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Fiscal Year (FY) 2010 Budget Estimate

May 2009



Procurement, Defense-Wide

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PROCUREMENT, DEFENSE-WIDE

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Exhibit P-1, Procurement Program

Missile Defense Agency

FY 2010 Budget Estimates

Appropriation: Procurement, Defense-Wide

Date: May 2009

Budget Activity: 01

<u>P-1 Line</u>	<u>Item</u>	<u>Ident</u>	<u>FY 2008</u>		<u>FY 2009</u>		<u>FY 2010</u>	
<u>Item No</u>	<u>Nomenclature</u>	<u>Code</u>	<u>Qty</u>	<u>Cost</u>	<u>Qty</u>	<u>Cost</u>	<u>Qty</u>	<u>Cost</u>
35	Terminal High Altitude Air Defense (THAAD) System	B		0.000		104.832	31	420.300
36	Standard Missile-3 (SM-3)	A		0.000		56.790		168.723
Total Direct Program				0.000		161.622		589.023

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PROCUREMENT, DEFENSE-WIDE

Missile Defense Agency

Terminal High Altitude Air Defense (THAAD) System

(\$ in Millions)

FY 2010 Estimate \$420.300

FY 2009 Estimate \$104.832

FY 2008 Estimate \$0.000

Program Overview

The Terminal High Altitude Area Defense (THAAD) is an element of the Terminal Defense Segment (TDS) of the Ballistic Missile Defense System (BMDS). THAAD enhances the TDS by deepening, complementing, and extending the BMDS battlespace and capability to engage ballistic targets in the late mid-course and terminal phases of their trajectory. THAAD will also be a surveillance sensor, providing sensor data to cue other elements of the BMDS. THAAD Batteries are composed of five major components (Interceptors, Launchers, an Army Navy/Transportable Radar Surveillance - Model 2 (AN/TPY-2) Radar, THAAD Fire Control and Communication (TFCC), and Peculiar Support Equipment). Fielded Batteries will be integrated into the BMDS. The AN/TPY-2 Radars for all THAAD Batteries are provided by the MDA Sensors Program. Common Support Equipment required for fielding Batteries is provided for by the Army.

Purpose and Scope of Work

The procurement of THAAD component hardware, consisting of 239 Interceptors, 15 Launchers, 10 THAAD Fire Control and Communications (TFCC) Tactical Station Groups (TSGs), and Peculiar Support Equipment (PSE). The Components being procured are planned to be configured into 4 THAAD Batteries (Batteries #3 through #6), along with Augmentation Hardware of additional (143) re-load Interceptors and Ground Components (3 Launchers, 2 TSGs).

This, along with Components acquired by the RDT&E Appropriation, will bring the inventory of THAAD Components to a total of 289 Interceptors, 21 Launchers, 14 TSGs, and PSE sufficient to support 7 batteries.

A THAAD Battery consists of a basic load of 24 Interceptors, 3 Launchers, one AN/TPY-2 Radar, one TFCC (consisting of 2 TSGs), and PSE.

Justification of Funds

FY09: Interceptor Long Lead procurement and obsolescence mitigation.

FY10:

- Interceptor Production Facilitization (IPF) tooling to increase Interceptor production rate capacity from 3 per month to 4 per month.
- Lot 1 procurement of 26 Interceptors and Ground Components (3 Launchers and 2 TSGs).
- Interceptor obsolescence mitigation for continuing Interceptor Lot production.

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Exhibit P-40, Budget Item Justification										Date May 2009		
Appropriation (Treasury) Code/CC/BA/BSA/Item Control Number 0300D Procurement, Defense-Wide/BA-01/35							P-1 Line Item Nomenclature THAAD System					
Program Element for Code B Items: PE 0208866C							Other Related Program Elements PE 0603881C					
	ID Code	Prior Years	FY 2008	FY 2009	FY 2010	FY 2011	FY 2012	FY 2013	FY 2014	FY 2015	To Complete	Total Program
Proc Qty					31							
Gross Cost (\$M)		0.000	0.000	104.832	420.300							525.132
Less PY Adv Proc (\$M)												
Plus CY Adv Proc (\$M)												
Net Proc (=P-1) (\$M)		0.000	0.000	104.832	417.339							522.171
Initial Spares (\$M)					2.961							2.961
Total Proc Cost (\$M)		0.000	0.000	104.832	420.300							525.132
Flyaway Unit Cost (\$M)												
Wpn Sys Proc U/C (\$M)												
							Exhibit P-40, Budget Justification (Exhibit P-40, page 1 of 1)					

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Exhibit P-5 Cost Analysis			Weapon System THAAD					Date: May 2009		
Appropriation (Treasury) Code/CC/BA/BSA/Item Control Number 0300D Procurement, Defense-Wide/BA-01/35						D Code: B		P-1 Line Item Nomenclature THAAD System		
WBS Cost Elements	Prior Years Unit Cost	Prior Years Total Cost	FY 2009 Unit Cost	FY 2009 Total Cost	FY 2010 Unit Cost	FY 2010 Total Cost	FY 2011 Unit Cost	FY 2011 Total Cost	FY 2012 Unit Cost	FY 2012 Total Cost
TH Hardware & Integration										
Interceptor				104.832	10.600	323.400				
Tactical Station Group					7.100	14.200				
Launcher					4.767	14.300				
Peculiar Support Equipment						12.937				
System Integration						55.463				
Total			-	104.832		420.300			-	

P-1 Line Item No 35

Exhibit P-5, Cost Analysis
(Exhibit P-5, page 1 of 1)

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Exhibit P-5a, Procurement History and Planning					Weapon System THAAD		Date: May 2009			
Appropriation (Treasury) Code/CC/BA/BSA/ItemControl Number 0300D Procurement, Defense-Wide/BA-01/35					P-1 Line Item Nomenclature THAAD System					
WBS COST ELEMENTS	Qty	Unit Cost	Location of PCO	RFP Issue Date	Contract Method & Type	Contractor and Location	Award Date	Date of First Delivery	Tech Data Available Now?	Date Revisions Available
FY 2009 Interceptor LL/Obsolescence	n/a	n/a	MDA, Hvl, AL	4QFY08	SS/FFP	LMSSC, Sunnyvale, CA	2Q, FY09	n/a	Yes	
FY 2010 - Lot 1										
Interceptor	26	10.600	MDA, Hvl, AL	3QFY09	SS/FPIF	LMSSC, Sunnyvale, CA	3Q, FY10	3Q, FY11	Yes	
Tactical Station Group	2	7.100	MDA, Hvl, AL	3QFY09	SS/FFP	LMSSC, Sunnyvale, CA	3Q, FY10	4Q, FY11	Yes	
Launcher	3	4.767	MDA, Hvl, AL	3QFY09	SS/FFP	LMSSC, Sunnyvale, CA	3Q, FY10	4Q, FY11	Yes	
Peculiar Support Equipment	n/a	n/a	MDA, Hvl, AL	3QFY09	SS/FFP	LMSSC, Sunnyvale, CA	3Q, FY10	4Q, FY11	Yes	
System Integration	n/a	n/a	MDA, Hvl, AL	3QFY09	SS/FFP	LMSSC, Sunnyvale, CA	3Q, FY10	n/a	n/a	
FY 2010 - Obsolescence										
Interceptor LL/Obsolescence	n/a	n/a	MDA, Hvl, AL	3QFY09	SS/FFP	LMSSC, Sunnyvale, CA	3QFY10	n/a	Yes	
REMARKS										
							Exhibit P-5a, Procurement History and Planning (Exhibit P-5a, page 1 of 1)			

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PROCUREMENT, DEFENSE-WIDE

Missile Defense Agency

Standard Missile-3 (SM-3)

(\$ in Millions)

FY 2010 Estimate	168.72
FY 2009 Estimate	56.79
FY 2008 Estimate	0.00

Program Overview

The Aegis Ballistic Missile Defense (Aegis BMD) mission is to deliver an enduring, operationally effective and supportable Ballistic Missile Defense Capability on Aegis cruisers and destroyers to defend the nation, deployed forces, friends and allies, and to incrementally increase this capability by delivering evolutionary spiral improvements as part of Ballistic Missile Defense System (BMDS) block upgrades. The Aegis BMD element of the BMDS builds upon the existing U.S. Navy Aegis Weapons System (AWS) and Standard Missile (SM) infrastructures. Aegis BMD provides a forward-deployable, mobile capability to detect and track Ballistic Missiles of all ranges, and the ability to destroy Short-Range Ballistic Missile (SRBM), Medium-Range Ballistic Missile (MRBM), Intermediate-Range Ballistic Missile (IRBM), and selected long-range class threats in the midcourse phase of flight. Spiral upgrades to both the Aegis BMD Weapon System and the SM-3 configurations will enable Aegis BMD to provide effective, supportable defensive capability against more difficult threats, including Long Range Ballistic Missiles (LRBMs), and expand capability to counter limited engagements in the terminal phase of flight.

Purpose and Scope of Work

Standard Missile-3 is being developed for Aegis Ballistic Missile Defense (BMD) as part of the Missile Defense Agency's Ballistic Missile Defense System (BMDS). The Aegis BMD system integrates SM-3 with the Aegis Weapon System (AWS) aboard U.S. Navy cruisers to provide an umbrella of protection against short to intermediate-range ballistic missile threats. SM-3 is compatible with the MK 41 Vertical Launching System (VLS) deployed on many U.S. Navy and international surface combatants. The SM-3 is primarily used and tested by the United States Navy and also operated by the Japan Maritime Self-Defense Force. SM-3 has a spiral upgrade path designed to counter the evolving ballistic missile threats. The SM-3 Block IA provides increased capability, over the SM-2 Block IV and SM-3 Block I, to engage short- to intermediate-range ballistic missiles. The SM-3 Block IA incorporates rocket motor upgrades and computer program modifications to improve sensor performance, missile guidance and control, and lower cost. It also includes producibility and maintainability features required to qualify the missile as a tactical fleet asset. The SM-3 Block I and Block IA are currently deployed by the United States and Japan Maritime Self-Defense Force. The SM-3 Block IB will incorporate a two-color, all reflective infrared seeker, enabling longer range acquisition and increased threat discrimination. A Throttleable DACS (TDACS) is also in development to provide a more flexible and lower cost alternative to the SDACS. The U.S. and Japan are co-developing the SM-3 Block IIA, which will incorporate 21" 2nd and 3rd stage rocket motors, providing a significant increase in engagement capability and larger defended areas. The Block IIA will also provide a larger, more capable KW to counter future ballistic missile threats.

Justification of Funds

Procures SM-3 interceptors to meet War Fighter requirements for providing an enduring, operationally effective and supportable Ballistic Missile Defense Capability on Aegis BMD capable cruisers and destroyers

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Exhibit P-40, Budget Item Justification										Date May 2009		
Appropriation (Treasury) Code/CC/BA/BSA/Item Control Number 0300D Procurement, Defense-Wide/BA-01/36							P-1 Line Item Nomenclature SM-3					
Program Element for Code B Items PE 0208866C							Other Related Program Elements PE 0603892C					
	ID Code	Prior Years	FY 2008	FY 2009	FY 2010	FY 2011	FY 2012	FY 2013	FY 2014	FY 2015	To Complete	Total Program
Proc Qty												
Gross Cost (\$M)		0.000	0.000	56.790	168.723							225.513
Less PY Adv Proc (\$M)												
Plus CY Adv Proc (\$M)												
Net Proc (=P-1) (\$M)		0.000	0.000	56.790	168.723							225.513
Initial Spares (\$M)												
Total Proc Cost (\$M)		0.000	0.000	56.790	168.723							225.513
Flyaway Unit Cost (\$M)												
Wpn Sys Proc U/C (\$M)												
<p>Description: Standard Missile-3 is being developed for Aegis Ballistic Missile Defense (BMD) as part of the Missile Defense Agency’s Ballistic Missile Defense System (BMDS). The Aegis BMD system integrates SM-3 with the Aegis Weapon System (AWS) aboard U.S. Navy cruisers to provide an umbrella of protection against short to intermediate-range ballistic missile threats. SM-3 is compatible with the MK 41 Vertical Launching System (VLS) deployed on many U.S. Navy and international surface combatants. The SM-3 is primarily used and tested by the United States Navy and also operated by the Japan Maritime Self-Defense Force. SM-3 has a spiral upgrade path designed to counter the evolving ballistic missile threats. The SM-3 Block IA provides increased capability, over the SM-2 Block IV and SM-3 Block I, to engage short- to intermediate-range ballistic missiles. The SM-3 Block IA incorporates rocket motor upgrades and computer program modifications to improve sensor performance, missile guidance and control, and lower cost. It also includes producibility and maintainability features required to qualify the missile as a tactical fleet asset. The SM-3 Block I and Block IA are currently deployed by the United States and Japan Maritime Self-Defense Force. The SM-3 Block IB will incorporate a two-color, all reflective infrared seeker, enabling longer range acquisition and increased threat discrimination. A Throttleable DACS (TDACS) is also in development to provide a more flexible and lower cost alternative to the SDACS. The U.S. and Japan are co-developing the SM-3 Block IIA, which will incorporate 21” 2nd and 3rd stage rocket motors, providing a significant increase in engagement capability and larger defended areas. The Block IIA will also provide a larger, more capable KW to counter future ballistic missile threats.</p> <p>Justification: Procures SM-3 interceptors to meet War Fighter requirements for providing an enduring, operationally effective and supportable Ballistic Missile Defense Capability on Aegis BMD capable cruisers and destroyers</p>												
										Exhibit P-40, Budget Justification Exhibit P-40, (Page 1 of 1)		

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Exhibit P-5a, Procurement History and Planning					Weapon System AEGIS BMD		Date: May 2009			
Appropriation (Treasury) Code/CC/BA/BSA/ItemControl Number 0300D, Procurement, Defense-Wide/BA-01/36					P-1 Line Item Nomenclature SM-3					
WBS COST ELEMENTS	Qty	Unit Cost	Location of PCO	RFP Issue Date	Contract Method & Type	Contractor and Location	Award Date	Date of First Delivery	Tech Data Available Now?	Date Revisions Available
SM-3 Missiles			Dahlgren, VA		CPIF	Raytheon Missile System, Tucson AZ				
REMARKS Missile procurement is incrementally funded.										
						Exhibit P-5a, Procurement History and Planning (Exhibit P-5a, page 1 of 1)				

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Exhibit P-21, Production Schedule															Date: May 2009																
Appropriation (Treasury) Code/CC/BA/BSA/Item Control No 0300D, Procurement, Defense-Wide/BA-01/36										Weapons System AEGIS BMD					P-1 Line Item Nomenclature SM-3																
										PRODUCTION RATE					PROCUREMENT LEADTIMES																
Item	Manufacturer's Name and Location					MSR	ECON	MAX	ALT Prior to Oct 1	ALT After 1-Oct	Initial Mfg PLT	Reorder Mfg PLT	Total	Unit of Measure																	
SM-3 Block IA Missiles	Raytheon Missile System					1 per month		4 per month			36 Months	36 Months		AUR																	
SM-3 Block IB Missiles	Tucson Arizona					1 per month		2 per month			36 Months	36 Months		AUR																	
FISCAL YEAR 2010															FISCAL YEAR 2011																
CALENDAR YEAR 2010															CALENDAR YEAR 2011																
ITEM	F Y	S V C	Q T Y	D E L	B A L	O C T	N O V	D E C	J A N	F E B	M A R	A P R	M A Y	J U N	J U L	A U G	S E P	O C T	N O V	D E C	J A N	F E B	M A R	A P R	M A Y	J U N	J U L	A U G	S E P	B A L	
CLIN 3 (BIK IA Missiles 72-94)	2010		23		23								1	2	2	2	2													23	
CLIN 4 (Blk IA Missiles 99-110)	2010		12		12																									12	
CLIN X2 (BIK IB Missiles 141-170)	2010		30		30																									30	
CLIN X3 (BIK IB Missiles 171-200)	2010		30		30																									30	
CLIN X 4 (BIK IB Missiles 201-231)	2010		31		31																									31	
CLIN X5 (BIK IB Missiles 232-263)	2010		32		32																									32	
Additional 66 Missiles CLIN TBD	2010		66		66																									66	
FISCAL YEAR 2012															FISCAL YEAR 2013																
CALENDAR YEAR 2012															CALENDAR YEAR 2013																
ITEM	F Y	S V C	Q T Y	D E L	B A L	O C T	N O V	D E C	J A N	F E B	M A R	A P R	M A Y	J U N	J U L	A U G	S E P	O C T	N O V	D E C	J A N	F E B	M A R	A P R	M A Y	J U N	J U L	A U G	S E P	B A L	
REMARKS:																															
P-1 Line Item No. 36																															
Exhibit P-21, Production Schedule (Exhibit P-21, page 1 of 1)																															

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