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**Exhibit R-2, RDT&E Budget Item Justification:** PB 2017 Missile Defense Agency **Date:** February 2016

<b>Appropriation/Budget Activity</b> 0400: <i>Research, Development, Test &amp; Evaluation, Defense-Wide / 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 2015	FY 2016	FY 2017 Base	FY 2017 OCO	FY 2017 Total	FY 2018	FY 2019	FY 2020	FY 2021	Cost To Complete	Total Cost
Total Program Element	1,790.691	259.278	172.645	106.038	-	106.038	0.000	0.000	0.000	0.000	0	2,328.652
MD09: <i>SM-3 Block IIA Co-Development</i>	1,738.427	236.565	139.866	91.071	-	91.071	0.000	0.000	0.000	0.000	0	2,205.929
MT09: <i>SM-3 Block IIA Co-Development Test</i>	1.897	7.468	25.186	12.208	-	12.208	0.000	0.000	0.000	0.000	0	46.759
MD40: <i>Program-Wide Support</i>	50.367	15.245	7.593	2.759	-	2.759	0.000	0.000	0.000	0.000	0	75.964

**Program MDAP/MAIS Code:** 362

**Note**

Decrease from FY 2016 to FY 2017 is attributable to the conclusion of the SM-3 Block IIA design and technology development efforts as well as a decrease in test events as reflected in the Integrated Master Test Plan (IMTP).

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

The Aegis BMD mission is to deliver an enduring, operationally effective and supportable BMD capability to defend the nation, deployed forces, friends and allies and to increase this capability by delivering evolutionary improvements as part of 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. 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.

Beginning in 2006, Aegis BMD and the Japanese Ministry of Defense (JMOD) have undertaken an SM-3 Cooperative Development (SCD) Project. The objective of the SCD project is the development and initial at-sea flight test of the SM-3 Block IIA missile. The U.S. and Japan will bear equitable burden to complete the project, as documented in the U.S./Japan Memorandum of Understanding (MOU) SCD Annex. Each nation will fund the full extent of its participation in the project. No funds are transferred between the U.S. and Japan under the MOU.

The SM-3 Block IIA provides important improvements over SM-3 Block IB capability, including increased velocity and range provided by a 21-inch diameter rocket motor propulsion stack, and more than doubled seeker sensitivity and more than tripled divert capability incorporated in an advanced kinetic warhead. New component technologies include, but are not limited to: lightweight nosecone, advanced kinetic warhead, 21-inch second stage rocket motor, and 21-inch third stage rocket motor. The effort includes risk reduction for key components and supports EPAA Phase III.

Working with the Services' Operational Test Agencies (OTA) and with the support of the Director of Operational Test and Evaluation (DOT&E), MDA 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.

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**Exhibit R-2, RDT&E Budget Item Justification:** PB 2017 Missile Defense Agency **Date:** February 2016

<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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MD40 Program-Wide Support (PWS) consists of essential non-headquarters management efforts providing integrated and efficient support to MDA functions and activities across the entire BMDS.

<b>B. Program Change Summary (\$ in Millions)</b>	<b>FY 2015</b>	<b>FY 2016</b>	<b>FY 2017 Base</b>	<b>FY 2017 OCO</b>	<b>FY 2017 Total</b>
Previous President's Budget	263.695	172.645	66.828	-	66.828
Current President's Budget	259.278	172.645	106.038	-	106.038
Total Adjustments	-4.417	0.000	39.210	-	39.210
• 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	-0.019	0.000			
• SBIR/STTR Transfer	-4.398	0.000			
• Other Adjustment	0.000	0.000	39.210	-	39.210

**Change Summary Explanation**

FY 2015 decrease reflects realignment of Department of Defense priorities.

FY 2017 increase reflects additional missile software build and qualification for SFTM-02 to complete program. Funding was realigned from 0208866C MD09 Aegis BMD Procurement.

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<b>Exhibit R-2A, RDT&amp;E Project Justification:</b> PB 2017 Missile Defense Agency										<b>Date:</b> February 2016		
<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>COST (\$ in Millions)</b>	<b>Prior Years</b>	<b>FY 2015</b>	<b>FY 2016</b>	<b>FY 2017 Base</b>	<b>FY 2017 OCO</b>	<b>FY 2017 Total</b>	<b>FY 2018</b>	<b>FY 2019</b>	<b>FY 2020</b>	<b>FY 2021</b>	<b>Cost To Complete</b>	<b>Total Cost</b>
MD09: SM-3 Block IIA Co-Development	1,738.427	236.565	139.866	91.071	-	91.071	0.000	0.000	0.000	0.000	0	2,205.929
Quantity of RDT&E Articles	-	-	-	-	-	-	-	-	-	-		

**Note**

Decrease from FY 2016 to FY 2017 is attributable to the conclusion of the SM-3 Block IIA design and technology development efforts.

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

The objective of the SCD project is the development and initial at-sea flight test of the SM-3 Block IIA, and preparation for subsequent production decisions. The U.S. and Japan have a mutual interest in the evolutionary development of improvements to the SM-3. The SM-3 Block IIA will increase the area that can be defended by Aegis BMD and increase the probability of kill against a larger threat set. It will leverage enhanced capability provided by BMDS sensor upgrades.

Technology improvements planned for the SM-3 Block IIA include an increase in velocity and range provided by a 21-inch diameter rocket motor propulsion stack, and more than doubled seeker sensitivity and more than tripled 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.

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

Phase I took the program through System Design Review (SDR) in FY 2009. Aegis BMD executed risk reduction efforts for the Propulsion, Nosecone, Seeker, Divert Attitude Control System (DACS) development efforts, and test plans. Phase 1 also included requirements definition for the SM-3 Block IIA

Phase II encompassed the work from SDR through the Critical Design Review (CDR) in FY 2014. Aegis BMD refined requirements and defined the performance allocation and component configuration for the development of the SM-3 Block IIA. The U.S. and Japan designed, fabricated, tested, and evaluated the SM-3 Block IIA sections per the agreed work-share agreement.

Phase III extends 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. Phase III is planned to complete in FY2017.

The SCD project will:

- Develop and integrate components for the SM-3 Block IIA into an All Up Round (AUR). Japan's work share includes 21 inch 2nd and 3rd stage components and the 21 inch nosecone. The U.S. workshare includes the advanced kinetic warhead, advanced seeker, large diameter divert and attitude control system, and lightweight VLS canister.
- Integrate the SM-3 Block IIA Vertical Launch System (VLS) with Aegis ship systems.

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<b>Exhibit R-2A, RDT&amp;E Project Justification:</b> PB 2017 Missile Defense Agency		<b>Date:</b> February 2016
<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 2015</b>	<b>FY 2016</b>	<b>FY 2017</b>
<p><b>Title:</b> SM-3 Block IIA Cooperative Development (SCD)</p> <p align="right"><b>Articles:</b></p> <p><b>Description:</b> This activity develops the SM-3 Block IIA which 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.</p> <p><b>FY 2015 Accomplishments:</b>                      SM-3 Blk IIA Development:                      - Conducted PFRT Guidance Section Test                      - Conducted G-Switch Qualification                      - Delivered HAT-1 TDACS to Dahlgren                      - Performed SEP Nut Qualification                      - Performed G-Switch Flight Termination System (FTS) Qualification                      - Conducted Throttleable Divert and Attitude Control System (TDACS) live cast of QUAL-2, SFTM-1 and SFTM-2                      - Conducted Tunnel testing for Strake Qualification                      - Certified Flight Termination Receivers (FTRs)                      - Delivered TDACS DVT asset to NTS for Environmental Testing                      - Performed TDACS Nozzle Cover Ejection Test                      - Received CTV-2 unit from Aerojet                      - Manufactured CTV-2 Avionics Suite for Flight Certification Testing                      - Conducted Guidance Unit Flight Test Cert Testing                      - Conducted CTV-1 with positive Telemetry data                      - Conducted Throttleable Divert Attitude Control System (TDACS) Design Verification Test                      - Initiated SM-3 IIA AUR Huntsville I&amp;T Process Proofing                      - Delivered Inert Operational Missile to Combat Systems Engineering Development Site (CSEDS)                      - Prepared and conducted TDACS qualification Testing                      - Manufactured TDACS Insensitive Munitions Fast Cook-off Units                      - Delivered Throttleable Divert and Attitude Control System (TDACS), Guidance Section (GS), and Kinetic Warhead (KW) Guidance Unit in support of BMDS Flight Test event                      - Prepared for and supported BMDS Flight Test events as reflected in the IMTP and the Exhibit R-4 schedule</p> <p>Vertical Launch System (VLS) Canister:                      - Conducted Mk 29 Mod 0 Canister In-Process Review</p>	236.565	139.866	91.071
	-	-	-

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<b>Exhibit R-2A, RDT&amp;E Project Justification:</b> PB 2017 Missile Defense Agency		<b>Date:</b> February 2016
<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 2015</b>	<b>FY 2016</b>	<b>FY 2017</b>
<ul style="list-style-type: none"> <li>- Prepared for and conducted Insensitive Munitions testing</li> <li>- Prepared for and conducted Packaging, Handling, Storage &amp; Transportation testing</li> <li>- Prepared for and supported BMDS Flight Test events as reflected in the IMTP and the Exhibit R-4 schedule</li> </ul> <p><b>FY 2016 Plans:</b> Decrease from FY 2015 is attributable to the conclusion of the design and technology development efforts associated with a maturing program.</p> <p>SM-3 Block IIA Development:</p> <ul style="list-style-type: none"> <li>- Complete Software Functional Qualification testing to ensure successful flight test intercepts</li> <li>- Complete Integration &amp; Test Proofing to ensure proper implementation of manufacturing processes of the SM-3 Block IIA missile</li> <li>- Continue qualification and testing of the Throttleable Divert and Attitude Control System (TDACS) in support of pending flight test to ensure missile components meet performance and manufacturing requirements</li> <li>- Complete Kinetic Warhead (KW) Qualification testing to ensure missile components meet performance and manufacturing requirements</li> <li>- Complete Guidance Section (GS) Qualification to ensure missile components meet performance and manufacturing requirements</li> <li>- Complete Kinetic Warhead (KW) and Guidance Section (GS) Post Near Miss Shock Performance Testing that provides data for missile hazard classification</li> <li>- Deliver TDACS, GS, and 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>- Complete Insensitive Munitions testing</li> <li>- Complete Packaging, Handling, Storage &amp; Transportation testing to allow for missile transportation</li> <li>- Prepare for and conduct BMDS Flight Test events as reflected in the IMTP and the Exhibit R-4 schedule</li> </ul> <p><b>FY 2017 Plans:</b> Decrease in funding from FY 2016 to FY 2017 is due to SM-3 Block IIA Co-Development completion.</p> <ul style="list-style-type: none"> <li>- Complete Co-development of the SM-3 Block IIA</li> <li>- Prepare for and support BMDS Flight Test events as reflected in the IMTP and the Exhibit R-4 schedule</li> <li>- Complete SFTM-02 missile software build and qualification</li> <li>- Build and deliver SFTM-02 flight test All Up Round (AUR)</li> <li>- Implement SM-3 Block IIA Seeker Guidance Section Evaluation Lab (GSEL) photon injection capability</li> </ul>			

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<b>Exhibit R-2A, RDT&amp;E Project Justification:</b> PB 2017 Missile Defense Agency		<b>Date:</b> February 2016
<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 2015</b>	<b>FY 2016</b>	<b>FY 2017</b>
- Complete SM-3 Block IIA performance verification report			
- Develop and deliver lightweight VLS canisters in support of SCD testing events			
<b>Accomplishments/Planned Programs Subtotals</b>	236.565	139.866	91.071

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

<b>Line Item</b>	<b>FY 2015</b>	<b>FY 2016</b>	<b>FY 2017 Base</b>	<b>FY 2017 OCO</b>	<b>FY 2017 Total</b>	<b>FY 2018</b>	<b>FY 2019</b>	<b>FY 2020</b>	<b>FY 2021</b>	<b>Cost To Complete</b>	<b>Total Cost</b>
• 0603884C: <i>Ballistic Missile Defense Sensors</i>	260.347	228.392	230.077	-	230.077	144.893	141.815	171.644	158.421	Continuing	Continuing
• 0603890C: <i>BMD Enabling Programs</i>	395.927	404.780	401.594	-	401.594	404.993	409.481	427.603	434.868	Continuing	Continuing
• 0603892C: <i>AEGIS BMD</i>	761.646	830.647	959.066	-	959.066	841.738	700.596	592.940	528.744	Continuing	Continuing
• 0603896C: <i>Ballistic Missile Defense Command and Control, Battle Management &amp; Communication</i>	420.516	429.853	439.617	-	439.617	413.198	432.763	454.601	462.065	Continuing	Continuing

**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 Controlled 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 2017 Missile Defense Agency												Date: February 2016			
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 2015		FY 2016		FY 2017 Base		FY 2017 OCO		FY 2017 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) - MD09 - D	MIPR	MDA : Arlington, VA	0.000	5.084		5.547	Nov 2015	0.000		-		0.000	Continuing	Continuing	Continuing
SM-3 Block IIA Cooperative Development (SCD) - SM-3 Block IIA Cooperative Development (SCD) - SM-3 Blk IIA Canister - MD09	MIPR	BAE : MD	49.856	7.946		3.130	Nov 2015	1.500	Nov 2016	-		1.500	Continuing	Continuing	Continuing
SM-3 Block IIA Cooperative Development (SCD) - SM-3 Block IIA Cooperative Development (SCD) - SM-3 Blk IIA Development - MD09	SS/CPAF	RAYTHEON : AZ	1,530.920	192.595		112.640	Nov 2015	80.921	Nov 2016	-		80.921	Continuing	Continuing	Continuing
SM-3 Block IIA Cooperative Development (SCD) - SM-3 Block IIA Cooperative Development (SCD) - SM-3 Blk IIA Development - MD09 - 20117135426611	MIPR	NSWC/DD/VA : VA	32.116	7.023		4.985	Nov 2015	2.000	Nov 2016	-		2.000	Continuing	Continuing	Continuing
SM-3 Block IIA Cooperative Development (SCD) - SM-3 Block IIA Cooperative Development (SCD) - SM-3 Blk IIA Development - MD09 - 20117135426613	C/CPFF	JHU/APL : MD	87.119	17.184		8.788	Nov 2015	5.000	Nov 2016	-		5.000	Continuing	Continuing	Continuing
SM-3 Block IIA Cooperative Development (SCD) - SM-3 Block IIA Cooperative Development (SCD) - SM-3 Blk IIA Development - MD09 - 20117135426614	MIPR	MIT/LL : MA	7.857	0.000		0.388	Nov 2015	0.250	Nov 2016	-		0.250	Continuing	Continuing	Continuing

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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 2015		FY 2016		FY 2017 Base		FY 2017 OCO		FY 2017 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) - SM-3 Block IIA Cooperative Development (SCD) - SM-3 Blk IIA Development - MD09 - 20117135426616	MIPR	NSWC/PHD : CA	9.085	1.258		0.412	Nov 2015	0.300	Nov 2016	-		0.300	Continuing	Continuing	Continuing
SM-3 Block IIA Cooperative Development (SCD) - SM-3 Block IIA Cooperative Development (SCD) - SM-3 Blk IIA Development - MD09 - 20117135426619	MIPR	NSWC IH : MD	8.442	0.000		0.240	Nov 2015	0.130	Nov 2016	-		0.130	Continuing	Continuing	Continuing
SM-3 Block IIA Cooperative Development (SCD) - SM-3 Block IIA Cooperative Development (SCD) - SM-3 Blk IIA Development - MD09 - Crane	MIPR	NSWC/Crane : IN	2.048	0.958		0.355	Nov 2015	0.150	Nov 2016	-		0.150	Continuing	Continuing	Continuing
SM-3 Block IIA Cooperative Development (SCD) - SM-3 Block IIA Cooperative Development (SCD) - SM-3 Blk IIA Development - MD09 CL	MIPR	NAWC/CL : CA	3.025	1.572		0.466	Nov 2015	0.200	Nov 2016	-		0.200	Continuing	Continuing	Continuing
SM-3 Block IIA Cooperative Development (SCD) - SM-3 Block IIA Cooperative Development (SCD) - SM-3 Blk IIA Mission Assurance - MD09	MIPR	NSWC/CO : CA	0.976	0.000		0.145	Nov 2015	0.020	Nov 2016	-		0.020	Continuing	Continuing	Continuing
SM-3 Block IIA Cooperative Development (SCD) - SM-3 Block IIA	MIPR	NSWC Carderock : MD	0.000	0.225		0.000		0.000		-		0.000	Continuing	Continuing	Continuing

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**Exhibit R-3, RDT&E Project Cost Analysis: PB 2017 Missile Defense Agency** **Date:** February 2016

<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>				<b>FY 2015</b>		<b>FY 2016</b>		<b>FY 2017 Base</b>		<b>FY 2017 OCO</b>		<b>FY 2017 Total</b>	<b>Cost To Complete</b>	<b>Total Cost</b>	<b>Target Value of Contract</b>
<b>Cost Category Item</b>	<b>Contract Method &amp; Type</b>	<b>Performing Activity &amp; Location</b>	<b>Prior Years</b>	<b>Cost</b>	<b>Award Date</b>	<b>Cost</b>	<b>Award Date</b>	<b>Cost</b>	<b>Award Date</b>	<b>Cost</b>	<b>Award Date</b>	<b>Cost</b>			
Cooperative Development (SCD) - SM-3 Block IIA Development-MD09															
SM-3 Block IIA Cooperative Development (SCD) - SM-3 Block IIA Cooperative Development (SCD) - Testing & Evaluation - MD09	MIPR	Various : CA, VA, MD	5.825	2.221		2.449	Nov 2015	0.500	Nov 2016	-		0.500	Continuing	Continuing	Continuing
SM-3 Block IIA Cooperative Development (SCD) - SM-3 Block IIA Cooperative Development (SCD)- Mission Assurance- MD09	MIPR	NSWC/DD/VA : Dahlgren, VA	1.158	0.499		0.321	Nov 2015	0.100	Nov 2016	-		0.100	Continuing	Continuing	Continuing
<b>Subtotal</b>			1,738.427	236.565		139.866		91.071		-		91.071	-	-	-

**Remarks**  
N/A

<b>Support (\$ in Millions)</b>				<b>FY 2015</b>		<b>FY 2016</b>		<b>FY 2017 Base</b>		<b>FY 2017 OCO</b>		<b>FY 2017 Total</b>	<b>Cost To Complete</b>	<b>Total Cost</b>	<b>Target Value of Contract</b>
<b>Cost Category Item</b>	<b>Contract Method &amp; Type</b>	<b>Performing Activity &amp; Location</b>	<b>Prior Years</b>	<b>Cost</b>	<b>Award Date</b>	<b>Cost</b>	<b>Award Date</b>	<b>Cost</b>	<b>Award Date</b>	<b>Cost</b>	<b>Award Date</b>	<b>Cost</b>			
<b>Subtotal</b>			-	-		-		-		-		-	-	-	-

**Remarks**  
N/A

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**Exhibit R-3, RDT&E Project Cost Analysis: PB 2017 Missile Defense Agency** **Date:** February 2016

<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>Test and Evaluation (\$ in Millions)</b>				<b>FY 2015</b>		<b>FY 2016</b>		<b>FY 2017 Base</b>		<b>FY 2017 OCO</b>		<b>FY 2017 Total</b>	<b>Cost To Complete</b>	<b>Total Cost</b>	<b>Target Value of Contract</b>
<b>Cost Category Item</b>	<b>Contract Method &amp; Type</b>	<b>Performing Activity &amp; Location</b>	<b>Prior Years</b>	<b>Cost</b>	<b>Award Date</b>	<b>Cost</b>	<b>Award Date</b>	<b>Cost</b>	<b>Award Date</b>	<b>Cost</b>	<b>Award Date</b>	<b>Cost</b>			
<b>Subtotal</b>			-	-		-		-		-		-	-	-	-

**Remarks**  
N/A

<b>Management Services (\$ in Millions)</b>				<b>FY 2015</b>		<b>FY 2016</b>		<b>FY 2017 Base</b>		<b>FY 2017 OCO</b>		<b>FY 2017 Total</b>	<b>Cost To Complete</b>	<b>Total Cost</b>	<b>Target Value of Contract</b>
<b>Cost Category Item</b>	<b>Contract Method &amp; Type</b>	<b>Performing Activity &amp; Location</b>	<b>Prior Years</b>	<b>Cost</b>	<b>Award Date</b>	<b>Cost</b>	<b>Award Date</b>	<b>Cost</b>	<b>Award Date</b>	<b>Cost</b>	<b>Award Date</b>	<b>Cost</b>			
<b>Subtotal</b>			-	-		-		-		-		-	-	-	-

**Remarks**  
N/A

<b>Prior Years</b>	<b>FY 2015</b>		<b>FY 2016</b>		<b>FY 2017 Base</b>		<b>FY 2017 OCO</b>		<b>FY 2017 Total</b>	<b>Cost To Complete</b>	<b>Total Cost</b>	<b>Target Value of Contract</b>
<b>Project Cost Totals</b>	1,738.427	236.565		139.866		91.071		-	91.071	-	-	-

**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 2017 Missile Defense Agency</b>		<b>Date:</b> February 2016
<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 2015				FY 2016				FY 2017				FY 2018				FY 2019				FY 2020				FY 2021							
	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				
MD09 SM-3 Block IIA Co-Development	+	+	+	+	+	+	+	+	+	+	+	+																				

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<b>Exhibit R-4A, RDT&amp;E Schedule Details:</b> PB 2017 Missile Defense Agency		<b>Date:</b> February 2016
<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
MD09 SM-3 Block IIA Co-Development	1	2015	4	2017

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<b>Exhibit R-2A, RDT&amp;E Project Justification:</b> PB 2017 Missile Defense Agency										<b>Date:</b> February 2016		
<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>COST (\$ in Millions)</b>	<b>Prior Years</b>	<b>FY 2015</b>	<b>FY 2016</b>	<b>FY 2017 Base</b>	<b>FY 2017 OCO</b>	<b>FY 2017 Total</b>	<b>FY 2018</b>	<b>FY 2019</b>	<b>FY 2020</b>	<b>FY 2021</b>	<b>Cost To Complete</b>	<b>Total Cost</b>
MT09: SM-3 Block IIA Co-Development Test	1.897	7.468	25.186	12.208	-	12.208	0.000	0.000	0.000	0.000	0	46.759
Quantity of RDT&E Articles	-	-	-	-	-	-	-	-	-	-	-	-

**Note**  
Decrease from FY 2016 to FY 2017 is due to decreased test events in accordance with the IMTP.

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

Working with the Services' Operational Test Agencies (OTA), with the support of the Director of Operational Test and Evaluation (DOT&E), 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.

The MDA and the Japanese Ministry of Defense conduct the SCD Project for the development and initial flight test of the SM-3 Block IIA in accordance with the jointly signed SCD Annex. The Joint signed SCD Program Schedule (dated October 2013) includes the following test events:

- \* Restrained Firing - COMPLETE
- \* Propulsion Test Vehicle - 1 (PTV-1) - COMPLETE FY 2014
- \* Controlled Test Vehicle - 1 (CTV-1) - COMPLETE FY 2015
- \* Controlled Test Vehicle - 2 (CTV-2) (Planned for Q1 FY16)
- \* SCD FTM - 1 (SFTM-01) (Planned for FY16)
- \* SCD FTM - 2 (SFTM-02) (Planned for FY17)

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

	<b>FY 2015</b>	<b>FY 2016</b>	<b>FY 2017</b>
<b>Title:</b> SM-3 Co-Development Flight Test Execution	7.468	25.186	12.208
<b>Articles:</b>	-	-	-
<b>Description:</b> This activity conducts ground and flight testing using the Aegis BMD 5.1 system to improve confidence in missile defense capabilities under development and ensure the capabilities transferred to the warfighter are operationally effective, suitable, and survivable.			
<b>FY 2015 Accomplishments:</b>			

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<b>Exhibit R-2A, RDT&amp;E Project Justification:</b> PB 2017 Missile Defense Agency		<b>Date:</b> February 2016
<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 2015</b>	<b>FY 2016</b>	<b>FY 2017</b>
- Prepared for and conducted Ballistic Missile Defense System Flight and Ground Test events as reflected in the IMTP the Exhibit R-4 schedule.			
<b>FY 2016 Plans:</b> The increase from FY 2015 to FY 2016 is due to the first scheduled flight test (SFTM-01) for the SM-3 Block IIA Co-Development program being conducted in third quarter FY 2016 and SFTM-02 being conducted in first quarter FY 2017.			
-Begin test planning for FY 2016 Aegis flight test missions: develop models and simulations, and ready the range for test. -Conduct Aegis BMD-specific analysis during pre and post-mission analysis phases. -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 2017 Plans:</b> The decrease in funding from FY 2016 to FY 2017 is due to decreased number of test in FY 2017.			
- Conduct flight test program (SFTM-02)to meet the Aegis and SM-3 Block IIA components of the EPAA Phase III architecture - Complete Aegis BMD-specific analysis during post mission phase.			
<b>Accomplishments/Planned Programs Subtotals</b>	7.468	25.186	12.208

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

<u>Line Item</u>	<u>FY 2015</u>	<u>FY 2016</u>	<u>FY 2017</u> <u>Base</u>	<u>FY 2017</u> <u>OCO</u>	<u>FY 2017</u> <u>Total</u>	<u>FY 2018</u>	<u>FY 2019</u>	<u>FY 2020</u>	<u>FY 2021</u>	<u>Cost To</u> <u>Complete</u>	<u>Total Cost</u>
• 0603884C: <i>Ballistic Missile Defense Sensors</i>	260.347	228.392	230.077	-	230.077	144.893	141.815	171.644	158.421	Continuing	Continuing
• 0603890C: <i>BMD Enabling Programs</i>	395.927	404.780	401.594	-	401.594	404.993	409.481	427.603	434.868	Continuing	Continuing
• 0603892C: <i>AEGIS BMD</i>	761.646	830.647	959.066	-	959.066	841.738	700.596	592.940	528.744	Continuing	Continuing
• 0603896C: <i>Ballistic Missile Defense Command and Control, Battle Management &amp; Communication</i>	420.516	429.853	439.617	-	439.617	413.198	432.763	454.601	462.065	Continuing	Continuing
• 0604878C: <i>Aegis BMD Test</i>	88.041	78.468	95.012	-	95.012	127.720	91.461	88.217	98.525	Continuing	Continuing
• 0604880C: <i>Land Based SM-3 (LBSM3)</i>	121.413	34.970	43.293	-	43.293	29.045	19.259	21.294	21.646	Continuing	Continuing

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<b>Exhibit R-2A, RDT&amp;E Project Justification:</b> PB 2017 Missile Defense Agency		<b>Date:</b> February 2016
<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

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

<u>Line Item</u>	<u>FY 2015</u>	<u>FY 2016</u>	<u>FY 2017</u> <u>Base</u>	<u>FY 2017</u> <u>OCO</u>	<u>FY 2017</u> <u>Total</u>	<u>FY 2018</u>	<u>FY 2019</u>	<u>FY 2020</u>	<u>FY 2021</u>	<u>Cost To</u> <u>Complete</u>	<u>Total Cost</u>
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**Remarks**

**D. Acquisition Strategy**

N/A

**E. Performance Metrics**

N/A

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**Exhibit R-3, RDT&E Project Cost Analysis: PB 2017 Missile Defense Agency** **Date:** February 2016

<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 2015		FY 2016		FY 2017 Base		FY 2017 OCO		FY 2017 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 2015		FY 2016		FY 2017 Base		FY 2017 OCO		FY 2017 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 2015		FY 2016		FY 2017 Base		FY 2017 OCO		FY 2017 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 Flight Test Execution - SM-3 Block IIA Cooperative Development (SCD) - SM-3 Blk IIA Development - MT09	SS/CPAF	Raytheon : Tucson, AZ	0.200	0.000		0.000		0.350	Oct 2016	-		0.350	Continuing	Continuing	Continuing
SM-3 Co-Development Flight Test Execution - SM-3 Co-Development Testing - SM-3 Blk IIA Development (SCD) Testing & Evaluation - MT09	MIPR	NSWC PHD : San Diego, CA	0.625	0.954		6.982	Nov 2015	0.700	Oct 2016	-		0.700	Continuing	Continuing	Continuing
SM-3 Co-Development Flight Test Execution - SM-3 Co-Development	MIPR	NSWC/DD/VA : Dahlgren, VA	0.247	0.505		3.589	Nov 2015	0.700	Nov 2016	-		0.700	Continuing	Continuing	Continuing

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**Exhibit R-3, RDT&E Project Cost Analysis: PB 2017 Missile Defense Agency** **Date:** February 2016

<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 2015		FY 2016		FY 2017 Base		FY 2017 OCO		FY 2017 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			
Testing - SM-3 Blk IIA Development (SCD) Testing & Evaluation - MT09 - 2012628435314															
SM-3 Co-Development Flight Test Execution - SM-3 Co-Development Testing - SM-3 Blk IIA Development (SCD) Testing & Evaluation - MT09 - 20126284353142	C/CPFF	JHU : APL MD	0.200	0.000		7.485	Nov 2015	1.800	Oct 2016	-		1.800	Continuing	Continuing	Continuing
SM-3 Co-Development Flight Test Execution - SM-3 Co-Development Testing - SM-3 Blk IIA Development (SCD) Testing & Evaluation - MT09 - 20126284353143	MIPR	NAWC : Pt. Mugu CA	0.500	2.530		3.663	Nov 2015	2.000	Nov 2016	-		2.000	Continuing	Continuing	Continuing
SM-3 Co-Development Flight Test Execution - SM-3 Co-Development Testing - SM-3 Blk IIA Development (SCD) Testing & Evaluation - MT09 PMRF	MIPR	PMRF Barking Sands : Kauai, HI	0.025	0.000		2.559	Nov 2015	2.105	Oct 2016	-		2.105	Continuing	Continuing	Continuing
SM-3 Co-Development Flight Test Execution - SM-3 Co-Development Testing - SM-3 Blk IIA Development (SCD) Testing & Evaluation - MT09-Variou	MIPR	Various : HI, VA, CA, MA	0.100	0.603		0.018	Nov 2015	3.210	Nov 2016	-		3.210	Continuing	Continuing	Continuing
SM-3 Co-Development Flight Test Execution - SM-3 Co-Development Testing - SM-3 Blk IIA	MIPR	NSWC : IH MD	0.000	0.000		0.890	Nov 2015	0.000		-		0.000	Continuing	Continuing	Continuing

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**Exhibit R-3, RDT&E Project Cost Analysis: PB 2017 Missile Defense Agency** **Date:** February 2016

<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 2015		FY 2016		FY 2017 Base		FY 2017 OCO		FY 2017 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 (SCD) Testing & Evaluation-MT09 - 20126284353146															
SM-3 Co-Development Flight Test Execution - SM-3 Co-Development Testing (SCD) testing & Evaluation-MT09-D	Various	MT09-D : MT09-D	0.000	0.162		0.000		0.000		-		0.000	Continuing	Continuing	Continuing
SM-3 Co-Development Flight Test Execution - SM-3 Co-Development Testing - SM-3 Blk IIA Test & Evaluation-MT09 L3 Comm	MIPR	L3 Communications : TX	0.000	1.339		0.000		0.000		-		0.000	Continuing	Continuing	Continuing
SM-3 Co-Development Flight Test Execution - SM-3 Co-Development Testing -SM-3 Blk IIA Development (SCD) Testing & Evaluation-MT09 MDA	MIPR	MDA : VA	0.000	0.600		0.000		0.000		-		0.000	Continuing	Continuing	Continuing
SM-3 Co-Development Flight Test Execution - SM-3 Co-Development Testing- SM-3 Blk IIA Development (SCD) Testing & Evaluation-MT09 Corona	MIPR	NSWC Corona : CA	0.000	0.775		0.000		0.560	Oct 2016	-		0.560	Continuing	Continuing	Continuing
SM-3 Co-Development Flight Test Execution - SM-3 Co-Development Testing- SM-3 Blk IIA Development (SCD) Testing & Evaluation-MT09 NAWC AD	MIPR	NAWC AD : Pax River, MD	0.000	0.000		0.000		0.223	Nov 2016	-		0.223	Continuing	Continuing	Continuing

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**Exhibit R-3, RDT&E Project Cost Analysis: PB 2017 Missile Defense Agency** **Date:** February 2016

<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 2015		FY 2016		FY 2017 Base		FY 2017 OCO		FY 2017 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 Flight Test Execution - SM-3 Co-Development Testing- SM-3 Blk IIA Development (SCD) Testing & Evaluation-MT09 SSC PAC	MIPR	SSC PAC : San Diego, CA	0.000	0.000		0.000		0.560	Oct 2016	-		0.560	Continuing	Continuing	Continuing
<b>Subtotal</b>			1.897	7.468		25.186		12.208		-		12.208	-	-	-

**Remarks**  
N/A

<b>Management Services (\$ in Millions)</b>				FY 2015		FY 2016		FY 2017 Base		FY 2017 OCO		FY 2017 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 2015	FY 2016	FY 2017 Base	FY 2017 OCO	FY 2017 Total	Cost To Complete	Total Cost	Target Value of Contract
<b>Project Cost Totals</b>	1.897	7.468	25.186	12.208	-	12.208	-	-	-

**Remarks**  
N/A

**UNCLASSIFIED**

<b>Exhibit R-4, RDT&amp;E Schedule Profile: PB 2017 Missile Defense Agency</b>		<b>Date:</b> February 2016
<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 2015				FY 2016				FY 2017				FY 2018				FY 2019				FY 2020				FY 2021			
	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
SFTM-02 (AEGIS 5.1, Intercept Flight Test)																												
SFTM-01 (AEGIS 5.1, Intercept Flight Test)								△																				
SCD CTV-01 (AEGIS SCD, Interceptor Only Flight Test)			▲																									
SCD CTV-02 (AEGIS SCD, Interceptor Only Flight Test)				▲																								

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<b>Exhibit R-4A, RDT&amp;E Schedule Details:</b> PB 2017 Missile Defense Agency		<b>Date:</b> February 2016
<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
SFTM-02 (AEGIS 5.1, Intercept Flight Test)	2	2017	2	2017
SFTM-01 (AEGIS 5.1, Intercept Flight Test)	4	2016	4	2016
SCD CTV-01 (AEGIS SCD, Interceptor Only Flight Test)	3	2015	3	2015
SCD CTV-02 (AEGIS SCD, Intercept Only Flight Test)	1	2016	1	2016

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**Exhibit R-2A, RDT&E Project Justification:** PB 2017 Missile Defense Agency **Date:** February 2016

<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 2015	FY 2016	FY 2017 Base	FY 2017 OCO	FY 2017 Total	FY 2018	FY 2019	FY 2020	FY 2021	Cost To Complete	Total Cost
MD40: Program-Wide Support	50.367	15.245	7.593	2.759	-	2.759	0.000	0.000	0.000	0.000	0	75.964
Quantity of RDT&E Articles	-	-	-	-	-	-	-	-	-	-		

**Note**

In FY 2016 and in FY 2017, Program Wide Support reflects proportional changes as a result of a decrease 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 on the R-3.

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

PWS contains non-headquarters management costs in support of MDA functions and activities across the entire BMDS. It Includes Government Civilians, and Contract Support Services. This provides integrity and oversight of the BMDS as well as supports MDA in the development and evaluation of technologies that will respond to the changing threat. Additionally, PWS includes Global Deployment personnel and support performing deployment site preparation and activation and, provides facility capabilities for MDA Executing Agent locations. Other MDA wide costs includes: physical and technical security; civilian drug testing; audit readiness; the Science, Technology, Engineering, and Mathematics (STEM) program; legal services and settlements; travel and agency training; office, equipment, vehicle, and warehouse leases; utilities and base operations; data and unified communications support; supplies and maintenance; materiel and readiness and central property management of equipment; and similar operating expenses. PWS is allocated on a pro-rata basis and therefore, fluctuates by year based on the adjusted RDT&E profile (which excludes: 0305103C Cyber Security Initiative, 0603274C Special Programs, 0603913C Israeli Cooperative Program and 0901598C Management Headquarters).

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

	FY 2015	FY 2016	FY 2017
<b>Title:</b> Program Wide Support	15.245	7.593	2.759
<b>Articles:</b>	-	-	-
<b>Description:</b> See Description below.			
<b>FY 2015 Accomplishments:</b> See paragraph A: Mission Description and Budget Item Justification			
<b>FY 2016 Plans:</b> See paragraph A: Mission Description and Budget Item Justification			
<b>FY 2017 Plans:</b> - See paragraph A: Mission Description and Budget Item Justification			
<b>Accomplishments/Planned Programs Subtotals</b>	15.245	7.593	2.759

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<b>Exhibit R-2A, RDT&amp;E Project Justification:</b> PB 2017 Missile Defense Agency		<b>Date:</b> February 2016
<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>
<b>C. Other Program Funding Summary (\$ in Millions)</b> N/A		
<b>Remarks</b>		
<b>D. Acquisition Strategy</b> N/A		
<b>E. Performance Metrics</b> N/A		

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**Exhibit R-3, RDT&E Project Cost Analysis: PB 2017 Missile Defense Agency** **Date:** February 2016

<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 2015		FY 2016		FY 2017 Base		FY 2017 OCO		FY 2017 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 Management	Allot	Various: Multi : AL less than CA less than CO less than VA	4.338	2.097		0.000		0.055	Jul 2017	-		0.055	Continuing	Continuing	Continuing
Program Wide Support - Agency Operations and Support Other Agency Services	MIPR	Defense Manpower Data Center : AL, CA, CO, VA	0.009	0.000		0.000		0.000		-		0.000	Continuing	Continuing	Continuing
Program Wide Support - Agency Operations and Support Service	C/CPFF	Various : Multi: AL, CA, CO, VA	0.000	11.258		0.000		2.704	Jul 2017	-		2.704	Continuing	Continuing	Continuing
Program Wide Support - Agency Operations and Support Services	C/Various	Various; Multi : AL, CO, VA	44.237	0.000		7.593	Mar 2016	0.000		-		0.000	Continuing	Continuing	Continuing
Program Wide Support - Agency Operations and Support Services (FFP)	C/FFP	Various : Multi: AL, CA, CO, VA	0.000	0.000		0.000		0.000		-		0.000	Continuing	Continuing	Continuing
Program Wide Support - Agency Operations and Support Services (Reqn)	Reqn	Various : Multi: AL, CA, CO, VA	0.000	0.000		0.000		0.000		-		0.000	Continuing	Continuing	Continuing
Program Wide Support - Facilities and Maintenance	MIPR	Various: Multi : AK, AL, CA, VA	1.783	1.890		0.000		0.000		-		0.000	Continuing	Continuing	Continuing
<b>Subtotal</b>			50.367	15.245		7.593		2.759		-		2.759	-	-	-

**Remarks**  
N/A

	Prior Years	FY 2015	FY 2016	FY 2017 Base	FY 2017 OCO	FY 2017 Total	Cost To Complete	Total Cost	Target Value of Contract
<b>Project Cost Totals</b>	50.367	15.245	7.593	2.759	-	2.759	-	-	-

**Remarks**  
N/A

**UNCLASSIFIED**

**Exhibit R-4, RDT&E Schedule Profile: PB 2017 Missile Defense Agency** **Date:** February 2016

<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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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 2015				FY 2016				FY 2017				FY 2018				FY 2019				FY 2020				FY 2021							
	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				
MD40 Program-Wide Support	+	+	+	+	+	+	+	+	+	+	+	+																				

**UNCLASSIFIED**

<b>Exhibit R-4A, RDT&amp;E Schedule Details:</b> PB 2017 Missile Defense Agency		<b>Date:</b> February 2016
<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

Schedule Details

Events	Start		End	
	Quarter	Year	Quarter	Year
MD40 Program-Wide Support	1	2015	4	2017