence, to include benchmarking/anchoring pedigree. - Conducted system-level verification and validation of threat trajectory and signature end-to-end environmental implementation is consistent and correct communications and architecture behave properly and interoperability is adequately addressed. - Developed and implemented M&S standards consistent with industry best practices. - Conducted annual review of BMDS Element VV&A programs. - Developed, implemented and controlled configuration of web-based problem reporting system to capture M&S anomalies and incorporate corrections into requirements process in order to guarantee and measure M&S improvement. - Led BMDS VV&A working group to improve VV&A operations and ultimately improve creditability of predicted M&S BMDS performance. - Developed and implemented metrics for system-level M&S to increase efficiencies and effectiveness. - Ensured that individual BMDS elements properly conducted VV&A for their models. 				
FY 2013 Plans:				
<ul style="list-style-type: none"> - Continue to demonstrate initial OA redesign capabilities and improved Instantaneous Object Processing capabilities. - Continue support to the Combat Systems Engineering Development Site (CSEDS) for Aegis BMD system development. 				
FY 2014 Plans:				

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Exhibit R-2A, RDT&E Project Justification: PB 2014 Missile Defense Agency	DATE: April 2013
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APPROPRIATION/BUDGET ACTIVITY 0400: <i>Research, Development, Test & Evaluation, Defense-Wide</i> BA 4: <i>Advanced Component Development & Prototypes (ACD&P)</i>	R-1 ITEM NOMENCLATURE PE 0603892C: <i>AEGIS BMD</i>	PROJECT MD09: <i>Aegis BMD</i>
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B. Accomplishments/Planned Programs (\$ in Millions, Article Quantities in Each)	FY 2012	FY 2013	FY 2014
<ul style="list-style-type: none"> - Provide integrated VV&A of Missile Defense Agency (MDA) M&S at the system level for specific events, to include Technical Assessment, Performance Assessment, Ground Tests that support Ballistic Missile Defense System (BMDS) fielding decisions, and tier one Combatant Commanders (COCOM) exercises. - Develop integrated Verification, Validation and Accreditation (VV&A) event Plans and Reports for events as reflected in the Integrated Master Test Plan (IMTP) and the Exhibit R-4 schedule. - Conduct specified system post-flight reconstructions and pre-mission testing events so as to optimize the body of evidence and analysis supporting system-level Ballistic Missile Defense System (BMDS) accreditation perform all system-level VV&A associated with these events as reflected in the IMTP and the Exhibit R-4 schedule. - Conduct system-level verification and validation of threat trajectory and signature end-to-end environmental implementation is consistent and correct communications and architecture behave properly and interoperability is adequately addressed. 			
Accomplishments/Planned Programs Subtotals	1,094.395	775.978	726.109

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

Line Item	FY 2012	FY 2013	FY 2014 Base	FY 2014 OCO	FY 2014 Total	FY 2015	FY 2016	FY 2017	FY 2018	Cost To Complete	Total Cost
• 0604881C: <i>AEGIS SM-3 Block IIA Co-Development</i>	457.529	420.630	308.522		308.522	230.466	128.743	41.014	0.000	0.000	1,586.904

Remarks

D. Acquisition Strategy

The Aegis Ballistic Missile Defense (BMD) element acquisition approach supports evolutionary development, continuously building upon demonstrated capabilities to advance overall Ballistic Missile Defense System (BMDS) capability. After considering all the technical and management aspects of the program and to meet the requirements presented by an evolving ballistic missile threat, the Aegis BMD program awarded sole source contracts to Raytheon and Lockheed Martin to continue development of the Standard Missile-3 (SM-3) missile and the Aegis BMD Weapon System, respectively.

The Modeling & Simulation (M&S) acquisition strategy utilizes full and open competition to develop, acquire and deliver the integrated architectures/frameworks, as well as develop and deliver models of AEGIS systems. The Digital and Hardware in the loop (HWIL) product centers integrate the suite of M&S into a composite simulation capability, all based on an open architecture. M&S achieves this end-state via close collaboration between its integrating contractor teams (Digital and HWIL) and those of the AEGIS BMD prime contractors, with additional technical standards and engineering oversight provided by Federally Funded Research and Development Centers and University Affiliated Research Centers.

E. Performance Metrics

N/A

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Exhibit R-3, RDT&E Project Cost Analysis: PB 2014 Missile Defense Agency **DATE:** April 2013

APPROPRIATION/BUDGET ACTIVITY 0400: <i>Research, Development, Test & Evaluation, Defense-Wide</i> BA 4: <i>Advanced Component Development & Prototypes (ACD&P)</i>	R-1 ITEM NOMENCLATURE PE 0603892C: <i>AEGIS BMD</i>	PROJECT MD09: <i>Aegis BMD</i>
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Product Development (\$ in Millions)				FY 2012		FY 2013		FY 2014 Base		FY 2014 OCO		FY 2014 Total	Cost To Complete	Total Cost	Target Value of Contract
Cost Category Item	Contract Method & Type	Performing Activity & Location	All Prior Years	Cost	Award Date	Cost	Award Date	Cost	Award Date	Cost	Award Date	Cost			
Aegis Ballistic Missile Defense (BMD) 4.0 Development - BMD 4.0.1 Dev.	MIPR	NAVSEA:VA	0.000	8.239		2.662	Oct 2012	0.000		-		0.000	0.000	10.901	0.000
Aegis Ballistic Missile Defense (BMD) 4.0 Development - BMD 4.0.1 Dev. - 201112203132279	MIPR	CORONA:CA	0.000	0.000		2.000	Oct 2012	1.479	Oct 2013	-		1.479	Continuing	Continuing	Continuing
Aegis Ballistic Missile Defense (BMD) 4.0 Development - BMD 4.0.1 Dev. - MD09	MIPR	NSWC/DD:DAHLGREN, VA	59.679	3.501		3.979	Oct 2012	5.810	Oct 2013	-		5.810	Continuing	Continuing	Continuing
Aegis Ballistic Missile Defense (BMD) 4.0 Development - BMD 4.0.1 Dev. - MD09 - 20117142293189	MIPR	NSWC/PHD:PT. HUENEME, CA	9.812	2.036		2.484	Oct 2012	2.165	Oct 2013	-		2.165	Continuing	Continuing	Continuing
Aegis Ballistic Missile Defense (BMD) 4.0 Development - BMD 4.0.1 Dev. - MD09 - 20117142293191	MIPR	JHU/APL/MD:COLUMBIA, MD	17.906	4.000		10.151	Oct 2012	4.385	Oct 2013	-		4.385	Continuing	Continuing	Continuing
Aegis Ballistic Missile Defense (BMD) 4.0 Development - BMD 4.0.1 Dev. - MD09 - 20117142293194	MIPR	MDA:VA	10.818	4.491		5.010	Oct 2012	0.000		-		0.000	0.000	20.319	0.000
Aegis Ballistic Missile Defense (BMD) 4.0 Development - BMD 4.0.1 Dev. - MD09 - 20117142293195	SS/CPHF	LOCKHEED MARTIN:MOORESTOWN, NJ	33.432	29.311		60.887	Oct 2012	31.703	Oct 2013	-		31.703	Continuing	Continuing	Continuing
Aegis Ballistic Missile Defense (BMD) 4.0 Development - BMD	SS/CPAF	RAYTHEON/AZ:TUCSON, AZ	1.900	0.043		10.989	Oct 2012	36.411	Oct 2013	-		36.411	Continuing	Continuing	Continuing

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Exhibit R-3, RDT&E Project Cost Analysis: PB 2014 Missile Defense Agency **DATE:** April 2013

APPROPRIATION/BUDGET ACTIVITY 0400: <i>Research, Development, Test & Evaluation, Defense-Wide</i> BA 4: <i>Advanced Component Development & Prototypes (ACD&P)</i>	R-1 ITEM NOMENCLATURE PE 0603892C: <i>AEGIS BMD</i>	PROJECT MD09: <i>Aegis BMD</i>
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Product Development (\$ in Millions)				FY 2012		FY 2013		FY 2014 Base		FY 2014 OCO		FY 2014 Total			
Cost Category Item	Contract Method & Type	Performing Activity & Location	All Prior Years	Cost	Award Date	Cost	Award Date	Cost	Award Date	Cost	Award Date	Cost	Cost To Complete	Total Cost	Target Value of Contract
4.0.1 Dev. - MD09 - 20117142293198															
Aegis Ballistic Missile Defense (BMD) 4.0 Development - BMD 4.0.1 Dev. - MD09 - 201171422932	MIPR	AEGIS BMD:DAHLGREN, VA	53.887	17.334		2.000	Oct 2012	0.000		-		0.000	0.000	73.221	0.000
Aegis Ballistic Missile Defense (BMD) 5.0 Development - MD09	SS/CPIF	LOCKHEED MARTIN:MOORESTOWN NJ	402.901	115.525		111.410	Oct 2012	89.668	Oct 2013	-		89.668	Continuing	Continuing	Continuing
Aegis Ballistic Missile Defense (BMD) 5.0 Development - MD09 - 20117142316263	MIPR	NSWC/DD:DAHLGREN, VA	23.062	22.883		10.208	Oct 2012	11.612	Oct 2013	-		11.612	Continuing	Continuing	Continuing
Aegis Ballistic Missile Defense (BMD) 5.0 Development - MD09 - 20117142316266	MIPR	NSWC/PHD:PT. HUENEME, CA	1.084	1.702		0.366	Oct 2012	1.315	Oct 2013	-		1.315	Continuing	Continuing	Continuing
Aegis Ballistic Missile Defense (BMD) 5.0 Development - MD09 - 20117142316267	MIPR	JHU/APL/MD:COLUMBIA, MD	22.020	5.323		10.199	Oct 2012	10.681	Oct 2013	-		10.681	Continuing	Continuing	Continuing
Aegis Ballistic Missile Defense (BMD) 5.0 Development - MD09 - 2011714231627	MIPR	MDA:VA	44.594	0.000		52.674	Oct 2012	1.075	Oct 2013	-		1.075	Continuing	Continuing	Continuing
Aegis Ballistic Missile Defense (BMD) 5.0 Development - MD09 - 20117142316272	C/CPAF	RAYTHEON/AZ:TUCSON, AZ	0.030	0.000		0.000		0.875	Oct 2013	-		0.875	Continuing	Continuing	Continuing
Aegis Ballistic Missile Defense (BMD) 5.0 Development - MD09 - 20117142316275	SS/CPAF	RAYTHEON/AZ:TUCSON, AZ	4.000	0.000		5.617	Oct 2012	0.000		-		0.000	0.000	9.617	0.000

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Exhibit R-3, RDT&E Project Cost Analysis: PB 2014 Missile Defense Agency **DATE:** April 2013

APPROPRIATION/BUDGET ACTIVITY 0400: <i>Research, Development, Test & Evaluation, Defense-Wide</i> BA 4: <i>Advanced Component Development & Prototypes (ACD&P)</i>	R-1 ITEM NOMENCLATURE PE 0603892C: <i>AEGIS BMD</i>	PROJECT MD09: <i>Aegis BMD</i>
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Product Development (\$ in Millions)				FY 2012		FY 2013		FY 2014 Base		FY 2014 OCO		FY 2014 Total	Cost To Complete	Total Cost	Target Value of Contract
Cost Category Item	Contract Method & Type	Performing Activity & Location	All Prior Years	Cost	Award Date	Cost	Award Date	Cost	Award Date	Cost	Award Date	Cost			
Aegis Ballistic Missile Defense (BMD) 5.0 Development - MD09 - 20117142316278	MIPR	AEGIS BMD:AZ, VA, CA	0.000	0.000		12.542	Oct 2012	1.273	Oct 2013	-		1.273	Continuing	Continuing	Continuing
Aegis Ballistic Missile Defense (BMD) 5.0 Development - MD09 - 20117142316278 - 2012628495024	MIPR	NSWC:CRANE	0.000	0.000		0.000		0.612	Oct 2013	-		0.612	Continuing	Continuing	Continuing
Aegis Ballistic Missile Defense (BMD) 5.0 Development - MD09 - 20117142316278 - 20126284950245	MIPR	MITRE:CECOM	0.000	0.665		0.000		1.169	Oct 2013	-		1.169	Continuing	Continuing	Continuing
Aegis Ballistic Missile Defense (BMD) 5.0 Development - MD09 - 20117142316278 - 20126284950249	MIPR	Aegis Techrep:VA	0.000	1.079		0.000		0.000		-		0.000	0.000	1.079	0.000
Aegis Ballistic Missile Defense (BMD) 5.1 Development - MD09	MIPR	AEGIS BMD:AZ, VA, CA	49.605	4.802		0.000		2.465	Nov 2013	-		2.465	Continuing	Continuing	Continuing
Aegis Ballistic Missile Defense (BMD) 5.1 Development - MD09 - 20117142323679	MIPR	MDA:VA	13.705	8.383		0.000		2.864	Nov 2013	-		2.864	Continuing	Continuing	Continuing
Aegis Ballistic Missile Defense (BMD) 5.1 Development - MD09 - 20117142323680	MIPR	NSWC/DD:DAHLGREN, VA	24.949	5.570		16.366	Oct 2012	8.143	Oct 2013	-		8.143	Continuing	Continuing	Continuing
Aegis Ballistic Missile Defense (BMD) 5.1 Development - MD09 - 20117142323684	MIPR	NSWC/PHD:PT HUENEME, CA	1.049	0.000		0.000		1.025	Nov 2013	-		1.025	Continuing	Continuing	Continuing

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Exhibit R-3, RDT&E Project Cost Analysis: PB 2014 Missile Defense Agency **DATE:** April 2013

APPROPRIATION/BUDGET ACTIVITY 0400: <i>Research, Development, Test & Evaluation, Defense-Wide</i> BA 4: <i>Advanced Component Development & Prototypes (ACD&P)</i>	R-1 ITEM NOMENCLATURE PE 0603892C: <i>AEGIS BMD</i>	PROJECT MD09: <i>Aegis BMD</i>
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Product Development (\$ in Millions)				FY 2012		FY 2013		FY 2014 Base		FY 2014 OCO		FY 2014 Total	Cost To Complete	Total Cost	Target Value of Contract
Cost Category Item	Contract Method & Type	Performing Activity & Location	All Prior Years	Cost	Award Date	Cost	Award Date	Cost	Award Date	Cost	Award Date	Cost			
Aegis Ballistic Missile Defense (BMD) 5.1 Development - MD09 - 20117142323686	MIPR	JHU/APL/ MD:COLUMBIA, MD	20.703	4.741		19.054	Oct 2012	9.929	Oct 2013	-		9.929	Continuing	Continuing	Continuing
Aegis Ballistic Missile Defense (BMD) 5.1 Development - MD09 - 20117142323689	SS/CPAF	LOCKHEED MARTIN:MOORESTOWN, NJ	10.373	48.763		118.008	Oct 2012	150.394	Oct 2013	-		150.394	Continuing	Continuing	Continuing
Aegis Ballistic Missile Defense (BMD) 5.1 Development - MD09 - 20117142323691	SS/CPAF	RAYTHEON/ AZ:TUCSON, AZ	0.210	0.000		0.000		4.326	Oct 2013	-		4.326	Continuing	Continuing	Continuing
Aegis Ballistic Missile Defense (BMD) 5.1 Development - MD09 - 20126284501509	MIPR	SPAWAR:-	0.000	2.629		0.000		4.956	Nov 2013	-		4.956	Continuing	Continuing	Continuing
Standard Missile-3 (SM-3) Block IB Development - MD09	SS/CPAF	Raytheon:Tucson, AZ	671.572	207.572		55.319	Oct 2012	28.175	Oct 2013	-		28.175	Continuing	Continuing	Continuing
Standard Missile-3 (SM-3) Block IB Development - MD09 - 20117142332255	MIPR	NSWC/DD:Dahlgren, VA	25.232	7.568		2.500	Oct 2012	1.695	Oct 2013	-		1.695	Continuing	Continuing	Continuing
Standard Missile-3 (SM-3) Block IB Development - MD09 - 20117142332256	MIPR	JHU/APL/ MD:Columbia, MD	33.847	1.791		2.700	Oct 2012	3.728	Oct 2013	-		3.728	Continuing	Continuing	Continuing
Standard Missile-3 (SM-3) Block IB Development - MD09 - 20117142332259	MIPR	NSWC/PHD:Port Huneme, CA	8.357	2.772		1.120	Oct 2012	1.356	Oct 2013	-		1.356	Continuing	Continuing	Continuing
Standard Missile-3 (SM-3) Block IB Development - MD09 - 20117142332261	MIPR	NSWC Carderock:MD	15.020	0.590		1.993	Oct 2012	0.678	Oct 2013	-		0.678	Continuing	Continuing	Continuing
Standard Missile-3 (SM-3) Block IB Development - MD09 - 20117142332264	MIPR	AEGIS BMD:VA, AZ, CA	66.372	6.352		0.000		0.000		-		0.000	0.000	72.724	0.000

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Exhibit R-3, RDT&E Project Cost Analysis: PB 2014 Missile Defense Agency **DATE:** April 2013

APPROPRIATION/BUDGET ACTIVITY 0400: <i>Research, Development, Test & Evaluation, Defense-Wide</i> BA 4: <i>Advanced Component Development & Prototypes (ACD&P)</i>	R-1 ITEM NOMENCLATURE PE 0603892C: <i>AEGIS BMD</i>	PROJECT MD09: <i>Aegis BMD</i>
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Product Development (\$ in Millions)				FY 2012		FY 2013		FY 2014 Base		FY 2014 OCO		FY 2014 Total	Cost To Complete	Total Cost	Target Value of Contract
Cost Category Item	Contract Method & Type	Performing Activity & Location	All Prior Years	Cost	Award Date	Cost	Award Date	Cost	Award Date	Cost	Award Date	Cost			
Aegis Ballistic Missile Defense (BMD) Testing - MD09	MIPR	NSWCDD:DAHLGREN, VA	3.621	0.425		0.000		0.000		-		0.000	0.000	4.046	0.000
Aegis Ballistic Missile Defense (BMD) Testing - MD09 - 20117142341695	MIPR	NSWC/PHD:PT. HUENEME, CA	2.853	0.000		0.000		0.000		-		0.000	0.000	2.853	0.000
Aegis Ballistic Missile Defense (BMD) Testing - MD09 - 20117142341698	MIPR	JHU/APL/ MD:COLUMBIA, MD	7.971	3.250		0.000		0.000		-		0.000	0.000	11.221	0.000
Aegis Ballistic Missile Defense (BMD) Testing - MD09 - 20117142341702	MIPR	NAVSEA:VA	4.181	33.798		0.000		0.000		-		0.000	0.000	37.979	0.000
Aegis Ballistic Missile Defense (BMD) Testing - MD09 - 20117142341705	MIPR	SPAWAR:SAN DIEGO, CA	1.016	0.000		0.000		0.000		-		0.000	0.000	1.016	0.000
Aegis Ballistic Missile Defense (BMD) Testing - MD09 - 20117142341708	MIPR	Corona:Corona, CA	1.383	0.000		0.000		0.000		-		0.000	0.000	1.383	0.000
Aegis Ballistic Missile Defense (BMD) Testing - MD09 - 20117142341709	C/CPAF	Lockheed Martin:Moorestown, NJ	0.000	0.825		0.000		0.000		-		0.000	0.000	0.825	0.000
Aegis Ballistic Missile Defense (BMD) Testing - MD09 - 20117142341713	MIPR	Aegis BMD:VA, AZ, CA	0.000	18.920		0.000		0.000		-		0.000	0.000	18.920	0.000
Fielding - Aegis Weapon System (AWS) - MD09	MIPR	MDA:Arlington Va	0.000	0.000		0.000		3.730	Nov 2013	-		3.730	Continuing	Continuing	Continuing
Fielding - Aegis Weapon System (AWS) - MD09 -	SS/CPIF	Lockheed Martin:Moorestown, NJ	145.849	32.540		58.584	Oct 2012	75.681	Oct 2013	-		75.681	Continuing	Continuing	Continuing
Fielding - Aegis Weapon System (AWS) - MD09 - 20117142347879	MIPR	NSWC/PHD:Port Hueneme, CA	30.171	0.000		9.034	Oct 2012	12.857	Oct 2013	-		12.857	Continuing	Continuing	Continuing

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Exhibit R-3, RDT&E Project Cost Analysis: PB 2014 Missile Defense Agency **DATE:** April 2013

APPROPRIATION/BUDGET ACTIVITY 0400: <i>Research, Development, Test & Evaluation, Defense-Wide</i> BA 4: <i>Advanced Component Development & Prototypes (ACD&P)</i>	R-1 ITEM NOMENCLATURE PE 0603892C: <i>AEGIS BMD</i>	PROJECT MD09: <i>Aegis BMD</i>
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Product Development (\$ in Millions)				FY 2012		FY 2013		FY 2014 Base		FY 2014 OCO		FY 2014 Total	Cost To Complete	Total Cost	Target Value of Contract
Cost Category Item	Contract Method & Type	Performing Activity & Location	All Prior Years	Cost	Award Date	Cost	Award Date	Cost	Award Date	Cost	Award Date	Cost			
Fielding - Aegis Weapon System (AWS) - MD09 - 20117142347888	MIPR	NSWC/DD:Dahlgren, VA	24.995	1.432		1.500	Oct 2012	2.135	Oct 2013	-		2.135	Continuing	Continuing	Continuing
Fielding - Aegis Weapon System (AWS) - MD09 - 20117142347891	C/CPAF	Raytheon:Washington, DC	3.800	8.387		2.130	Oct 2012	3.031	Oct 2013	-		3.031	Continuing	Continuing	Continuing
Fielding - Aegis Weapon System (AWS) - MD09 - 20117142347892	MIPR	PEO IWS:Minneapolis, MN	2.300	32.800		4.600	Oct 2012	6.547	Oct 2013	-		6.547	Continuing	Continuing	Continuing
Fielding - Aegis Weapon System (AWS) - MD09 - 20117142347895	MIPR	AEGIS TECHREP:Moorestown, NJ	1.700	1.600		1.700	Oct 2012	2.419	Oct 2013	-		2.419	Continuing	Continuing	Continuing
Fielding - Aegis Weapon System (AWS) - MD09 - 20117142347898	MIPR	NAVSEA:VA	72.377	37.171		9.100	Oct 2012	2.000	Oct 2013	-		2.000	Continuing	Continuing	Continuing
SM-3 Manufacturing - SM-3 BLK IB MANUFACTURING - MD09	SS/CPAF	Raytheon:Tucson, AZ	255.652	81.453		0.000		0.000		-		0.000	0.000	337.105	0.000
SM-3 Manufacturing - SM-3 BLK IB MANUFACTURING - MD09 - 20117142352564	MIPR	NSWCDD:Port Hueneme, CA	4.001	0.000		0.000		0.000		-		0.000	0.000	4.001	0.000
SM-3 Manufacturing - SM-3 BLK IB MANUFACTURING - MD09 - 20117142352566	MIPR	NSWC Carderock:MD	11.760	0.000		0.000		0.000		-		0.000	0.000	11.760	0.000
SM-3 Production Support - CANISTERS - MD09	MIPR	PEO IWS:Minneapolis, MN	15.800	0.000		0.000		0.000		-		0.000	0.000	15.800	0.000
SM-3 Production Support - PRODUCTION ENGINEERING - MD09	SS/CPAF	Raytheon:Tucson, AZ	29.102	46.039		0.000		0.000		-		0.000	0.000	75.141	0.000

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Exhibit R-3, RDT&E Project Cost Analysis: PB 2014 Missile Defense Agency **DATE:** April 2013

APPROPRIATION/BUDGET ACTIVITY 0400: <i>Research, Development, Test & Evaluation, Defense-Wide</i> BA 4: <i>Advanced Component Development & Prototypes (ACD&P)</i>	R-1 ITEM NOMENCLATURE PE 0603892C: <i>AEGIS BMD</i>	PROJECT MD09: <i>Aegis BMD</i>
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Product Development (\$ in Millions)				FY 2012		FY 2013		FY 2014 Base		FY 2014 OCO		FY 2014 Total	Cost To Complete	Total Cost	Target Value of Contract
Cost Category Item	Contract Method & Type	Performing Activity & Location	All Prior Years	Cost	Award Date	Cost	Award Date	Cost	Award Date	Cost	Award Date	Cost			
Fleet Integration - 20098185191945	MIPR	NSWC/PHD:Port Hueneme, CA	15.027	1.588		1.456	Oct 2012	1.663	Nov 2013	-		1.663	Continuing	Continuing	Continuing
Fleet Integration - MD09	MIPR	SMDC/ARSTRST:Huntsville, AL	8.395	0.228		0.118	Oct 2012	0.144	Nov 2013	-		0.144	Continuing	Continuing	Continuing
Fleet Integration - MD09 -	SS/CPHF	Lockheed Martin:Moorestown, NJ	44.765	1.734		0.000		0.000		-		0.000	0.000	46.499	0.000
Fleet Integration - MD09 - 20117142371309	MIPR	NSWC/DD:Dahlgren, VA	4.944	0.000		0.000		0.000		-		0.000	0.000	4.944	0.000
Fleet Integration - MD09 - 20117142371317	MIPR	CSCS:Dahlgren, VA	8.670	1.696		1.217	Oct 2012	1.426	Nov 2013	-		1.426	Continuing	Continuing	Continuing
Fleet Integration - MD09 - 20117142371318	MIPR	JHU/APL/MD:Columbia, MD	3.299	1.882		0.816	Oct 2012	0.987	Nov 2013	-		0.987	Continuing	Continuing	Continuing
Fleet Integration - MD09 - 2011714237132	MIPR	NSWC/DD:Dahlgren, VA	10.819	2.947		1.360	Oct 2012	1.600	Nov 2013	-		1.600	Continuing	Continuing	Continuing
Fleet Integration - MD09 - 2012723031274	MIPR	MDA:VA	1.036	1.036		0.000		0.111	Nov 2013	-		0.111	Continuing	Continuing	Continuing
Modeling & Simulation HWIL Framework, Simulations, Models - DSA/SSF Integration - MD09	C/CPAF	Boeing:AL	21.506	0.000		0.000		0.000		-		0.000	0.000	21.506	0.000
Modeling & Simulation HWIL Framework, Simulations, Models - Single Stimulation Framework & Objective Simulation Framework, Procure, Install, Test - MD09	C/CPAF	Boeing:AL	100.671	50.709		38.947	Oct 2012	39.444	Nov 2013	-		39.444	Continuing	Continuing	Continuing
Systems Engineering & Integration - CSS - MD09	C/CPFF	CSC:VA	7.811	0.000		1.546	Oct 2012	1.573	Nov 2013	-		1.573	Continuing	Continuing	Continuing

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Exhibit R-3, RDT&E Project Cost Analysis: PB 2014 Missile Defense Agency **DATE:** April 2013

APPROPRIATION/BUDGET ACTIVITY 0400: <i>Research, Development, Test & Evaluation, Defense-Wide</i> BA 4: <i>Advanced Component Development & Prototypes (ACD&P)</i>	R-1 ITEM NOMENCLATURE PE 0603892C: <i>AEGIS BMD</i>	PROJECT MD09: <i>Aegis BMD</i>
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Product Development (\$ in Millions)				FY 2012		FY 2013		FY 2014 Base		FY 2014 OCO		FY 2014 Total	Cost To Complete	Total Cost	Target Value of Contract
Cost Category Item	Contract Method & Type	Performing Activity & Location	All Prior Years	Cost	Award Date	Cost	Award Date	Cost	Award Date	Cost	Award Date	Cost			
Systems Engineering & Integration - CSS - MD09 - 20117142392773	C/CPFF	Cobham:CA	6.660	0.000		1.031	Oct 2012	1.050	Nov 2013	-		1.050	Continuing	Continuing	Continuing
Systems Engineering & Integration - Industry - MD09	C/CPAF	Boeing:VA	12.117	0.000		5.154	Oct 2012	5.245	Nov 2013	-		5.245	Continuing	Continuing	Continuing
Systems Engineering & Integration - SEI&T - MD09	MIPR	MDA:ARLINGTON, VA	0.000	31.822		2.576	Oct 2012	2.623	Nov 2013	-		2.623	Continuing	Continuing	Continuing
M&S Digital Framework, Simulation, Models - Digital Simulation Architecture - MD09	C/CPAF	Northrop Grumman:CO	8.421	2.112		4.916	Oct 2012	4.983	Nov 2013	-		4.983	Continuing	Continuing	Continuing
Subtotal			3,198.792	912.059		666.023		589.216		0.000		589.216			

Remarks
N/A

Support (\$ in Millions)				FY 2012		FY 2013		FY 2014 Base		FY 2014 OCO		FY 2014 Total	Cost To Complete	Total Cost	Target Value of Contract
Cost Category Item	Contract Method & Type	Performing Activity & Location	All Prior Years	Cost	Award Date	Cost	Award Date	Cost	Award Date	Cost	Award Date	Cost			
Aegis Ballistic Missile Defense (BMD) 4.0 Development - BMD 4.0.1 Dev - 20098184410811	C/CPFF	Gryphon:Dahlgren, VA	3.801	0.215		0.000		0.000		-		0.000	0.000	4.016	0.000
Aegis Ballistic Missile Defense (BMD) 4.0 Development - BMD 4.0.1 Dev - MD09	MIPR	MDA MIDAESS:Arlington, VA	0.000	0.000		5.737	Oct 2012	10.824	Oct 2013	-		10.824	Continuing	Continuing	Continuing
Aegis Ballistic Missile Defense (BMD) 4.0 Development - BMD 4.0.1 Dev - MD09 -	MIPR	Dahlgren:Dahlgren, VA	4.817	0.000		0.000		1.203	Nov 2013	-		1.203	Continuing	Continuing	Continuing

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APPROPRIATION/BUDGET ACTIVITY 0400: <i>Research, Development, Test & Evaluation, Defense-Wide</i> BA 4: <i>Advanced Component Development & Prototypes (ACD&P)</i>	R-1 ITEM NOMENCLATURE PE 0603892C: <i>AEGIS BMD</i>	PROJECT MD09: <i>Aegis BMD</i>
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Support (\$ in Millions)				FY 2012		FY 2013		FY 2014 Base		FY 2014 OCO		FY 2014 Total			
Cost Category Item	Contract Method & Type	Performing Activity & Location	All Prior Years	Cost	Award Date	Cost	Award Date	Cost	Award Date	Cost	Award Date	Cost	Cost To Complete	Total Cost	Target Value of Contract
Aegis Ballistic Missile Defense (BMD) 4.0 Development - BMD 4.0.1 Dev - MD09 - 0	MIPR	MDA:Arlington, VA	36.244	2.132		4.222	Oct 2012	5.616	Oct 2013	-		5.616	Continuing	Continuing	Continuing
Aegis Ballistic Missile Defense (BMD) 4.0 Development - BMD 4.0.1 Dev - MD09 - 20117142431989	MIPR	NAVSEA:Washington, DC	17.962	1.468		2.789	Oct 2012	2.920	Oct 2013	-		2.920	Continuing	Continuing	Continuing
Aegis Ballistic Missile Defense (BMD) 4.0 Development - BMD 4.0.1 Dev - MD09 - 20117142431992	C/CPFF	GDIT:Dahlgren, VA	72.818	3.165		0.000		0.000		-		0.000	0.000	75.983	0.000
Aegis Ballistic Missile Defense (BMD) 4.0 Development - BMD 4.0.1 Dev - MD09 - 20117142431995	C/CPFF	Paradigm:Dahlgren, VA	17.821	1.252		0.000		0.000		-		0.000	0.000	19.073	0.000
Aegis Ballistic Missile Defense (BMD) 4.0 Development - BMD 4.0.1 Dev - MD09 - 20117142432002	C/CPIF	Lockheed Martin:Arlington, VA	2.006	0.000		0.622	Oct 2012	0.293	Nov 2013	-		0.293	Continuing	Continuing	Continuing
Aegis Ballistic Missile Defense (BMD) 4.0 Development - BMD 4.0.1 Dev - MD09 - 20117142432014	C/CPAF	Raytheon:Arlington, VA	1.960	0.000		0.536	Oct 2012	0.274	Nov 2013	-		0.274	Continuing	Continuing	Continuing
Aegis Ballistic Missile Defense (BMD) 4.0 Development - BMD 4.0.1 Dev - MD09 - 20117142432019	MIPR	Aegis BMD:Dahlgren, VA	2.628	0.520		0.487	Oct 2012	0.328	Nov 2013	-		0.328	Continuing	Continuing	Continuing

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APPROPRIATION/BUDGET ACTIVITY 0400: <i>Research, Development, Test & Evaluation, Defense-Wide</i> BA 4: <i>Advanced Component Development & Prototypes (ACD&P)</i>	R-1 ITEM NOMENCLATURE PE 0603892C: <i>AEGIS BMD</i>	PROJECT MD09: <i>Aegis BMD</i>
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Support (\$ in Millions)				FY 2012		FY 2013		FY 2014 Base		FY 2014 OCO		FY 2014 Total			
Cost Category Item	Contract Method & Type	Performing Activity & Location	All Prior Years	Cost	Award Date	Cost	Award Date	Cost	Award Date	Cost	Award Date	Cost	Cost To Complete	Total Cost	Target Value of Contract
Aegis Ballistic Missile Defense (BMD) 4.0 Development - BMD 4.0.1 Dev - MD09 - 20117142432022	MIPR	MDA :Arlington, VA	17.000	7.262		0.812	Oct 2012	2.734	Nov 2013	-		2.734	Continuing	Continuing	Continuing
Aegis Ballistic Missile Defense (BMD) 4.0 Development - BMD 4.0.1 Dev - MD09 - 2012722816284	MIPR	JHU/APL:Columbia MD	0.000	0.000		0.000		0.405	Nov 2013	-		0.405	Continuing	Continuing	Continuing
Aegis Ballistic Missile Defense (BMD) 5.0 Development - MD09	MIPR	MDA:Arlington, VA	12.050	6.232		8.978	Oct 2012	8.105	Oct 2013	-		8.105	Continuing	Continuing	Continuing
Aegis Ballistic Missile Defense (BMD) 5.0 Development - MD09 -	MIPR	JHU/APL:Columbia MD	0.000	0.000		0.000		0.584	Nov 2013	-		0.584	Continuing	Continuing	Continuing
Aegis Ballistic Missile Defense (BMD) 5.0 Development - MD09 - 20117142454161	MIPR	NAVSEA:Washington, DC	7.535	3.590		6.508	Oct 2012	4.214	Oct 2013	-		4.214	Continuing	Continuing	Continuing
Aegis Ballistic Missile Defense (BMD) 5.0 Development - MD09 - 20117142454164	C/CPFF	GDIT:Dahlgren, VA	8.921	8.488		0.000		0.000		-		0.000	0.000	17.409	0.000
Aegis Ballistic Missile Defense (BMD) 5.0 Development - MD09 - 20117142454167	C/CPFF	Paradigm:Dahlgren, VA	6.829	2.857		0.000		0.000		-		0.000	0.000	9.686	0.000
Aegis Ballistic Missile Defense (BMD) 5.0 Development - MD09 - 2011714245417	C/CPFF	Gryphon:Dahlgren, VA	1.394	0.000		0.000		0.000		-		0.000	0.000	1.394	0.000
Aegis Ballistic Missile Defense (BMD) 5.0	MIPR	Dahlgren:Dahlgren, VA	9.022	0.000		0.000		1.736	Nov 2013	-		1.736	Continuing	Continuing	Continuing

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Exhibit R-3, RDT&E Project Cost Analysis: PB 2014 Missile Defense Agency **DATE:** April 2013

APPROPRIATION/BUDGET ACTIVITY 0400: <i>Research, Development, Test & Evaluation, Defense-Wide</i> BA 4: <i>Advanced Component Development & Prototypes (ACD&P)</i>	R-1 ITEM NOMENCLATURE PE 0603892C: <i>AEGIS BMD</i>	PROJECT MD09: <i>Aegis BMD</i>
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Support (\$ in Millions)				FY 2012		FY 2013		FY 2014 Base		FY 2014 OCO		FY 2014 Total			
Cost Category Item	Contract Method & Type	Performing Activity & Location	All Prior Years	Cost	Award Date	Cost	Award Date	Cost	Award Date	Cost	Award Date	Cost	Cost To Complete	Total Cost	Target Value of Contract
Development - MD09 - 20117142454173															
Aegis Ballistic Missile Defense (BMD) 5.0 Development - MD09 - 20117142454175	C/CPIF	Lockheed Martin:Arlington, VA	0.849	0.000		0.590	Oct 2012	0.423	Nov 2013	-		0.423	Continuing	Continuing	Continuing
Aegis Ballistic Missile Defense (BMD) 5.0 Development - MD09 - 20117142454178	C/CPAF	Raytheon:Arlington, VA	0.287	0.000		0.551	Oct 2012	0.395	Nov 2013	-		0.395	0.000	1.233	0.000
Aegis Ballistic Missile Defense (BMD) 5.0 Development - MD09 - 20117142454181	MIPR	Aegis BMD:Dahlgren, VA	20.595	0.711		1.087	Oct 2012	0.474	Nov 2013	-		0.474	Continuing	Continuing	Continuing
Aegis Ballistic Missile Defense (BMD) 5.0 Development - MD09 - 20117142454184	MIPR	MDA :Arlington, VA	17.000	16.554		0.090	Oct 2012	3.945	Nov 2013	-		3.945	Continuing	Continuing	Continuing
Aegis Ballistic Missile Defense (BMD) 5.0 Development - MD09 - 20117142454188	MIPR	MDA MIDAESS:Arlington, VA	0.000	0.000		19.092	Oct 2012	15.621	Oct 2013	-		15.621	Continuing	Continuing	Continuing
Aegis Ballistic Missile Defense (BMD) 5.1 Development - MD09	MIPR	MDA:Arlington, VA	1.547	1.836		9.007	Oct 2012	12.615	Oct 2013	-		12.615	Continuing	Continuing	Continuing
Aegis Ballistic Missile Defense (BMD) 5.1 Development - MD09 - 2011714247033	MIPR	NAVSEA:Washington, DC	1.949	0.688		8.934	Oct 2012	6.560	Oct 2013	-		6.560	Continuing	Continuing	Continuing
Aegis Ballistic Missile Defense (BMD) 5.1 Development - MD09 - 20117142470333	C/CPFF	GDIT:Dahlgren, VA	5.661	2.349		0.000		0.000		-		0.000	0.000	8.010	0.000
Aegis Ballistic Missile Defense (BMD) 5.1	C/CPFF	Paradigm:Dahlgren, VA	1.587	0.734		0.000		0.000		-		0.000	0.000	2.321	0.000

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Exhibit R-3, RDT&E Project Cost Analysis: PB 2014 Missile Defense Agency **DATE:** April 2013

APPROPRIATION/BUDGET ACTIVITY 0400: <i>Research, Development, Test & Evaluation, Defense-Wide</i> BA 4: <i>Advanced Component Development & Prototypes (ACD&P)</i>	R-1 ITEM NOMENCLATURE PE 0603892C: <i>AEGIS BMD</i>	PROJECT MD09: <i>Aegis BMD</i>
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Support (\$ in Millions)				FY 2012		FY 2013		FY 2014 Base		FY 2014 OCO		FY 2014 Total	Cost To Complete	Total Cost	Target Value of Contract
Cost Category Item	Contract Method & Type	Performing Activity & Location	All Prior Years	Cost	Award Date	Cost	Award Date	Cost	Award Date	Cost	Award Date	Cost			
Development - MD09 - 20117142470336															
Aegis Ballistic Missile Defense (BMD) 5.1 Development - MD09 - 20117142470338	C/CPFF	Gryphon:Dahlgren, VA	0.255	0.216		0.000		0.000		-		0.000	0.000	0.471	0.000
Aegis Ballistic Missile Defense (BMD) 5.1 Development - MD09 - 20117142470341	MIPR	Dahlgren:Dahlgren, VA	4.545	1.524		0.000		2.702	Nov 2013	-		2.702	Continuing	Continuing	Continuing
Aegis Ballistic Missile Defense (BMD) 5.1 Development - MD09 - 20117142470344	C/CPIF	Lockheed Martin:Arlington, VA	0.225	0.000		0.539	Oct 2012	0.659	Nov 2013	-		0.659	Continuing	Continuing	Continuing
Aegis Ballistic Missile Defense (BMD) 5.1 Development - MD09 - 20117142470352	C/CPAF	Raytheon:Arlington, VA	0.182	0.000		0.503	Oct 2012	0.615	Nov 2013	-		0.615	Continuing	Continuing	Continuing
Aegis Ballistic Missile Defense (BMD) 5.1 Development - MD09 - 20117142470355	MIPR	Aegis BMD:Dahlgren, VA	2.478	0.051		0.997	Oct 2012	0.738	Nov 2013	-		0.738	Continuing	Continuing	Continuing
Aegis Ballistic Missile Defense (BMD) 5.1 Development - MD09 - 20117142470358	MIPR	MDA:Arlington, VA	17.000	4.432		0.930	Oct 2012	6.141	Nov 2013	-		6.141	Continuing	Continuing	Continuing
Aegis Ballistic Missile Defense (BMD) 5.1 Development - MD09 - 20117142470359	MIPR	MDA MIDAESS:Arlington, VA	0.000	0.000		9.215	Oct 2012	24.315	Oct 2013	-		24.315	Continuing	Continuing	Continuing
Aegis Ballistic Missile Defense (BMD) 5.1 Development - MD09 - 20117142470359 - 2012722862854	MIPR	JHU/APL:Columbia MD	0.000	0.000		0.000		0.910	Nov 2013	-		0.910	Continuing	Continuing	Continuing

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Exhibit R-3, RDT&E Project Cost Analysis: PB 2014 Missile Defense Agency **DATE:** April 2013

APPROPRIATION/BUDGET ACTIVITY 0400: <i>Research, Development, Test & Evaluation, Defense-Wide</i> BA 4: <i>Advanced Component Development & Prototypes (ACD&P)</i>	R-1 ITEM NOMENCLATURE PE 0603892C: <i>AEGIS BMD</i>	PROJECT MD09: <i>Aegis BMD</i>
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Support (\$ in Millions)				FY 2012		FY 2013		FY 2014 Base		FY 2014 OCO		FY 2014 Total			
Cost Category Item	Contract Method & Type	Performing Activity & Location	All Prior Years	Cost	Award Date	Cost	Award Date	Cost	Award Date	Cost	Award Date	Cost	Cost To Complete	Total Cost	Target Value of Contract
Standard Missile-3 (SM-3) Block IB Development - MD09	MIPR	JHU/APL:Columbia MD	0.000	0.000		0.000		0.173	Nov 2013	-		0.173	Continuing	Continuing	Continuing
Standard Missile-3 (SM-3) Block IB Development - MD09 -	MIPR	MDA:Arlington, VA	17.260	3.648		3.659	Oct 2012	1.720	Oct 2013	-		1.720	Continuing	Continuing	Continuing
Standard Missile-3 (SM-3) Block IB Development - MD09 - 20117142487038	MIPR	NAVSEA:Washington, DC	64.364	13.530		2.417	Oct 2012	1.246	Oct 2013	-		1.246	Continuing	Continuing	Continuing
Standard Missile-3 (SM-3) Block IB Development - MD09 - 20117142487064	C/CPFF	GDIT:Dahlgren, VA	24.912	4.842		0.000		0.000		-		0.000	0.000	29.754	0.000
Standard Missile-3 (SM-3) Block IB Development - MD09 - 20117142487067	C/CPFF	Paradigm:Dahlgren, VA	6.007	1.156		0.000		0.000		-		0.000	0.000	7.163	0.000
Standard Missile-3 (SM-3) Block IB Development - MD09 - 2011714248707	C/CPFF	Gryphon:Dahlgren, VA	0.445	0.458		0.000		0.000		-		0.000	0.000	0.903	0.000
Standard Missile-3 (SM-3) Block IB Development - MD09 - 20117142487073	MIPR	Dahlgren:Dahlgren, VA	9.053	0.000		0.000		0.513	Nov 2013	-		0.513	Continuing	Continuing	Continuing
Standard Missile-3 (SM-3) Block IB Development - MD09 - 20117142487113	C/CPIF	Lockheed Martin:Arlington, VA	2.009	0.000		0.219	Oct 2012	0.125	Nov 2013	-		0.125	Continuing	Continuing	Continuing
Standard Missile-3 (SM-3) Block IB Development - MD09 - 20117142487117	C/CPAF	Raytheon:Arlington, VA	0.318	0.000		0.205	Oct 2012	0.117	Nov 2013	-		0.117	Continuing	Continuing	Continuing
Standard Missile-3 (SM-3) Block IB Development - MD09 - 20117142487119	MIPR	Aegis BMD:Dahlgren, VA	37.055	0.604		0.427	Oct 2012	0.140	Nov 2013	-		0.140	Continuing	Continuing	Continuing
Standard Missile-3 (SM-3) Block IB Development - MD09 - 20117142487125	MIPR	MDA:Arlington, VA	18.869	8.120		0.390	Oct 2012	1.166	Nov 2013	-		1.166	Continuing	Continuing	Continuing

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Exhibit R-3, RDT&E Project Cost Analysis: PB 2014 Missile Defense Agency **DATE:** April 2013

APPROPRIATION/BUDGET ACTIVITY 0400: <i>Research, Development, Test & Evaluation, Defense-Wide</i> BA 4: <i>Advanced Component Development & Prototypes (ACD&P)</i>	R-1 ITEM NOMENCLATURE PE 0603892C: <i>AEGIS BMD</i>	PROJECT MD09: <i>Aegis BMD</i>
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Support (\$ in Millions)				FY 2012		FY 2013		FY 2014 Base		FY 2014 OCO		FY 2014 Total	Cost To Complete	Total Cost	Target Value of Contract
Cost Category Item	Contract Method & Type	Performing Activity & Location	All Prior Years	Cost	Award Date	Cost	Award Date	Cost	Award Date	Cost	Award Date	Cost			
Standard Missile-3 (SM-3) Block IB Development - MD09 - 20117142487128	MIPR	MDA MIDAESS:Arlington, VA	0.000	0.000		8.841	Oct 2012	4.617	Oct 2013	-		4.617	Continuing	Continuing	Continuing
Aegis Ballistic Missile Defense (BMD) Testing - TESTING - MD09	MIPR	MDA:Arlington, VA	1.984	0.000		0.000		0.000		-		0.000	0.000	1.984	0.000
Aegis Ballistic Missile Defense (BMD) Testing - TESTING - MD09 - 20117142501342	MIPR	NAVSEA:Washington, DC	4.032	0.000		0.000		0.000		-		0.000	0.000	4.032	0.000
Aegis Ballistic Missile Defense (BMD) Testing - TESTING - MD09 - 20117142501345	C/CPFF	GDIT:Dahlgren, VA	13.868	0.000		0.000		0.000		-		0.000	0.000	13.868	0.000
Aegis Ballistic Missile Defense (BMD) Testing - TESTING - MD09 - 20117142501348	C/CPFF	Paradigm:Dahlgren, VA	3.621	0.000		0.000		0.000		-		0.000	0.000	3.621	0.000
Aegis Ballistic Missile Defense (BMD) Testing - TESTING - MD09 - 20117142501353	C/CPFF	Gryphon:Dahlgren, VA	0.667	0.000		0.000		0.000		-		0.000	0.000	0.667	0.000
Aegis Ballistic Missile Defense (BMD) Testing - TESTING - MD09 - 20117142501356	C/CPIF	Lockheed Martin:Arlington, VA	0.459	0.000		0.000		0.000		-		0.000	0.000	0.459	0.459
Aegis Ballistic Missile Defense (BMD) Testing - TESTING - MD09 - 20117142501359	C/CPAF	Raytheon:Arlington, VA	0.404	15.704		0.000		0.000		-		0.000	0.000	16.108	0.404
Aegis Ballistic Missile Defense (BMD) Testing - TESTING - MD09 - 20117142501363	MIPR	MDA:Arlington, VA	9.581	0.000		0.000		0.000		-		0.000	0.000	9.581	9.581

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Exhibit R-3, RDT&E Project Cost Analysis: PB 2014 Missile Defense Agency **DATE:** April 2013

APPROPRIATION/BUDGET ACTIVITY 0400: <i>Research, Development, Test & Evaluation, Defense-Wide</i> BA 4: <i>Advanced Component Development & Prototypes (ACD&P)</i>	R-1 ITEM NOMENCLATURE PE 0603892C: <i>AEGIS BMD</i>	PROJECT MD09: <i>Aegis BMD</i>
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Support (\$ in Millions)				FY 2012		FY 2013		FY 2014 Base		FY 2014 OCO		FY 2014 Total	Cost To Complete	Total Cost	Target Value of Contract
Cost Category Item	Contract Method & Type	Performing Activity & Location	All Prior Years	Cost	Award Date	Cost	Award Date	Cost	Award Date	Cost	Award Date	Cost			
Subtotal			511.876	114.338		98.384		125.166		0.000		125.166			

Remarks
N/A

Test and Evaluation (\$ in Millions)				FY 2012		FY 2013		FY 2014 Base		FY 2014 OCO		FY 2014 Total	Cost To Complete	Total Cost	Target Value of Contract
Cost Category Item	Contract Method & Type	Performing Activity & Location	All Prior Years	Cost	Award Date	Cost	Award Date	Cost	Award Date	Cost	Award Date	Cost			
BMDs Level Testing - MD09	MIPR	NSWC/DD:DAHLGREN, VA	26.518	6.995		0.000		0.000		-		0.000	0.000	33.513	0.000
BMDs Level Testing - MD09 - 20117142514355	MIPR	NSWC/PHD:PT. HUENEME, CA	16.141	9.217		0.000		0.000		-		0.000	0.000	25.358	0.000
BMDs Level Testing - MD09 - 20117142514359	MIPR	JHU/APL/MD:COLUMBIA, MD	30.505	5.366		0.000		0.000		-		0.000	0.000	35.871	0.000
BMDs Level Testing - MD09 - 20117142514364	MIPR	MDA:VA	50.987	19.020		0.000		0.000		-		0.000	0.000	70.007	0.000
BMDs Level Testing - MD09 - 20117142514369	SS/CPIF	Lockheed Martin:Moorestown, NJ	38.485	0.000		0.000		0.000		-		0.000	0.000	38.485	0.000
BMDs Level Testing - MD09 - 20117142514372	MIPR	SPAWAR:San Diego, CA	5.405	2.175		0.000		0.000		-		0.000	0.000	7.580	0.000
BMDs Level Testing - MD09 - 20117142514377	SS/CPAF	Raytheon:Tucson, AZ	4.500	0.000		0.000		0.000		-		0.000	0.000	4.500	0.000
BMDs Level Testing - MD09 - 20117142514378	MIPR	PMRF:Barking Sands, Kauai, HI	7.000	5.450		0.000		0.000		-		0.000	0.000	12.450	0.000
BMDs Level Testing - MD09 - 20117142514383	MIPR	NAWC/PM:PT. MUGU, CA	2.700	5.250		0.000		0.000		-		0.000	0.000	7.950	0.000
BMDs Level Testing - MD09 - 20117142514388	MIPR	MDA/DTR:HUNTSVILLE, AL	3.490	0.000		0.000		0.000		-		0.000	0.000	3.490	0.000

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Exhibit R-3, RDT&E Project Cost Analysis: PB 2014 Missile Defense Agency **DATE:** April 2013

APPROPRIATION/BUDGET ACTIVITY 0400: <i>Research, Development, Test & Evaluation, Defense-Wide</i> BA 4: <i>Advanced Component Development & Prototypes (ACD&P)</i>	R-1 ITEM NOMENCLATURE PE 0603892C: <i>AEGIS BMD</i>	PROJECT MD09: <i>Aegis BMD</i>
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Test and Evaluation (\$ in Millions)				FY 2012		FY 2013		FY 2014 Base		FY 2014 OCO		FY 2014 Total	Cost To Complete	Total Cost	Target Value of Contract
Cost Category Item	Contract Method & Type	Performing Activity & Location	All Prior Years	Cost	Award Date	Cost	Award Date	Cost	Award Date	Cost	Award Date	Cost			
M&S VV&A and Test Operations - M&S VV&A and Test Operations - MD09	C/CPAF	Northrop Grumman:VA	46.418	14.525		11.571	Oct 2012	11.727	Nov 2013	-		11.727	Continuing	Continuing	Continuing
Subtotal			232.149	67.998		11.571		11.727		0.000		11.727			

Remarks
N/A

Management Services (\$ in Millions)				FY 2012		FY 2013		FY 2014 Base		FY 2014 OCO		FY 2014 Total	Cost To Complete	Total Cost	Target Value of Contract
Cost Category Item	Contract Method & Type	Performing Activity & Location	All Prior Years	Cost	Award Date	Cost	Award Date	Cost	Award Date	Cost	Award Date	Cost			
Subtotal			0.000	0.000		0.000		0.000		0.000		0.000	0.000	0.000	0.000

Remarks
N/A

	All Prior Years	FY 2012	FY 2013	FY 2014 Base	FY 2014 OCO	FY 2014 Total	Cost To Complete	Total Cost	Target Value of Contract
Project Cost Totals	3,942.817	1,094.395	775.978	726.109	0.000	726.109			

Remarks
Funding in the All Prior Years column represents a summary of Prior Years Total Costs for active contracts, MIPRs, and civilian salaries on the R-3.

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Exhibit R-4, RDT&E Schedule Profile: PB 2014 Missile Defense Agency **DATE:** April 2013

APPROPRIATION/BUDGET ACTIVITY 0400: <i>Research, Development, Test & Evaluation, Defense-Wide</i> BA 4: <i>Advanced Component Development & Prototypes (ACD&P)</i>	R-1 ITEM NOMENCLATURE PE 0603892C: <i>AEGIS BMD</i>	PROJECT MD09: <i>Aegis BMD</i>
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Significant Event Complete ▲ Milestone Decision Complete ★ Element Test Complete ◆ System Level Test Complete ● Complete Activity ✦
 Significant Event Planned △ Milestone Decision Planned ☆ Element Test Planned ◇ System Level Test Planned ○ Planned Activity ✧

	FY 2012				FY 2013				FY 2014				FY 2015				FY 2016				FY 2017				FY 2018			
	1	2	3	4	1	2	3	4	1	2	3	4	1	2	3	4	1	2	3	4	1	2	3	4	1	2	3	4
BMD 3.6.1 Ship Installations	✧	✧	✧	✧	✧	✧	✧	✧	✧																			
BMD 4.0 Ship Installations			✧	✧	✧	✧	✧	✧	✧	✧	✧	✧	✧	✧	✧	✧	✧	✧	✧	✧	✧	✧	✧	✧	✧	✧	✧	
BMD 5.0 Ship Installations			✧	✧	✧	✧	✧	✧	✧	✧	✧	✧	✧	✧	✧	✧	✧	✧	✧	✧	✧	✧	✧	✧	✧	✧	✧	
BMD 4.0 Development	★																											
BMD 4.0 Certification	✦	✦	✦	✦																								
BMD 5.0 Development	✧	✧	✧	✧	✧	✧	✧	✧	✧	✧	✧	✧	✧	✧	✧	✧	✧	✧	✧	✧	✧	✧	✧	✧	✧	✧	✧	
BMD 5.0 Demo				△																								
BMD 5.0 Certification														△														
BMD 5.1 System Requirements Review (SRR) #2	▲																											
BMD 5.1 Development	✧	✧	✧	✧	✧	✧	✧	✧	✧	✧	✧	✧	✧	✧	✧	✧	✧	✧	✧	✧	✧	✧	✧	✧	✧	✧	✧	
BMD 5.1 Demo																					△							
BMD 5.1 System Design Review (SDR) #1		▲																										
BMD 5.1 System Design Review (SDR) #2				△																								
BMD 5.1 Preliminary Design Review (PDR)								△																				
BMD 5.1 Critical Design Review (CDR)													△															
SM-3 BIK IB Missile Deliveries		✧	✧	✧	✧	✧	✧																					
SM-3 BIK IB Hazard Assessment Testing	✧	✧	✧	✧	✧	✧																						
SM-3 BIK IB Manufacturing Readiness Review (MRR)				▲																								
BMD 5.1 Certification																									△			
FTI-01 (FTO-01 Risk Reduction Flight Test)				▲																								
FTM-16 E2A (Aegis Intercept Flight Test)			▲																									
FTM-18 (Aegis Intercept Flight Test)			▲																									
FTM-19 (Aegis Intercept Flight Test)			△																									

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Exhibit R-4A, RDT&E Schedule Details: PB 2014 Missile Defense Agency		DATE: April 2013
APPROPRIATION/BUDGET ACTIVITY 0400: <i>Research, Development, Test & Evaluation, Defense-Wide</i> BA 4: <i>Advanced Component Development & Prototypes (ACD&P)</i>	R-1 ITEM NOMENCLATURE PE 0603892C: <i>AEGIS BMD</i>	PROJECT MD09: <i>Aegis BMD</i>

Schedule Details

Events	Start		End	
	Quarter	Year	Quarter	Year
BMD 3.6.1 Ship Installations	1	2012	1	2014
BMD 4.0 Ship Installations	3	2012	1	2015
BMD 5.0 Ship Installations	3	2012	4	2017
BMD 4.0 Development	1	2012	1	2012
BMD 4.0 Certification	1	2012	4	2012
BMD 5.0 Development	1	2012	2	2015
BMD 5.0 Demo	1	2013	1	2013
BMD 5.0 Certification	3	2015	3	2015
BMD 5.1 System Requirements Review (SRR) #2	1	2012	1	2012
BMD 5.1 Development	1	2012	4	2017
BMD 5.1 Demo	2	2017	2	2017
BMD 5.1 System Design Review (SDR) #1	2	2012	2	2012
BMD 5.1 System Design Review (SDR) #2	1	2013	1	2013
BMD 5.1 Preliminary Design Review (PDR)	1	2014	1	2014
BMD 5.1 Critical Design Review (CDR)	1	2015	1	2015
SM-3 Blk IB Missile Deliveries	2	2012	3	2013
SM-3 Blk IB Hazard Assessment Testing	1	2012	2	2013
SM-3 Blk IB Manufacturing Readiness Review (MRR)	4	2012	4	2012
BMD 5.1 Certification	2	2018	2	2018
FTI-01 (FTO-01 Risk Reduction Flight Test)	1	2013	1	2013
FTM-16 E2A (Aegis Intercept Flight Test)	3	2012	3	2012
FTM-18 (Aegis Intercept Flight Test)	3	2012	3	2012

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Exhibit R-4A, RDT&E Schedule Details: PB 2014 Missile Defense Agency **DATE:** April 2013

APPROPRIATION/BUDGET ACTIVITY 0400: <i>Research, Development, Test & Evaluation, Defense-Wide</i> BA 4: <i>Advanced Component Development & Prototypes (ACD&P)</i>	R-1 ITEM NOMENCLATURE PE 0603892C: <i>AEGIS BMD</i>	PROJECT MD09: <i>Aegis BMD</i>
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Events	Start		End	
	Quarter	Year	Quarter	Year
FTM-19 (Aegis Intercept Flight Test)	4	2012	4	2012

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Exhibit R-2A, RDT&E Project Justification: PB 2014 Missile Defense Agency **DATE:** April 2013

APPROPRIATION/BUDGET ACTIVITY 0400: <i>Research, Development, Test & Evaluation, Defense-Wide</i> BA 4: <i>Advanced Component Development & Prototypes (ACD&P)</i>	R-1 ITEM NOMENCLATURE PE 0603892C: <i>AEGIS BMD</i>	PROJECT MC09: <i>Cyber Operations</i>
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COST (\$ in Millions)	All Prior Years	FY 2012	FY 2013 [#]	FY 2014 Base	FY 2014 OCO ^{##}	FY 2014 Total	FY 2015	FY 2016	FY 2017	FY 2018	Cost To Complete	Total Cost
MC09: <i>Cyber Operations</i>	-	0.000	0.000	0.260	-	0.260	0.264	0.269	0.273	0.281	Continuing	Continuing
Quantity of RDT&E Articles		0	0	0		0	0	0	0	0		

[#] FY 2013 Program is from the FY 2013 President's Budget, submitted February 2012

^{##} The FY 2014 OCO Request will be submitted at a later date

Note

Project MC09 is a new Defensive Cyber Operations Project established in this Program Element (PE) for PB 2014. Funds were previously reported in Project MD09 of this PE 0603892C.

A. Mission Description and Budget Item Justification

The funds in this project sustain Missile Defense Agency (MDA) DoD Information Assurance Certification and Accreditation Program (DIACAP) and Controls Validation Testing (CVT) activities, analysis of validation results, risk assessments and reviews of proposed Program Manager/Information Assurance Manager (PM/IAM) Plans of Action and Milestones (POA&Ms) for MDA AEGIS Ballistic Missile Defense mission systems. It maintains the Certification and Accreditation (C&A) data repository, capturing the DIACAP documentation (artifacts, validation results, and Information Assurance Risk Assessment results, and Designated Approving Authority (DAA) accreditation decisions) and POA&M on all MDA information systems.

This project supports the monitoring and tracking of Cybersecurity mitigations detailed in Information Technology security POA&Ms. Activities include preparation of C&A documentation and accreditation recommendations to the MDA Senior Information Assurance Officer (SIAO)/Certification Authority (CA) and DAA. Independent Verification and Validation (IV&V) team actions ensure the availability, integrity, authentication, confidentiality and non-repudiation of the MDA mission, test and administrative systems. Activities in the Project are necessary to comply with the Federal Information Security Management Act (FISMA).

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

	FY 2012	FY 2013	FY 2014
Title: Network / System Certification and Accreditation (C&A)	0.000	0.000	0.260
Articles:	0	0	0
Description: See Description below.			
FY 2012 Accomplishments: N/A			
FY 2013 Plans: See MD09 for FY 2013 plans.			
FY 2014 Plans:			

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Exhibit R-2A, RDT&E Project Justification: PB 2014 Missile Defense Agency **DATE:** April 2013

APPROPRIATION/BUDGET ACTIVITY 0400: <i>Research, Development, Test & Evaluation, Defense-Wide</i> BA 4: <i>Advanced Component Development & Prototypes (ACD&P)</i>	R-1 ITEM NOMENCLATURE PE 0603892C: <i>AEGIS BMD</i>	PROJECT MC09: <i>Cyber Operations</i>
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B. Accomplishments/Planned Programs (\$ in Millions, Article Quantities in Each)	FY 2012	FY 2013	FY 2014
-Conduct cyber security / information assurance engineering and architecture planning for Aegis BMD information technology systems.			
-Plan and test the IA controls for Ballistic Missile Defense System (BMDS) Aegis BMD systems.			
-Develop Aegis BMD DIACAP certification and accreditation packages.			
-Conduct Controls Validation Testing (CVT) of Aegis BMD mission systems and provide Plan of Action and Milestones to mitigate information assurance deficiencies.			
-Conduct annual information assurance reviews on the Aegis BMD enclaves to assess compliance in implementing and maintaining IA controls.			
Accomplishments/Planned Programs Subtotals	0.000	0.000	0.260

C. Other Program Funding Summary (\$ in Millions)											
Line Item	FY 2012	FY 2013	FY 2014 Base	FY 2014 OCO	FY 2014 Total	FY 2015	FY 2016	FY 2017	FY 2018	Cost To Complete	Total Cost
• 0603175C: <i>Ballistic Missile Defense Technology</i>	67.921	79.975	309.203		309.203	212.715	220.185	220.732	220.373	Continuing	Continuing
• 0603882C: <i>Ballistic Missile Defense Midcourse Defense Segment</i>	1,143.313	903.172	1,033.903		1,033.903	1,045.500	1,002.568	815.198	781.824	Continuing	Continuing
• 0603884C: <i>Ballistic Missile Defense Sensors</i>	222.696	347.012	315.183		315.183	340.899	334.705	341.811	278.313	Continuing	Continuing
• 0603888C: <i>Ballistic Missile Defense Test & Targets</i>	88.162	0.000	0.000		0.000	0.000	0.000	0.000	0.000	0.000	88.162
• 0603896C: <i>Ballistic Missile Defense Command and Control, Battle Management & Communication</i>	356.900	366.552	418.355		418.355	433.470	454.452	461.991	451.947	Continuing	Continuing
• 0603898C: <i>Ballistic Missile Defense Joint Warfighter Support</i>	36.684	55.550	47.419		47.419	47.793	53.182	54.037	54.608	Continuing	Continuing

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Exhibit R-2A, RDT&E Project Justification: PB 2014 Missile Defense Agency										DATE: April 2013	
APPROPRIATION/BUDGET ACTIVITY 0400: <i>Research, Development, Test & Evaluation, Defense-Wide</i> BA 4: <i>Advanced Component Development & Prototypes (ACD&P)</i>				R-1 ITEM NOMENCLATURE PE 0603892C: <i>AEGIS BMD</i>				PROJECT MC09: <i>Cyber Operations</i>			

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

<u>Line Item</u>	<u>FY 2012</u>	<u>FY 2013</u>	<u>FY 2014</u> <u>Base</u>	<u>FY 2014</u> <u>OCO</u>	<u>FY 2014</u> <u>Total</u>	<u>FY 2015</u>	<u>FY 2016</u>	<u>FY 2017</u>	<u>FY 2018</u>	<u>Cost To</u> <u>Complete</u>	<u>Total Cost</u>
• 0603904C: <i>Missile Defense Integration and Operations Center (MDIOC)</i>	58.970	63.043	52.131		52.131	59.893	52.005	61.751	53.511	Continuing	Continuing
• 0604880C: <i>Land Based SM-3 (LBSM3)</i>	299.012	276.338	129.374		129.374	124.547	51.927	55.808	32.938	Continuing	Continuing
• 0901598C: <i>Management HQ - MDA</i>	28.824	34.855	37.712		37.712	38.580	39.546	40.320	35.325	Continuing	Continuing

Remarks

D. Acquisition Strategy

N/A

E. Performance Metrics

N/A

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Exhibit R-3, RDT&E Project Cost Analysis: PB 2014 Missile Defense Agency **DATE:** April 2013

APPROPRIATION/BUDGET ACTIVITY 0400: <i>Research, Development, Test & Evaluation, Defense-Wide</i> BA 4: <i>Advanced Component Development & Prototypes (ACD&P)</i>	R-1 ITEM NOMENCLATURE PE 0603892C: <i>AEGIS BMD</i>	PROJECT MC09: <i>Cyber Operations</i>
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Support (\$ in Millions)				FY 2012		FY 2013		FY 2014 Base		FY 2014 OCO		FY 2014 Total	Cost To Complete	Total Cost	Target Value of Contract
Cost Category Item	Contract Method & Type	Performing Activity & Location	All Prior Years	Cost	Award Date	Cost	Award Date	Cost	Award Date	Cost	Award Date	Cost			
Network / System Certification and Accreditation (C&A) - CND/IA Advisory and Assistance Services	C/CPIF	Torch Technologies:Huntsville, AL	0.000	0.000		0.000		0.260	Jul 2014	-		0.260	0.000	0.260	0.000
Subtotal			0.000	0.000		0.000		0.260		0.000		0.260	0.000	0.260	0.000

Remarks
N/A

	All Prior Years	FY 2012	FY 2013	FY 2014 Base	FY 2014 OCO	FY 2014 Total	Cost To Complete	Total Cost	Target Value of Contract
Project Cost Totals	0.000	0.000	0.000	0.260	0.000	0.260	0.000	0.260	0.000

Remarks
N/A

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Exhibit R-2A, RDT&E Project Justification: PB 2014 Missile Defense Agency **DATE:** April 2013

APPROPRIATION/BUDGET ACTIVITY 0400: <i>Research, Development, Test & Evaluation, Defense-Wide</i> BA 4: <i>Advanced Component Development & Prototypes (ACD&P)</i>	R-1 ITEM NOMENCLATURE PE 0603892C: <i>AEGIS BMD</i>	PROJECT MT09: <i>Aegis BMD Test</i>
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COST (\$ in Millions)	All Prior Years	FY 2012	FY 2013 [#]	FY 2014 Base	FY 2014 OCO ^{##}	FY 2014 Total	FY 2015	FY 2016	FY 2017	FY 2018	Cost To Complete	Total Cost
MT09: <i>Aegis BMD Test</i>	-	0.000	150.291	137.373	-	137.373	117.521	82.152	116.380	159.295	Continuing	Continuing
Quantity of RDT&E Articles		0	0	0		0	0	0	0	0		

[#] FY 2013 Program is from the FY 2013 President's Budget, submitted February 2012

^{##} The FY 2014 OCO Request will be submitted at a later date

Note

N/A

A. Mission Description and Budget Item Justification

The Aegis Ballistic Missile Defense (Aegis BMD) mission is to deliver an enduring, operationally effective and supportable Ballistic Missile Defense capability to defend the nation, deployed forces, friends and allies, and to increase this capability by delivering evolutionary improvements as part of Ballistic Missile Defense System (BMDS) upgrades. The Aegis BMD element of the BMDS capitalizes upon and evolves from the existing U.S. Navy Aegis Weapons System (AWS) and Standard Missile (SM) infrastructures. Aegis BMD provides a forward-deployable, mobile capability to detect and track Ballistic Missiles of all ranges, and the ability to destroy Short-Range Ballistic Missiles (SRBM), Medium-Range Ballistic Missiles (MRBM), and Intermediate-Range Ballistic Missiles (IRBM) in the midcourse phase of flight and shorter range missile in terminal phase. Aegis BMD also provides a Long Range Surveillance and Track (LRS&T) capability to the BMDS. Upgrades to both the Aegis BMD Weapon System and the SM-3 configuration enable Aegis BMD to provide effective, supportable defensive capability against longer range, more sophisticated threats and an enduring Aegis Ashore defensive capability.

Proving Missile Defense:

Working with the Services` Operational Test Agencies (OTA), with the support of the Director of Operational Test and Evaluation (DOT&E), Missile Defense Agency (MDA) has developed a test program to improve confidence in missile defense capabilities under development and ensure the capabilities transferred to the war fighter are operationally effective, suitable, and survivable.

As part of the Agency`s rigorous test program, System Pre-Flight predictions provide confidence in test execution by predicting element performance and exercising element interfaces. System Post Flight Reconstruction replicates the Ballistic Missile Defense System configuration and actual environmental conditions and target dynamics observed in flight to anchor modeling and simulation results.

The Integrated Master Test Plan (IMTP) is event-oriented and extends until the collection of all identified data is completed to ensure adequate test investments.

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

	FY 2012	FY 2013	FY 2014
Title: Aegis Ballistic Missile Defense (BMD) Testing	0.000	87.199	55.160

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Exhibit R-2A, RDT&E Project Justification: PB 2014 Missile Defense Agency		DATE: April 2013		
APPROPRIATION/BUDGET ACTIVITY 0400: <i>Research, Development, Test & Evaluation, Defense-Wide</i> BA 4: <i>Advanced Component Development & Prototypes (ACD&P)</i>		R-1 ITEM NOMENCLATURE PE 0603892C: <i>AEGIS BMD</i>		PROJECT MT09: <i>Aegis BMD Test</i>
B. Accomplishments/Planned Programs (\$ in Millions, Article Quantities in Each)		FY 2012	FY 2013	FY 2014
<i>Articles:</i>		0	0	0
<p>Description: See Description below.</p> <p>FY 2012 Accomplishments: - Funded under MD09 accomplishments.</p> <p>FY 2013 Plans: - Conduct Aegis BMD-specific analysis during pre- and post-mission analysis phases. - Begin test planning for FY 2014 Aegis flight test missions: prepare target, develop models and simulations, and ready the range for test. - Prepare for and conduct BMDS Flight and Ground Test events as reflected in the IMTP and the Exhibit R-4 schedule. - Participate in BMD special technology experiments.</p> <p>FY 2014 Plans: - Continue to conduct Aegis BMD-specific analysis during pre and post-mission analysis phases. - Begin test planning for FY 2015 Aegis flight test missions: prepare target, develop models and simulations, and ready the range for test. - Continue to conduct Post Flight Analysis for test conducted in FY 2014 Aegis flight test missions. - Prepare for and conduct Ballistic Missile Defense System (BMDS) Flight and Ground Test events as reflected in the Integrated Master Test Plan (IMTP) and the Exhibit R-4 schedule. - Participate in BMD special technology experiments.</p>				
Title: BMDS Level Testing		0.000	41.986	63.040
<i>Articles:</i>		0	0	0
<p>Description: See Description below.</p> <p>FY 2012 Accomplishments: - Funded under MD09 accomplishments.</p> <p>FY 2013 Plans: - Prepare for and conduct BMDS Flight and Ground Test events as reflected in the IMTP and the Exhibit R-4 schedule. - Exercise of Phase II capability of the Phased Adaptive Approach.</p> <p>FY 2014 Plans: - Prepare for and conduct BMDS Flight and Ground Test events as reflected in the IMTP and the Exhibit R-4 schedule.</p>				

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Exhibit R-2A, RDT&E Project Justification: PB 2014 Missile Defense Agency **DATE:** April 2013

APPROPRIATION/BUDGET ACTIVITY 0400: <i>Research, Development, Test & Evaluation, Defense-Wide</i> BA 4: <i>Advanced Component Development & Prototypes (ACD&P)</i>	R-1 ITEM NOMENCLATURE PE 0603892C: <i>AEGIS BMD</i>	PROJECT MT09: <i>Aegis BMD Test</i>
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B. Accomplishments/Planned Programs (\$ in Millions, Article Quantities in Each)	FY 2012	FY 2013	FY 2014
- Exercise of Phase II capability of the Phased Adaptive Approach.			
Title: Modeling & Simulation HWIL Framework, Simulations, Models Articles:	0.000 0	21.106 0	19.173 0
Description: See Description below.			
FY 2012 Accomplishments: - Funded under MD09 accomplishments.			
FY 2013 Plans: - Continue to deploy and integrate BMDS Hardware in the Loop (HWIL) stimulation framework-Single Stimulation Framework (SSF) with Elements for BMDS ground, Flight tests and training - Implement upgrades to the BMDS HWIL SSF that support execution of increasingly more complex BMDS ground test campaigns. - Support BMDS HWIL SSF V&V and data analysis for BMDS ground tests and demos.			
FY 2014 Plans: - Deliver the Objective Simulation Framework (OSF) Version 1.0 to begin the transition of Hardware-in-the-Loop capabilities. - Deliver improved debris and phenomenology modeling changes to support Aegis 4.0 and future baselines. - Incorporate advanced M&S capabilities into the next version of the OSF for Aegis BMD for tracking, discrimination, engagement and associated upper tier mitigation to satisfy PAA Phase II/III needs.			
FY 2014 decrease is due to initial consolidation of Digital and HWIL frameworks as part of OSF implementation.			
Accomplishments/Planned Programs Subtotals	0.000	150.291	137.373

C. Other Program Funding Summary (\$ in Millions)											
<u>Line Item</u>	<u>FY 2012</u>	<u>FY 2013</u>	<u>FY 2014</u>	<u>FY 2014</u>	<u>FY 2014</u>	<u>FY 2015</u>	<u>FY 2016</u>	<u>FY 2017</u>	<u>FY 2018</u>	<u>Cost To</u>	<u>Total Cost</u>
			<u>Base</u>	<u>OCO</u>	<u>Total</u>					<u>Complete</u>	
• 0604881C: <i>AEGIS SM-3 Block IIA Co-Development</i>	457.529	420.630	308.522		308.522	230.466	128.743	41.014	0.000	0.000	1,586.904
Remarks											

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Exhibit R-2A, RDT&E Project Justification: PB 2014 Missile Defense Agency		DATE: April 2013
APPROPRIATION/BUDGET ACTIVITY 0400: <i>Research, Development, Test & Evaluation, Defense-Wide</i> BA 4: <i>Advanced Component Development & Prototypes (ACD&P)</i>	R-1 ITEM NOMENCLATURE PE 0603892C: <i>AEGIS BMD</i>	PROJECT MT09: <i>Aegis BMD Test</i>

D. Acquisition Strategy

The Aegis Ballistic Missile Defense (BMD) element acquisition approach supports evolutionary development, continuously building upon demonstrated capabilities to advance overall Ballistic Missile Defense System (BMDS) capability. Competition will be maximized for procurement of any products or services in FY 2014, as appropriate.

E. Performance Metrics

N/A

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Exhibit R-3, RDT&E Project Cost Analysis: PB 2014 Missile Defense Agency **DATE:** April 2013

APPROPRIATION/BUDGET ACTIVITY 0400: <i>Research, Development, Test & Evaluation, Defense-Wide</i> BA 4: <i>Advanced Component Development & Prototypes (ACD&P)</i>	R-1 ITEM NOMENCLATURE PE 0603892C: <i>AEGIS BMD</i>	PROJECT MT09: <i>Aegis BMD Test</i>
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Product Development (\$ in Millions)				FY 2012		FY 2013		FY 2014 Base		FY 2014 OCO		FY 2014 Total	Cost To Complete	Total Cost	Target Value of Contract
Cost Category Item	Contract Method & Type	Performing Activity & Location	All Prior Years	Cost	Award Date	Cost	Award Date	Cost	Award Date	Cost	Award Date	Cost			
Subtotal			0.000	0.000		0.000		0.000		0.000		0.000	0.000	0.000	0.000

Remarks
N/A

Support (\$ in Millions)				FY 2012		FY 2013		FY 2014 Base		FY 2014 OCO		FY 2014 Total	Cost To Complete	Total Cost	Target Value of Contract
Cost Category Item	Contract Method & Type	Performing Activity & Location	All Prior Years	Cost	Award Date	Cost	Award Date	Cost	Award Date	Cost	Award Date	Cost			
Subtotal			0.000	0.000		0.000		0.000		0.000		0.000	0.000	0.000	0.000

Remarks
N/A

Test and Evaluation (\$ in Millions)				FY 2012		FY 2013		FY 2014 Base		FY 2014 OCO		FY 2014 Total	Cost To Complete	Total Cost	Target Value of Contract
Cost Category Item	Contract Method & Type	Performing Activity & Location	All Prior Years	Cost	Award Date	Cost	Award Date	Cost	Award Date	Cost	Award Date	Cost			
Aegis Ballistic Missile Defense (BMD) Testing - MT09 -	MIPR	NSWC:DAHLGREN, VA	0.000	0.000		10.755	Oct 2012	6.804	Oct 2013	-		6.804	Continuing	Continuing	Continuing
Aegis Ballistic Missile Defense (BMD) Testing - MT09 - 201112202597076	MIPR	PMRF Barking Sands:Kauai, HI	0.000	0.000		5.674	Oct 2012	3.589	Oct 2013	-		3.589	Continuing	Continuing	Continuing
Aegis Ballistic Missile Defense (BMD) Testing - MT09 - 201112202597078	MIPR	NAWC/ PM PT:MUGU, CA	0.000	0.000		5.790	Oct 2012	3.663	Oct 2013	-		3.663	Continuing	Continuing	Continuing
Aegis Ballistic Missile Defense (BMD) Testing - MT09 - 201112202597082	MIPR	NSWC DD:DAHLGREN, VA	0.000	0.000		3.883	Oct 2012	2.456	Oct 2013	-		2.456	Continuing	Continuing	Continuing
Aegis Ballistic Missile Defense (BMD) Testing - MT09 - 201112202630564	MIPR	JHU/APL/ MD:COLUMBIA, MD	0.000	0.000		23.042	Oct 2012	14.576	Nov 2013	-		14.576	Continuing	Continuing	Continuing

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Exhibit R-3, RDT&E Project Cost Analysis: PB 2014 Missile Defense Agency **DATE:** April 2013

APPROPRIATION/BUDGET ACTIVITY 0400: <i>Research, Development, Test & Evaluation, Defense-Wide</i> BA 4: <i>Advanced Component Development & Prototypes (ACD&P)</i>	R-1 ITEM NOMENCLATURE PE 0603892C: <i>AEGIS BMD</i>	PROJECT MT09: <i>Aegis BMD Test</i>
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Test and Evaluation (\$ in Millions)				FY 2012		FY 2013		FY 2014 Base		FY 2014 OCO		FY 2014 Total			
Cost Category Item	Contract Method & Type	Performing Activity & Location	All Prior Years	Cost	Award Date	Cost	Award Date	Cost	Award Date	Cost	Award Date	Cost	Cost To Complete	Total Cost	Target Value of Contract
Aegis Ballistic Missile Defense (BMD) Testing - MT09 - 201112202630567	MIPR	MDA:VA	0.000	0.000		7.278	Oct 2012	4.604	Oct 2013	-		4.604	Continuing	Continuing	Continuing
Aegis Ballistic Missile Defense (BMD) Testing - MT09 - 201112202630569	SS/CPIF	Lockheed Martin:Moorestown, NJ	0.000	0.000		10.752	Oct 2012	6.801	Oct 2013	-		6.801	Continuing	Continuing	Continuing
Aegis Ballistic Missile Defense (BMD) Testing - MT09 - 20111220263057	MIPR	SPAWARD:San Diego, CA	0.000	0.000		8.146	Oct 2012	5.153	Oct 2013	-		5.153	Continuing	Continuing	Continuing
Aegis Ballistic Missile Defense (BMD) Testing - MT09 - 20111220266947	MIPR	NSWC/PHD PT.:HUENEME, CA	0.000	0.000		11.879	Oct 2012	7.514	Oct 2013	-		7.514	Continuing	Continuing	Continuing
BMDS Level Testing - MT09	MIPR	NSWC PHD PT.:HUENEME, CA	0.000	0.000		3.406	Oct 2012	4.108	Oct 2013	-		4.108	Continuing	Continuing	Continuing
BMDS Level Testing - MT09 - 201112202535339	MIPR	JHU/APL/ MD:COLUMBIA, MD	0.000	0.000		8.645	Oct 2012	10.425	Oct 2013	-		10.425	Continuing	Continuing	Continuing
BMDS Level Testing - MT09 - 20111220253534	MIPR	NAVSEA:VA	0.000	0.000		11.014	Oct 2012	13.282	Oct 2013	-		13.282	Continuing	Continuing	Continuing
BMDS Level Testing - MT09 - 201112202535342	MIPR	SPAWAR SAN DIEGO:CA	0.000	0.000		1.586	Oct 2012	1.913	Oct 2013	-		1.913	Continuing	Continuing	Continuing
BMDS Level Testing - MT09 - 201112202535344	MIPR	CORONA:CA	0.000	0.000		1.751	Oct 2012	2.112	Oct 2013	-		2.112	Continuing	Continuing	Continuing
BMDS Level Testing - MT09 - 201112202535347	MIPR	LOCKHEED MARTIN:MOORESTOWN NJ	0.000	0.000		4.338	Oct 2012	5.231	Oct 2013	-		5.231	Continuing	Continuing	Continuing
BMDS Level Testing - MT09 - 201112202535348	MIPR	AEGIS BMD:VA	0.000	0.000		11.246	Oct 2012	25.969	Oct 2013	-		25.969	Continuing	Continuing	Continuing
Modeling & Simulation HWIL Framework, Simulations, Models - Objective Simulation Framework, Procure, Install, Test	C/CPAF	BOEING:AL	0.000	0.000		21.106	Oct 2012	19.173	Oct 2013	-		19.173	Continuing	Continuing	Continuing

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Exhibit R-3, RDT&E Project Cost Analysis: PB 2014 Missile Defense Agency **DATE:** April 2013

APPROPRIATION/BUDGET ACTIVITY 0400: <i>Research, Development, Test & Evaluation, Defense-Wide</i> BA 4: <i>Advanced Component Development & Prototypes (ACD&P)</i>	R-1 ITEM NOMENCLATURE PE 0603892C: <i>AEGIS BMD</i>	PROJECT MT09: <i>Aegis BMD Test</i>
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Test and Evaluation (\$ in Millions)				FY 2012		FY 2013		FY 2014 Base		FY 2014 OCO		FY 2014 Total	Cost To Complete	Total Cost	Target Value of Contract
Cost Category Item	Contract Method & Type	Performing Activity & Location	All Prior Years	Cost	Award Date	Cost	Award Date	Cost	Award Date	Cost	Award Date	Cost			
Subtotal			0.000	0.000		150.291		137.373		0.000		137.373			

Remarks
N/A

Management Services (\$ in Millions)				FY 2012		FY 2013		FY 2014 Base		FY 2014 OCO		FY 2014 Total	Cost To Complete	Total Cost	Target Value of Contract
Cost Category Item	Contract Method & Type	Performing Activity & Location	All Prior Years	Cost	Award Date	Cost	Award Date	Cost	Award Date	Cost	Award Date	Cost			
Subtotal			0.000	0.000		0.000		0.000		0.000		0.000	0.000	0.000	0.000

Remarks
N/A

Project Cost Totals	All Prior Years	FY 2012	FY 2013	FY 2014 Base	FY 2014 OCO	FY 2014 Total	Cost To Complete	Total Cost	Target Value of Contract
0.000	0.000		150.291		137.373		0.000		137.373

Remarks
N/A

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Exhibit R-4, RDT&E Schedule Profile: PB 2014 Missile Defense Agency	DATE: April 2013
APPROPRIATION/BUDGET ACTIVITY 0400: <i>Research, Development, Test & Evaluation, Defense-Wide</i> BA 4: <i>Advanced Component Development & Prototypes (ACD&P)</i>	R-1 ITEM NOMENCLATURE PE 0603892C: <i>AEGIS BMD</i>
PROJECT MT09: <i>Aegis BMD Test</i>	

Significant Event Complete
 Milestone Decision Complete
 Element Test Complete
 System Level Test Complete
 Complete Activity
 Significant Event Planned
 Milestone Decision Planned
 Element Test Planned
 System Level Test Planned
 Planned Activity

	FY 2012				FY 2013				FY 2014				FY 2015				FY 2016				FY 2017				FY 2018						
	1	2	3	4	1	2	3	4	1	2	3	4	1	2	3	4	1	2	3	4	1	2	3	4	1	2	3	4	1	2	3
FTO-01 (Aegis/THAAD/Patriot Multiple Engagement Flight Test)							△																								
FTX-19 (Aegis Simulated Intercept Flight Test)							△																								
FTM-21 (Aegis Intercept Flight Test) (Salvo)							△																								
FTM-22 (Aegis Intercept Flight Test)							△																								
FTX-18 (Aegis Simulated Intercept Flight Test)							△																								
FTX-20 (Aegis Simulated Intercept Flight Test)									△																						
AA CTV-01 (Aegis Ashore Flight Test)											△																				
FTM-23 (Aegis Intercept Flight Test)												△																			
FTM-24 (Aegis Intercept Flight Test)													△																		
AA FTM-02 (Aegis Ashore Intercept Flight Test)														△																	
AA FTM-01 (Aegis Ashore Intercept Flight Test)															△																
FTM-26 (Aegis Intercept Flight Test)																△															
FTM-25 (Aegis Intercept Flight Test)																	△														
FTX-23 (Aegis Flight Test)																															
FTO-02 (AA/Aegis/THAAD/Patriot Multiple Engagement Flight Test)																															
FTM-29 / FTM-30																															
FTO-03 (GM/AA/Aegis/THAAD/Patriot Multiple Engagement Flight Test)																															
GTD-04E																															
Fast Event 1																															
Fast Event 2																															

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Exhibit R-4A, RDT&E Schedule Details: PB 2014 Missile Defense Agency **DATE:** April 2013

APPROPRIATION/BUDGET ACTIVITY 0400: <i>Research, Development, Test & Evaluation, Defense-Wide</i> BA 4: <i>Advanced Component Development & Prototypes (ACD&P)</i>	R-1 ITEM NOMENCLATURE PE 0603892C: <i>AEGIS BMD</i>	PROJECT MT09: <i>Aegis BMD Test</i>
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Schedule Details

Events	Start		End	
	Quarter	Year	Quarter	Year
FTO-01 (Aegis/THAAD/Patriot Multiple Engagement Flight Test)	3	2013	3	2013
FTX-19 (Aegis Simulated Intercept Flight Test)	3	2013	3	2013
FTM-21 (Aegis Intercept Flight Test) (Salvo)	3	2013	3	2013
FTM-22 (Aegis Intercept Flight Test)	3	2013	3	2013
FTX-18 (Aegis Simulated Intercept Flight Test)	3	2013	3	2013
FTX-20 (Aegis Simulated Intercept Flight Test)	1	2014	1	2014
AA CTV-01 (Aegis Ashore Flight Test)	3	2014	3	2014
FTM-23 (Aegis Intercept Flight Test)	3	2014	3	2014
FTM-24 (Aegis Intercept Flight Test)	4	2014	4	2014
AA FTM-02 (Aegis Ashore Intercept Flight Test)	1	2015	1	2015
AA FTM-01 (Aegis Ashore Intercept Flight Test)	1	2015	1	2015
FTM-26 (Aegis Intercept Flight Test)	1	2015	1	2015
FTM-25 (Aegis Intercept Flight Test)	1	2015	1	2015
FTX-23 (Aegis Flight Test)	3	2016	3	2016
FTO-02 (AA/Aegis/THAAD/Patriot Multiple Engagement Flight Test)	4	2015	4	2015
FTM-29 / FTM-30	1	2018	1	2018
FTO-03 (GM/AA/Aegis/THAAD/Patriot Multiple Engagement Flight Test)	4	2018	4	2018
GTD-04E	1	2014	1	2014
Fast Event 1	3	2014	3	2014
Fast Event 2	3	2014	3	2014

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Exhibit R-2A, RDT&E Project Justification: PB 2014 Missile Defense Agency **DATE:** April 2013

APPROPRIATION/BUDGET ACTIVITY 0400: <i>Research, Development, Test & Evaluation, Defense-Wide</i> BA 4: <i>Advanced Component Development & Prototypes (ACD&P)</i>	R-1 ITEM NOMENCLATURE PE 0603892C: <i>AEGIS BMD</i>	PROJECT MX09: <i>Aegis BMD Development Support</i>
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COST (\$ in Millions)	All Prior Years	FY 2012	FY 2013 [#]	FY 2014 Base	FY 2014 OCO ^{##}	FY 2014 Total	FY 2015	FY 2016	FY 2017	FY 2018	Cost To Complete	Total Cost
MX09: <i>Aegis BMD Development Support</i>	-	4.427	15.588	23.963	-	23.963	44.883	67.185	73.515	82.641	Continuing	Continuing
Quantity of RDT&E Articles		0	0	0		0	0	0	0	0		

[#] FY 2013 Program is from the FY 2013 President's Budget, submitted February 2012

^{##} The FY 2014 OCO Request will be submitted at a later date

Note

N/A

A. Mission Description and Budget Item Justification

Aegis Ballistic Missile Defense, in accordance with negotiated agreements between the U. S. Navy and the Missile Defense Agency has identified and segregated funding for Operations and Sustainment of Aegis BMD specific elements resident aboard Aegis capable Navy ships and Land Based, Aegis Ashore Facilities. This support is identified under several categories. First, sustainment to Land Based Standard Missile-3 (SM-3) Pacific Missile Range Facility (PMRF). Second, Computer Program Sustainment, consisting of, but not limited to, review of Trouble Observation Reports (TORs) that are generated by ship crews during exercises or deployments, determination of root causes and preparation of Computer Program Change Request (CPCR) to correct TORs, updates to the in-service computer program to apply, test and certify multiple CPCRs, and tests installation of Aegis Weapon System (SPY / FCS) alignment updates (as required). Third, provide Support to Annual Integration Events (AIEs) to ensure any updated Aegis Combat System (ACS) computer programs do not degrade BMD equipped ships and provide distance and technical support for BMD equipped ships. Fourth, provide technical support documentation updates and provide an In-Service Engineering Agent (Naval Surface Warfare Center Port Hueneme Division) for annual technical evaluations of training, logistics, and material readiness, to include any corrective actions required prior to a BMDS mission. Finally, provide Shipboard Sustainment, consisting of, but not limited to BMDS unique parts and material support for parts as listed in the Cost Analysis and Requirements Document (CARD) and parts as identified by the Commercial off the Shelf (COTS) Obsolescence / Diminished Manufacturing Support Engineering (DMS).

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

	FY 2012	FY 2013	FY 2014
Title: Aegis Ballistic Missile Defense Operations and Support	4.427	15.588	23.963
Articles:	0	0	0
Description: See Description below.			
FY 2012 Accomplishments:			
- Threat updates to support real world events and flight missions.			
FY 2013 Plans:			
- Provide In-service Engineering support to Aegis BMD.			

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Exhibit R-2A, RDT&E Project Justification: PB 2014 Missile Defense Agency		DATE: April 2013
APPROPRIATION/BUDGET ACTIVITY 0400: <i>Research, Development, Test & Evaluation, Defense-Wide</i> BA 4: <i>Advanced Component Development & Prototypes (ACD&P)</i>	R-1 ITEM NOMENCLATURE PE 0603892C: <i>AEGIS BMD</i>	PROJECT MX09: <i>Aegis BMD Development Support</i>

B. Accomplishments/Planned Programs (\$ in Millions, Article Quantities in Each)	FY 2012	FY 2013	FY 2014
<ul style="list-style-type: none"> - Provide operational and maintenance training for Aegis BMD ship crews. - Provide logistics support (including technical manuals, spares, and Reliability, Maintainability, and Availability analysis and products) for Aegis BMD. - Provide initial sustainment to Land Based SM-3 Pacific Missile Range Facility (PMRF). - Provide Sustainment of BMD 3.6.1 Computer Program. - Provide Sustainment of Shipboard BMD Specific Equipment. - Provide Sustainment of SM-3. - Provide support to Phase III/IV system engineering studies. <p>FY 2014 Plans:</p> <ul style="list-style-type: none"> - Maintain and operate the facility at PMRF and ensure Aegis Ashore mission. - Provide Sustainment of BMD 3.6.1 Computer Program to include the engineering and development of all 3.6 baseline update software and associated safety, system engineering, configuration management, performance verification, supporting documentation, labs, information assurance, certification, and critical emergent code corrections based on test data. - Provide Shipboard Sustainment of BMD specific equipment to include In-service sustainment of BMD Baseline Aegis Combat System (ACS) and Vertical Launch System Global Positioning System (VLS GPS) Interface (VGI) hardware configuration management and integrated logistics support certifications submission and approval, Commercial Off-The-Shelf management Technical documentation updates. - Provide Sustainment of Standard Missile-3 (SM-3) to include Recertification, Transportation, Integrated Logistics Support, VLS Canister Support, Quality and Reliability, Minor repairs, and Surveillance. - Provide In-service Engineering support to Aegis BMD. - Provide capability and maintenance training for Aegis BMD ship crews. <p>The FY 2014 increase is due to the increase in the number of operational SM-3s and BMD capable ships.</p>			
Accomplishments/Planned Programs Subtotals	4.427	15.588	23.963

C. Other Program Funding Summary (\$ in Millions)											
Line Item	FY 2012	FY 2013	FY 2014 Base	FY 2014 OCO	FY 2014 Total	FY 2015	FY 2016	FY 2017	FY 2018	Cost To Complete	Total Cost
• 0603902C: <i>Next Generation Aegis Missile (Standard Missile-3 Block IIB (SM-3 IIB))</i>	28.456	224.077	0.000		0.000	0.000	0.000	0.000	0.000	Continuing	Continuing
• 0604880C: <i>Land Based SM-3 (LBSM3)</i>	299.012	276.338	129.374		129.374	124.547	51.927	55.808	32.938	Continuing	Continuing

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Exhibit R-2A, RDT&E Project Justification: PB 2014 Missile Defense Agency	DATE: April 2013
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APPROPRIATION/BUDGET ACTIVITY 0400: <i>Research, Development, Test & Evaluation, Defense-Wide</i> BA 4: <i>Advanced Component Development & Prototypes (ACD&P)</i>	R-1 ITEM NOMENCLATURE PE 0603892C: <i>AEGIS BMD</i>	PROJECT MX09: <i>Aegis BMD Development Support</i>
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C. Other Program Funding Summary (\$ in Millions)

<u>Line Item</u>	<u>FY 2012</u>	<u>FY 2013</u>	<u>FY 2014</u> <u>Base</u>	<u>FY 2014</u> <u>OCO</u>	<u>FY 2014</u> <u>Total</u>	<u>FY 2015</u>	<u>FY 2016</u>	<u>FY 2017</u>	<u>FY 2018</u>	<u>Cost To</u> <u>Complete</u>	<u>Total Cost</u>
• 0604881C: <i>AEGIS SM-3 Block IIA Co-Development</i>	457.529	420.630	308.522		308.522	230.466	128.743	41.014	0.000	0.000	1,586.904

Remarks

D. Acquisition Strategy

The Aegis Ballistic Missile Defense (BMD) element acquisition approach supports evolutionary development, continuously building upon demonstrated capabilities to advance overall Ballistic Missile Defense System (BMDS) capability. After considering all the technical and management aspects of the program and to meet the requirements presented by an evolving ballistic missile threat, the Aegis BMD program awarded sole source contracts to Raytheon and Lockheed Martin to continue development of the Standard Missile-3 (SM-3) missile and the Aegis BMD Weapon System, respectively.

Competition will be maximized for purchase of any products or services in FY 2014, as appropriate.

E. Performance Metrics

N/A

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Exhibit R-3, RDT&E Project Cost Analysis: PB 2014 Missile Defense Agency **DATE:** April 2013

APPROPRIATION/BUDGET ACTIVITY 0400: <i>Research, Development, Test & Evaluation, Defense-Wide</i> BA 4: <i>Advanced Component Development & Prototypes (ACD&P)</i>	R-1 ITEM NOMENCLATURE PE 0603892C: <i>AEGIS BMD</i>	PROJECT MX09: <i>Aegis BMD Development Support</i>
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Product Development (\$ in Millions)				FY 2012		FY 2013		FY 2014 Base		FY 2014 OCO		FY 2014 Total	Cost To Complete	Total Cost	Target Value of Contract
Cost Category Item	Contract Method & Type	Performing Activity & Location	All Prior Years	Cost	Award Date	Cost	Award Date	Cost	Award Date	Cost	Award Date	Cost			
Aegis Ballistic Missile Defense Operations and Support - ABMD O&S - MX09	MIPR	VARIOUS:/NJ, VA, CA	0.000	4.427		15.588	Oct 2012	23.963	Oct 2013	-		23.963	Continuing	Continuing	Continuing
Subtotal			0.000	4.427		15.588		23.963		0.000		23.963			

Remarks

N/A

Support (\$ in Millions)				FY 2012		FY 2013		FY 2014 Base		FY 2014 OCO		FY 2014 Total	Cost To Complete	Total Cost	Target Value of Contract
Cost Category Item	Contract Method & Type	Performing Activity & Location	All Prior Years	Cost	Award Date	Cost	Award Date	Cost	Award Date	Cost	Award Date	Cost			
Subtotal			0.000	0.000		0.000		0.000		0.000		0.000	0.000	0.000	0.000

Remarks

N/A

Test and Evaluation (\$ in Millions)				FY 2012		FY 2013		FY 2014 Base		FY 2014 OCO		FY 2014 Total	Cost To Complete	Total Cost	Target Value of Contract
Cost Category Item	Contract Method & Type	Performing Activity & Location	All Prior Years	Cost	Award Date	Cost	Award Date	Cost	Award Date	Cost	Award Date	Cost			
Subtotal			0.000	0.000		0.000		0.000		0.000		0.000	0.000	0.000	0.000

Remarks

N/A

Management Services (\$ in Millions)				FY 2012		FY 2013		FY 2014 Base		FY 2014 OCO		FY 2014 Total	Cost To Complete	Total Cost	Target Value of Contract
Cost Category Item	Contract Method & Type	Performing Activity & Location	All Prior Years	Cost	Award Date	Cost	Award Date	Cost	Award Date	Cost	Award Date	Cost			
Subtotal			0.000	0.000		0.000		0.000		0.000		0.000	0.000	0.000	0.000

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Exhibit R-3, RDT&E Project Cost Analysis: PB 2014 Missile Defense Agency **DATE:** April 2013

APPROPRIATION/BUDGET ACTIVITY 0400: <i>Research, Development, Test & Evaluation, Defense-Wide</i> BA 4: <i>Advanced Component Development & Prototypes (ACD&P)</i>	R-1 ITEM NOMENCLATURE PE 0603892C: <i>AEGIS BMD</i>	PROJECT MX09: <i>Aegis BMD Development Support</i>
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Management Services (\$ in Millions)				FY 2012		FY 2013		FY 2014 Base		FY 2014 OCO		FY 2014 Total	Cost To Complete	Total Cost	Target Value of Contract
Cost Category Item	Contract Method & Type	Performing Activity & Location	All Prior Years	Cost	Award Date	Cost	Award Date	Cost	Award Date	Cost	Award Date	Cost			

Remarks
N/A

	All Prior Years	FY 2012	FY 2013	FY 2014 Base	FY 2014 OCO	FY 2014 Total	Cost To Complete	Total Cost	Target Value of Contract
Project Cost Totals	0.000	4.427	15.588	23.963	0.000	23.963			

Remarks
N/A

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Exhibit R-2A, RDT&E Project Justification: PB 2014 Missile Defense Agency **DATE:** April 2013

APPROPRIATION/BUDGET ACTIVITY 0400: <i>Research, Development, Test & Evaluation, Defense-Wide</i> BA 4: <i>Advanced Component Development & Prototypes (ACD&P)</i>	R-1 ITEM NOMENCLATURE PE 0603892C: <i>AEGIS BMD</i>	PROJECT MD40: <i>Program-Wide Support</i>
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COST (\$ in Millions)	All Prior Years	FY 2012	FY 2013 [#]	FY 2014 Base	FY 2014 OCO ^{##}	FY 2014 Total	FY 2015	FY 2016	FY 2017	FY 2018	Cost To Complete	Total Cost
MD40: <i>Program-Wide Support</i>	-	40.197	50.550	49.351	-	49.351	47.477	53.046	44.086	41.099	Continuing	Continuing
Quantity of RDT&E Articles		0	0	0		0	0	0	0	0		

[#] FY 2013 Program is from the FY 2013 President's Budget, submitted February 2012
^{##} The FY 2014 OCO Request will be submitted at a later date

Note
 In FY 2013, Program Wide Support reflects a proportional change as a result of increases to BMD Aegis.

A. Mission Description and Budget Item Justification
 Program-Wide Support (PWS) contains non-headquarters management costs in support of Missile Defense Agency (MDA) functions and activities across the entire Ballistic Missile Defense System (BMDS). It Includes Government Civilians, Contract Support Service, and Federally Funded Research and Development Center (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, such as physical and technical security, legal services, travel and agency training, office and equipment leases, utilities, data and unified communications support, supplies and maintenance, materiel and readiness and central property management of equipment, and similar operating expenses. Also includes legal settlements. In keeping with congressional intent, Program Wide Support 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 2012	FY 2013	FY 2014
Title: Program Wide Support	40.197	50.550	49.351
Articles:	0	0	0
Description: See Description below.			
FY 2012 Accomplishments: See paragraph A: Mission Description and Budget Item Justification			
FY 2013 Plans: See paragraph A: Mission Description and Budget Item Justification			
FY 2014 Plans: See paragraph A: Mission Description and Budget Item Justification			
Accomplishments/Planned Programs Subtotals	40.197	50.550	49.351

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Exhibit R-2A, RDT&E Project Justification: PB 2014 Missile Defense Agency		DATE: April 2013
APPROPRIATION/BUDGET ACTIVITY 0400: <i>Research, Development, Test & Evaluation, Defense-Wide</i> BA 4: <i>Advanced Component Development & Prototypes (ACD&P)</i>	R-1 ITEM NOMENCLATURE PE 0603892C: <i>AEGIS BMD</i>	PROJECT MD40: <i>Program-Wide Support</i>

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

N/A

Remarks

D. Acquisition Strategy

N/A

E. Performance Metrics

NA

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Exhibit R-3, RDT&E Project Cost Analysis: PB 2014 Missile Defense Agency **DATE:** April 2013

APPROPRIATION/BUDGET ACTIVITY 0400: <i>Research, Development, Test & Evaluation, Defense-Wide</i> BA 4: <i>Advanced Component Development & Prototypes (ACD&P)</i>	R-1 ITEM NOMENCLATURE PE 0603892C: <i>AEGIS BMD</i>	PROJECT MD40: <i>Program-Wide Support</i>
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Support (\$ in Millions)				FY 2012		FY 2013		FY 2014 Base		FY 2014 OCO		FY 2014 Total	Cost To Complete	Total Cost	Target Value of Contract
Cost Category Item	Contract Method & Type	Performing Activity & Location	All Prior Years	Cost	Award Date	Cost	Award Date	Cost	Award Date	Cost	Award Date	Cost			
Program Wide Support - Agency Operations Management	C/CPAF	Various:Multi: AL, CA, CO, VA	0.000	0.000		0.016	Mar 2013	6.129	Mar 2014	-		6.129	Continuing	Continuing	Continuing
Program Wide Support - Agency Operations and Support Civilian Salaries	Allot	MDA:Multi: AK, AL, CO, CA, VA	0.000	24.331		41.423	Oct 2012	41.352	Oct 2013	-		41.352	Continuing	Continuing	Continuing
Program Wide Support - Agency Operations and Support Other Agency Services	Allot	Various:Multi: AK/AL/CA/CO/HI/MD/VA/NJ/NY/OCONUS	0.000	1.500		5.776	Mar 2013	1.870	Mar 2014	-		1.870	Continuing	Continuing	Continuing
Program Wide Support - Agency Operations and Support Services	C/CPAF	Various:Multi: AL, CA, CO, VA	0.000	14.366		1.720	Nov 2012	0.000		-		0.000	16.086	32.172	0.000
Program Wide Support - FFRDC/UARC	MIPR	Various:Multi: AL, CA, CO, VA	0.000	0.000		1.615	Nov 2012	0.000		-		0.000	1.615	3.230	0.000
Subtotal			0.000	40.197		50.550		49.351		0.000		49.351			

Remarks
N/A

	All Prior Years	FY 2012	FY 2013	FY 2014 Base	FY 2014 OCO	FY 2014 Total	Cost To Complete	Total Cost	Target Value of Contract
Project Cost Totals	0.000	40.197	50.550	49.351	0.000	49.351			

Remarks
N/A