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**Exhibit R-2, RDT&E Budget Item Justification:** PB 2015 Missile Defense Agency **Date:** March 2014

<b>Appropriation/Budget Activity</b> 0400: <i>Research, Development, Test &amp; Evaluation, Defense-Wide I BA 4: Advanced Component Development &amp; Prototypes (ACD&amp;P)</i>	<b>R-1 Program Element (Number/Name)</b> PE 0604881C / <i>AEGIS SM-3 Block IIA Co-Development</i>
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COST (\$ in Millions)	Prior Years	FY 2013	FY 2014	FY 2015 Base	FY 2015 OCO #	FY 2015 Total	FY 2016	FY 2017	FY 2018	FY 2019	Cost To Complete	Total Cost
Total Program Element	1,087.391	416.723	308.493	263.695	-	263.695	175.871	67.451	-	-	-	2,319.624
MD09: <i>SM-3 Block IIA Co-Development</i>	1,070.908	398.971	289.788	240.751	-	240.751	139.284	50.456	-	-	-	2,190.158
MT09: <i>SM-3 Block IIA Co-Development Test</i>	-	-	2.303	7.680	-	7.680	26.254	12.768	-	-	-	49.005
MD40: <i>Program-Wide Support</i>	16.483	17.752	16.402	15.264	-	15.264	10.333	4.227	-	-	-	80.461

**MDAP/MAIS Code:** 362

# The FY 2015 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. 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 Intercontinental Ballistic Missiles (ICBMs) in early phases of flight. Upgrades to both the Aegis BMD Weapon System and the Standard Missile-3 (SM-3) configurations evolve Aegis BMD to provide effective, supportable defensive capability against more difficult threats.

Beginning in 2006, Aegis BMD and the Japanese Ministry of Defense (JMOD) have undertaken an SM-3 Cooperative Development (SCD) program. The objective of the SCD project is the development and initial at-sea flight test of the SM-3 Blk IIA missile, and preparation for subsequent production decisions.

Key technology improvements planned for the SM-3 Block IIA missile include an increase in velocity and an increase in range provided by a 21-inch diameter rocket motor propulsion stack, more than doubled seeker sensitivity and more than three times divert capability incorporated in an advanced kinetic warhead. Key component technologies to be developed include, but are not limited to: lightweight nosecone, advanced kinetic warhead, 21-inch second stage rocket motor, and 21-inch third stage rocket motor. Technology risk reduction will be conducted to reduce key component development risk. The U.S. and Japan will bear equitable burden to conduct the Project. The assignment of work documented in the U.S./Japan Memorandum of Understanding (MOU) SCD Annex represents an equitable sharing of work. The U.S. and Japan will fund the full extent of their participation in the Project. No funds will be transferred between the U.S. and Japan under the MOU.

Proving Missile Defense:

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<b>Exhibit R-2, RDT&amp;E Budget Item Justification:</b> PB 2015 Missile Defense Agency	<b>Date:</b> March 2014
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<b>Appropriation/Budget Activity</b> 0400: <i>Research, Development, Test &amp; Evaluation, Defense-Wide I BA 4: Advanced Component Development &amp; Prototypes (ACD&amp;P)</i>	<b>R-1 Program Element (Number/Name)</b> PE 0604881C / <i>AEGIS SM-3 Block IIA Co-Development</i>
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- 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.

- 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.

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

<b>B. Program Change Summary (\$ in Millions)</b>	<b>FY 2013</b>	<b>FY 2014</b>	<b>FY 2015 Base</b>	<b>FY 2015 OCO</b>	<b>FY 2015 Total</b>
Previous President's Budget	420.630	308.522	230.466	-	230.466
Current President's Budget	416.723	308.493	263.695	-	263.695
Total Adjustments	-3.907	-0.029	33.229	-	33.229
• Congressional General Reductions	-0.622	-0.029			
• Congressional Directed Reductions	-	-			
• Congressional Rescissions	-	-			
• Congressional Adds	-	-			
• Congressional Directed Transfers	50.000	-			
• Reprogrammings	-9.965	-			
• SBIR/STTR Transfer	-5.495	-			
• Other Adjustment	-37.825	-	33.229	-	33.229

**Change Summary Explanation**

FY 2015 increase of \$33.2M due mainly to the following:

- \$36.0M was received from PE 0603892C MD09 to provide support in order to increase schedule and performance of the Block IIA development.
- Approximately \$3.0M was decreased due to minor cost savings adjustments across the program.

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**Exhibit R-2A, RDT&E Project Justification:** PB 2015 Missile Defense Agency **Date:** March 2014

<b>Appropriation/Budget Activity</b> 0400 / 4	<b>R-1 Program Element (Number/Name)</b> PE 0604881C / AEGIS SM-3 Block IIA Co-Development	<b>Project (Number/Name)</b> MD09 / SM-3 Block IIA Co-Development
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COST (\$ in Millions)	Prior Years	FY 2013	FY 2014	FY 2015 Base	FY 2015 OCO #	FY 2015 Total	FY 2016	FY 2017	FY 2018	FY 2019	Cost To Complete	Total Cost
MD09: SM-3 Block IIA Co-Development	1,070.908	398.971	289.788	240.751	-	240.751	139.284	50.456	-	-	-	2,190.158
Quantity of RDT&E Articles	-	-	-	-	-	-	-	-	-	-		

# The FY 2015 OCO Request will be submitted at a later date.

**Note**

N/A

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

The U.S. and Japan have a mutual interest in the evolutionary development of improvements to the Standard Missile-3 (SM-3). In FY 2006, the two countries signed a Memorandum of Understanding (MOU) for the co-development of an upgraded, 21-inch diameter SM-3 missile (SM-3 Block IIA). The objective of the SM-3 Cooperative Development (SCD) project is the development and initial at-sea flight test of the SM-3 Blk IIA missile. The SM-3 Block IIA missile will increase the area that can be defended by Aegis Ballistic Missile Defense (BMD) and increase the probability of kill against a larger threat set. It will leverage enhanced capability provided by Ballistic Missile Defense System (BMDS) sensor upgrades. The SM-3 Block IIA missile development will build upon established joint research investments by both the U.S. and Japan. The U.S. and Japan will equitably share both work and cost.

Key technology improvements planned for the SM-3 Block IIA missile include an increase in velocity and an increase in range provided by a 21-inch diameter rocket motor propulsion stack, more than doubled seeker sensitivity and more than three times divert capability incorporated in an advanced kinetic warhead. Key component technologies to be developed include, but are not limited to: lightweight nosecone, advanced kinetic warhead, 21-inch second stage rocket motor, and 21-inch third stage rocket motor. Technology risk reduction will be conducted to reduce key component development risk. The assignment of work documented in the U.S./Japan (MOU) SCD Annex represents an equitable sharing of work. The U.S. and Japan will fund the full extent of their participation in the Project. No funds will be transferred between the U.S. and Japan under the MOU.

The Scope of Work of the SCD project can be defined in three phases:

Phase I takes the program through System Design Review (SDR) completion. Aegis BMD will execute risk reduction efforts for the propulsion, nosecone, seeker and Divert Attitude Control System (DACS) development efforts and test plans, and conduct requirements definition for the SM-3 Block IIA missile configuration.

Phase II will refine the scope of work from SDR through Critical Design Review (CDR) completion. Aegis BMD will refine requirements and define the performance allocation and component configuration for the development and testing of the SM-3 Block IIA missile. Both parties will design, fabricate, test, and evaluate the SM-3 Block IIA missile sections per the agreed work-share.

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<b>Exhibit R-2A, RDT&amp;E Project Justification:</b> PB 2015 Missile Defense Agency		<b>Date:</b> March 2014		
<b>Appropriation/Budget Activity</b> 0400 / 4	<b>R-1 Program Element (Number/Name)</b> PE 0604881C / AEGIS SM-3 Block IIA Co-Development	<b>Project (Number/Name)</b> MD09 / SM-3 Block IIA Co-Development		
Phase III will refine the scope of work from CDR to the completion of the SCD flight test program as defined in the Agreement. This phase defines developmental cost share agreements between the United States and the Government of Japan, completes component engineering and integration, executes cooperative flight tests, and continues discussions on production and maintenance options.				
The SCD project will:				
<ul style="list-style-type: none"> <li>- Develop components for the SM-3 Block IIA missile and integrate them into an All Up Round (AUR): e.g., 21 inch 2nd and 3rd stage components (Japan work share); 21 inch nosecone (Japan work share); Advanced kinetic warhead (United States work share); Advanced seeker (United States work share); Large diameter divert and attitude control system (United States work share); Integrate the SM-3 Blk IIA missile and Vertical Launch System (VLS) with Aegis ship systems</li> <li>- Includes development of a light weight VLS canister (United States work share)</li> <li>- Conduct test and evaluation through ground and flight testing using an early delivery of Aegis Ballistic Missile Defense (BMD) 5.1 system (Joint work share)</li> </ul>				
<b>B. Accomplishments/Planned Programs (\$ in Millions, Article Quantities in Each)</b>		<b>FY 2013</b>	<b>FY 2014</b>	<b>FY 2015</b>
<b>Title:</b> SM-3 Block IIA Cooperative Development (SCD)		398.971	289.788	240.751
<b>Articles:</b>		-	-	-
<b>Description:</b> See Description below.				
<b>FY 2013 Accomplishments:</b> (IAW Project Phase II Jointly approved re-plan)				
<ul style="list-style-type: none"> <li>-Conducted SM-3 Blk IIA Propulsion Stack &amp; System Critical Design Review (CDR).</li> <li>-Conducted Mk 29 Mod 0 Canister CDR.</li> <li>-Conducted and analyzed results of Restrained Firing Test Event.</li> <li>-Began the procurement process of SM-3 Blk IIA RDT&amp;E Missile Rounds to support Flight Test program.</li> <li>-Demonstrated performance of missile sub-sections.</li> <li>-Conducted test planning and analysis in preparation for the Hazard Assessment Test (HAT) 40 FT Vertical Drop Test and the MK 72 Booster Fast Cook-Off Test in support of CTV-1 SM-3 Blk IIA Flight Test.</li> </ul>				
<b>FY 2014 Plans:</b>				
SM-3 Blk IIA Missile Development:				
<ul style="list-style-type: none"> <li>- Begin missile integration testing.</li> <li>- Continue purchasing SM-3 Blk IIA RDT&amp;E Missile Rounds to support Flight Test program.</li> <li>- Complete qualification of missile Guidance Section.</li> <li>- Begin missile level Hardware in the Loop (HWIL) integration testing.</li> <li>- Prepare for and conduct Ballistic Missile Defense System Flight and Ground Test events as reflected in the Integrated Master Test Plan and the Exhibit R-4 schedule</li> </ul>				

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<b>Exhibit R-2A, RDT&amp;E Project Justification:</b> PB 2015 Missile Defense Agency		<b>Date:</b> March 2014
<b>Appropriation/Budget Activity</b> 0400 / 4	<b>R-1 Program Element (Number/Name)</b> PE 0604881C / AEGIS SM-3 Block IIA Co-Development	<b>Project (Number/Name)</b> MD09 / SM-3 Block IIA Co-Development

<b>B. Accomplishments/Planned Programs (\$ in Millions, Article Quantities in Each)</b>	<b>FY 2013</b>	<b>FY 2014</b>	<b>FY 2015</b>
<p>Vertical Launch System (VLS) Canister:</p> <ul style="list-style-type: none"> <li>- Complete VLS ship integration drawings and VLS technical manuals.</li> <li>- Prepare for and conduct Ballistic Missile Defense System Flight and Ground Test events as reflected in the IMTP and the Exhibit R-4 schedule</li> <li>- Purchase materials to fabricate canisters in support of the SM-3 Cooperative Development Test Program.</li> </ul> <p>The budget reduction in FY 2014 reflects Program of Record activities that will occur after CDR as the Program begins to transition from Development to Integration and Testing.</p> <p><b><i>FY 2015 Plans:</i></b></p> <p>SM-3 Blk IIA Missile Development:</p> <ul style="list-style-type: none"> <li>-Demonstrate Real-time Scene Generator Final Capability</li> <li>- Conduct Throttleable Divert Attitude Control System (TDACS) Design Verification Test</li> <li>-Conduct KW Closed Loop System Test</li> <li>-Complete SM-3 IIA AUR Huntsville I&amp;T Process Proofing</li> <li>-Deliver Inert Operational Missile to Combat Systems Engineering Development Site (CSEDS)</li> <li>-Complete TDACS qualification Testing</li> <li>-Deliver Near Miss Shock Testing Hardware</li> <li>-Complete Post Near Miss Shock Performance Testing of Kinetic Warhead (KW) and Guidance Section (GS)</li> <li>-Deliver TDACS IM Fast Cook-off Units</li> <li>-Deliver Throttleable Divert and Attitude Control System (TDACS), Guidance Section (GS), and Kinetic Warhead (KW) Guidance Unit in support of BMDS Flight Test event</li> <li>- Prepare for and conduct BMDS Flight Test events as reflected in the IMTP and the Exhibit R-4 schedule</li> </ul> <p>Vertical Launch System (VLS) Canister:</p> <ul style="list-style-type: none"> <li>-Conduct Mk 29 Mod 0 Canister In-Process Review</li> <li>-Prepare for and conduct Insensitive Munitions testing</li> <li>-Prepare for and conduct Packaging, Handling, Storage &amp; Transportation testing</li> <li>-Prepare for and conduct BMDS Flight Test events as reflected in the IMTP and the Exhibit R-4 schedule</li> </ul>			
<b>Accomplishments/Planned Programs Subtotals</b>	398.971	289.788	240.751

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<b>Exhibit R-2A, RDT&amp;E Project Justification:</b> PB 2015 Missile Defense Agency		<b>Date:</b> March 2014
<b>Appropriation/Budget Activity</b> 0400 / 4	<b>R-1 Program Element (Number/Name)</b> PE 0604881C / AEGIS SM-3 Block IIA Co-Development	<b>Project (Number/Name)</b> MD09 / SM-3 Block IIA Co-Development

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

Line Item	FY 2013	FY 2014	FY 2015	FY 2015	FY 2015	FY 2016	FY 2017	FY 2018	FY 2019	Cost To	
			Base	OCO	Total					Complete	Total Cost
• 0603884C: Ballistic Missile Defense Sensors	306.896	366.590	392.893	-	392.893	462.030	448.763	403.272	368.125	Continuing	Continuing
• 0603890C: BMD Enabling Programs	336.763	372.309	410.863	-	410.863	412.264	400.813	531.752	637.123	Continuing	Continuing
• 0603896C: Ballistic Missile Defense Command and Control, Battle Management & Communication	344.431	405.319	443.484	-	443.484	456.182	462.525	452.937	465.638	Continuing	Continuing
• 0603902C: Next Generation Aegis Missile (Standard Missile-3 Block IIB (SM-3 IIB))	58.952	-	-	-	-	-	-	-	-	-	58.952
• 0604881C: AEGIS SM-3 Block IIA Co-Development	416.723	308.493	263.695	-	263.695	175.871	67.451	-	-	-	1,232.233

**Remarks**

**D. Acquisition Strategy**

The SM-3 Cooperative Development program for the SM-3 Block IIA missile will utilize a performance-based approach that ties program decision milestones to the performance of development prototypes, as well as Propulsion Test Vehicle and Control Test Vehicle flight test article performance. Acquisition of hardware, software modifications and required services will occur in conjunction with contractual and tasking efforts to U.S. Navy work and events, and as defined by signed agreements between the Governments of the United States and Japan.

Competition will be used to purchase any products or services, when appropriate.

**E. Performance Metrics**

N/A

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Exhibit R-3, RDT&E Project Cost Analysis: PB 2015 Missile Defense Agency												Date: March 2014			
Appropriation/Budget Activity				R-1 Program Element (Number/Name)						Project (Number/Name)					
0400 / 4				PE 0604881C / AEGIS SM-3 Block IIA Co-Development						MD09 / SM-3 Block IIA Co-Development					
Product Development (\$ in Millions)				FY 2013		FY 2014		FY 2015 Base		FY 2015 OCO		FY 2015 Total			
Cost Category Item	Contract Method & Type	Performing Activity & Location	Prior Years	Cost	Award Date	Cost	Award Date	Cost	Award Date	Cost	Award Date	Cost	Cost To Complete	Total Cost	Target Value of Contract
SM-3 Block IIA Cooperative Development (SCD) - Mission Assurance - MD09	MIPR	NSWC/DD/VA : Dahlgren, VA	0.750	0.408		0.700	Dec 2013	0.499	Dec 2014	-		0.499	Continuing	Continuing	Continuing
SM-3 Block IIA Cooperative Development (SCD) - SM-3 Blk IIA Canister - MD09	MIPR	BAE : MD	32.926	9.914		9.498	Dec 2013	6.768	Dec 2014	-		6.768	Continuing	Continuing	Continuing
SM-3 Block IIA Cooperative Development (SCD) - SM-3 Blk IIA Development - MD09	SS/CPAF	RAYTHEON : AZ	953.990	340.767		250.783	Nov 2013	212.957	Dec 2014	-		212.957	Continuing	Continuing	Continuing
SM-3 Block IIA Cooperative Development (SCD) - SM-3 Blk IIA Development - MD09 - 20117135426611	MIPR	NSWC/DD/VA : VA	18.551	6.507		8.530	Nov 2013	6.078	Dec 2014	-		6.078	Continuing	Continuing	Continuing
SM-3 Block IIA Cooperative Development (SCD) - SM-3 Blk IIA Development - MD09 - 20117135426613	C/CPFF	JHU/APL : MD	44.616	21.166		18.203	Nov 2013	12.971	Nov 2014	-		12.971	Continuing	Continuing	Continuing
SM-3 Block IIA Cooperative Development (SCD) - SM-3 Blk IIA Development - MD09 - 20117135426614	MIPR	MIT/LL : MA	5.403	1.302		0.830	Nov 2013	0.591	Nov 2014	-		0.591	Continuing	Continuing	Continuing
SM-3 Block IIA Cooperative Development (SCD) - SM-3 Blk IIA Development - MD09 - 20117135426616	MIPR	NSWC/PHD : CA	7.177	0.830		0.553	Nov 2013	0.394	Nov 2014	-		0.394	Continuing	Continuing	Continuing
SM-3 Block IIA Cooperative Development (SCD) - SM-3 Blk IIA	MIPR	NSWC IH : MD	5.995	0.926		0.691	Nov 2013	0.493	Nov 2014	-		0.493	Continuing	Continuing	Continuing

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**Exhibit R-3, RDT&E Project Cost Analysis: PB 2015 Missile Defense Agency** **Date:** March 2014

<b>Appropriation/Budget Activity</b> 0400 / 4	<b>R-1 Program Element (Number/Name)</b> PE 0604881C / AEGIS SM-3 Block IIA Co-Development	<b>Project (Number/Name)</b> MD09 / SM-3 Block IIA Co-Development
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<b>Product Development (\$ in Millions)</b>				FY 2013		FY 2014		FY 2015 Base		FY 2015 OCO		FY 2015 Total	Cost To Complete	Total Cost	Target Value of Contract
Cost Category Item	Contract Method & Type	Performing Activity & Location	Prior Years	Cost	Award Date	Cost	Award Date	Cost	Award Date	Cost	Award Date	Cost			
Development - MD09 - 20117135426619															
SM-3 Block IIA Cooperative Development (SCD) - SM-3 BIK IIA Development - MD09 - CD	MIPR	NSWC/CD : MD	0.000	1.400		-		-		-		-	Continuing	Continuing	Continuing
SM-3 Block IIA Cooperative Development (SCD) - SM-3 BIK IIA Development - MD09 - Crane	MIPR	NSWC/Crane : IN	0.000	0.993		-		-		-		-	Continuing	Continuing	Continuing
SM-3 Block IIA Cooperative Development (SCD) - SM-3 BIK IIA Development - MD09 CL	MIPR	NAWC/CL : CA	0.000	1.827		-		-		-		-	Continuing	Continuing	Continuing
SM-3 Block IIA Cooperative Development (SCD) - SM-3 BIK IIA Mission Assurance - MD09	MIPR	NSWC/CO : CA	0.000	0.826		-		-		-		-	Continuing	Continuing	Continuing
SM-3 Block IIA Cooperative Development (SCD) - SM-3 BIK IIA Test Risk Reduction - MD09	C/CPFF	TREX : CA	0.000	7.780		-		-		-		-	Continuing	Continuing	Continuing
SM-3 Block IIA Cooperative Development (SCD) - Testing & Evaluation - MD09	MIPR	Various : CA, VA, MD	1.500	4.325		-		-		-		-	-	5.825	13.995
<b>Subtotal</b>			1,070.908	398.971		289.788		240.751		-		240.751	-	-	-

**Remarks**  
N/A

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**Exhibit R-3, RDT&E Project Cost Analysis: PB 2015 Missile Defense Agency** **Date:** March 2014

<b>Appropriation/Budget Activity</b> 0400 / 4	<b>R-1 Program Element (Number/Name)</b> PE 0604881C / AEGIS SM-3 Block IIA Co-Development	<b>Project (Number/Name)</b> MD09 / SM-3 Block IIA Co-Development
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<b>Support (\$ in Millions)</b>				FY 2013		FY 2014		FY 2015 Base		FY 2015 OCO		FY 2015 Total	Cost To Complete	Total Cost	Target Value of Contract
Cost Category Item	Contract Method & Type	Performing Activity & Location	Prior Years	Cost	Award Date	Cost	Award Date	Cost	Award Date	Cost	Award Date	Cost			
<b>Subtotal</b>			-	-		-		-		-		-	-	-	-

**Remarks**  
N/A

<b>Test and Evaluation (\$ in Millions)</b>				FY 2013		FY 2014		FY 2015 Base		FY 2015 OCO		FY 2015 Total	Cost To Complete	Total Cost	Target Value of Contract
Cost Category Item	Contract Method & Type	Performing Activity & Location	Prior Years	Cost	Award Date	Cost	Award Date	Cost	Award Date	Cost	Award Date	Cost			
<b>Subtotal</b>			-	-		-		-		-		-	-	-	-

**Remarks**  
N/A

<b>Management Services (\$ in Millions)</b>				FY 2013		FY 2014		FY 2015 Base		FY 2015 OCO		FY 2015 Total	Cost To Complete	Total Cost	Target Value of Contract
Cost Category Item	Contract Method & Type	Performing Activity & Location	Prior Years	Cost	Award Date	Cost	Award Date	Cost	Award Date	Cost	Award Date	Cost			
<b>Subtotal</b>			-	-		-		-		-		-	-	-	-

**Remarks**  
N/A

	Prior Years	FY 2013	FY 2014	FY 2015 Base	FY 2015 OCO	FY 2015 Total	Cost To Complete	Total Cost	Target Value of Contract
<b>Project Cost Totals</b>	1,070.908	398.971	289.788	240.751	-	240.751	-	-	-

**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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<b>Exhibit R-4, RDT&amp;E Schedule Profile: PB 2015 Missile Defense Agency</b>		<b>Date:</b> March 2014
<b>Appropriation/Budget Activity</b> 0400 / 4	<b>R-1 Program Element (Number/Name)</b> PE 0604881C / AEGIS SM-3 Block IIA Co-Development	<b>Project (Number/Name)</b> MD09 / SM-3 Block IIA Co-Development

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 2013				FY 2014				FY 2015				FY 2016				FY 2017				FY 2018				FY 2019			
	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
SM-3 Blk IIA PS Critical Design Review (CDR)		▲																										
SM-3 Blk IIA SYS/KW Critical Design Review (CDR)				▲																								
Restrained Level Firing		◆																										

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<b>Exhibit R-4A, RDT&amp;E Schedule Details:</b> PB 2015 Missile Defense Agency		<b>Date:</b> March 2014
<b>Appropriation/Budget Activity</b> 0400 / 4	<b>R-1 Program Element (Number/Name)</b> PE 0604881C / AEGIS SM-3 Block IIA Co-Development	<b>Project (Number/Name)</b> MD09 / SM-3 Block IIA Co-Development

Schedule Details

Events	Start		End	
	Quarter	Year	Quarter	Year
SM-3 Blk IIA PS Critical Design Review (CDR)	2	2013	2	2013
SM-3 Blk IIA SYS/KW Critical Design Review (CDR)	4	2013	4	2013
Restrained Level Firing	2	2013	2	2013

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**Exhibit R-2A, RDT&E Project Justification:** PB 2015 Missile Defense Agency **Date:** March 2014

<b>Appropriation/Budget Activity</b> 0400 / 4	<b>R-1 Program Element (Number/Name)</b> PE 0604881C / AEGIS SM-3 Block IIA Co-Development	<b>Project (Number/Name)</b> MT09 / SM-3 Block IIA Co-Development Test
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COST (\$ in Millions)	Prior Years	FY 2013	FY 2014	FY 2015 Base	FY 2015 OCO #	FY 2015 Total	FY 2016	FY 2017	FY 2018	FY 2019	Cost To Complete	Total Cost
MT09: SM-3 Block IIA Co-Development Test	-	-	2.303	7.680	-	7.680	26.254	12.768	-	-	-	49.005
Quantity of RDT&E Articles	-	-	-	-	-	-	-	-	-	-		

# The FY 2015 OCO Request will be submitted at a later date.

**Note**

N/A

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

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 warfighter are operationally effective, suitable, and survivable.

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. The bottom line is that MDA is focused on conducting meaningful ballistic missile testing that demonstrates the capabilities of the BMDS.

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

	FY 2013	FY 2014	FY 2015
<b>Title:</b> SM-3 Co-Development Testing	-	2.303	7.680
<b>Articles:</b>	-	-	-
<b>Description:</b> See Description below.			
<b>FY 2013 Accomplishments:</b> -No FY 2013 efforts, funding begins in FY 2014			
<b>FY 2014 Plans:</b> -Prepare for and conduct Ballistic Missile Defense System Flight and Ground Test events as reflected in the Integrated Master Test Plan and the Exhibit R-4 schedule.			
<b>FY 2015 Plans:</b>			

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<b>Exhibit R-2A, RDT&amp;E Project Justification:</b> PB 2015 Missile Defense Agency		<b>Date:</b> March 2014
<b>Appropriation/Budget Activity</b> 0400 / 4	<b>R-1 Program Element (Number/Name)</b> PE 0604881C / AEGIS SM-3 Block IIA Co-Development	<b>Project (Number/Name)</b> MT09 / SM-3 Block IIA Co-Development Test

<b>B. Accomplishments/Planned Programs (\$ in Millions, Article Quantities in Each)</b>	<b>FY 2013</b>	<b>FY 2014</b>	<b>FY 2015</b>
-Prepare for and conduct Ballistic Missile Defense System Flight and Ground Test events as reflected in the Integrated Master Test Plan and the Exhibit R-4 schedule.			
<b>Accomplishments/Planned Programs Subtotals</b>	-	2.303	7.680

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

<b>Line Item</b>	<b>FY 2013</b>	<b>FY 2014</b>	<b>FY 2015 Base</b>	<b>FY 2015 OCO</b>	<b>FY 2015 Total</b>	<b>FY 2016</b>	<b>FY 2017</b>	<b>FY 2018</b>	<b>FY 2019</b>	<b>Cost To Complete</b>	<b>Total Cost</b>
• 0603884C: Ballistic Missile Defense Sensors	306.896	366.590	392.893	-	392.893	462.030	448.763	403.272	368.125	Continuing	Continuing
• 0603890C: BMD Enabling Programs	336.763	372.309	410.863	-	410.863	412.264	400.813	531.752	637.123	Continuing	Continuing
• 0603896C: Ballistic Missile Defense Command and Control, Battle Management & Communication	344.431	405.319	443.484	-	443.484	456.182	462.525	452.937	465.638	Continuing	Continuing
• 0603902C: Next Generation Aegis Missile (Standard Missile-3 Block IIB (SM-3 IIB))	58.952	-	-	-	-	-	-	-	-	-	58.952
• 0604880C: Land Based SM-3 (LBSM3)	243.876	129.374	123.444	-	123.444	32.641	26.337	22.889	17.825	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 2015 Missile Defense Agency** **Date:** March 2014

<b>Appropriation/Budget Activity</b> 0400 / 4	<b>R-1 Program Element (Number/Name)</b> PE 0604881C / AEGIS SM-3 Block IIA Co-Development	<b>Project (Number/Name)</b> MT09 / SM-3 Block IIA Co-Development Test
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<b>Product Development (\$ in Millions)</b>				FY 2013		FY 2014		FY 2015 Base		FY 2015 OCO		FY 2015 Total	Cost To Complete	Total Cost	Target Value of Contract
Cost Category Item	Contract Method & Type	Performing Activity & Location	Prior Years	Cost	Award Date	Cost	Award Date	Cost	Award Date	Cost	Award Date	Cost			
<b>Subtotal</b>			-	-		-		-		-		-	-	-	-

**Remarks**  
N/A

<b>Support (\$ in Millions)</b>				FY 2013		FY 2014		FY 2015 Base		FY 2015 OCO		FY 2015 Total	Cost To Complete	Total Cost	Target Value of Contract
Cost Category Item	Contract Method & Type	Performing Activity & Location	Prior Years	Cost	Award Date	Cost	Award Date	Cost	Award Date	Cost	Award Date	Cost			
<b>Subtotal</b>			-	-		-		-		-		-	-	-	-

**Remarks**  
N/A

<b>Test and Evaluation (\$ in Millions)</b>				FY 2013		FY 2014		FY 2015 Base		FY 2015 OCO		FY 2015 Total	Cost To Complete	Total Cost	Target Value of Contract
Cost Category Item	Contract Method & Type	Performing Activity & Location	Prior Years	Cost	Award Date	Cost	Award Date	Cost	Award Date	Cost	Award Date	Cost			
SM-3 Co-Development Testing - SM-3 Blk IIA Development (SCD) Testing & Evaluation - MT09	MIPR	NSWC : PHD CA	0.000	-		0.900	Nov 2013	3.001	Nov 2014	-		3.001	Continuing	Continuing	Continuing
SM-3 Co-Development Testing - SM-3 Blk IIA Development (SCD) Testing & Evaluation - MT09 - 2012628435314	MIPR	NSWC/DD/VA : Dahlgren, VA	0.000	-		0.400	Nov 2013	1.334	Nov 2014	-		1.334	Continuing	Continuing	Continuing
SM-3 Co-Development Testing - SM-3 Blk IIA Development (SCD) Testing & Evaluation - MT09 - 20126284353142	MIPR	JHU : APL MD	0.000	-		0.400	Nov 2013	1.334	Nov 2014	-		1.334	Continuing	Continuing	Continuing

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**Exhibit R-3, RDT&E Project Cost Analysis: PB 2015 Missile Defense Agency** **Date:** March 2014

<b>Appropriation/Budget Activity</b> 0400 / 4	<b>R-1 Program Element (Number/Name)</b> PE 0604881C / AEGIS SM-3 Block IIA Co-Development	<b>Project (Number/Name)</b> MT09 / SM-3 Block IIA Co-Development Test
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<b>Test and Evaluation (\$ in Millions)</b>				FY 2013		FY 2014		FY 2015 Base		FY 2015 OCO		FY 2015 Total	Cost To Complete	Total Cost	Target Value of Contract
Cost Category Item	Contract Method & Type	Performing Activity & Location	Prior Years	Cost	Award Date	Cost	Award Date	Cost	Award Date	Cost	Award Date	Cost			
SM-3 Co-Development Testing - SM-3 Blk IIA Development (SCD) Testing & Evaluation - MT09 - 20126284353143	MIPR	NAWC : Pt. Mugu CA	0.000	-		0.500	Nov 2013	1.667	Nov 2014	-		1.667	Continuing	Continuing	Continuing
SM-3 Co-Development Testing - SM-3 Blk IIA Development (SCD) Testing & Evaluation-MT09 - 20126284353146	MIPR	NSWC : IH MD	0.000	-		0.103	Nov 2013	0.344	Nov 2014	-		0.344	Continuing	Continuing	Continuing
<b>Subtotal</b>			0.000	-		2.303		7.680		-		7.680	-	-	-

**Remarks**

N/A

<b>Management Services (\$ in Millions)</b>				FY 2013		FY 2014		FY 2015 Base		FY 2015 OCO		FY 2015 Total	Cost To Complete	Total Cost	Target Value of Contract
Cost Category Item	Contract Method & Type	Performing Activity & Location	Prior Years	Cost	Award Date	Cost	Award Date	Cost	Award Date	Cost	Award Date	Cost			
<b>Subtotal</b>			-	-		-		-		-		-	-	-	-

**Remarks**

N/A

	Prior Years	FY 2013	FY 2014	FY 2015 Base	FY 2015 OCO	FY 2015 Total	Cost To Complete	Total Cost	Target Value of Contract
<b>Project Cost Totals</b>	0.000	-	2.303	7.680	-	7.680	-	-	-

**Remarks**

N/A

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<b>Exhibit R-4, RDT&amp;E Schedule Profile: PB 2015 Missile Defense Agency</b>		<b>Date:</b> March 2014
<b>Appropriation/Budget Activity</b> 0400 / 4	<b>R-1 Program Element (Number/Name)</b> PE 0604881C / AEGIS SM-3 Block IIA Co-Development	<b>Project (Number/Name)</b> MT09 / SM-3 Block IIA Co-Development Test

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 2013				FY 2014				FY 2015				FY 2016				FY 2017				FY 2018				FY 2019			
	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
SCD PTV-01 (Aegis Flight Test)					◆																							
SCD CTV-01 (Aegis Flight Test)									◇																			
SCD CTV-02 (Aegis Flight Test)											◇																	
SFTM-1 E1/E2 (Aegis Intercept Flight Test)															◇													
SFTM-2 (Aegis Intercept Flight Test)																◇												

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<b>Exhibit R-4A, RDT&amp;E Schedule Details:</b> PB 2015 Missile Defense Agency		<b>Date:</b> March 2014
<b>Appropriation/Budget Activity</b> 0400 / 4	<b>R-1 Program Element (Number/Name)</b> PE 0604881C / AEGIS SM-3 Block IIA Co-Development	<b>Project (Number/Name)</b> MT09 / SM-3 Block IIA Co-Development Test

Schedule Details

Events	Start		End	
	Quarter	Year	Quarter	Year
SCD PTV-01 (Aegis Flight Test)	1	2014	1	2014
SCD CTV-01 (Aegis Flight Test)	2	2015	2	2015
SCD CTV-02 (Aegis Flight Test)	4	2015	4	2015
SFTM-1 E1/E2 (Aegis Intercept Flight Test)	3	2016	3	2016
SFTM-2 (Aegis Intercept Flight Test)	1	2017	1	2017

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**Exhibit R-2A, RDT&E Project Justification:** PB 2015 Missile Defense Agency **Date:** March 2014

<b>Appropriation/Budget Activity</b> 0400 / 4	<b>R-1 Program Element (Number/Name)</b> PE 0604881C / AEGIS SM-3 Block IIA Co-Development	<b>Project (Number/Name)</b> MD40 / Program-Wide Support
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COST (\$ in Millions)	Prior Years	FY 2013	FY 2014	FY 2015 Base	FY 2015 OCO #	FY 2015 Total	FY 2016	FY 2017	FY 2018	FY 2019	Cost To Complete	Total Cost
MD40: <i>Program-Wide Support</i>	16.483	17.752	16.402	15.264	-	15.264	10.333	4.227	-	-	-	80.461
Quantity of RDT&E Articles	-	-	-	-	-	-	-	-	-	-		

# The FY 2015 OCO Request will be submitted at a later date.

**Note**

In FY 2014, Program Wide Support reflects a proportional change as a result of adjustments to SM-3 Block IIA Co-Development. 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**

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 2013	FY 2014	FY 2015
<b>Title:</b> Program Wide Support	17.752	16.402	15.264
<b>Articles:</b>	-	-	-
<b>Description:</b> See Description below.			
<b>FY 2013 Accomplishments:</b> See paragraph A, Mission Description and budget item justification.			
<b>FY 2014 Plans:</b> See paragraph A: Mission Description and Budget Item Justification			
<b>FY 2015 Plans:</b> See paragraph A: Mission Description and Budget Item Justification			
<b>Accomplishments/Planned Programs Subtotals</b>	17.752	16.402	15.264

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<b>Exhibit R-2A, RDT&amp;E Project Justification:</b> PB 2015 Missile Defense Agency		<b>Date:</b> March 2014
<b>Appropriation/Budget Activity</b> 0400 / 4	<b>R-1 Program Element (Number/Name)</b> PE 0604881C / <i>AEGIS SM-3 Block IIA Co-Development</i>	<b>Project (Number/Name)</b> MD40 / <i>Program-Wide Support</i>

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

N/A

**Remarks**

**D. Acquisition Strategy**

N/A

**E. Performance Metrics**

N/A

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**Exhibit R-3, RDT&E Project Cost Analysis:** PB 2015 Missile Defense Agency **Date:** March 2014

<b>Appropriation/Budget Activity</b> 0400 / 4	<b>R-1 Program Element (Number/Name)</b> PE 0604881C / AEGIS SM-3 Block IIA Co-Development	<b>Project (Number/Name)</b> MD40 / Program-Wide Support
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<b>Support (\$ in Millions)</b>				FY 2013		FY 2014		FY 2015 Base		FY 2015 OCO		FY 2015 Total	Cost To Complete	Total Cost	Target Value of Contract
Cost Category Item	Contract Method & Type	Performing Activity & Location	Prior Years	Cost	Award Date	Cost	Award Date	Cost	Award Date	Cost	Award Date	Cost			
Program Wide Support - Agency Operations and Support Services	C/CPFF	Various; Multi : AL, CO, VA	16.483	14.942		15.364	Mar 2014	15.136	Mar 2015	-		15.136	Continuing	Continuing	Continuing
Program Wide Support - Agency Operations management	Allot	Various: Multi : ALless than CAless than COless than VA	0.000	1.027		1.038	Jun 2014	0.128	Jun 2015	-		0.128	Continuing	Continuing	Continuing
Program Wide Support - Facilities and maintenance	MIPR	Various: Multi : AK, AL, CA, VA	0.000	1.783		-		-		-		-	Continuing	Continuing	Continuing
<b>Subtotal</b>			16.483	17.752		16.402		15.264		-		15.264	-	-	-

**Remarks**  
N/A

	Prior Years	FY 2013	FY 2014	FY 2015 Base	FY 2015 OCO	FY 2015 Total	Cost To Complete	Total Cost	Target Value of Contract
<b>Project Cost Totals</b>	16.483	17.752	16.402	15.264	-	15.264	-	-	-

**Remarks**  
N/A