

UNCLASSIFIED

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

APPROPRIATION/BUDGET ACTIVITY				R-1 ITEM NOMENCLATURE							
0400: <i>Research, Development, Test & Evaluation, Defense-Wide</i> BA 4: <i>Advanced Component Development & Prototypes (ACD&P)</i>				PE 0604881C: <i>AEGIS SM-3 Block IIA Co-Development</i>							
COST (\$ in Millions)	FY 2011	FY 2012	FY 2013 Base	FY 2013 OCO	FY 2013 Total	FY 2014	FY 2015	FY 2016	FY 2017	Cost To Complete	Total Cost
Total Program Element	299.767	473.843	420.630	-	420.630	273.926	200.699	185.007	46.103	Continuing	Continuing
MD09: <i>SM-3 Block IIA Co-Development</i>	299.767	456.889	399.284	-	399.284	256.696	183.161	145.335	33.315	Continuing	Continuing
MT09: <i>SM-3 Block IIA Co-Development Test</i>	-	-	-	-	-	3.428	7.759	30.565	10.454	Continuing	Continuing
MD40: <i>Program-Wide Support</i>	-	16.954	21.346	-	21.346	13.802	9.779	9.107	2.334	Continuing	Continuing

Note

NA

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 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 Japan Ministry of Defense (JMOD) have undertaken an SM-3 Cooperative Development (SCD) program, which consists of an upgrade of the SM-3 Block (Blk) IB missile to a 21-inch diameter SM-3 missile (SM-3 Blk IIA). The objective of the SCD project is the development and initial at-sea flight test of the SM-3 Blk IIA missile, and prepare for a subsequent production decisions.

Key technology improvements planned for the SM-3 Blk 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 Memorandum of Understanding (MOU) 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:

UNCLASSIFIED

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

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 0604881C: <i>AEGIS SM-3 Block IIA Co-Development</i>
---	---

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

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

<u>B. Program Change Summary (\$ in Millions)</u>	<u>FY 2011</u>	<u>FY 2012</u>	<u>FY 2013 Base</u>	<u>FY 2013 OCO</u>	<u>FY 2013 Total</u>
Previous President's Budget	318.800	424.454	357.194	-	357.194
Current President's Budget	299.767	473.843	420.630	-	420.630
Total Adjustments	-19.033	49.389	63.436	-	63.436
• Congressional General Reductions	-2.189	-0.611			
• Congressional Directed Reductions	-	-			
• Congressional Rescissions	-	-			
• Congressional Adds	-	-			
• Congressional Directed Transfers	-	50.000			
• Reprogrammings	-9.999	-			
• SBIR/STTR Transfer	-6.845	-			
• Other Adjustment	-	-	63.436	-	63.436

Change Summary Explanation

The Consolidated Appropriation Act of FY 2012 (Public Law 112-74) directed transfer of \$50M from Line 69 (PE 0603902C, Next Generation Aegis Missile) to Line 110 (PE 0604881C, SM-3 Co-Development (SCD)) for Risk Reduction program adjustment.

FY 2013 adjustments resulted from a Jointly approved SCD Project re-plan in March 2011. The Propellant, Third Stage Rocket Motor (TSRM), Nosecone, and the Divert and Attitude Control System (DACS) PDRs were not completed in 1Q FY 2011 as scheduled. Subsequently the program was re-planned to include the addition of multiple engineering iterations to enable a more balanced engineering process with lower project execution risk.

UNCLASSIFIED

Exhibit R-2A, RDT&E Project Justification: PB 2013 Missile Defense Agency									DATE: February 2012		
APPROPRIATION/BUDGET ACTIVITY				R-1 ITEM NOMENCLATURE				PROJECT			
0400: Research, Development, Test & Evaluation, Defense-Wide BA 4: Advanced Component Development & Prototypes (ACD&P)				PE 0604881C: AEGIS SM-3 Block IIA Co-Development				MD09: SM-3 Block IIA Co-Development			
COST (\$ in Millions)	FY 2011	FY 2012	FY 2013 Base	FY 2013 OCO	FY 2013 Total	FY 2014	FY 2015	FY 2016	FY 2017	Cost To Complete	Total Cost
MD09: SM-3 Block IIA Co-Development	299.767	456.889	399.284	-	399.284	256.696	183.161	145.335	33.315	Continuing	Continuing
Quantity of RDT&E Articles	0	0	0		0	0	0	0	0		

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 SM-3. In FY 2006, the two countries signed a MOU for the co-development of an upgraded, 21-inch diameter SM-3 missile (SM-3 Blk IIA). The objective of the SCD project is the development and initial at-sea flight test of the SM-3 Blk IIA missile. The SM-3 Blk IIA missile 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. The SM-3 Blk IIA missile development will build upon established joint research investments by both the U.S. and Japan. The U.S. and Japan will equitable share both work and cost.

Key technology improvements planned for the SM-3 Blk IIA missile include an increase in velocity, an increase in range provided by a 21-inch diameter rocket motor propulsion stack, more than doubled seeker sensitivity and increased divert capability incorporated in an advanced kinetic warhead by more than three times. Key component technologies to be developed under this Annex 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 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 Blk 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 Blk IIA missile. Both parties will design, fabricate, test, and evaluate the SM-3 Block IIA missile sections per the agreed work-share.

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:

UNCLASSIFIED

Exhibit R-2A, RDT&E Project Justification: PB 2013 Missile Defense Agency		DATE: February 2012		
APPROPRIATION/BUDGET ACTIVITY 0400: Research, Development, Test & Evaluation, Defense-Wide BA 4: Advanced Component Development & Prototypes (ACD&P)	R-1 ITEM NOMENCLATURE PE 0604881C: AEGIS SM-3 Block IIA Co-Development	PROJECT MD09: SM-3 Block IIA Co-Development		
-Develop components for the SM-3 Blk IIA missile and integrate them into an All Up Round (AUR): -21`` 2nd and 3rd stage components (Japan work share) -21`` 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 VLS with Aegis ship systems: -Includes development of a light weight VLS canister (United States work share) -Conduct test and evaluation using ground- and flight testing using an early delivery of Aegis BMD 5.1 system (Plan until JUN2011 was to use a modified 4.0.1 system. Replan approved JUN2011) (Joint work share)				
B. Accomplishments/Planned Programs (\$ in Millions, Article Quantities in Each)		FY 2011	FY 2012	FY 2013
Title: SM-3 Blk IIA Development (SCD)		299.767	456.889	399.284
Articles:		0	0	0
Description: See Description Below				
FY 2011 Accomplishments: -SM-3 Blk IIA Missile Development: -Completed Incremental Missile Section Level PDRs. Controlled Surface Assembly, TSRM Assembly/Attitude Control System, Nosecone, Guided Missile Assembly -Continued design progress towards missile section-level Critical Design Reviews (CDRs). -Commenced missile integration and test demo (Milestone 2) demonstrating preliminary functionality of guidance section hardware. -Conducted 2nd and 3rd stage motor structural and shock tests. -Conducted Preliminary 2nd and 3rd stage rocket motor static firing test. -Conducted technology maturation efforts for Focal Plane Array (FPA), and Read Out Integrated Circuit (ROIC) to obtain a Technical Readiness Level of 6 by CDR. -Initiated risk reduction effort with ATK for Divert Attitude Control System.				

UNCLASSIFIED

Exhibit R-2A, RDT&E Project Justification: PB 2013 Missile Defense Agency		DATE: February 2012	
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 0604881C: <i>AEGIS SM-3 Block IIA Co-Development</i>	PROJECT MD09: <i>SM-3 Block IIA Co-Development</i>	
B. Accomplishments/Planned Programs (\$ in Millions, Article Quantities in Each)		FY 2011	FY 2012
-BMD 4.0.1 Engineering Release (ENG REL) Development: -Completed SCD In Process Review -Initiated BMD 4.0.1 (ENG REL) SDR preparation, to include model analysis support. SDR was not conducted due to government SCD Replan, which enables ability to conduct the SCD Flight Test Missions with an Aegis BMD 5.1 system. -Continued AWS/SM-3 BLK IIA interface development in support of SCD PDR -Completion of Technology Maturation Efforts for Canister Composite Shell Structure in support of Level 6 by SCD CDR -Completed MK 29 MOD 0 Canister PDR -Complete Class I ECP (Engineering Change Proposal) detailing Vertical Launch System (VLS) integration changes -T&E: -Continued requirements definition, Material Purchase and Fabrication of VLS Tilt Fixture and Enclosures for PTV-1 (Aegis Flight Test), CTV-1 (Aegis Flight Test) and CTV-2 (Aegis Flight Test) Ground Based Tests -Continued Test Document Preparation FY 2012 Plans: (IAW Project Phase II Jointly approved re-plan) --SM-3 Blk IIA Missile Development: -Begin missile section-level CDRs. -Obtain Weapons System Engineering Safety Review Board approval of missile safety design. -Complete Milestones 3 and 4 of the integrated system demonstration. -Complete planning for restrained firing test. -BMD 4.0.1 Engineering (ENG REL) Development was removed from Program of Record due to government SCD Replan, which enable ability to conduct the SCD Flight Test Missions with an Aegis BMD 5.1 system. Aegis BMD system being developed under PE 0603892C. -VLS Canister -Complete shock, vibration, temperature/humidity, and hydrostatic pressure testing of SM-3 Blk IIA Mark 29 Missile Canister.			

UNCLASSIFIED

Exhibit R-2A, RDT&E Project Justification: PB 2013 Missile Defense Agency									DATE: February 2012		
APPROPRIATION/BUDGET ACTIVITY 0400: Research, Development, Test & Evaluation, Defense-Wide BA 4: Advanced Component Development & Prototypes (ACD&P)				R-1 ITEM NOMENCLATURE PE 0604881C: AEGIS SM-3 Block IIA Co-Development				PROJECT MD09: SM-3 Block IIA Co-Development			
B. Accomplishments/Planned Programs (\$ in Millions, Article Quantities in Each)									FY 2011	FY 2012	FY 2013
-T&E: -Conduct analysis and planning for restrained firing test in FY 2013. FY 2013 Plans: (IAW Project Phase II Jointly approved re-plan) -Conduct SM-3 Blk IIA Propulsion Stack & System/Kinetic Warhead CDR. -Conduct Mk 29 Mod 0 Canister CDR. -Conduct and analyze results of Restrained Firing Test Event. -Begin procurement of SM-3 Blk IIA RDT&E Missile Rounds to support Flight Test program. -Demonstrate performance of missile sub-sections. -Hazard Assessment Test (HAT) 40FT Vertical Drop Test and Fast Cook-Off Test and analysis in preparation for CTV-1 (Aegis Flight Test).											
Accomplishments/Planned Programs Subtotals									299.767	456.889	399.284
C. Other Program Funding Summary (\$ in Millions)											
Line Item	FY 2011	FY 2012	FY 2013 Base	FY 2013 OCO	FY 2013 Total	FY 2014	FY 2015	FY 2016	FY 2017	Cost To Complete	Total Cost
• 0603888C: Ballistic Missile Defense Test & Targets	999.068	85.569	0.000		0.000	0.000	0.000	0.000	0.000	0.000	1,084.637
• 0603890C: BMD Enabling Programs	401.113	415.048	362.711		362.711	339.197	373.346	395.350	394.085	Continuing	Continuing
• 0603892C: AEGIS BMD	1,530.767	988.928	992.407		992.407	960.870	950.097	1,030.201	958.680	Continuing	Continuing
• 0603896C: Ballistic Missile Defense Command and Control, Battle Management & Communication	454.440	363.640	366.552		366.552	376.116	383.055	358.431	364.725	Continuing	Continuing
• 0603902C: Next Generation Aegis Missile (Standard Missile-3 Block IIB (SM-3 IIB))	0.000	13.443	224.077		224.077	295.248	455.373	508.356	430.239	Continuing	Continuing
• 0604880C: Land Based SM-3 (LBSM3)	286.142	306.185	276.338		276.338	127.235	113.677	47.718	56.193	Continuing	Continuing

UNCLASSIFIED

Exhibit R-2A, RDT&E Project Justification: PB 2013 Missile Defense Agency		DATE: February 2012
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 0604881C: <i>AEGIS SM-3 Block IIA Co-Development</i>	PROJECT MD09: <i>SM-3 Block IIA Co-Development</i>
<u>D. Acquisition Strategy</u> The SM-3 Cooperative Development program for the SM-3 Blk 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 for procurement of any products or services, when appropriate.		
<u>E. Performance Metrics</u> N/A		

UNCLASSIFIED

Exhibit R-3, RDT&E Project Cost Analysis: PB 2013 Missile Defense Agency										DATE: February 2012			
APPROPRIATION/BUDGET ACTIVITY				R-1 ITEM NOMENCLATURE				PROJECT					
0400: Research, Development, Test & Evaluation, Defense-Wide BA 4: Advanced Component Development & Prototypes (ACD&P)				PE 0604881C: AEGIS SM-3 Block IIA Co-Development				MD09: SM-3 Block IIA Co-Development					
Product Development (\$ in Millions)				FY 2012		FY 2013 Base		FY 2013 OCO		FY 2013 Total			
Cost Category Item	Contract Method & Type	Performing Activity & Location	Total Prior Years Cost	Cost	Award Date	Cost	Award Date	Cost	Award Date	Cost	Cost To Complete	Total Cost	Target Value of Contract
SM-3 Blk IIA Development (SCD) SM-3 Blk IIA Development - MD09	SS/CPAF	RAYTHEON:AZ	591.214	357.534	Nov 2011	362.346	Nov 2012	-		362.346	Continuing	Continuing	Continuing
SM-3 Blk IIA Development (SCD) SM-3 Blk IIA Development - MD09 - 20117135426611	MIPR	NSWC/DD/VA:VA	13.120	4.090	Nov 2011	4.469	Nov 2012	-		4.469	Continuing	Continuing	Continuing
SM-3 Blk IIA Development (SCD) SM-3 Blk IIA Development - MD09 - 20117135426613	MIPR	JHU/APL:MD	27.919	16.826	Nov 2011	15.361	Nov 2012	-		15.361	Continuing	Continuing	Continuing
SM-3 Blk IIA Development (SCD) SM-3 Blk IIA Development - MD09 - 20117135426614	MIPR	MIT/LL:MA	4.503	1.395	Nov 2011	0.922	Nov 2012	-		0.922	Continuing	Continuing	Continuing
SM-3 Blk IIA Development (SCD) SM-3 Blk IIA Development - MD09 - 20117135426616	MIPR	NSWC/PHD:CA	6.815	0.426	Nov 2011	0.372	Nov 2012	-		0.372	Continuing	Continuing	Continuing
SM-3 Blk IIA Development (SCD) SM-3 Blk IIA Development - MD09 - 20117135426619	MIPR	NSWC IH:MD	5.553	0.452	Nov 2011	0.308	Nov 2012	-		0.308	Continuing	Continuing	Continuing
SM-3 Blk IIA Development (SCD) SM-3 Blk IIA Development - MD09 - 2011713542662	MIPR	MDA:VA	12.916	7.567	Nov 2011	-	Nov 2012	-		-	Continuing	Continuing	Continuing
SM-3 Blk IIA Development (SCD) BMD 4.0.1 Eng Rel - MD09	SS/CPAF	LOCKHEED MARTIN:NJ	26.611	16.412	Dec 2011	-		-		-	Continuing	Continuing	Continuing
SM-3 Blk IIA Development (SCD) BMD 4.0.1 Eng Rel - MD09 - 20117135426623	MIPR	SEG:CA	2.750	0.523	Dec 2011	-		-		-	Continuing	Continuing	Continuing

UNCLASSIFIED

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

APPROPRIATION/BUDGET ACTIVITY 0400: Research, Development, Test & Evaluation, Defense-Wide BA 4: Advanced Component Development & Prototypes (ACD&P)				R-1 ITEM NOMENCLATURE PE 0604881C: AEGIS SM-3 Block IIA Co-Development				PROJECT MD09: SM-3 Block IIA Co-Development			
---	--	--	--	--	--	--	--	---	--	--	--

Product Development (\$ in Millions)				FY 2012		FY 2013 Base		FY 2013 OCO		FY 2013 Total			
Cost Category Item	Contract Method & Type	Performing Activity & Location	Total Prior Years Cost	Cost	Award Date	Cost	Award Date	Cost	Award Date	Cost	Cost To Complete	Total Cost	Target Value of Contract
SM-3 Blk IIA Development (SCD) BMD 4.0.1 Eng Rel - MD09 - 20117135426625	MIPR	MDA:VA	1.234	1.435	Dec 2011	-		-		-	Continuing	Continuing	Continuing
SM-3 Blk IIA Development (SCD) BMD 4.0.1 Eng Rel - MD09 - 20117135426627	MIPR	NSWC/DD/VA:Dahlgren, VA	0.780	0.907	Dec 2011	-		-		-	Continuing	Continuing	Continuing
SM-3 Blk IIA Development (SCD) BMD 4.0.1 Eng Rel - MD09 - 20117135426628	MIPR	JHU/APL:MD	2.731	3.176	Dec 2011	-		-		-	Continuing	Continuing	Continuing
SM-3 Blk IIA Development (SCD) Testing & Evaluation - MD09	MIPR	NSWC/PHD:CA	1.500	3.600	Nov 2011	8.895	Nov 2012	-		8.895	Continuing	Continuing	Continuing
SM-3 Blk IIA Development (SCD) SM-3 Blk IIA Canister - MD09	MIPR	BAE:MD	19.826	16.200	Dec 2011	5.911	Dec 2012	-		5.911	Continuing	Continuing	Continuing
SM-3 Blk IIA Development (SCD) SM-3 Blk IIA VLS - MD09	MIPR	Lockheed Martin:Baltimore, MD	0.968	1.416	Dec 2011	-		-		-	Continuing	Continuing	Continuing
SM-3 Blk IIA Development (SCD) Mission Assurance - MD09	MIPR	NSWC/DD/VA:Dahlgren, VA	0.400	0.600	Dec 2011	0.700	Dec 2012	-		0.700	Continuing	Continuing	Continuing
SM-3 Blk IIA Development (SCD) SCD - MD09	MIPR	MDA :VA	19.128	24.330	Dec 2011	-		-		-	Continuing	Continuing	Continuing
Subtotal			737.968	456.889		399.284		-		399.284			

Remarks

N/A

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

UNCLASSIFIED

Exhibit R-3, RDT&E Project Cost Analysis: PB 2013 Missile Defense Agency											DATE: February 2012			
APPROPRIATION/BUDGET ACTIVITY 0400: Research, Development, Test & Evaluation, Defense-Wide BA 4: Advanced Component Development & Prototypes (ACD&P)				R-1 ITEM NOMENCLATURE PE 0604881C: AEGIS SM-3 Block IIA Co-Development				PROJECT MD09: SM-3 Block IIA Co-Development						
Support (\$ in Millions)				FY 2012		FY 2013 Base		FY 2013 OCO		FY 2013 Total				
Cost Category Item	Contract Method & Type	Performing Activity & Location	Total Prior Years Cost	Cost	Award Date	Cost	Award Date	Cost	Award Date	Cost	Cost To Complete	Total Cost	Target Value of Contract	
Remarks N/A														
Test and Evaluation (\$ in Millions)				FY 2012		FY 2013 Base		FY 2013 OCO		FY 2013 Total				
Cost Category Item	Contract Method & Type	Performing Activity & Location	Total Prior Years Cost	Cost	Award Date	Cost	Award Date	Cost	Award Date	Cost	Cost To Complete	Total Cost	Target Value of Contract	
Subtotal			-	-		-		-		-	0.000	0.000	0.000	
Remarks N/A														
Management Services (\$ in Millions)				FY 2012		FY 2013 Base		FY 2013 OCO		FY 2013 Total				
Cost Category Item	Contract Method & Type	Performing Activity & Location	Total Prior Years Cost	Cost	Award Date	Cost	Award Date	Cost	Award Date	Cost	Cost To Complete	Total Cost	Target Value of Contract	
Subtotal			-	-		-		-		-	0.000	0.000	0.000	
Remarks N/A														
			Total Prior Years Cost	FY 2012		FY 2013 Base		FY 2013 OCO		FY 2013 Total	Cost To Complete	Total Cost	Target Value of Contract	
Project Cost Totals			737.968	456.889		399.284		-		399.284				
Remarks NA														

UNCLASSIFIED

Exhibit R-4, RDT&E Schedule Profile: PB 2013 Missile Defense Agency		DATE: February 2012
APPROPRIATION/BUDGET ACTIVITY	R-1 ITEM NOMENCLATURE	PROJECT
0400: Research, Development, Test & Evaluation, Defense-Wide BA 4: Advanced Component Development & Prototypes (ACD&P)	PE 0604881C: AEGIS SM-3 Block IIA Co-Development	MD09: SM-3 Block IIA Co-Development

UNCLASSIFIED

Exhibit R-4A, RDT&E Schedule Details: PB 2013 Missile Defense Agency			DATE: February 2012
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 0604881C: <i>AEGIS SM-3 Block IIA Co-Development</i>	PROJECT MD09: <i>SM-3 Block IIA Co-Development</i>	

Schedule Details

Events	Start		End	
	Quarter	Year	Quarter	Year
SM-3 Blk IIA DACS Risk Reduction Implementation Decision	1	2012	1	2012
SM-3 Blk IIA DACS Preliminary Design Review (PDR)	1	2012	1	2012
SM-3 Blk IIA KW Preliminary Design Review (PDR)	2	2012	2	2012
SM-3 Blk IIA System Preliminary Design Review (PDR)	2	2012	2	2012
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

UNCLASSIFIED

Exhibit R-2A, RDT&E Project Justification: PB 2013 Missile Defense Agency									DATE: February 2012		
APPROPRIATION/BUDGET ACTIVITY 0400: Research, Development, Test & Evaluation, Defense-Wide BA 4: Advanced Component Development & Prototypes (ACD&P)				R-1 ITEM NOMENCLATURE PE 0604881C: AEGIS SM-3 Block IIA Co-Development				PROJECT MT09: SM-3 Block IIA Co-Development Test			
COST (\$ in Millions)	FY 2011	FY 2012	FY 2013 Base	FY 2013 OCO	FY 2013 Total	FY 2014	FY 2015	FY 2016	FY 2017	Cost To Complete	Total Cost
MT09: SM-3 Block IIA Co-Development Test	-	-	-	-	-	3.428	7.759	30.565	10.454	Continuing	Continuing
Quantity of RDT&E Articles	0	0	0		0	0	0	0	0		

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. Upgrades to both the Aegis BMD Weapon System and the SM-3 configurations evolve Aegis BMD to provide effective, supportable defensive capability against more difficult threats.

Beginning in 2006, Aegis BMD and the Japan Ministry of Defense (JMOD) have undertaken an SM-3 Cooperative Development (SCD) program, which consists of an upgrade of the SM-3 Blk IB missile to a 21-inch diameter SM-3 missile (SM-3 Blk IIA). The objective of the SCD project is the development and initial at-sea flight test of the SM-3 Blk IIA missile.

Key technology improvements planned for the SM-3 Blk 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. The U.S. and Japan will equitably share work.

Proving Missile Defense:

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

UNCLASSIFIED

Exhibit R-2A, RDT&E Project Justification: PB 2013 Missile Defense Agency		DATE: February 2012	
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 0604881C: <i>AEGIS SM-3 Block IIA Co-Development</i>	PROJECT MT09: <i>SM-3 Block IIA Co-Development Test</i>

B. Accomplishments/Planned Programs (\$ in Millions, Article Quantities in Each)	FY 2011	FY 2012	FY 2013
Title: SM-3 Co-Development Testing Articles: Description: See Description Below FY 2011 Accomplishments: No FY 2011 Effort, funding begins in FY 2014 FY 2012 Plans: No FY 2012 efforts, funding begins in FY 2014 FY 2013 Plans: No FY 2013 Efforts, funding begins in FY 2014	- 0	- 0	- 0
Accomplishments/Planned Programs Subtotals	-	-	-

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

D. Acquisition Strategy
N/A

E. Performance Metrics
N/A

UNCLASSIFIED

Exhibit R-3, RDT&E Project Cost Analysis: PB 2013 Missile Defense Agency											DATE: February 2012		
APPROPRIATION/BUDGET ACTIVITY 0400: Research, Development, Test & Evaluation, Defense-Wide BA 4: Advanced Component Development & Prototypes (ACD&P)				R-1 ITEM NOMENCLATURE PE 0604881C: AEGIS SM-3 Block IIA Co-Development				PROJECT MT09: SM-3 Block IIA Co-Development Test					

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

Remarks
N/A

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

Remarks
N/A

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

Remarks
N/A

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

Remarks
N/A

UNCLASSIFIED

Exhibit R-3, RDT&E Project Cost Analysis: PB 2013 Missile Defense Agency									DATE: February 2012		
APPROPRIATION/BUDGET ACTIVITY 0400: Research, Development, Test & Evaluation, Defense-Wide BA 4: Advanced Component Development & Prototypes (ACD&P)				R-1 ITEM NOMENCLATURE PE 0604881C: AEGIS SM-3 Block IIA Co-Development				PROJECT MT09: SM-3 Block IIA Co-Development Test			
	Total Prior Years Cost	FY 2012		FY 2013 Base		FY 2013 OCO		FY 2013 Total	Cost To Complete	Total Cost	Target Value of Contract
Project Cost Totals	-	-		-		-		-	0.000	0.000	0.000

Remarks

NA

UNCLASSIFIED

Exhibit R-4, RDT&E Schedule Profile: PB 2013 Missile Defense Agency		DATE: February 2012
APPROPRIATION/BUDGET ACTIVITY	R-1 ITEM NOMENCLATURE	PROJECT
0400: Research, Development, Test & Evaluation, Defense-Wide BA 4: Advanced Component Development & Prototypes (ACD&P)	PE 0604881C: AEGIS SM-3 Block IIA Co-Development	MT09: SM-3 Block IIA Co-Development Test

UNCLASSIFIED

Exhibit R-4A, RDT&E Schedule Details: PB 2013 Missile Defense Agency			DATE: February 2012
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 0604881C: <i>AEGIS SM-3 Block IIA Co-Development</i>	PROJECT MT09: <i>SM-3 Block IIA Co-Development Test</i>	

Schedule Details

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

UNCLASSIFIED

Exhibit R-2A, RDT&E Project Justification: PB 2013 Missile Defense Agency								DATE: February 2012			
APPROPRIATION/BUDGET ACTIVITY 0400: Research, Development, Test & Evaluation, Defense-Wide BA 4: Advanced Component Development & Prototypes (ACD&P)				R-1 ITEM NOMENCLATURE PE 0604881C: AEGIS SM-3 Block IIA Co-Development				PROJECT MD40: Program-Wide Support			
COST (\$ in Millions)	FY 2011	FY 2012	FY 2013 Base	FY 2013 OCO	FY 2013 Total	FY 2014	FY 2015	FY 2016	FY 2017	Cost To Complete	Total Cost
MD40: Program-Wide Support	-	16.954	21.346	-	21.346	13.802	9.779	9.107	2.334	Continuing	Continuing
Quantity of RDT&E Articles	0	0	0		0	0	0	0	0		
Note In FY 2013, Program Wide Support reflects a proportional increase as a result of adjustments to SM-3 Block IIA Co-Development.											
A. Mission Description and Budget Item Justification Program-Wide Support (PWS) contains non-headquarters management costs in support of MDA functions and activities across the entire Ballistic Missile Defense System (BMDS). Includes Government Civilians, Advisory and Assistance Services, and Federally Funded Research and Development contracts (FFRDC) providing integrity and oversight of the BMDS as well as, supporting MDA in enabling the development and evaluation of technologies that will respond to the changing threat. In addition, includes Global Deployment personnel and support performing deployment site preparation and activation. Other costs included provide facility capabilities for MDA Executing Agent locations (with the exception of Federal Office Building 2 after FY 2011), such as physical and technical security, legal services, travel and agency training, office and equipment leases, rents and utilities, data and unified communications support, supplies and maintenance, logistics and central property management of equipment, and similar operating expenses. Also includes legal settlements, and foreign currency fluctuations on a limited number of foreign contracts. In keeping with congressional intent, PWS is allocated on a pro-rata basis and therefore, fluctuates by year based on the total MDA budget.											
B. Accomplishments/Planned Programs (\$ in Millions, Article Quantities in Each)								FY 2011	FY 2012	FY 2013	
Title: Civilian Salaries and Support Articles: Description: See Description Below FY 2011 Accomplishments: Budget Project did not exist in FY 2011. FY 2012 Plans: See paragraph A, Mission Description and Budget Item Justification FY 2013 Plans: See paragraph A, Mission Description and budget item justification.								-	16.954	21.346	
								0	0	0	
								Accomplishments/Planned Programs Subtotals			
C. Other Program Funding Summary (\$ in Millions) N/A											

UNCLASSIFIED

Exhibit R-2A, RDT&E Project Justification: PB 2013 Missile Defense Agency		DATE: February 2012
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 0604881C: <i>AEGIS SM-3 Block IIA Co-Development</i>	PROJECT MD40: <i>Program-Wide Support</i>
<u>D. Acquisition Strategy</u> N/A		
<u>E. Performance Metrics</u> N/A		