## Department of Defense Fiscal Year (FY) 2015 Budget Estimates

March 2014



## Missile Defense Agency

Defense Wide Justification Book Volume 2b of 2

Procurement, Defense-Wide (Includes O&M and MILCON)

**UNCLASSIFIED** 

UNCLASSIFIED
THIS PAGE INTENTIONALLY LEFT BLANK

Missile Defense Agency • President's Budget Submission FY 2015 • Procurement

## **Table of Volumes**

Chemical Biological Defense Program	Volume 1
Defense Contract Audit Agency	
Defense Contract Management Agency	Volume 1
Defense Human Resources Activity	Volume 1
Defense Information Systems Agency	Volume 1
Defense Logistics Agency	Volume 1
Defense Media Activity	Volume 1
Defense Security Cooperation Agency	Volume 1
Defense Security Service	Volume 1
Defense Threat Reduction Agency	Volume 1
Defense Technology Security Administration	Volume 1
Department of Defense Dependent Education Activity	Volume 1
Office of the Secretary of Defense	Volume 1
The Joint Staff	
United States Special Operations Command	Volume 1
Washington Headquarters Service	Volume 1

Missile Defense Agency • President's Budget Submission FY 2015 • Procurement

Joint Urgent Operational Needs Fund	Volume
Missile Defense Agency	Volume 2

Missile Defense Agency • President's Budget Submission FY 2015 • Procurement

## **Volume 2b Table of Contents**

Introduction and Explanation of Contents	Volume 2b - v
Comptroller Exhibit P-1	Volume 2b - vi
Line Item Table of Contents (by Appropriation then Line Number)	Volume 2b - ix
Line Item Table of Contents (Alphabetically by Line Item Title)	Volume 2b - x
Operations and Maintenance - MDA	Volume 2b - xii
Military Construction - MDA	Volume 2b - I
Exhibit P-40's	Volume 2b - 1



## **Introduction & Explanation of Contents**

The Department of Defense FY2015 President's Budget RDT&E (Includes Procurement, O&M, and MILCON), Defense-wide Volume 2, Missile Defense Agency (MDA) justification materials consists of two books titled Volume 2a and 2b. Justification documents are provided in the books as listed below.

#### Volume 2a

- R-1 Comptroller Exhibit
- MDA FY 2015 Budget Estimate Overview
- MDA Appropriation Summary
- Congressional Reporting Requirements
- Program Assessment Rating Tool (PART) Submission
- Acronyms
- RDT&E Exhibits in BA-03, BA-04, and BA-06

#### Volume 2b

- P-1 Comptroller Exhibit
- MDA Operation and Maintenance Exhibit
- MDA MILCON Exhibits
- MDA Procurement Exhibits



## Defense-Wide FY 2015 President's Budget Exhibit P-1 FY 2015 President's Budget Total Obligational Authority (Dollars in Thousands)

24 Feb 2014

Appropriation: 0300D Procurement, Defense-Wide

Line	Ident		& OCO)	Base	2014 Enacted	FY 20 OCO Ena	acted		Enacted		2015 Base	S e
No Item Nomenclature	Code 	Quantity	Cost	Quantit	-	Quantity	Cost	Quantity	Cost	Quantit	_	C
Budget Activity 01: Major Equipment												
28 Aegis BMD Advance Procurement Advance Procurement (CY)											68,880	U
Major Equipment, Missile Defense Agency												
29 THAAD	В	36	416,838	33	571,851			33	571,851	31	464,424	U
30 Aegis BMD	В	33	463,374	52	580,814			52	580,814	30	435,430	U
31 BMDS AN/TPY-2 Radars	В	1	378,574		55,800				55,800		48,140	U
32 Aegis Ashore Phase III	A			1	131,400			1	131,400		225,774	U
33 Radar Spares	В		10,901									U
34 Iron Dome	A		194,481	1	220,309			1	220,309	1	175,972	U
Total Major Equipment			464,168	:	1,560,174				560,174		1,418,620	
Total Procurement, Defense-Wide			464,168		1,560,174				560,174		1,418,620	,

P-1C1: FY 2015 President's Budget (Published Version), as of February 24, 2014 at 09:35:04

THIS PAGE INTENTIONALLY LEFT BLANK	UNCLASSIFIED
	THIS PAGE INTENTIONALLY LEFT BLANK

Missile Defense Agency • President's Budget Submission FY 2015 • Procurement

## **Line Item Table of Contents (by Appropriation then Line Number)**

#### Appropriation 0300D: Procurement, Defense-Wide

Line #	ВА	BSA	Line Item Number	Line Item Title	Page
29	01	17	MD07	THAADVolume	2b - 1
30	01	17	MD09	AEGIS BMDVolume 2	2b - 11
28	01	17	MD09	AEGIS BMD, Advance Procurement	2b - 23
31	01	17	MD11	BMDS AN/TPY-2 RadarsVolume	2b - 27
32	01	17	MD73	Aegis Ashore Phase IIIVolume	2b - 47
33	01	17	MD77	Radar SparesVolume 2	2b - 51
34	01	17	MD83	Iron Dome	2b - 55



Missile Defense Agency • President's Budget Submission FY 2015 • Procurement

## Line Item Table of Contents (Alphabetically by Line Item Title)

Line Item Title	Line Item Number	Line #	ВА	BSA	Page
AEGIS BMD	MD09	30	01	17	Volume 2b - 11
AEGIS BMD, Advance Procurement	MD09	28	01	17	Volume 2b - 23
Aegis Ashore Phase III	MD73	32	01	17	Volume 2b - 47
BMDS AN/TPY-2 Radars	MD11	31	01	17	Volume 2b - 27
Iron Dome	MD83	34	01	17	Volume 2b - 55
Radar Spares	MD77	33	01	17	Volume 2b - 51
THAAD	MD07	29	01	17	Volume 2b - 1



# Fiscal Year 2015 Budget Estimates Missile Defense Agency (MDA)



March 2014

(This page intentionally left blank.)

#### TABLE OF CONTENTS

PBA-19 Exhibit - Introductory Statement (PBA-19, Appropriation Highlights)	1
O-1 Exhibit - O&M Funding by Budget Activity/Activity Group/Subactivity Group	
O-1A Exhibit - O&M Funding by Budget Activity/Activity Group/Subactivity Group	
OP-32 Exhibit - Appropriation Summary of Price/Program Growth	
OP-32A Exhibit - Appropriation Summary of Price/Program Growth	
PB-31R Exhibit - Personnel Summary	
PB-31D Exhibit - Summary of Funding Increases and Decreases	
OP-5 Exhibit - Operation and Maintenance Detail	
Contract Services	25
PB-15 - Advisory and Assistance Services	30
PB-15 - RDT&E	32
PB-31Q - Manpower Changes in Full-Time Equivalent	34

(This page intentionally left blank.)

Appropriation Summary	FY 2013	Price	Program	FY 2014	Price	Program	FY 2015
	Actual	<u>Change</u>	<u>Change</u>	Estimate	<u>Change</u>	<u>Change</u>	Estimate
O&M, Defense-Wide	\$221.6	\$4.2	\$143.6	\$369.4	\$6.7	\$40.5	\$416.6

	FY 2013 <u>Actual</u>	FY 2014 <u>Estimate</u>	FY 2015 Estimate
1. Operational Support	221,609	369,371	416,644
Aegis Ballistic Missile Defense (BMD)	11,050	17,738	11,666
Ballistic Missile Defense (BMD) Midcourse Defense Segment	0	137,776	146,218
Ballistic Missile Defense Systems (BMDS) AN/TPY-2 Radars	173,543	140,225	183,047
Terminal High Altitude Area Defense (THAAD)	37,016	73,632	75,713
Total Operation and Maintenance, Defense-Wide	221,609	369,371	416,644

	FY 2013 <u>Actual</u>	FY 2014 Estimate	FY 2015 Estimate
1. Operational Support	221,609	369,371	416,644
Aegis Ballistic Missile Defense (BMD)	11,050	17,738	11,666
Ballistic Missile Defense (BMD) Midcourse Defense Segment	0	137,776	146,218
Ballistic Missile Defense Systems (BMDS) AN/TPY-2 Radars	173,543	140,225	183,047
Terminal High Altitude Area Defense (THAAD)	37,016	73,632	75,713
Total Operation and Maintenance, Defense-Wide	221,609	369,371	416,644

		FY 2013 Program	Price Growth Percent	Price Growth	Program Growth	FY 2014 Program	Price Growth Percent	Price Growth	Program Growth	FY 2015 Program
	Supplies & Materials									
401	DLA Energy (Fuel Products)	0	-2.95%	0	1,532	1,532	2.21%	34	120	1,686
499	Total Supplies & Materials	0		0	1,532	1,532		34	120	1,686
	DWCF Purchases									
677	DISA Telecomm Svcs - Reimbursable	0	8.54%	0	5	5	7.80%	0	-5	0
699	Total DWCF Purchases	0		0	5	5		0	-5	0
	<u>Transportation</u>									
771	Commercial Transport	0	1.90%	0	1,031	1,031	1.80%	19	-1	1,049
799	Total Transportation	0		0	1,031	1,031		19	-1	1,049
	Other Purchases									
913	Purchased Utilities (Non-Fund)	0	1.90%	0	4,142	4,142	1.80%	75	662	4,879
920	Supplies & Materials (Non-Fund)	0	1.90%	0	78	78	1.80%	1	16	95
922	Equipment Maintenance By Contract	209,201	1.90%	3 <b>,</b> 975	93,145	306,321	1.80%	5,514	44,675	356,510
923	Facilities Sust, Rest, & Mod by Contract	0	1.90%	0	12,767	12,767	1.80%	230	213	13,210
932	Mgt Prof Support Svcs	0	1.90%	0	7,471	7,471	1.80%	134	-9	7,596
937	Locally Purchased Fuel (Non-Fund)	0	-2.95%	0	52	52	2.21%	1	0	53
987	Other Intra-Govt Purch	0	1.90%	0	13,888	13,888	1.80%	250	-2,790	11,348
989	Other Services	12,408	1.90%	236	9,207	21,851	1.80%	393	-2,548	19,696
990	IT Contract Support Services	0	1.90%	0	233	233	1.80%	4	285	522
999	Total Other Purchases	221,609		4,211	140,983	366,803		6,602	40,504	413,909
	Total	221,609		4,211	143,551	369,371		6,655	40,618	416,644

OP-32 Exhibit, Appropriation Summary of Price/Program Growth MDA-4

		FY 2013 Program	Price Growth Percent	Price Growth	Program Growth	FY 2014 Program	Price Growth Percent	Price Growth	Program Growth	FY 2015 Program
	Supplies & Materials									
401	DLA Energy (Fuel Products)	0	-2.95%	0	1,532	1,532	2.21%	34	120	1,686
499	Total Supplies & Materials	0		0	1,532	1,532		34	120	1,686
	DWCF Purchases									
677	DISA Telecomm Svcs - Reimbursable	0	8.54%	0	5	5	7.80%	0	-5	0
699	Total DWCF Purchases	0		0	5	5		0	-5	0
	Transportation									
771	Commercial Transport	0	1.90%	0	1,031	1,031	1.80%	19	-1	1,049
799	Total Transportation	0		0	1,031	1,031		19	-1	1,049
	Other Purchases									
913	Purchased Utilities (Non-Fund)	0	1.90%	0	4,142	4,142	1.80%	75	662	4,879
920	Supplies & Materials (Non-Fund)	0	1.90%	0	78	78	1.80%	1	16	95
922	Equipment Maintenance By Contract	209,201	1.90%	3 <b>,</b> 975	93,145	306,321	1.80%	5,514	44,675	356,510
923	Facilities Sust, Rest, & Mod by Contract	0	1.90%	0	12,767	12,767	1.80%	230	213	13,210
932	Mgt Prof Support Svcs	0	1.90%	0	7,471	7,471	1.80%	134	-9	7,596
937	Locally Purchased Fuel (Non-Fund)	0	-2.95%	0	52	52	2.21%	1	0	53
987	Other Intra-Govt Purch	0	1.90%	0	13,888	13,888	1.80%	250	-2,790	11,348
989	Other Services	12,408	1.90%	236	9,207	21,851	1.80%	393	-2,548	19,696
990	IT Contract Support Services	0	1.90%	0	233	233	1.80%	4	285	522
999	Total Other Purchases	221,609		4,211	140,983	366,803		6,602	40,504	413,909
	Total	221,609		4,211	143,551	369,371		6,655	40,618	416,644

OP-32A Exhibit, Appropriation Summary of Price/Program Growth MDA-5

	FY 2013	FY 2014	FY 2015	Change FY 2014/2015
Contractor FTEs (Total)	510	894	894	0

#### Personnel Summary Explanations:

The FY 2013 to FY 2014 contractor FTE increase is due to a congressional direction to transfer all GMD Operations and Sustainment activities previously captured in the Ballistic Missile Defense Midcourse Segment RDT&E program element (0603882C) to the Operations and Maintenance, Defense-Wide appropriation. There is no contractor FTE increase for FY 2014 to FY 2015.

FY 2014 President's Budget Request (Amended, if applicable)	<u>TOTAL</u> 256,201
1. Congressional Adjustments	
a. Distributed Adjustments	
1) Distributed Adjustments	127,456
b. Undistributed Adjustments	
1) Program Reduction	-10,000
c. Adjustments to Meet Congressional Intent	
d. General Provisions	
1) Section 8140 - DWCF Excess Cash	-4,140
2) Section 8034 - Indian Lands Environmental Mitigation	-143
3) Section 8023 - FFRDC	-3
FY 2014 Appropriated Amount	369,371
2. War-Related and Disaster Supplemental Appropriations	
3. Fact-of-Life Changes	
FY 2014 Baseline Funding	369,371
4. Reprogrammings (Requiring 1415 Actions)	
Revised FY 2014 Estimate	369,371
5. Less: Item 2, War-Related and Disaster Supplemental Appropriations and Item 4, Reprogrammings	
FY 2014 Normalized Current Estimate	369,371
6. Price Change	6,655
7 Functional Transfers	

- 7. Functional Transfers
- 8. Program Increases
  - a. Annualization of New FY 2014 Program

PB-31D Exhibit, Summary of Funding Increases and Decreases  $$\operatorname{\mathtt{MDA-7}}$$ 

	TOTAL
b. One-Time FY 2015 Increases	
c. Program Growth in FY 2015	
1) BMDS Radar program increase is due to the establishment of depot capability at Letterkenny Army Depot and the sustainment efforts with the PACOM Radar deployment. (FY 2014 baseline \$141,896K +0 FTE)	41,151
2) BMD Midcourse Defense Segment program increase is due to a congressional transfer of all GMD Operations and Sustainment activities from RDT&E to O&M appropriation.(FY 2014 baseline \$139,300K \$+0 FTE)	6,918
3) THAAD program increase is due to increased field support required for the fielding of the fifth THAAD battery. (FY 2014 baseline \$74,510K, +0 FTE)  9. Program Decreases	1,203
a. Annualization of FY 2014 Program Decreases	
b. One-Time FY 2014 Increases	
c. Program Decreases in FY 2015	
1) Aegis BMD program decrease is due to a reduction in required recertification of SM-3 Block IA for deployment aboard US Navy BMD configured ships. (FY 2014 baseline \$17,950K, +0 FTE)	-8,654
FY 2015 Budget Request	416,644

Operation and Maintenance, Defense-Wide Summary (\$ in thousands)
Budget Activity (BA) 1: Operating Forces
Subactivity Group 11A

	FY 2013	Price	Program	FY 2014	Price	Program	FY 2015
	<u>Actual</u>	<u>Change</u>	<u>Change</u>	<u>Estimate</u>	<u>Change</u>	<u>Change</u>	<u>Estimate</u>
MDA	221,609	4,211	143,551	369,371	6,655	40,618	416,644

#### I. Description of Operations Financed:

A. Aegis Ballistic Missile Defense (BMD).

Aegis BMD funding will support a wide range of activities in support of the SM-3 Blk IA including Vertical Launch System (VLS) canister spares, fleet introduction and support, first destination AUR transportation; re-certification of the SM-3 Blk IA at 4 year midlife, demilitarization of the Blk IA at 8 year mid-life, and round surveillance.

B. Ballistic Missile Defense (BMD) Midcourse Defense Segment.

The Ground-based Midcourse Defense (GMD) program is the element of the Ballistic Missile Defense System (BMDS) that provides combatant commanders with a continuously available (24 hours a day, 7 days a week, 365 days a year) capability to defend the Homeland against limited intermediate and long-range ballistic missile threats in the midcourse battle space. Missile Defense Agency (MDA) funding supports the operations and sustainment of the GMD weapon system that consists of Ground Based Interceptors (GBI), GMD Fire Control (GFC) systems, GMD Communications Network (GCN), In-Flight Interceptor Communications System Data Terminals (IDT) and all of the ground Launch Support Systems (LSS), silos, silo interface vaults (SIVs), environmental control systems, Command Launch Equipment (CLE), firing circuits and safety systems. This funding specifically provides for a wide range of activities in support of the fielded capabilities to include the GBIs

#### I. Description of Operations Financed (cont.)

at Fort Greely, Alaska (FGA) and Vandenberg Air Force Base (VAFB), California as well as IDTs at Eareckson Air Station (EAS), Alaska, FGA, VAFB and Fort Drum, New York. It also provides for the maintenance, repair, training, sustainment and supply support, sustaining engineering, network operations, integrated logistics support, execution and management of day-to-day planning, configuration control, scheduling, execution control, system transitioning and performance reporting functions at FGA, VAFB, EAS, Fort Drum and the Missile Defense Integration Operations Center (MDIOC), at Colorado Springs, Colorado. Additionally, the funding provides Base Operations Support (BOS) for facility sustainment and maintenance at the various GMD sites. BOS includes funding for utilities, facility maintenance, communications infrastructure support, grounds maintenance, snow removal and other services required to support the fielded weapon system.

- C. Ballistic Missile Defense Systems (BMDS) AN/TPY-2 Radars.
  This funding provides for the Upgraded Early Warning Radar (UEWR)/Cobra Dane Radar Software Sustainment unique to the Missile Defense mission. FY 2015 funding also provides training, sustainment and daily operations of 11 Army Navy/Transportable Radar Surveillance and Control-2 radars: five forward-based radars, and six Terminal High Altitude Area Defense battery radars. This funding will also establish depot capability at Letterkenny Army Depot (LEAD) to support AN/TPY-2 Electronics Equipment Unit (EEU) retrofit in FY 2015.
- D. Terminal High Altitude Area Defense (THAAD).

  As described in the BMDS Transition and Transfer (T2) Annex, the MDA is responsible for the sustainment of the missile defense unique or developmental items and the U.S. Army is responsible for the sustainment of the common items. MDA funding accomplishes the

#### I. Description of Operations Financed (cont.)

following efforts: Provides field and sustainment level maintenance for all THAAD deployed equipment for missile defense unique equipment only. Provides spares, repair parts, and maintenance capability at the location of the deployed THAAD batteries. Spares and repair parts include the contractor transportation, packaging and handling of Line Replaceable Units (LRUs) and inventory control and storage of repair parts, LRUs, and spares. Provides engineering support for the THAAD missile defense unique equipment. Provides missile transportation and handling from the missile storage location to the site of the THAAD launchers. Updates logistical data information of the Interactive Electronic Technical Manual (IETM) with the most current data and provide software user's guide up-dates and certify each revision of the software. Provides maintenance and upkeep for all THAAD training devices. Provides maintenance support to the missile defense unique equipment in the THAAD Fire Battery, for all New Equipment Training and any Delta training for fielded units required due to design changes for replacement soldiers. Provides Special Tools and Test Equipment for the organic depot. Begins RESET program. Ensures THAAD assets are properly maintained and the crews are trained to meet Combatant Commanders needs.

### II. Force Structure Summary:

A. Aegis Ballistic Missile Defense (BMD). 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. The Aegis BMD element of the BMDS capitalizes upon and evolves from the existing United States Navy Aegis Weapons System (AWS) and Standard Missile (SM) infrastructures. Aegis BMD provides a forward-deployable, mobile capability to detect and track Ballistic Missiles of all ranges, and the ability to destroy Short-Range Ballistic Missiles (SRBM), Medium-Range Ballistic Missiles (MRBM), and Intermediate-Range Ballistic Missiles (IRBM) in the midcourse phase of flight and shorter range missile in terminal phase. Aegis BMD

#### II. Force Structure Summary (cont.)

also provides a Long Range Surveillance and Track (LRS&T) capability to the BMDS. Aegis BMDS program decrease in FY 2015 is due to a reduction in required recertifications of SM-3 Block IA for deployment aboard US Navy BMD configured ships.

- B. Ballistic Missile Defense (BMD) Midcourse Defense Segment. The GMD fielded weapon system is under the command of U.S. Northern Command (NORTHCOM) and consists of soldiers from the 100th Missile Defense Brigade (5 crews) headquartered at Colorado Springs, Colorado, and its 49th Missile Defense Battalion (5 crews) at Fort Greely, Alaska. The 30 operationally deployed GBIs located at FGA (26 GBIs) and VAFB (4 GBIs) each deliver a single Exoatmospheric Kill Vehicle (EKV) to defeat threat warheads in space during the midcourse phase of the ballistic trajectory. The GMD Fire Control System consists of redundant fire control nodes at FGA (2 each) and the MDIOC (2 each). IDTs are currently located at FGA, VAFB, EAS and the MDA plans to field an additional IDT at Fort Drum, New York with an Initial Operational Capability (IOC) in 3rd QTR FY 2015. The increase in FY 2015 adheres to congressional direction to transfer all GMD Operations and Sustainment activities previously captured in the Ballistic Missile Defense Midcourse Segment RDT&E program element (0603882C) to the Operations and Maintenance, Defense -Wide appropriation starting in FY 2014.
- C. Ballistic Missile Defense Systems (BMDS) AN/TPY-2 Radars. This funding provides for the Upgraded Early Warning Radar (UEWR)/Cobra Dane Radar Software Sustainment in support of the Missile Defense mission. The Air Force is responsible for the day to day operations and Maintenance of the UEWRs and Cobra Dane Radar. The FY 2015 funding also provides for the training, sustainment and daily operation of eleven Army Navy/Transportable Radar Surveillance and Control-2 (AN/TPY-2) radars: five forward-based radars, and six Terminal High Altitude Area Defense battery radars. These services are

#### II. Force Structure Summary (cont.)

furnished through Centralized Contractor Logistics Support (CCLS) contracts. This funding will also establish depot capability at Letterkenny Army Depot (LEAD) to support an AN/TPY-2 Electronics Equipment Unit (EEU) retrofit in FY15. The force structure and operational tempo are documented in the AN/TPY-2 Cost Analysis Requirements Description dated January 2012. The increase in the FY 2015 O&M estimate is due to the establishment of depot capability at LEAD and the sustainment efforts associated with the planned deployment of the PACOM Radar.

D. Terminal High Altitude Area Defense (THAAD). Army force structure for THAAD is currently set at six batteries with six launchers operated by ninety-five soldiers and documented on Modified Table of Organization and Equipment (MTOE) number 44693G000. The battery is organized to conduct 120-day deployments (forty-five days of entry operations and seventy-five days of 17-hour/day combat operations). This operational tempo can be increased with appropriate attachments and support. The battery requires support from the Army for communications, security, common supplies, and services. THAAD missile defense unique supplies are routed to a non-theater contractor supply and specialized maintenance chain. To this end, the battery brings with it a twelve-person contractor support team with its own complement of equipment. The contractor team will be documented on an Army Table of Distribution and Allowances (TDA) to facilitate movement into a war zone with the battery. Interceptors are not considered part of battery force structure and are allocated by commanders in accordance with the mission and threat. Batteries will be doctrinally assigned to the theater Army Air and Missile Defense Command. Engagements will be coordinated through the theater Air Operations Center. With the provision of specialized communications and radar software, the battery will be able to communicate directly with the Ballistic Missile Defense System Command and Control Battle Management and Communications (C2BMC) system making it capable of performing surveillance and tracking missions in addition to its normal active defense engagement mission. The

#### II. Force Structure Summary (cont.)

increase in FY 2015 is due to increased field support required for the fielding of the fifth THAAD battery.

#### III. Financial Summary (\$ in thousands)

FY 2014 Congressional Action FY 2013 Budget Current FY 2015 A. BA Subactivities Actual Request Amount Percent Appropriated <u>Estimate</u> **Estimate** 44.2 1. Operational Support 221,609 256,201 113,170 369,371 369,371 416,644 Aegis Ballistic -706 -3.8 11,050 18,444 17,738 17,738 11,666 Missile Defense (BMD) 0 Ballistic Missile 0 137,776 n/a 137,776 137,776 146,218 Defense (BMD) Midcourse Defense Segment Ballistic Missile 173,543 145,798 -5**,**573 -3.8 140,225 140,225 183,047 Defense Systems (BMDS) AN/TPY-2 Radars Terminal High Altitude -18,327-19.9 73,632 37,016 91,959 73,632 75,713 Area Defense (THAAD) 44.2 369,371 Total 221,609 256,201 113,170 369,371 416,644

### III. Financial Summary (\$ in thousands)

		Change	Change
В.	Reconciliation Summary	FY 2014/FY 2014	FY 2014/FY 2015
	Baseline Funding	256,201	369,371
	Congressional Adjustments (Distributed)	127,456	
	Congressional Adjustments (Undistributed)	-10,000	
	Adjustments to Meet Congressional Intent		
	Congressional Adjustments (General Provisions)	-4,286	
	Subtotal Appropriated Amount	369,371	
	Fact-of-Life Changes (2014 to 2014 Only)		
	Subtotal Baseline Funding	369,371	
	Supplemental		
	Reprogrammings		
	Price Changes		6,655
	Functional Transfers		
	Program Changes		40,618
	Current Estimate	369,371	416,644
	Less: Wartime Supplemental		
	Normalized Current Estimate	369,371	

### III. Financial Summary (\$ in thousands)

C. Reconciliation of Increases and Decreases	Amount	<u>Totals</u>
FY 2014 President's Budget Request (Amended, if applicable)		256,201
1. Congressional Adjustments		113,170
a. Distributed Adjustments		
1) Distributed Adjustments	127,456	
b. Undistributed Adjustments		
1) Program Reduction	-10,000	
c. Adjustments to Meet Congressional Intent		
d. General Provisions		
1) Section 8140 - DWCF Excess Cash	-4,140	
2) Section 8034 - Indian Lands Environmental Mitigation	-143	
3) Section 8023 - FFRDC	-3	
FY 2014 Appropriated Amount		369,371
2. War-Related and Disaster Supplemental Appropriations		
3. Fact-of-Life Changes		
FY 2014 Baseline Funding		369,371
4. Reprogrammings (Requiring 1415 Actions)		
Revised FY 2014 Estimate		369,371
5. Less: Item 2, War-Related and Disaster Supplemental		
Appropriations and Item 4, Reprogrammings		
FY 2014 Normalized Current Estimate		369,371
6. Price Change		6,655
7. Functional Transfers		
8. Program Increases		49,272
a. Annualization of New FY 2014 Program		
b. One-Time FY 2015 Increases		
c. Program Growth in FY 2015		
1) BMDS Radar program increase is due to the	41,151	
establishment of depot capability at Letterkenny Army	·	
Depot and the sustainment efforts with the PACOM Radar		
deployment. (FY 2014 baseline \$141,896K +0 FTE)		

### III. Financial Summary (\$ in thousands)

C. Reconciliation of Increases and Decreases	Amount	<u>Totals</u>
2) BMD Midcourse Defense Segment program increase is	6,918	
due to a congressional transfer of all GMD Operations		
and Sustainment activities from RDT&E to O&M		
appropriation.(FY 2014 baseline \$139,300K \$+0 FTE)		
3) THAAD program increase is due to increased field	1,203	
support required for the fielding of the fifth THAAD	,	
battery. (FY 2014 baseline \$74,510K, +0 FTE)		
9. Program Decreases		-8,654
a. Annualization of FY 2014 Program Decreases		·
b. One-Time FY 2014 Increases		
c. Program Decreases in FY 2015		
1) Aegis BMD program decrease is due to a reduction in	-8,654	
required recertification of SM-3 Block IA for deployment	,	
aboard US Navy BMD configured ships. (FY 2014 baseline		
\$17,950K, +0 FTE)		
FY 2015 Budget Request		416,644

# IV. Performance Criteria and Evaluation Summary:

A. Aegis Ballistic Missile Defense BMD Standard Missile 3 Block IA (SM-3 BLK IA). Performance Objectives are defined in the SM-3 contracts as follows: The performance incentive of the SM-3 Cost Plus/ Incentive Fee/Award Fee (CP/IF/AF) contracts is determined by a formula designed to focus on reduction of overall maintenance cost and efficiency of recertification and the timely return of SM-3s to the fleet.

B. Ballistic Missile Defense Midcourse Defense Segment. The Ground-Based Midcourse System utilizes a performance clause on the Development and Sustainment Contract (DSC) with Boeing using GMD System Availability SA and GBI Availability GA criteria as the primary operational readiness metric to gauge the DSC Prime Contractor's sustainment performance.

The intent of using SA and GA criteria are to: 1) Maximize availability of the GMD weapon system to the warfighter for the Homeland Defense mission; and 2) Maximize the availability of operational interceptors to the Warfighter. Specifically, at any given time during performance of the contract, the DSC Contractor is responsible for making a minimum number of healthy GBIs available, and ensuring that COCOM minimum asset availability is maintained per established COCOM readiness criteria.

Specific SA and GA Calculation: All calculations are based on times measured to the nearest minute.

SA = (TT - TCM - TPM - Government Directed Down Time)

(TT - Government Directed Down Time)

# IV. Performance Criteria and Evaluation Summary:

GA = (TT- Government Directed Down Time - Time that fewer than x\* GBIs Healthy)

(TT - Government Directed Down Time)

SA and GA Calculation Notes:

TT	Total Time (24 hrs/X days in Month)
TCM	Total downtime due to corrective maintenance actions
	including logistics
TPM	Total downtime due to preventative maintenance actions
	including logistics delay
Government	When the Government expressly directs the Contractor
Directed	to take the system or selected prime mission equipment
Down Time	asset(s) out of an operational state for a specified
(GDDT)	period of time for activities that are neither CM nor
	PM. Further, GDDT includes periods when the system or
	assets are turned off based on unforeseen or scheduled
	events (beyond the control, fault or negligence of the
	contractor or any of its subcontractors) which created
	conditions that render the system unavailable to the
	Warfighter GDDT does not include scheduled Corrective
	Maintenance (CM) and Preventive Maintenance (PM)
	activities covered in the Warfighter Asset Management
	Process. Under Performance Based Logistics (PBL), the
	DSC Contractor should schedule maintenance using the
	Asset Management Process in a way that minimizes down
	time.

# IV. Performance Criteria and Evaluation Summary:

C. Ballistic Missile Defense Systems (BMDS) AN/TPY-2 Radars.

Upgraded Early Warning Radars (UEWR) and Cobra Dane operations and sustainment are managed by Air Force Space to maintain radar mission capability and meet specified operational availability requirements to maintain and enhance the Missile Defense mission for these radars.

For Army Navy/Transportable Radar Surveillance and Control-2 (AN/TPY-2) radars, the contractor's performance in operations and sustainment will be measured by the radars' demonstrated operational availability (Ao), defined as:

$$\underline{A_{\circ}}$$
 = Total Time - Non Mission Capable Time Total Time

For AN/TPY-2 radars: "Total time" is defined as 24 hours per day times the number of days in the period of performance of the task order. Performance measurement does not include contractually-

defined conditions that are outside the control of the Contractor and are exceptions to  $A_{\circ}$  downtime. For AN/TPY-2 radars, performance incentives are calculated as follows:

Та	rget	A <sub>o</sub> =	= 95%		
$A_{o} > 95\%$	100%	of	Performance	Incentive	Pool

# IV. Performance Criteria and Evaluation Summary:

A <sub>o</sub> ≥ 70%, <95%	Actual A <sub>o</sub> % achieved times pool amount
$A_{\circ} < 70\%$	Performance Fee = 0%

D. Terminal High Altitude Area Defense (THAAD). THAAD utilizes a Performance Clause in the Interim Contractor Support (ICS) contract with LM to incentivize LM for THAAD weapon system readiness. The assessment of the performance clause is based on evaluation of Battery Operational Readiness and Minimum Capability:

Operational Readiness (OR) is calculated by dividing the number of hours the required components (2 TSG's and 3 Launchers) are available to accomplish the mission during a rating period by the number of hours possible during the rating period. For OR levels greater than 70% and less than or equal to 100%, the contractor is awarded an incentive fee on a sliding scale for that portion. Minimum Capability (MC) is also calculated by dividing the number of hours the required components (1 TSG and 2 Launchers) are available to accomplish the mission during a rating period by the number of hours possible during the rating period. For MC readiness levels less than 100% the contractor is awarded zero fee for that portion.

V. <u>Personnel Summary</u>	FY 2013	FY 2014	FY 2015	Change FY 2013/ <u>FY 2014</u>	Change FY 2014/ <u>FY 2015</u>
Contractor FTEs (Total)	510	894	894	384	0

The FY 2013 to FY 2014 contractor FTE increase is due to a congressional direction to transfer all GMD Operations and Sustainment activities previously captured in the Ballistic Missile Defense Midcourse Segment RDT&E program element (0603882C) to the Operations and Maintenance, Defense-Wide appropriation. There is no contractor FTE increase for FY 2014 to FY 2015.

# VI. OP 32 Line Items as Applicable (Dollars in thousands):

		Chan	ge		Chan	ge	
	FY 2013	FY 2013/F	<u>Y 2014</u>	FY 2014	FY 2014/F	Y 2015	FY 2015
OP 32 Line	<u>Actual</u>	Price	Program	<b>Estimate</b>	Price	Program	<b>Estimate</b>
401 DLA Energy (Fuel Products)	0	0	1,532	1,532	34	120	1,686
499 Total Supplies & Materials	0	0	1,532	1,532	34	120	1,686
677 DISA Telecomm Svcs - Reimbursable	0	0	5	5	0	-5	0
699 Total DWCF Purchases	0	0	5	5	0	-5	0
771 Commercial Transport	0	0	1,031	1,031	19	-1	1,049
799 Total Transportation	0	0	1,031	1,031	19	-1	1,049
913 Purchased Utilities (Non-Fund)	0	0	4,142	4,142	75	662	4,879
920 Supplies & Materials (Non- Fund)	0	0	78	78	1	16	95
922 Equipment Maintenance By Contract	209,201	3 <b>,</b> 975	93,145	306,321	5,514	44,675	356,510
923 Facilities Sust, Rest, & Mod by Contract	0	0	12,767	12,767	230	213	13,210
932 Mgt Prof Support Svcs	0	0	7,471	7,471	134	-9	7,596
937 Locally Purchased Fuel (Non- Fund)	0	0	52	52	1	0	53
987 Other Intra-Govt Purch	0	0	13,888	13,888	250	-2,790	11,348
989 Other Services	12,408	236	9,207	21,851	393	-2,548	19,696
990 IT Contract Support Services	0	0	233	233	4	285	522
999 Total Other Purchases	221,609	4,211	140,983	366,803	6,602	40,504	413,909
Total	221,609	4,211	143,551	369,371	6,655	40,618	416,644

# CONTRACT SERVICES FUNDING (\$ in Millions)

Line	By PB/OP-32 Inflation Category Code	FY 2013 Base & OCO <u>Actual</u> '1	FY 2014 Base Request /2	FY 2014 OCO Request /2	FY 2015 Base Request	FY 2015 OCO Request
931	Contract Consultants					
932	Mgmt and Professional Support Services	0	7	0	8	0
933	Studies, Analysis and Evaluations					
934	Engineering and Technical Services					
	Total 25.1 - Advisory and Assistance Services	0	7	0	7	0
989	Other Contracts	0	22	0	20	0
926	Other Overseas Purchases					
	Total 25.2 - Other Services	0	22	0	20	0
923	Facility Maintenance	0	13	0	13	0
	<b>Total 25.4 - Operation and Maintenance of Facilities</b>	0	13	0	13	0
985	Research and Development Contracts					
	<b>Total 25.5 - Research and Development Contracts</b>	0	0	0	0	0
986	Medical Care					
	Total 25.6 - Medical Care	0	0	0	0	0
922	Equipment Maintenance - Contract	209	306	0	357	
927	Air Defense Contracts					0
928	Ship Maintenance by Contract					
929	Aircraft Rework by Contract					
930	Other Depot Maintenance (Non-Fund)					
990	IT Contract Support Services	0	1	0	1	0
	Total 25.7 - Operation and Maintenance of Equipme	nt 0	307	0	358	0
964	Subsistence Contracts					
	Total 25.8- Subsistance and Support of Persons	0	0	0	0	0
	Total	0	349	0	398	0

# CONTRACT SERVICES FUNDING (\$ in Millions)

		FY 2013 Base & OCO	FY 2014 Base	FY 2014 OCO	FY 2015	FY 2015 OCO
Line	Dy DD/OD 22 Inflation Catagory Code	Actual 11	Request	Request	Base Request	
931	By PB/OP-32 Inflation Category Code  Contract Consultants	Actual	Kequest	Kequest	Kequest	Request
931		0	47	0	47	0
	Mgmt and Professional Support Services	0	4/	U	4/	0
933	Studies, Analysis and Evaluations					
934	Engineering and Technical Services		45	0	45	0
	Total 25.1 - Advisory and Assistance Services	0	47	0	47	0
989	Other Contracts	0	42	0	42	0
926	Other Overseas Purchases					
	Total 25.2 - Other Services	0	42	0	42	0
923	Facility Maintenance	0	129	0	129	0
,	Total 25.4 - Operation and Maintenance of Facilities	0	129	0	129	0
985	Research and Development Contracts					
	Total 25.5 - Research and Development Contracts	0	0	0	0	0
986	Medical Care					
	Total 25.6 - Medical Care	0	0	0	0	0
			0			
922	Equipment Maintenance - Contract	510	674	0	674	0
927	Air Defense Contracts					
928	Ship Maintenance by Contract					
929	Aircraft Rework by Contract					
930	Other Depot Maintenance (Non-Fund)					
990	IT Contract Support Services	0	2		2	0
	Total 25.7 - Operation and Maintenance of Equipmen	nt 510	676	0	676	0

### CONTRACT SERVICES

Defense-Wide Missile Defense Agency Operation and Maintenance Justification Narrative

### Description of Services Financed:

A. Aegis Ballistic Missile Defense (BMD). Aegis BMD funding will support a wide range of activities in support of the SM-3 Blk IA including Vertical Launch System (VLS) canister spares, fleet introduction and support, first destination AUR transportation; re-certification of the SM-3 Blk IA at 4 year mid-life, demilitarization of the Blk IA at 8 year mid-life, and round surveillance.

B. Ballistic Missile Defense (BMD) Midcourse Defense Segment. The Ground-based Midcourse Defense (GMD) program is the element of the Ballistic Missile Defense System (BMDS) that provides combatant commanders with a continuously available (24 hours a day, 7 days a week, 365 days a year) capability to defend the Homeland against limited intermediate and long-range ballistic missile threats in the midcourse battle space. Missile Defense Agency (MDA) funding supports the operations and sustainment of the GMD weapon system that consists of Ground Based Interceptors (GBI), GMD Fire Control (GFC) systems, GMD Communications Network (GCN), In-Flight Interceptor Communications System Data Terminals (IDT) and all of the ground Launch Support Systems (LSS), silos, silo interface vaults (SIVs), environmental control systems, Command Launch Equipment (CLE), firing circuits and safety systems. This funding specifically provides for a wide range of activities in support of the fielded capabilities to include the GBIs at Fort Greely, Alaska (FGA) and Vandenberg Air Force Base (VAFB), California as well as IDTs at Eareckson Air Station (EAS), Alaska, FGA, VAFB and Fort Drum, New York. It also provides for the maintenance, repair, training, sustainment and supply support, sustaining engineering, network operations, integrated logistics support, execution and management of day-to-day planning, configuration control, scheduling, execution control, system transitioning and performance reporting functions at FGA, VAFB, EAS, Fort Drum and the Missile Defense Integration Operations Center (MDIOC), at Colorado Springs, Colorado. Additionally, the funding provides Base Operations Support (BOS) for facility sustainment and maintenance at the various GMD sites. BOS includes funding for utilities, facility maintenance, communications infrastructure support, grounds maintenance, snow removal and other services required to support the fielded weapon system.

C. Ballistic Missile Defense Systems (BMDS) AN/TPY-2 Radars. This funding provides for the Upgraded Early

Warning Radar (UEWR)/Cobra Dane Radar Software Sustainment unique to the Missile Defense mission. FY 2015 funding also provides training, sustainment and daily operations of 11 Army Navy/Transportable Radar Surveillance and Control-2 radars: five forward-based radars, and six Terminal High Altitude Area Defense battery radars. This funding will also establish depot capability at Letterkenny Army Depot (LEAD) to support AN/TPY-2 Electronics Equipment Unit (EEU) retrofit in FY 2015.

D. Terminal High Altitude Area Defense (THAAD). Terminal High Altitude Area Defense (THAAD). As described in the BMDS Transition and Transfer (T2) Annex, the MDA is responsible for the sustainment of the missile defense unique or developmental items and the U.S. Army is responsible for the sustainment of the common items. MDA funding accomplishes the following efforts: Provides field and sustainment level maintenance for all THAAD deployed equipment for missile defense unique equipment only. Provides spares, repair parts, and maintenance capability at the location of the deployed THAAD batteries. Spares and repair parts include the contractor transportation, packaging and handling of Line Replaceable Units (LRUs) and inventory control and storage of repair parts, LRUs, and spares. Provides engineering support for the THAAD missile defense unique equipment. Provides missile transportation and handling from the missile storage location to the site of the THAAD launchers. Updates logistical data information of the Interactive Electronic Technical Manual (IETM) with the most current data and provide software user's quide up-dates and certify each revision of the software. Provides maintenance and upkeep for all THAAD training devices. Provides maintenance support to the missile defense unique equipment in the THAAD Fire Battery, for all New Equipment Training and any Delta training for fielded units required due to design changes for replacement soldiers. Provides Special Tools and Test Equipment for the organic depot. Begins RESET program. Ensures THAAD assets are properly maintained and the crews are trained to meet Combatant Commanders needs.

### Reporting Limitations:

N/A

### Summary of Increases/Decreases:

- A. Aegis Ballistic Missile Defense (BMD). Aegis BMDS program decrease in FY 2015 is due to a reduction in required recertification of SM-3 Block IA for deployment aboard US Navy BMD configured ships.
- B. Ballistic Missile Defense (BMD) Midcourse Defense Segment. The BMD Midcourse Defense Segment program increase in FY 2015 due to a congressional direction to transfer all GMD Operations and Sustainment

activities previously captured in the Ballistic Missile Defense Midcourse Segment RDT&E program element (0603882C) to the Operations and Maintenance, Defense -Wide appropriation starting in FY 2014.

- C. Ballistic Missile Defense Systems (BMDS) AN/TPY-2 Radars. The BMDS AN/TPY-2 Radars program increase in FY 2015 O&M estimate is due to the establishment of depot capability at LEAD and the sustainment efforts associated with the planned deployment of the PACOM Radar.
- D. Terminal High Altitude Area Defense (THAAD). The THAAD program increase is due to the increased of field support required for the fielding of the fifth THAAD battery.

DATE PREPARED: 5 February 2014

POC: Jennifer Varga
TELEPHONE: 256-450-4931

Appropriation/Fund	FY 2013 Actual	FY 2014 Estimate	
I. Management & Professional Support Services FFRDC Work	0	0	0
Non-FFRDC Work	<u>0</u>	7,471	<u>7,596</u>
Subtotal	0	7,471	7,596
II. Studies, Analysis & Evaluations			
FFRDC Work	0	0	0
Non-FFRDC Work	<u>0</u>	0	<u>0</u>
Subtotal	0	0	0
III. Engineering & Technical Services			
FFRDC Work	0	0	0
Non-FFRDC Work	<u>0</u>	0	0
Subtotal	0	0	0
TOTAL			
FFRDC Work	0	0	0
Non-FFRDC Work	0	7,471	7,596
Reimbursable	0	0	0

### Explanation of Funding Changes (FY 2013 to FY 2014):

The FY 2014 amount captured in this exhibit is for the THAAD Hybrid Cell. THAAD Hybrid Cell provides Doctrine, Training, Leadership, Organization, Materiel, Soldier (DTLOMS) support for the THAAD system. The Hybrid Cell provides technical guidance, financial management, cost and schedule performance analysis, cost estimation and analysis, integration activities, and sub-contract management to ensure effective use of appropriated resources for Program Support Items activity.

### Explanation of Funding Changes (FY 2014 to FY 2015):

The FY 2015 amount captured in this exhibit is for the THAAD Hybrid Cell. THAAD Hybrid Cell provides Doctrine, Training, Leadership, Organization, Materiel, Soldier (DTLOMS) support for the THAAD system. The Hybrid Cell provides technical guidance, financial management, cost and schedule performance analysis, cost estimation and analysis, integration activities, and sub-contract management to ensure effective use of appropriated resources for Program Support Items activity.

DATE PREPARED: 5 February 2014

POC: Jennifer Varga TELEPHONE: 256-450-4931

# (Dollars in Thousands)

Appropriation/Fund: RDT&E (0400)	FY 2013	FY 2014	FY 2015	FY 2016
Management & Professional Support Services				
FFRDC Work	1,742	1,624	1,791	1,489
Non-FFRDC Work	219,064	204,211	225,272	<u>187,240</u>
Sub-Total	220,806	205,835	227,063	188,729
O Obelian Analysis & Franksking				
2. Studies, Analysis & Evaluations	40.400	40.000	400=4	
FFRDC Work	18,433	19,272	18,954	22,055
Non-FFRDC Work	<u>12,618</u>	<u>13,194</u>	<u>12,975</u>	<u>15,099</u>
Sub-Total	31,051	32,466	31,929	37,154
3. Engineering & Technical Services				
FFRDC Work	125,834	125,764	107,607	90,956
Non-FFRDC Work	164,881	164,790	140,999	119,181
Sub-Total	290,715	290,554	248,606	210,137
TOTAL	542,572	528,855	507,598	436,020
FFRDC Work	146,008	146,660	128,352	114,500
Non-FFRDC Work	396,564	382,195	379,246	321,520

DATE PREPARED: 24 February 2014

POC: Jennifer Varga
TELEPHONE: 256-450-4931

		Foreign N	<u>National</u>	
MISSILE DEFENSE AGENCY	US Direct Hire	Direct Hire	Indirect Hire	<u>Total</u>
	0	0	0	0
1. FY 2013 FTEs	0	•	•	· ·
2. FY 2014 FTEs	Ü	0	0	0
3. FY 2015 FTEs	0	0	0	0
4.SUMMARY		Foreign N	National	
	US Direct Hire	Direct Hire	Indirect Hire	<u>Total</u>
FY 2013				
Total Component	0	0	0	0
Direct Funded	0	0	0	0
Reimbursable Funded	0	0	0	0
FY 2014				
Total Component	0	0	0	0
Direct Funded	0	0	0	0
Reimbursable Funded	0	0	0	0
FY 2015				
Total Component	0	0	0	0
Direct Funded	0	0	0	0
Reimbursable Funded	0	0	0	0

# Missile Defense Agency

# Fiscal Year 2015

President's Budget Submittal

Military Construction Exhibit



**March 2014** 

# MISSILE DEFENSE AGENCY FY 2015 MILITARY CONSTRUCTION PRESIDENT'S BUDGET SUBMITTAL DESCRIPTIVE SUMMARIES

# (\$ in Thousands)

<u>Program</u>	<u>Authorization</u>	<b>Appropriation</b>
Major Construction	ī	ī
Unspecified Minor Construction	2,000	2,000
MILCON Planning & Design	38,704	38,704
TOTAL MILITARY CONSTRUCTION	40,704	40,704

# MISSILE DEFENSE AGENCY FY 2015 Military Construction, Defense-Wide (\$ in Thousands)

Volume 2b - liii

State/Installation/Project MILCON Planning and Design **Major Construction Unspecified Minor Construction** Authorization Request 38,704 2,000 Approp. Request 38,704 2,000 Current **Mission** 

TOTAL MILITARY CONSTRUCTION

40,704

40,704

Page

New/

						liv
1. COMPONENT MDA	FY 2015 MILITARY CONSTRUCTION PROJECT DATA	UCTION	I PROJECT DA		2.DATE March 2014	ne 2b -
3. INSTALLATION AND LOCATION Various Worldwide Lo	cations	<b>4. PROJECT TITLE</b> Unspecified	Minor	Construction	מנ	Volun
5. PROGRAM ELEMENT $\mathrm{N/A}$	6. CATEGORY CODE 7. I	7. PROJECT NUMBER ${ m N/A}$	NUMBER N/A	8. PROJECT C	COST (\$000) 2,000	
	9. COST ESTIMATES	TIMATES		-		
	ITEM	M/N	QUANTITY	UNIT COST	COST (\$000)	
Unspecified Minor Co	Construction	S L			2,000	0
ESTMATED CONTRACT COST CONTINGENCY PERCENT (0.0%)	(0.0%)				2,000	0
SUBTOTAL SUPERVISION, INSPECTION	CION & OVERHEAD (0.0%)				2,000	0 0
TOTAL REQUEST (ROUNDED) INSTALLED EQPT-OTHER APPROPRIATIONS					2,000 2,000 (0)	000
10. DESCRIPTION OF PROPOSED CONSTRUCTION: Provide construction projects, not otherwise at \$2 million or less, including normal copermanent or temporary facilities and permanent or temporary facilities and nor less that are intended solely to conhealth-threatening, or safety-threaten:	PROPOSED CONSTRUCTION: Provide a lump projects, not otherwise authorized projects, including normal construct temporary facilities and projects are intended solely to correct a cening, or safety-threatening, in a	de a lump sum authorized by construction, projects have correct a defining, in accompany	amount law, h altera ing a f ciency rdance	unspec y a fu or co: l cost is li	pecified funded cost of conversion of ost of \$3 million life-threatening, USC Section 2805.	• •
11.REQUIREMENT: As required	iired					
REQUIREMENT: These funds requirements for construction from unforeseen situation property. Included would development requirements	s provide MDA the ction, alteration, ns affecting missi be projects to su of the Ballistic	ne capability on, or modific ssion perform support miss c Missile De	ability to react in modification of face performance or safe rt mission critical sile Defense System	ct in FY of facili safety o safet res tical res ystem.	2015 to ties resulting f life or earch and	Ώ

					) 	- Iv
MDA	FY 2015 MILITARY CONSTRUCTION PROJECT DATA	TRUCTION	PROJECT DA		March 2014	ne 2b
3. INSTALLATION AND LOCATION Various Worldwide Lo	<b>rion</b> Locations	4. PROJECT TITLE Planning an	TITLE 3 and Design			Volu
5. PROGRAM ELEMENT ${ m N/A}$	6. CATEGORY CODE $\mathrm{N}/\mathrm{A}$	7. PROJECT NUMBER	NUMBER N/A	8. PROJECT C	COST (\$000) 38,704	
	9. COST	COST ESTIMATES		-		
	ITEM	M/N	QUANTITY	UNIT COST	COST (\$000)	
Planning and Design	p	ST			38,704	)4
ᇤᆸ	.0%)				38,704 0 38,704	0 0 0 0
SUPERVISION, INSPECTION & OVERHEAD TOTAL REQUEST (ROUNDED) INSTALLED EQPT-OTHER APPROPRIATIONS	NSPECTION & OVERHEAD (0.0%) (ROUNDED) -OTHER APPROPRIATIONS				38,704 38,704 (0)	04
10. DESCRIPTION OF PROPOSED CONSTRUCTION: The financing for architectural and eng Missile Defense Agency (MDA) Milita	fur gine	requested wing services		sed to	provide on design of	
11.REQUIREMENT: As re	required					
REQUIREMENT: These complete design of i unspecified minor complete for accompliance time to be included	planning and facilities in construction prolish planning in subsequent	design funds are the MDA military cojects which are and design for fi	required construct anticipat uture proj	to initiate ion program ed to arise ects with a programs.	e and including se during a long lead-	•



Exhibit P-40, Budget Line Item Justification: PB 2015 Missile Defense Agency

Date: March 2014

Appropriation / Budget Activity / Budget Sub Activity:

P-1 Line Item Number / Title:

0300D: Procurement, Defense-Wide / BA 01: Major Equipment / BSA 17: Major

MD07 / THAAD

Equipment, Missile Defense Agency

ID Code (A=Service Ready, B=Not Service Ready): B

Program Elements for Code B Items: 0603884C, 0603881C

Other Related Program Elements: 0603881C, 0603884C

Line Item MDAP/MAIS Code: 362

Item MDAP/MAIS Code(s):

Line Item MDAP/MAIS Code: 362	Item MD	AP/MAIS Cod	ie(s):									
Resource Summary	Prior Years	FY 2013	FY 2014	FY 2015 Base	FY 2015 OCO <sup>#</sup>	FY 2015 Total	FY 2016	FY 2017	FY 2018	FY 2019	To Complete	Total
Procurement Quantity (Units in Each)	94	34	33	31	-	31	38	30	29	29	135	453
Gross/Weapon System Cost (\$ in Millions)	1,711.973	416.838	571.851	464.424	-	464.424	602.692	533.258	491.026	459.124	2,098.614	7,349.800
Less PY Advance Procurement (\$ in Millions)	-	-	-	-	-	-	-	-	-	-	-	-
Net Procurement (P1) (\$ in Millions)	1,711.973	416.838	571.851	464.424	-	464.424	602.692	533.258	491.026	459.124	2,098.614	7,349.800
Plus CY Advance Procurement (\$ in Millions)	-	-	-	-	-	-	-	-	-	-	-	-
Total Obligation Authority (\$ in Millions)	1,711.973	416.838	571.851	464.424	-	464.424	602.692	533.258	491.026	459.124	2,098.614	7,349.800
(The following	Resource Sum	mary rows are fo	or informational p	ourposes only. Ti	ne corresponding	g budget request	s are documente	ed elsewhere.)				
Initial Spares (\$ in Millions)	-	-	-	-	-	-	-	-	-	-	-	-
Flyaway Unit Cost (\$ in Millions)	11.610	11.020	11.026	12.367	-	12.367	12.334	12.715	12.927	13.115	13.006	12.306
Gross/Weapon System Unit Cost (\$ in Millions)	18.212	12.260	17.329	14.981	-	14.981	15.860	17.775	16.932	15.832	15.545	16.225

<sup>#</sup> The FY 2015 OCO Request will be submitted at a later date.

# **Description:**

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 Army Navy / Transportable Radar Surveillance - Model 2 (AN/TPY-2) will also be a surveillance sensor, providing sensor data to cue other elements of the BMDS. THAAD, in conjunction with the fielded PATRIOT System, provides the TDS and supports the Missile Defense Agency (MDA) objective of enhancing the BMDS capability. Five major components (Interceptors, Launchers, AN/TPY-2 Radar, THAAD Fire Control and Communication (TFCC), and Peculiar Support Equipment) will be integrated into the THAAD element and the BMDS.

Concurrent with the FY 2012 - FY 2014 U.S. procurements, MDA THAAD is executing a Foreign Military Sales (FMS) Case for two (2) Batteries and 192 Interceptors. The magnitude of the U.S. Government and Foreign Military Sales combined buy reduced the unit price. FY 2015 is planned to be procured as a standalone purchase of a significantly lower quantity resulting in an interceptor unit price increase.

The FY 2015 request funds 31 THAAD interceptors, support efforts including Missile Round Pallet, Stockpile Reliability Program, obsolescence mitigation, modifications, and training efforts such as THAAD Table Top Trainers and New Equipment Training.

Exhibits Sch	nedule		Р	rior Year	's		FY 2013			FY 2014		FY	2015 Ba	se	FY	′ 2015 O	co	FY	2015 To	tal
Title*	Exhibits	ID CD	Unit Cost (\$ M)	Qty (Each)	Total Cost (\$ M)	Unit Cost (\$ M)	Qty (Each)	Total Cost (\$ M)	Unit Cost (\$ M)	<b>Qty</b> (Each)	Total Cost (\$ M)	Unit Cost (\$ M)	<b>Qty</b> (Each)	Total Cost (\$ M)	Unit Cost (\$ M)	Qty (Each)	Total Cost (\$ M)	Unit Cost (\$ M)	<b>Qty</b> (Each)	Total Cost (\$ M)
Item - THAAD	P-5, P-5a, P-21	В	18.212	94	1,711.973	12.260	34	416.838	17.329	33	571.851	14.981	31	464.424	-	-	-	14.981	31	464.424
Total Gross/Weapon System Cost			18.212	94	1,711.973	12.260	34	416.838	17.329	33	571.851	14.981	31	464.424	-	-	-	14.981	31	464.424

LI MD07 - THAAD Missile Defense Agency UNCLASSIFIED
Page 1 of 10

P-1 Line #29

Exhibit P-40, Budget Line Item Justification: PB 2015 Missile Defense Agency

Date: March 2014

Appropriation / Budget Activity / Budget Sub Activity:

P-1 Line Item Number / Title:

0300D: Procurement, Defense-Wide / BA 01: Major Equipment / BSA 17: Major

MD07 / THAAD

Equipment, Missile Defense Agency

ID Code (A=Service Ready, B=Not Service Ready): B

Program Elements for Code B Items: 0603884C, 0603881C

Other Related Program Elements: 0603881C, 0603884C

Line Item MDAP/MAIS Code: 362

Item MDAP/MAIS Code(s):

						` '														
Exhibits Sch	nedule			FY 2016			FY 2017			FY 2018			FY 2019		To	Comple	te		Total	
Title*	Exhibits	ID CD	Unit Cost	Qty (Each)	Total Cost	Unit Cost (\$ M)	Qty (Each)	Total Cost	Unit Cost (\$ M)	Qty (Each)	Total Cost	Unit Cost (\$ M)	Qty (Each)	Total Cost	Unit Cost (\$ M)	Qty (Each)	Total Cost (\$ M)	Unit Cost	Qty (Each)	Total Cost
Item - THAAD	P-5, P-5a, P-21	В	15.860	38	602.692	17.775	30	533.258	16.932	29	491.026	15.832	29	459.124	15.545	135	2,098.614	16.225	453	7,349.800
Total Gross/Weapon System Cost			15.860	38	602.692	17.775	30	533.258	16.932	29	491.026	15.832	29	459.124	15.545	135	2,098.614	16.225	453	7,349.800

\*For Items, Title represents the Item Number / Title [DODIC].

Note: Totals in this Exhibit P-40 set may not be exact or add due to rounding.

### Justification:

Funding shown above supports the procurement of the listed THAAD Interceptors, Launchers, Tactical Station Groups, new equipment & training devices for the Batteries and Institutional Training Base, all associated peculiar support equipment (to include the Mobile Support Truck, Generator set, spares transport shelter, and the Battery Logistics Operation Center), and engineering changes. RDT&E funded tactical hardware (first two THAAD batteries) are not included in the costs above.

"Procurement Quantity" and "Flyaway Unit Cost" above represent interceptors only, but the "Net Procurement" cost above includes the costs of all hardware. Prior FYs and FY 2014 funding includes procurement of significant number of ground components, which affects the "Gross Weapon System Unit Cost".

LI MD07 - THAAD Missile Defense Agency Page 2 of 10

P-1 Line #29

Exhibit P-5, Cost Analysis: PB 2015 Missile Defense Agency

Date: March 2014

Appropriation / Budget Activity / Budget Sub Activity:

P-1 Line Item Number / Title:

Item Number / Title [DODIC]:

0300D / 01 / 17

MD07 / THAAD

- / THAAD

	Prior			FY 2015	FY 2015	FY 2015					То	
Resource Summary	Years	FY 2013	FY 2014	Base	OCO#	Total	FY 2016	FY 2017	FY 2018	FY 2019	Complete	Total
Procurement Quantity (Units in Each)	94	34	33	31	-	31	38	30	29	29	135	453
Gross/Weapon System Cost (\$ in Millions)	1,711.973	416.838	571.851	464.424	-	464.424	602.692	533.258	491.026	459.124	2,098.614	7,349.800
Less PY Advance Procurement (\$ in Millions)	-	-	-	-	-	-	-	-	-	-	-	-
Net Procurement (P1) (\$ in Millions)	1,711.973	416.838	571.851	464.424	-	464.424	602.692	533.258	491.026	459.124	2,098.614	7,349.800
Plus CY Advance Procurement (\$ in Millions)	-	-	-	-	-	-	-	-	-	-	-	-
Total Obligation Authority (\$ in Millions)	1,711.973	416.838	571.851	464.424	-	464.424	602.692	533.258	491.026	459.124	2,098.614	7,349.800
(The following	Resource Sumi	mary rows are fo	or informational p	urposes only. Th	ne corresponding	budget request	s are documente	ed elsewhere.)			]	
Initial Spares (\$ in Millions)	-	-	-	-	-	-	-	-	-	-	-	-
Gross/Weapon System Unit Cost (\$ in Millions)	18.212	12.260	17.329	14.981	-	14.981	15.860	17.775	16.932	15.832	15.545	16.225

<sup>#</sup> The FY 2015 OCO Request will be submitted at a later date.

		Р	rior Years	;		FY 2013			FY 2014		FY	2015 Bas	se	FY	2015 OC	:0	FY	2015 Tot	al
Cost Elements	ID CD	Unit Cost	Qty (Each)	Total Cost (\$ M)															
Hardware Cost		*	,			·										,		,	
Recurring Cost																			
Interceptor <sup>(†)</sup>	В	11.610	94	1,091.307	11.022	34	374.740	11.022	33	363.726	12.367	31	383.377	-	-	-	12.367	31	383.37
Launcher <sup>(†)</sup>	В	7.641	24	183.377	-	-	-	7.743	6	46.457	-	-	-	-	-	-	-	-	-
Support Equipment	В	31.393	3	94.180	2.059	1	2.059	24.567	1	24.567	-	-	-	-	-	-	-	-	-
TFCC Tactical Station Group <sup>(†)</sup>	В	10.086	8	80.690	-	-	-	9.270	2	18.540	-	-	-	-	-	-	-	-	-
Subtotal: Recurring Cost		-	-	1,449.554	-	-	376.799	-	-	453.290	-	-	383.377	-	-	-	-	-	383.37
Subtotal: Hardware Cost		-	-	1,449.554	-	-	376.799	-	-	453.290	-	-	383.377	-	-	-	-	-	383.37
Support Cost																			
Obsolescence and Modifications		-	-	-	10.870	1	10.870	21.840	1	21.840	36.502	1	36.502	-	-	-	36.502	1	36.50
Production Support & Testing		256.660	1	256.660	18.356	1	18.356	42.760	1	42.760	29.830	1	29.830	-	-	-	29.830	1	29.83
Training		5.759	1	5.759	10.813	1	10.813	53.961	1	53.961	14.715	1	14.715	-	-	-	14.715	1	14.71
Subtotal: Support Cost		-	-	262.419	-	-	40.039	-	-	118.561	-	-	81.047	-	-	-	-	-	81.04
Gross/Weapon System Cost		18.212	94	1,711.973	12.260	34	416.838	17.329	33	571.851	14.981	31	464.424	_	-	_	14.981	31	464.42

Exhibit P-5, Cost Analysis: PB 2015 Missile Defense Agency

Appropriation / Budget Activity / Budget Sub Activity:

0300D / 01 / 17

Date: March 2014

Item Number / Title [DODIC]:
- / THAAD

03000701717							IVIDUT	IIIAAD	<u>,                                      </u>					-	/ IIIAAL	,			
			FY 2016			FY 2017			FY 2018			FY 2019		To	Complet	е	1	Total Cost	:
Cost Elements	ID CD	Unit Cost	<b>Qty</b> (Each)	Total Cost (\$ M)	Unit Cost	Qty (Each)	Total Cost (\$ M)	Unit Cost	Qty (Each)	Total Cost (\$ M)	Unit Cost	<b>Qty</b> (Each)	Total Cost (\$ M)	Unit Cost	Qty (Each)	Total Cost (\$ M)	Unit Cost	Qty (Each)	Total Cost (\$ M)
Hardware Cost																			
Recurring Cost																			
Interceptor <sup>(†)</sup>	В	12.334	38	468.690	12.715	30	381.450	12.927	29	374.891	13.115	29	380.325	13.006	135	1,755.864	12.305	453	5,574.370
Launcher <sup>(†)</sup>	В	-	-	-	7.788	6	46.728	-	-	-	-	-	-	-	-	-	7.682	36	276.562
Support Equipment	В	-	-	-	9.151	1	9.151	21.080	1	21.080	-	-	-	-	-	-	21.577	7	151.037
TFCC Tactical Station Group <sup>(†)</sup>	В	-	-	_	-	-	_	-	-	_	-	-	_	-	-	_	9.923	10	99.230
Subtotal: Recurring Cost		-	-	468.690	-	-	437.329	-	-	395.971	-	-	380.325	-	-	1,755.864	-	-	6,101.199
Subtotal: Hardware Cost		-	-	468.690	-	-	437.329	-	-	395.971	-	-	380.325	-	-	1,755.864	-	-	6,101.199
Support Cost	,										,				•				
Obsolescence and Modifications		66.157	1	66.157	43.904	1	43.904	46.187	1	46.187	36.328	1	36.328	227.092	1	227.092	61.110	8	488.880
Production Support & Testing		39.416	1	39.416	29.075	1	29.075	39.878	1	39.878	42.471	1	42.471	115.658	1	115.658	68.234	9	614.104
Training		28.429	1	28.429	22.950	1	22.950	8.990	1	8.990	-	-	-	-	-	-	20.802	7	145.617
Subtotal: Support Cost		-	-	134.002	-	-	95.929	-	-	95.055	-	-	78.799	-	-	342.750	-	-	1,248.60
Gross/Weapon System Cost		15.860	38	602.692	17.775	30	533.258	16.932	29	491.026	15.832	29	459.124	15.545	135	2,098.614	16.225	453	7,349.800

### Remarks:

"Procurement Quantity" above represents interceptors only, but the "Net Procurement" cost above includes the costs of all hardware. Prior FYs and FY 2014 funding includes procurement of significant number of ground components, which affects the "Gross Weapon System Unit Cost". Support Equipment captures miscellaneous items such as THAAD Active Leak Sensor System (TALSS) and Battery Support Center (BSC) that support the THAAD Batteries and varies from year to year.

Concurrent with the FY 2012 - FY 2014 U.S. procurements, MDA THAAD is executing a Foreign Military Sales (FMS) Case for two (2) batteries and 192 Interceptors. The magnitude of the USG and FMS combined buy reduced the unit price. FY 2015 is planned to be procured as a standalone purchase of a significantly lower quantity resulting in an interceptor unit price increase.

Obsolescence above encompasses those mitigation activities that protects the system design and ensures a producible technical data package. This preserves an affordable future product cost within an acceptable production schedule. Examples of these mitigation activities include component replacement parts, materials, and qualification, alternative source/parts qualification, and piece part/material bridge buys to support subsequent years' production lots.

(†) indicates the presence of a P-5a

LI MD07 - THAAD Missile Defense Agency UNCLASSIFIED
Page 4 of 10

P-1 Line #29

Exhibit P-5a, Procurement History and Planning: PB 2015 Missile Defense Agency

Appropriation / Budget Activity / Budget Sub Activity:

0300D / 01 / 17

Date: March 2014

P-1 Line Item Number / Title:

MD07 / THAAD

- / THAAD

			-									
Cost Elements	0 C 0	FY	Contractor and Location	Method/Type or Funding Vehicle	Location of PCO	Award Date	Date of First Delivery	Qty (Each)	Unit Cost	Specs Avail Now?	Date Revision Available	RFP Issue Date
Interceptor - Lot 1 <sup>(†)</sup>		2010	Lockheed Martin / Troy, AL	SS / FPIF	MDA, Huntsville, AL	Mar 2011	Jul 2012	26	14.480	Y		Oct 2009
Interceptor - Lot 2 <sup>(†)</sup>		2011	Lockheed Martin / Troy, AL	SS / FPIF	MDA, Huntsville, AL	Mar 2011	Jul 2013	22	12.100	Y		Oct 2009
Interceptor - Lot 4 <sup>(†)</sup>		2012	Lockheed Martin / Troy, AL	SS / FPIF	MDA, Huntsville, AL	Aug 2012	Nov 2014	46	11.022	Y		Aug 2011
Interceptor - Lot 5 <sup>(†)</sup>		2013	Lockheed Martin / Troy, AL	SS / FPIF	MDA, Huntsville, AL	Sep 2013	Apr 2016	34	11.022	Y		Aug 2011
Interceptor - Lot 6 <sup>(†)</sup>		2014	Lockheed Martin / Troy, AL	SS / FPIF	MDA, Huntsville, AL	Dec 2013	Jan 2017	33	11.022	Y		Jun 2013
Interceptor - Lot 7 <sup>(†)</sup>		2015	Lockheed Martin / Troy, AL	SS / FPIF	MDA, Huntsville, AL	Feb 2015	Sep 2017	31	12.367	Y		Mar 2014
Launcher - Lot 1 <sup>(†)</sup>		2010	Lockheed Martin / Camden, AR	SS/FFP	MDA, Huntsville, AL	May 2011	Apr 2013	6	9.170	Y		Oct 2009
Launcher - Lot 3 <sup>(†)</sup>		2011	Lockheed Martin / Camden, AR	SS/FFP	MDA, Huntsville, AL	Jul 2012	May 2014	6	9.130	Y		Aug 2011
Launcher - Lot 2 <sup>(†)</sup>		2011	Lockheed Martin / Camden, AR	SS/FFP	MDA, Huntsville, AL	May 2011	Oct 2013	6	9.130	Y		Oct 2009
Launcher - Lot 4 <sup>(†)</sup>		2012	Lockheed Martin / Camden, AR	SS/FFP	MDA, Huntsville, AL	Jul 2012	Nov 2014	6	7.490	Y		Aug 2011
Launcher - Lot 6 <sup>(†)</sup>		2014	Lockheed Martin / Camden, AR	SS/FFP	MDA, Huntsville, AL	Jun 2014	Apr 2016	6	7.743	Y		Jun 2013
TFCC Tactical Station Group - Lot $2^{(\dagger)}$		2011	Lockheed Martin / Camden, AR	SS/FFP	MDA, Huntsville, AL	Mar 2011	May 2013	4	10.100	Y		Oct 2009
TFCC Tactical Station Group - Lot $3^{(\dagger)}$		2011	Lockheed Martin / Camden, AR	SS/FFP	MDA, Huntsville, AL	Jul 2012	Aug 2014	2	10.100	Y		Aug 2011
TFCC Tactical Station Group - Lot $4^{(\dagger)}$		2012	Lockheed Martin / Camden, AR	SS/FFP	MDA, Huntsville, AL	Jul 2012	Oct 2014	2	9.260	Y		Aug 2011
TFCC Tactical Station Group - Lot $6^{(\dagger)}$		2014	Lockheed Martin / Camden, AR	SS / FFP	MDA, Huntsville, AL	Jun 2014	Jul 2016	2	9.270	Y		Jun 2013

<sup>(†)</sup> indicates the presence of a P-21

### Remarks:

- Lot 3 Interceptors were removed due to a Congressional Mark in FY 2011.
- Lot numbers relate to groupings in fiscal years and no Launcher or Tactical Fire Control and Communication (TFCC) Tactical Station Groups (TSGs) were scheduled for procurement in FY 2013, therefore Lot 5 is an interceptor only Lot.
- Delivery of Battery 3 completed in FY 2013.
- Delivery of Battery 4 completes in FY 2014.
- Delivery of Battery 5 completes in FY 2015.
- Delivery of Battery 6 completes in FY 2016.
- Delivery of additional Battery completes in FY 2019
- Concurrent with the FY 2012 FY 2014 U.S. procurements, MDA THAAD is executing a Foreign Military Sales (FMS) Case for two (2) Batteries and 192 Interceptors. The magnitude of the USG and FMS combined buy reduced the unit price. FY 2015 is planned to be procured as a standalone purchase of a significantly lower quantity resulting in an interceptor unit price increase.

UNCLASSIFIED
Page 5 of 10

Exhibit F	P-21, Pro	oducti	on Sc	hedu	le: PE	3 201	5 Mis	sile D	efens	e Age	ency											Date	e: Ma	rch 20	)14				
Appropr 0300D /		Budge	et Acti	ivity /	Budg	get Si	ub Ac	ctivity	<b>'</b> :		<b>Line</b> 07 / T			ber /	Title:	1							<b>Nur</b> HAAI	nber /	Title	[DOI	DIC]:		
	Cost E	lements in Each)						,		Fiscal Y	ear 2011											Fiscal Y	ear 2012	2					
	(0////0//	Lucin	ACCEPT				_			1100011			Calendar	Year 20	11							1100011		ndar Yea	2012				$\vdash$
M O F C R O # FY	SERVICE	PROC QTY	PRIOR TO 1 OCT 2010	BAL DUE AS OF 1 OCT	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
Interceptor - L					-							-		_			-											•	
1 2010		26	_	26						Ι -	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	1	-	-	Π
Interceptor - L																													
2 2011		22	_	22						I -	-	-	-	l -	-	_	-	-	-	_	-	-	-	T -	-	-	-	-	
nterceptor - L		1														1													
3 2012		46	-	46																							-	-	П
nterceptor - L		1																											
4 2013		34	_	34																									
Interceptor - L		1																											
5 2014		33	_	33																									
nterceptor - L																													
6 2015		31	_	31																									
_auncher - Lo	1	1																											
7 2010		6	-	6								-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	
Launcher - Lo		ļ										ļ.	-			ı						1	-	-					
8 2011	MDA	6	-	6																						-	-	-	
Launcher - Lo						1				-					1										ı				
9 2011	MDA	6	-	6								-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	
Launcher - Lo	it 4					1				-		!		1				1											
10 2012	MDA	6	-	6																						-	-	-	
Launcher - Lo	ot 6											J.																	
11 2014	MDA	6	-	6																									
TFCC Tactica	I Station Grou	ıp - Lot 2				1		-		-					1														
12 2011	MDA	4	-	4						-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	
TFCC Tactica	I Station Grou	ıp - Lot 3										ļ.	-			1						1							
13 2011	MDA	2	-	2																						-	-	-	
TFCC Tactica	l Station Grou	ıp - Lot 4								-																			
14 2012	MDA	2	-	2																						-	-	-	
TFCC Tactica	l Station Grou	ıp - Lot 6																											
15 2014	MDA	2	-	2																									
		'		,	O C T	N O	D E C	J A N	F E B	M A R	A P R	M A Y	J J	n n	A U	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 J	J J	A U G	S E P	E A
					1	V	0	N	В	K	K	T	N	L	G	<u> </u>	1	V	L	N N	В	K	ĸ	T	N	L	G	<u> </u>	L

LI MD07 - THAAD Missile Defense Agency UNCLASSIFIED
Page 6 of 10

P-1 Line #29 **Volume 2b - 6** 

	,	Juucu	on sc	neaui	e: PE	201	S IVIIS	Sile D	erens	e Age	ency											Date	e: Ma	rch 20	)14				
<b>Appropr</b> 0300D / (		Budge	t Acti	vity /	Budg	jet Si	ub Ac	tivity	:	- 1	<b>Line</b> 07 / T			ber /	Title:								Nun HAA[		Title	[DOD	IC]:		
	Cost El	lements in Each)								Fiscal Y	ear 2013											Fiscal Y	ear 2014						
	(0		ACCEPT										alendar	Year 20	13									ndar Yea	2014				$\vdash$
M O F C R		PROC	PRIOR TO 1 OCT	BAL DUE AS OF	0	N O	D E	J A	F E	M A	A P	M A	J	J	A U	S E	O C	N O	D E	J A	F E	M A	A P	M A	Ŋ	Ŋ	A U	S E	В
0 # FY	SERVICE	QTY	2012	1 OCT	Т	V	С	N	В	R	R	Υ	N	L	G	Р	Т	V	С	N	В	R	R	Υ	N	L	G	Р	L
Interceptor - L								1							1														1
1 2010		26	1	25	-	-	-	-	-	3	6	6	7	3															
Interceptor - L							1																						
2 2011		22	-	22	-	-	-	-	-	-	-	-	-	4	4	4	3	3	3	-	-	-	1						
nterceptor - L																							1						
3 2012		46	-	46	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	
nterceptor - L							1	T	1													1	1						_
4 2013		34	-	34												-	-	-	-	-	-	-	-	-	-	-	-	-	
nterceptor - L								,																					
5 2014		33	-	33															-	-	-	-	-	-	-	-	-	-	
nterceptor - L																													
6 2015		31	-	31																									
auncher - Lo																													_
7 2010		6	-	6	-	-	-	-	-	-	1	2	-	-	3														
Launcher - Lo																													
8 2011	MDA	6	-	6	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	1	1	1	1	1	
Launcher - Lo	t 2																												
9 2011	MDA	6	-	6	-	-	-	-	-	-	-	-	-	-	-	-	1	1	1	1	1	1							
Launcher - Lo	t 4																												
10 2012	MDA	6	-	6	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	
Launcher - Lo	t 6						•																						
11 2014	MDA	6	-	6																					-	-	-	-	
TFCC Tactica	Station Grou	p - Lot 2																											
12 2011	MDA	4	-	4	-	-	-	-	-	-	-	1	1	-	-	-	-	-	2										
TFCC Tactica	l Station Grou	p - Lot 3																											
13 2011	MDA	2	-	2	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	1	1	
TFCC Tactica	I Station Grou	p - Lot 4								-							l						ļ.						
14 2012		2	-	2	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	
TFCC Tactical															1									l .					
15 2014		2	-	2																					-	-	-	_	
1	1				0	N	D	J	F	М	Α	М	J	J	Α	S	0	N	D	J	F	М	Α	м	J	J	Α	s	В
					C T	0	E	A N	E	A R	P R	A Y	U	U	U	E P	C T	0	E	A	E B	A R	P	A Y	U	U	Ü G	Ë P	A
					T	V	С	N	В	∣ R	R	Υ	N	L	G	P	T	V	С	N	В	R	R	Y	N	L	G	P	L

LI MD07 - THAAD Missile Defense Agency UNCLASSIFIED
Page 7 of 10

P-1 Line #29

Exhibit F Appropr												Item	Num	ber /	Title	!		_					e: Mai n Num			[DOI	DIC]:		
0300D <i>I</i> (	01 <i>I</i> 17									ME	07 <i>I</i> 7	ΓΗΑΑΙ	)									-/T	HAAD	)					
		lements in Each)								Fiscal \	ear 2015	5										Fiscal Y	ear 2016						
			ACCEPT				_					C	alendar	Year 20	15								Calen	dar Yea	2016				
O F C R O # FY	SERVICE	PROC QTY	PRIOR TO 1 OCT 2014	BAL DUE AS OF 1 OCT	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
Interceptor - L											1				1														
1 2010		26	26	- 1																									-
Interceptor - L																													
2 2011	MDA	22	22	-																									-
Interceptor - L																													
3 2012	MDA	46	-	46	-	4	. 4	1 4	1 4	4	4	4	4	4	. 4	4	2		-										-
Interceptor - L	ot 5								-		1	1																	
4 2013	MDA	34	-	34	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	4	4	4	4	4	4	1
Interceptor - L	ot 6	'																										,	
5 2014	MDA	33	-	33	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	3
Interceptor - L	ot 7						•								•												,,		
6 2015	MDA	31	-	31					-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	3
Launcher - Lo	t 1						•								•												,,		
7 2010	MDA	6	6	-																									-
Launcher - Lo	t 3																												
8 2011	MDA	6	5	1	1																								-
Launcher - Lo	t 2																												
9 2011	MDA	6	6	-																									-
Launcher - Lo																													
10 2012	MDA	6	-	6	-	1	1	1 1	1 1	1	1																		-
Launcher - Lo																													
11 2014		6	-	6	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	1	1	1	1	1	1	-
TFCC Tactica		<del> </del>																											
12 2011		4	4	-																									-
TFCC Tactica		<del>.</del>																											
13 2011		2	2	-																									-
TFCC Tactica		<del> </del>		, ,																								,	
14 2012		2	-	2	1	1																							-
TFCC Tactica		<del> </del>		, ,					1	1	1	1	1	1		1		1	1			1					1	1	
15 2014	MDA	2	-	2	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	1	-	1	
					O C T	N O V	D E C	J A N	F E B	M A R	A P R	M A Y	N N	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	J U L	A U G	S E P	B A L
				ι			1			1				1	1		J.	ı	ı		1	J.			1				

LI MD07 - THAAD Missile Defense Agency UNCLASSIFIED
Page 8 of 10

P-1 Line #29

Exhibit P-21, Pi	roducti	ion Sc	hedu	le: PB	201	5 Mis	sile D	efens	e Age	ency											Dat	e: Ma	rch 2	014				
Appropriation / 0300D / 01 / 17	Budge	et Acti	vity /	Budg	et Su	ıb Ac	tivity	:			e Item THAA		nber /	Title	:							n <b>Nu</b> r HAAI	nber /	/ Title	[DOI	DIC]:		
	Elements								Fig. a. I. V	/a.a.r 204	•						,				Finant V	Year 201						
(Units	s in Each)	ACCEPT	1				1		FISCAI 1	ear 2017		Salanda	r Year 20	47					I		FISCAL		ndar Yea	2040				
м		PRIOR	BAL									Jaierida	r tear 20	17	T							Cale	nuar rea	1 2016				
O   F	PROC QTY	TO 1 OCT 2016	AS OF 1 OCT	O C T	N O V	D E C	J A N	F E B	M A R	A P R	M A Y	N U	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	N U	U J	A U G	S E P	A L
Interceptor - Lot 1								,			,											,	,					,
1 2010 MDA	26	26	-																									
Interceptor - Lot 2																												
2 2011 MDA	22	22	-																									
Interceptor - Lot 4		1	1																									
3 2012 MDA	46	46	-																									
Interceptor - Lot 5		1																										
4 2013 MDA	34	24	10	4	4	2																						
Interceptor - Lot 6		1						1	I		1	1	1			1												_
5 2014 MDA	33	-	33	-	-	-	4	4	4	4	4	4	4	. 4	1													
nterceptor - Lot 7		1	T											1	1 -									_				
6 2015 MDA	31	-	31	-	-	-	-	-	-	-	-	-	-	-	3	4	4	4	4	4	4	4						
Launcher - Lot 1																					_				_			_
7 2010 MDA Launcher - Lot 3	6	6	-																									
8 2011 MDA	6	6	l -			-																				_		Τ.
Launcher - Lot 2	0	0	-																									
9 2011 MDA	6	6	-																		-	-				-		Τ.
Launcher - Lot 4																												
10 2012 MDA	6	6	-																									Τ.
Launcher - Lot 6																												
11 2014 MDA	6	6	-																									Τ.
TFCC Tactical Station Gro	oup - Lot 2																											
12 2011 MDA	4	4	-																									
TFCC Tactical Station Gro	oup - Lot 3		1																									
13 2011 MDA	2	2	-																									
TFCC Tactical Station Gro	oup - Lot 4																											
14 2012 MDA	2	2	-																									
TFCC Tactical Station Gro	oup - Lot 6																											
15 2014 MDA	2	2	-																									
				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	L U J	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	L U	A U G	S E P	B A L

LI MD07 - THAAD Missile Defense Agency UNCLASSIFIED
Page 9 of 10

P-1 Line #29

Exhibit P-21, Production Schedule: PB 2015 Missile Defense Agency

Date: March 2014

Appropriation / Budget Activity / Budget Sub Activity: 0300D / 01 / 17

P-1 Line Item Number / Title:

Item Number / Title [DODIC]:

MD07 / THAAD

- / THAAD

	<u> </u>				71170											
		Product	ion Rates (Each / I	Month)	Procurement Leadtime (Months)											
MFR						Init	ial		Reorder							
Ref #	MFR Name - Location	MSR	1-8-5	MAX	ALT Prior to Oct 1	ALT After Oct 1	Mfg PLT	Total After Oct 1	ALT Prior to Oct 1	ALT After Oct 1	Mfg PLT	Total After Oct 1				
1	Lockheed Martin - Troy, AL	1.00	4.00	7.00	6	6	16	22	6	4	27	31				
2	Lockheed Martin - Troy, AL	1.00	4.00	5.00	6	6	28	34	6	4	27	31				
3	Lockheed Martin - Troy, AL	1.00	4.00	5.00	6	11	27	38	6	4	27	31				
4	Lockheed Martin - Troy, AL	1.00	4.00	5.00	6	12	31	43	6	4	27	31				
5	Lockheed Martin - Troy, AL	1.00	4.00	5.00	6	3	37	40	6	4	27	31				
6	Lockheed Martin - Troy, AL	1.00	4.00	5.00	6	6	31	37	6	4	27	31				
7	Lockheed Martin - Camden, AR	1.00	1.00	3.00	6	8	23	31	6	4	21	25				
8	Lockheed Martin - Camden, AR	1.00	1.00	2.00	6	10	22	32	6	4	21	25				
9	Lockheed Martin - Camden, AR	1.00	1.00	2.00	6	8	29	37	6	4	21	25				
10	Lockheed Martin - Camden, AR	1.00	1.00	2.00	6	10	28	38	6	3	21	24				
11	Lockheed Martin - Camden, AR	1.00	1.00	2.00	6	6	22	28	6	4	21	25				
12	Lockheed Martin - Camden, AR	1.00	2.00	2.00	6	6	26	32	6	4	24	28				
13	Lockheed Martin - Camden, AR	1.00	1.00	1.00	6	10	25	35	6	4	24	28				
14	Lockheed Martin - Camden, AR	1.00	1.00	1.00	6	10	27	37	6	3	24	27				
15	Lockheed Martin - Camden, AR	1.00	1.00	1.00	6	6	25	31	6	4	24	28				

### Remarks:

- Concurrent with the FY 2012 FY 2014 U.S. procurements, MDA THAAD is executing a Foreign Military Sales (FMS) Case for two (2) Batteries and 192 Interceptors. FY 2015 is planned to be procured as a standalone purchase of a significantly lower quantity of 31 U.S. interceptors only.
- The periods between U.S. Government interceptor deliveries will be filled with deliveries of Foreign Military Sales (FMS) interceptors and the buildup of sub-assemblies to support U.S. and FMS interceptors.
- Manufacturing lead times can vary due to factors such as pursuing multiple lot buys concurrently to achieve price discounts, increasing the lead time of the second simultaneously awarded lot buy.
- Interceptor Lots 5, 6 and 7 are delivered on an accelerated schedule to mitigate prior delayed contract awards and deliver interceptors to fill Batteries.

The first non-gray cell in the Delivery Schedule indicates the Contract Award Date.

Note: Due to space limitations, quantities in the Exhibit P-21 delivery calendar are truncated and rounded based on the maximum quantity in the calendar as follows. If the maximum quantity is less than or equal to than 9,999, all quantities are shown as each. If the maximum quantity is between 10,000 and 999,999 all quantities are shown in thousands. If the maximum quantity is between 1,000,000 and 999,999,999 all quantities are shown in millions (rounded to the nearest thousand). If the maximum quantity is equal or greater than 1,000,000,000 all quantities are shown in billions (rounded to the nearest million).

LI MD07 - THAAD Missile Defense Agency UNCLASSIFIED Page 10 of 10

P-1 Line #29

Exhibit P-40, Budget Line Item Justification: PB 2015 Missile Defense Agency

Date: March 2014

Appropriation / Budget Activity / Budget Sub Activity:

0300D: Procurement, Defense-Wide / BA 01: Major Equipment / BSA 17: Major

MD09 / AEGIS BMD

P-1 Line Item Number / Title:

Equipment, Missile Defense Agency

ID Code (A=Service Ready, B=Not Service Ready) : B

Program Elements for Code B Items: 0604881C. 0603892C. 0604880C

Other Related Program Elements: 0604880C, 0603892C.

Volume 2b - 11

0604881C

Line Item MDAP/MAIS Code: 362

Item MDAP/MAIS Code(s):

	1.00		-(-)-									
Resource Summary	Prior Years	FY 2013	FY 2014	FY 2015 Base	FY 2015 OCO <sup>#</sup>	FY 2015 Total	FY 2016	FY 2017	FY 2018	FY 2019	To Complete	Total
Procurement Quantity (Units in Each)	69	33	52	30	-	30	48	52	54	72	Continuing	Continuing
Gross/Weapon System Cost (\$ in Millions)	989.230	463.374	580.814	435.430	-	435.430	740.338	976.716	1,072.682	1,291.465	Continuing	Continuing
Less PY Advance Procurement (\$ in Millions)	-	-	-	-	-	-	68.880	70.189	69.819	88.499	Continuing	Continuing
Net Procurement (P1) (\$ in Millions)	989.230	463.374	580.814	435.430	-	435.430	671.458	906.527	1,002.863	1,202.966	Continuing	Continuing
Plus CY Advance Procurement (\$ in Millions)	-	-	-	68.880	-	68.880	70.189	69.819	88.499	90.180	Continuing	Continuing
Total Obligation Authority (\$ in Millions)	989.230	463.374	580.814	504.310	-	504.310	741.647	976.346	1,091.362	1,293.146	Continuing	Continuing
(The following	Resource Sumr	nary rows are fo	r informational p	urposes only. Th	ne corresponding	g budget request	s are documente	ed elsewhere.)				,
Initial Spares (\$ in Millions)	-	-	-	-	-	-	-	-	-	-	-	-
Flyaway Unit Cost (\$ in Millions)	27.189	11.116	10.070	11.605	-	11.605	11.576	11.573	11.676	13.982	Continuing	Continuing
Gross/Weapon System Unit Cost (\$ in Millions)	14.337	14.042	11.170	14.514	-	14.514	15.424	18.783	19.864	17.937	Continuing	Continuing

<sup>&</sup>lt;sup>#</sup> The FY 2015 OCO Request will be submitted at a later date.

# **Description:**

The SM-3 Block IB will incorporate a two-color, all reflective infrared seeker, enabling longer range acquisition and increased threat discrimination. A Throttleable Divert Altitude Control System (TDACS) will provide a more flexible and lower cost alternative to the Solid Divert Altitude Control System (SDACS). Initial production of the SM-3 Blk IB began in FY 2012 (quantity of 14), with a larger rate production procured in FY 2013 (quantity of 33), and planned and procured in FY 2014 (quantity of 52).

Prior Year Procurement quantity: A total of 41 SM-3 Block IA's appropriated in FY 2008, FY 2010 and FY 2011. The SM-3 Block IA's were transitioned from RDT&E to Procurement, Defense-Wide in FY 2009 utilizing funding from both appropriations. In FY 2012 14 SM-3 Block IA's were procured in a split buy which included 14 SM-3 Block IB's.

### For FY 2015:

### Missiles:

Procure quantity of 30 SM-3 Block IBs, as well as, provide a total of \$68.880 Million to Advance Procure four long lead items for the FY 2016 missile buy in order to maintain the planned production schedule. These four long lead items include the MK104 Dual Thrust Rocket Motors (26 month lead time), MK72 Boosters (29 month lead time), Integrated Dewar Assemblies (35 month lead time), and Circuit Card Assemblies (26 month lead time).

### Shipsets:

Procure two (2) AMOD BMD 5.0 CU DDGs Shipsets Inline

Procure two (2) BMD 5.0 shipsets

Install two (2) BMD 5.0 shipsets

Procure two (2) BMD 5.1 Vertical Launch System (VLS) upgrade kits

FY 2015 Flyaway Cost consists of 30 SM-3 Block IB's for \$348.139 Million

UNCLASSIFIED LI MD09 - AEGIS BMD Missile Defense Agency Page 1 of 12 P-1 Line #30

Exhibit P-40, Budget Line Item Justification: PB 2015 Missile Defense Agency

Date: March 2014

Appropriation / Budget Activity / Budget Sub Activity:

P-1 Line Item Number / Title:

0300D: Procurement, Defense-Wide / BA 01: Major Equipment / BSA 17: Major

MD09 / AEGIS BMD

Equipment, Missile Defense Agency

 $\textbf{ID Code} \,\, (\mathsf{A}\text{=}\mathsf{Service} \,\, \mathsf{Ready}, \, \mathsf{B}\text{=}\mathsf{Not} \,\, \mathsf{Service} \,\, \mathsf{Ready}) : B$ 

Program Elements for Code B Items: 0604881C, 0603892C, 0604880C

Other Related Program Elements: 0604880C, 0603892C,

0604881C

Line Item MDAP/MAIS Code: 362

Item MDAP/MAIS Code(s):

FY 2016 Flyway Cost consists of 48 SM-3 Block IB's for \$552.684 Million

FY 2017 Flyaway Cost consists of 42 SM-3 Block IB's for \$486.859 Million and 10 SM-3 Block IIA's for \$239.0 Million

FY 2018 Flyaway Cost consists of 41 SM-3 Block IB's for \$478.158 Million and 13 SM-3 Block IIA's for \$289.90 Million

FY 2019 Flyaway Cost consists of 51 SM-3 Block IB's for \$590.427 Million and 21 SM-3 Block IIA's for \$432.60 Million

Block IIA's

FY 2017 Gross/Weapon System Cost consists of \$543.185 Million/42 for SM-3 Block IB's and \$305.630 Million/10 for SM-3 Block IIA's

FY 2018 Gross/Weapon System Cost consists of \$527.502 Million/41 for SM-3 Block IB's and \$382.845 Million/13 for SM-3 Block IIA's

FY 2019 Gross/Weapon System Cost consists of \$616.260 Million/51 for SM-3 Block IB's and \$563.697 Million/21 for SM-3 Block IIA's

Exhibits Schedule  Title* Exhibits			Prior Years				FY 2013			FY 2014		FY	′ 2015 Ba	se	F۱	/ 2015 O	co	FY	2015 To	tal
			Unit Cost (\$ M)	Qty (Each)	Total Cost (\$ M)	Unit Cost (\$ M)	Qty (Each)	Total Cost (\$ M)	Unit Cost (\$ M)	Qty (Each)	Total Cost (\$ M)	Unit Cost (\$ M)	Qty (Each)	Total Cost (\$ M)	Unit Cost (\$ M)	Qty (Each)	Total Cost (\$ M)	Unit Cost (\$ M)	Qty (Each)	Total Cost
Item - Aegis BMD	P-5, P-5a, P-21	В	14.337	69	989.230	14.042	33	463.374	11.170	52	580.814	14.514	30	435.430	-	-	-	14.514	30	435.430
Total Gross/Weapon System Cost			14.337	69	989.230	14.042	33	463.374	11.170	52	580.814	14.514	30	435.430	-	-	-	14.514	30	435.430
Exhibits Scl	nedule		FY 2016			FY 2017			FY 2018			FY 2019			To Complete			Total		
Title*	Exhibits	ID CD	Unit Cost	Qty (Each)	Total Cost	Unit Cost	Qty (Each)	Total Cost	Unit Cost	Qty (Each)	Total Cost	Unit Cost	Qty (Each)	Total Cost (\$ M)	Unit Cost	Qty (Each)	Total Cost	Unit Cost (\$ M)	Qty (Each)	Total Cost
Item - Aegis BMD	P-5, P-5a, P-21	В	15.424	48	740.338	18.783	52	976.716	19.864	54	1,072.682	17.937	72	1,291.465	Continuing			Continuing		
Total Gross/Weapon System Cost			15.424	48	740.338	18.783	52	976.716	19.864	54	1,072.682	17.937	72	1,291.465	Continuing		l	Continuing		

\*For Items, Title represents the Item Number / Title [DODIC].

Note: Totals in this Exhibit P-40 set may not be exact or add due to rounding.

### Justification:

FY 2013: Full funding for 33 SM-3 Block IB's for delivery in FY 2015 FY 2014: Full funding for 52 SM-3 Block IB's for delivery in FY 2016

LI MD09 - AEGIS BMD Missile Defense Agency UNCLASSIFIED
Page 2 of 12

P-1 Line #30

Exhibit P-40, Budget Line Item Justification: PE	P-1 Line Item Number / Title:   dajor Equipment / BSA 17: Major			
Appropriation / Budget Activity / Budget Sub A 0300D: Procurement, Defense-Wide / BA 01: Majo Equipment, Missile Defense Agency	or Equipment / BSA 17: Major	MD09 / AEGIS BMD	Title:	
D Code (A=Service Ready, B=Not Service Ready) : B		Items: 0604881C, 0603892C,		
			'	
FY 2015: Full funding for 30 SM-3 Block IB's for delivery in FY 2016: Full funding for 48 SM-3 Block IB's for delivery in FY 2017: Full funding for 42 SM-3 Block IB's for delivery in FY 2018: Full funding for 41 SM-3 Block IB's for delivery in FY 2019: Full funding for 51 SM-3 Block IB's for delivery in FY	/ 2018 / 2019, and 10 SM-3 Block IIA for deliver / 2019, and 13 SM-3 Block IIA for deliver	ry in FY 2021		

LI MD09 - AEGIS BMD Missile Defense Agency UNCLASSIFIED
Page 3 of 12

P-1 Line #30

Exhibit P-5, Cost Analysis: PB 2015 Missile Defense Agency

Date: March 2014

Item Number / Title [DODIC]:

Appropriation / Budget Activity / Budget Sub Activity:

P-1 Line Item Number / Title:

- / Aegis BMD

0300D / 01 / 17

MD09 / AEGIS BMD

	Prior			FY 2015	FY 2015	FY 2015					То	
Resource Summary	Years	FY 2013	FY 2014	Base	OCO#	Total	FY 2016	FY 2017	FY 2018	FY 2019	Complete	Total
Procurement Quantity (Units in Each)	69	33	52	30	-	30	48	52	54	72	Continuing	Continuing
Gross/Weapon System Cost (\$ in Millions)	989.230	463.374	580.814	435.430	-	435.430	740.338	976.716	1,072.682	1,291.465	Continuing	Continuing
Less PY Advance Procurement (\$ in Millions)	-	-	-	-	-	-	68.880	70.189	69.819	88.499	Continuing	Continuing
Net Procurement (P1) (\$ in Millions)	989.230	463.374	580.814	435.430	-	435.430	671.458	906.527	1,002.863	1,202.966	Continuing	Continuing
Plus CY Advance Procurement (\$ in Millions)	-	-	-	68.880	-	68.880	70.189	69.819	88.499	90.180	Continuing	Continuing
Total Obligation Authority (\$ in Millions)	989.230	463.374	580.814	504.310	-	504.310	741.647	976.346	1,091.362	1,293.146	Continuing	Continuing
(The following	Resource Sum	mary rows are fo	or informational p	urposes only. Th	ne corresponding	g budget request	s are documente	ed elsewhere.)		:		
Initial Spares (\$ in Millions)	-	-	-	-	-	-	-	-	-	-	-	-
Gross/Weapon System Unit Cost (\$ in Millions)	14.337	14.042	11.170	14.514	-	14.514	15.424	18.783	19.864	17.937	Continuing	Continuing
#												

<sup>#</sup> The FY 2015 OCO Request will be submitted at a later date.

		Prior Years				FY 2013			FY 2014		FY	' 2015 Bas	e	F۱	2015 OC	0	FY	2015 Tot	al
Cost Elements	ID CD	Unit Cost	Qty (Each)	Total Cost (\$ M)	Unit Cost	Qty (Each)	Total Cost (\$ M)	Unit Cost	Qty (Each)	Total Cost (\$ M)	Unit Cost	Qty (Each)	Total Cost (\$ M)	Unit Cost	Qty (Each)	Total Cost (\$ M)	Unit Cost	Qty (Each)	Total Cost (\$ M)
Flyaway Cost					'			'				'			,		'		
Recurring Cost																			
SM-3 Block IA Procurement <sup>(†)</sup>	В	13.941	55	766.765	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
SM-3 Block IB Procurement <sup>(†)</sup>	В	13.402	14	187.625	12.130	33	400.275	10.070	52	523.641	11.605	30	348.139	-	-	-	11.605	30	348.13
SM-3 Block IIA	В	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Subtotal: Recurring Cost		-	-	954.390	- 1	-	400.275	-	-	523.641	-	-	348.139	-	-	-	-	-	348.13
Subtotal: Flyaway Cost		-	-	954.390	-	-	400.275	-	-	523.641	-	-	348.139	-	-	-	-	-	348.13
Hardware Cost		•				,			•										
Recurring Cost																			
ABMD 3.6.1 Hardware and Installs	В	15.000	1	15.000	7.500	1	7.500	-	-	-	-	-	-	-	-	-	-	-	-
ABMD 5.0 Hardware and Installs	В	-	-	-	-	-	-	-	-	-	17.600	2	35.200	-	-	-	17.600	2	35.20
ABMD 5.1 Hardware and Installs	В	-	-	-	-	-	-	-	-	-	2.408	1	2.408	-	-	-	2.408	1	2.40
BMD 3.6 to 4.1	В	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Canisters Procurement SM-3 Block IA/IB	В	0.265	28	7.419	0.220	30	6.599	0.349	52	18.173	0.285	30	8.550	-	-	-	0.285	30	8.55
Canisters Procurement SM-3 Block IIA	В	-	-	-	-	-	-	-	-	-	-	-	_	-	-	-	-	-	-
Subtotal: Recurring Cost		-	-	22.419	_	_	14.099	_	_	18.173	_	-	46.158	_	_		-		46.15

LI MD09 - AEGIS BMD Missile Defense Agency UNCLASSIFIED
Page 4 of 12

P-1 Line #30

								OIN	CLA33	ILIED									
Exhibit P-5, Cost	t Ar	alysis:	PB 2015	Missile	Defense	Agency	,								Date: Mar	ch 201	4		
<b>Appropriation / E</b> 0300D / 01 / 17	Bud	get Acti	vity / Bu	ıdget Sı	ub Activi	ty:		ne Item I / AEGIS		/ Title:					Item Num - / Aegis B		itle [DOI	DIC]:	
		Р	rior Years	;		FY 2013			FY 2014		F	/ 2015 Bas	e	F	Y 2015 OCC	<u> </u>	FY	2015 Tota	al
Cost Elements	ID CD	Unit Cost	Qty (Each)	Total Cost (\$ M)	Unit Cost	Qty (Each)	Total Cost (\$ M)	Unit Cost	Qty (Each)	Total Cost (\$ M)	Unit Cost	Qty (Each)	Total Cost (\$ M)	Unit Cost	Qty (Each)	Total Cost (\$ M)	Unit Cost	Qty (Each)	Total Cost (\$ M)
Subtotal: Hardware Cost		-	-	22.419	-	-	14.099	-	-	18.173	-	-	46.158	-	-	-	-	-	46.158
Support Cost		,						,				,						,	
SM-3 Production Engineering		12.421	1	12.421	49.000	1	49.000	39.000	1	39.000	41.133	1	41.133	-	-	-	41.133	1	41.133
Subtotal: Support Cost		-	-	12.421	-	-	49.000	-	-	39.000	-	-	41.133	-	-	-	-	-	41.133
Gross/Weapon System Cost		14.337	69	989.230	14.042	33	463.374	11.170	52	580.814	14.514	30	435.430	-	-	-	14.514	30	435.430
			FY 2016			FY 2017			FY 2018			FY 2019		T	To Complete	)	<del>                                     </del>	Total Cost	
Cost Elements	ID CD	Unit Cost	Qty (Each)	Total Cost (\$ M)	Unit Cost	Qty (Each)	Total Cost (\$ M)	Unit Cost	Qty (Each)	Total Cost (\$ M)	Unit Cost	Qty (Each)	Total Cost (\$ M)	Unit Cost	Qty (Each)	Total Cost (\$ M)	Unit Cost	Qty (Each)	Total Cost (\$ M)
Flyaway Cost		l						l l										,	
Recurring Cost																			
SM-3 Block IA Procurement <sup>(†)</sup>	В	-	-	_	-	-	-	-	-	-	-	-	-	_	-	-	13.941	55	766.765
SM-3 Block IB Procurement <sup>(†)</sup>	В	11.514	48	552.684	11.592	42	486.859	11.662	41	478.158	11.577	51	590.427		Continuing			Continuing	
SM-3 Block IIA	В	-	-	-	23.900	10	239.000	22.300	13	289.900	20.600	21	432.600	-	-	-	21.852	44	961.500
Subtotal: Recurring Cost		-	-	552.684	-	-	725.859	-	-	768.058	-	-	1,023.027		Continuing			Continuing	
Subtotal: Flyaway Cost		-	-	552.684	-	-	725.859	-	-	768.058	-	-	1,023.027		Continuing			Continuing	
Hardware Cost																			
Recurring Cost																			
ABMD 3.6.1 Hardware and Installs	В	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	11.250	2	22.500
ABMD 5.0 Hardware and Installs	В	31.410	1	31.410	36.500	1	36.500	25.700	2	51.400	22.550	2	45.100	-	-	-	24.951	8	199.610
ABMD 5.1 Hardware and Installs	В	3.555	1	3.555	8.500	1	8.500	7.535	1	7.535	25.408	1	25.408	-	-	-	9.481	5	47.406
BMD 3.6 to 4.1	В	27.633	3	82.900	27.633	3	82.900	34.467	3	103.400	41.000	1	41.000	-	-	-	31.020	10	310.200
Canisters Procurement SM-3 Block IA/IB	В	0.317	48	15.192	0.341	42	14.310	0.310	41	12.693	0.310	51	15.810		Continuing			Continuing	
Canisters Procurement SM-3 Block IIA	В	-	-	-	0.600	10	6.000	0.500	13	6.500	0.600	21	12.600	-	-	-	0.570	44	25.100
Subtotal: Recurring Cost		-	-	133.057	-	-	148.210	-	-	181.528	-	-	139.918		Continuing			Continuing	
Subtotal: Hardware Cost		-	-	133.057	-	-	148.210	-	-	181.528	-	-	139.918		Continuing			Continuing	
Support Cost													·			<u> </u>			
SM-3 Production Engineering		54.597	1	54.597	102.647	1	102.647	123.096	1	123.096	128.520	1	128.520		Continuing			Continuing	

LI MD09 - AEGIS BMD Missile Defense Agency UNCLASSIFIED
Page 5 of 12

P-1 Line #30

Exhibit P-5, Cost Analysis: PB 2015 Missile Defense Agency

Appropriation / Budget Activity / Budget Sub Activity:

0300D / 01 / 17

Date: March 2014

Item Number / Title [DODIC]:

- / Aegis BMD

			FY 2016			FY 2017	L		FY 2018			FY 2019		To	Complete	)	-	Total Cost	:
Cost Elements	ID CD	Unit Cost	Qty (Each)	Total Cost (\$ M)	Unit Cost	<b>Qty</b> (Each)	Total Cost (\$ M)	Unit Cost	<b>Qty</b> (Each)	Total Cost (\$ M)	Unit Cost	Qty (Each)	Total Cost (\$ M)	Unit Cost	Qty (Each)	Total Cost (\$ M)	Unit Cost	<b>Qty</b> (Each)	Total Cost (\$ M)
Subtotal: Support Cost		-	-	54.597	-	-	102.647	-	-	123.096	-	-	128.520		Continuing			Continuing	
Gross/Weapon System Cost		15.424	48	740.338	18.783	52	976.716	19.864	54	1,072.682	17.937	72	1,291.465		Continuing			Continuing	

### Remarks:

N/A

<sup>(†)</sup> indicates the presence of a P-5a

Exhibit P-5a, Procurement History and Planning: PB 2015 Missile Defense Agency

Appropriation / Budget Activity / Budget Sub Activity:

0300D / 01 / 17

P-1 Line Item Number / Title:

MD09 / AEGIS BMD

Item Number / Title [DODIC]:

- / Aegis BMD

Cost Elements	0 C O	FY	Contractor and Location	Method/Type or Funding Vehicle	Location of PCO	Award Date	Date of First Delivery	Qty (Each)	Unit Cost	Specs Avail Now?	Revision	RFP Issue Date
SM-3 Block IA Procurement <sup>(†)</sup>		2011	Raytheon / Tucson, AZ	C / CPIF	Dahlgren, VA	Sep 2011	Oct 2013	23	10.310	Υ		Nov 2010
SM-3 Block IA Procurement <sup>(†)</sup>		2012	Raytheon / Tucson, AZ	C / CPIF	Dahlgren, VA	Aug 2012	Jul 2014	14	11.140	Υ	Jan 2017	Aug 2011
SM-3 Block IB Procurement <sup>(†)</sup>		2012	Raytheon / Tucson, AZ	C / CPIF	Dahlgren, VA	May 2012	Dec 2013	14	13.400	Υ		Aug 2011
SM-3 Block IB Procurement <sup>(†)</sup>		2013	Raytheon / Tucson, AZ	C / CPIF	Dahlgren, VA	Jun 2013	Jan 2015	33	12.130	Y		Aug 2012
SM-3 Block IB Procurement <sup>(†)</sup>		2014	Raytheon / Tucson, AZ	C / CPIF	Dahlgren, VA	Apr 2014	Jan 2016	52	10.070	Y		Aug 2013
SM-3 Block IB Procurement <sup>(†)</sup>		2015	Raytheon / Tucson, AZ	SS / FP	Dahlgren, VA	Feb 2015	Jan 2017	30	11.605	Y		Aug 2014
Advance Procurement				·		•						
MK72 Boosters		2015	TBD / TBD	SS / FP	TBD	Feb 2015	Jul 2017	48	0.429	N		Feb 2014
MK 104 Dual Thrust Rocket Motors		2015	TBD / TBD	SS / FP	TBD	Feb 2015	Apr 2017	48	0.289	N		Feb 2014
Integrated Dewar Assemblies		2015	TBD / TBD	SS / FP	TBD	Feb 2015	Jan 2018	48	0.376	N		Feb 2014
Circuit Card Assemblies		2015	TBD / TBD	SS/FP	TBD	Feb 2015	Apr 2017	48	0.341	N		Feb 2014

<sup>&</sup>lt;sup>(†)</sup> indicates the presence of a P-21

Εx	hibi	it P	-21, Pro	oducti	ion Sc	hedul	e: PE	3 201	5 Mis	sile D	efens	e Age	ency											Date	e: Maı	rch 20	)14				
			<b>ation</b> / 1 1 / 17	Budge	et Acti	vity /	Budg	get Si	ub Ac	tivity	<b>:</b>		<b>Line</b> 009 / <i>P</i>		-		Title:								Num egis E	<b>nber /</b> BMD	Title	[DOI	DIC]:		
				ements n Each)								Fiscal \	ear 2011											Fiscal Y	ear 2012						
Π.					ACCEPT									C	alendar	Year 201	11				_				Calen	dar Year	2012				
0   I C   I O   I	F R	-γ	SERVICE	PROC QTY	PRIOR TO 1 OCT 2010	BAL DUE AS OF 1 OCT	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 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
SM-	-3 Bloc	ck IA I	Procurement			'								,		,		,						,	,			,			
Prio	r Year	rs Del	iveries: 18																												
		011		23	-	23												-	-	-	-	-	-	-	-	-	-	-	-	-	
1	2 20	012	MDA	14	-	14																							-	-	
SM-	-3 Bloo	ck IB F	Procurement												,																
	3 20	012	MDA	14	-	14																				-	-	-	-	-	
;	3 20	013	MDA	33	-	33																									
	3 20	014	MDA	52	-	52																									
	3 20	015	MDA	30	-	30																									
							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	J J	A U G	S E P	0 C T	N O V	D E C	J A N	F E B	M A R	A P R	M A Y	J J	J U L	A U G	S E P	B A L

Ξxŀ	hibi	it P-	21, Pro	ducti	on Sc	hedul	e: PE	3 201	5 Mis	sile D	efens	e Age	ency											Date	: Mar	ch 20	)14				
			ation / I 1 / 17	Budge	et Acti	vity /	Budg	jet Sı	ub Ac	tivity	:		<b>Line</b> 09 / <i>P</i>				Title:							Item - / Ae	<b>Num</b> egis E		Title	[DOD	IC]:		
			Cost El (Units i									Fiscal Y	ear 2013											Fiscal Ye	ar 2014		,				
					ACCEPT									C	alendar	Year 201	3								Calen	dar Year	2014				
0 F C F 0 #	₹ .	-Y	SERVICE	PROC QTY	PRIOR TO 1 OCT 2012	BAL DUE AS OF 1 OCT	0 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	0 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 n	A U G	S E P	B A L
SM-	3 Bloc	ck IA P	rocurement																	,											
Prior	Years	rs Deliv	veries: 18																												-
1	20	)11 N	ИDA	23	-	23	-	-	-	-	-	-	-	-	-	-	-	-	5	3	2	2	4	4	3						-
2	2 20	)12 N	ИDA	14	-	14	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	1	2	2	
SM-	3 Bloc	ck IB P	rocurement						•											,			,	,	,			,			
3	3 20	)12 N	ИDA	14	-	14	-	-	-	-	-	-	-	-	-	-	-	-	-	-	1	3	2	3	1	2	2				-
3	3 20	)13 N	ИDA	33	-	33									-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	3
3	3 20	)14 N	ИDA	52	-	52																			-	-	-	-	-	-	5
3	3 20	)15 N	ИDA	30	-	30																									3
							0 0	N O V	D E C	J A N	F E B	M A R	A P R	M A Y	J U N	n 1	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	J U	n 1	A U G	S E P	B

C N F FY         SERVICE ON SHAPE         PROC ON SHAPE         AS OF ON SHAPE         C N SHAPE         A N SHAPE<	S E P	J A U U	016 J	dar Year	egis B ear 2016 Calend A P	- / Ae	F E	A E	A	E	E	E	E	E	:		A	Α	E	F	- / /	scal Ye	Year 20 Ca	gis E ar 2016 Caler A P	BMI	MD ar Year M	ır 2016 J		J		Α	Ε
Column   Fiscal Year 2015   Fi	E	UU	J	M A	Calend A P	M A	F E	A E	A	E	E	E	E	E	:		A	Α	E	F	M	M A	Ca	Caler A P	endar `	М	J					Ε
PRIOR   PROC   PROC   OCT   AS OF   CO   OCT   OCT	E	UU	J	M A	A P	Α	E	A E	A	E	E	E	E	E	:		A	Α	E	<b>=</b> ∣	Α	Α	А	A P	N A	М	J					Ε
O F F V SERVICE OTY OT AS OF C O D E A E A P A U U U U U U U U U U U U U U U U U	E	UU	U	Α	Р	Α	E	A E	A	E	E	E	E	E	:		A	Α	E	<b>=</b> ∣	Α	Α		Р	_ A							Ε
Prior Years Deliveries: 18    1								<u>'</u>		- 1							N	IN		3	R	R '	R	R	Y					7	Ğ	Р
1 2011 MDA 23 23 -																											1					
2 2012 MDA 14 5 9 3 3 3 3 S SM-3 Block IB Procurement  3 2012 MDA 14 14																																
SM-3 Block IB Procurement    3   2012   MDA																																
3   2012   MDA																																
3 2013 MDA 33 - 33 3 4 4 2 2 3 2 3 2 3 3 3 3 3 3 2 2 4 4 5 4 5 4 5 4 5 4 5 4 5 4 5 4 5 5 4 5																																
3 2014 MDA 52 - 52 4 4 5 4 5	_								7						_	_	7															
3 2015 MDA 30 - 30									_	_					-	3	+										1					
	-	4 4	_		4			7	1	_					-	+	$\vdash$	- 1	•		+		_	4	4		+	_	4	4	4	
	S			M	Α	M	F		-	_	D D				-	+	<u> </u>	-	+	-			_		_		+	_		+	^	
C   O   E   A   E   A   P   A   U   U   E   C   O   E   A   E   A   P   A   U   U   U	E P	UU	U	Α	Р	Α	E	A E		E	E	E	E	E	:				E	<b>=</b> ∣	Α	Α	P	Р	A	Α	U			ι	U	Ε

SM-3 Block IA Prior Years Deliv	Cost E (Units )  SERVICE Procuremen	lements in Each) PROC QTY	ACCEPT PRIOR TO 1 OCT	BAL DUE AS OF	0	et Su	b Ac	tivity:			09 / /	e Iten AEGI			er /	Title							- / A	<b>Num</b> egis B		Title	[DOI	OIC]:	
D F R P SM-3 Block IA Proprior Years Deliver 1 2011 M	(Units a	PROC QTY	PRIOR TO 1 OCT	DUE		N			F	iscal Y	ear 201	7																	
D F R P SM-3 Block IA Proprior Years Deliver 1 2011 M	Procuremen	PROC QTY	PRIOR TO 1 OCT	DUE		N																	Fiscal Ye	ar 2018					
D F R P SM-3 Block IA Proprior Years Deliver 1 2011 M	Procuremen	QTY	TO 1 OCT	DUE		N							Caler	ndar Ye	ear 201	7								Calen	dar Year	2018			
Prior Years Deliv				1 OCT	C T	0	D E C	J A N	F E B	M A R	A P R	M A Y		N N	J U	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
1 2011 N	liveries: 10	t		l l	Į.																1						<u> </u>		
	liveries. 10																												
2012		23	23	-																									L
	MDA	14	14	-	_																								
M-3 Block IB P		1			_																								
3 2012 N		14	14	-																									
3 2013 N		33	33	-		1																							$\vdash$
3 2014 N		52	39	13	4	4	5					1 .	_					1 .			1								L
3 2015 N	MDA	30	-	30	-	-		2	2	3	2	+	3	3	. 2	2	-	+								. 1			
					O C T	N O V	D E C	J A N	F E B	M A R	A P R	M A Y		N N	n n	A U G	S E P	O C T	N O V	D E C	A N	F E B	M A R	A P R	M A Y	N U	J U	A U G	S E P

Exhibit P-21, Production Schedule: PB 2015 Missile Defense AgencyDate: March 2014Appropriation / Budget Activity / Budget Sub Activity:P-1 Line Item Number / Title:<br/>MD09 / AEGIS BMDItem Number / Title [DODIC]:<br/>- / Aegis BMD

	Produc	tion Rates (Each /	Month)				Procurement Le	adtime (Months)			
MFR					lni	tial			Reo	rder	
Ref				ALT	ALT		Total	ALT	ALT		Total
# MFR Name - Location	MSR	1-8-5	MAX	Prior to Oct 1	After Oct 1	Mfg PLT	After Oct 1	Prior to Oct 1	After Oct 1	Mfg PLT	After Oct 1
1 Raytheon - Tucson, AZ	1.00	4.00	8.00	4	-	30	30	4	-	30	30
2 Raytheon - Tucson, AZ	1.00	4.00	8.00	4	1	24	25	4	-	24	24
3 Raytheon - Tucson, AZ	1.00	4.00	8.00	4	-	24	24	4	-	24	24

The first non-gray cell in the Delivery Schedule indicates the Contract Award Date.

Note: Due to space limitations, quantities in the Exhibit P-21 delivery calendar are truncated and rounded based on the maximum quantity in the calendar as follows. If the maximum quantity is less than or equal to than 9,999, all quantities are shown as each. If the maximum quantity is between 1,000,000 and 999,999,999 all quantities are shown in millions (rounded to the nearest thousand). If the maximum quantity is equal or greater than 1,000,000,000 all quantities are shown in billions (rounded to the nearest million).

LI MD09 - AEGIS BMD Missile Defense Agency

Exhibit P-40, Advance Procurement Budget Line Item Justification: PB 2015 Missile Defense Agency

70.189

Date: March 2014

Appropriation / Budget Activity / Budget Sub Activity:

P-1 Line Item Number / Title:

88.499

0300D: Procurement, Defense-Wide / BA 01: Major Equipment / BSA 17: Major Equipment, Missile Defense Agency

MD09 / AEGIS BMD

ID Code (A=Service Ready, B=Not Service Ready) : B

**Program Elements for Code B Items:** 0604881C, 0603892C, 0604880C

 $\textbf{Other Related Program Elements: } 0604880C, \, 0603892C, \,$ 

Continuing

0604881C

Line Item MDAP/MAIS Code: 362

Item MDAP/MAIS Code(s):

Elifo Rolli MB/ R/MI/ RO GOGOT COE	100111 1012	, a, , a, a, a, c,	.0(0).									
Resource Summary	Prior Years	FY 2013	FY 2014	FY 2015 Base	FY 2015 OCO <sup>#</sup>	FY 2015 Total	FY 2016	FY 2017	FY 2018	FY 2019	To Complete	Total
Gross/Weapon System Cost (\$ in Millions)	-	-	-	68.880	-	68.880	70.189	69.819	88.499	90.180	Continuing	Continuing
Net Procurement (P1) (\$ in Millions)	-	-	-	68.880	-	68.880	70.189	69.819	88.499	90.180	Continuing	Continuing
Total Obligation Authority (\$ in Millions)	-	-	-	68.880	-	68.880	70.189	69.819	88.499	90.180	Continuing	Continuing

## **Description:**

FY 2015 advance procurement funding totaling \$68.88M to procure four long-lead items - MK104 Dual Thrust Rocket Motors (26 month lead time), MK72 Boosters (29 month lead time), Integrated Dewar Assemblies (35 month lead time), and Circuit Card Assemblies (26 month lead time) - for FY 2016 missile buy.

Exhibits Sc	hedule		P	Prior Year	rs		FY 2013			FY 2014		FY	2015 Ba	ise	FY	2015 O	co	FY	2015 To	otal
Title*	Exhibits	ID CD	Unit Cost	Qty (Each)	Total Cost (\$ M)	Unit Cost (\$ M)	Qty (Each)	Total Cost (\$ M)	Unit Cost (\$ M)	Qty (Each)	Total Cost (\$ M)	Unit Cost (\$ M)	Qty (Each)	Total Cost (\$ M)	Unit Cost (\$ M)	Qty (Each)	Total Cost (\$ M)	Unit Cost (\$ M)	Qty (Each)	Total Cost (\$ M)
Item - / Aegis BMD	P-10				-			-			-			68.880			-			68.880
Total Gross/Weapon System Cost					_			-			-			68.880			-			68.880
Exhibits Sc	hedule			FY 2016			FY 2017			FY 2018			FY 2019		To	Comple	te		Total	
Title*	Exhibits	ID CD	Unit Cost	Qty (Each)	Total Cost (\$ M)	Unit Cost (\$ M)	Qty (Each)	Total Cost (\$ M)	Unit Cost (\$ M)	Qty (Each)	Total Cost (\$ M)	Unit Cost (\$ M)	Qty (Each)	Total Cost (\$ M)	Unit Cost (\$ M)	Qty (Each)	Total Cost (\$ M)	Unit Cost (\$ M)	Qty (Each)	Total Cost (\$ M)
Item - / Aegis BMD	P-10				70.189			69.819			88.499			90.180		Continuing	,	·	Continuing	_

\*For Items, Title represents the Item Number / Title [DODIC].

Note: Totals in this Exhibit P-40 set may not be exact or add due to rounding.

### Justification:

Total Gross/Weapon

System Cost

The FY 2015 advance procurement funding acquires long lead items for SM-3 Block IB (e.g., MK 72 Boosters, Dual Thrust Rocket Motors, Integrated Dewar Assemblies, and Circuit Card Assemblies) required to manufacture missiles and to maintain the planned production schedule.

69.819

LI MD09 - AEGIS BMD Missile Defense Agency UNCLASSIFIED
Page 1 of 3

P-1 Line #28

90.180

Volume 2b - 23

Continuing

Exhibit P-10, Advance Procureme Defense Agency	nt Requirement	s Analysis	(page 1 -	Budget Fu	ınding Ju	stification)	: PB 2015	Missile	Date: Mar	ch 2014		
Appropriation / Budget Activity / I 0300D / 01 / 17	Budget Sub Acti	ivity:	<b>P-1 Line I</b> MD09 / AE		er / Title:				P-5 Numb - / Aegis B			
ID Code (A=Service Ready, B=Not Service Ready	r) : B		·									
First System (2015) Award Date: February 2015	First System (2 January 2018	015) Comple	tion Date:				nterval Between Months	en Systems	:			
Aegis BMD		Production Leadtime (Months)	Prior Years	FY 2013 (Each)	FY 2014 (Each)	FY 2015 (Each)	FY 2016 (Each)	FY 2017 (Each)	FY 2018 (Each)	FY 2019 (Each)	To Complete (Each)	Total (Each)
Quantity		35	69	33	52	30	48	52	54	72	-	-
Cost Element		When Rqd (Months)	Prior Years	FY 2013 (\$ M)	FY 2014 (\$ M)	FY 2015 (\$ M)	FY 2016 (\$ M)	FY 2017 (\$ M)	FY 2018 (\$ M)	FY 2019 (\$ M)	To Complete (\$ M)	Total (\$ M)
Other												
MK72 Boosters <sup>(†)</sup>		29	-	-	-	20.580	20.971	20.861	26.442	26.944	Continuing	Continuing
MK 104 Dual Thrust Rocket Motors <sup>(†)</sup>		26	-	-	-	13.860	14.123	14.049	17.808	18.146	Continuing	Continuing
Integrated Dewar Assemblies (†)		35	-	-	-	18.060	18.404	18.306	23.204	23.645	Continuing	Continuing
Circuit Card Assemblies (†)		26	-	-	-	16.380	16.691	16.603	21.045	21.445	Continuing	Continuing
Total: Other			0.000	-		68.880	70.189	69.819	88.499	90.180	Continuing	Continuing
Total Advance Procurement/Obligation Au	thority		-	-	-	68.880	70.189	69.819	88.499	90.180	Continuing	Continuing

Exhibit P-10, Advance Procurement Requirements Analysis Defense Agency	s (page 2 - Budget Funding Justification): PB 2015 Missile	Date: March 2014
Appropriation / Budget Activity / Budget Sub Activity:	P-1 Line Item Number / Title:	P-5 Number / Title:
0300D / 01 / 17	MD09 / AEGIS BMD	- / Aegis BMD

ID Code (A=Service Ready, B=Not Service Ready) : B

				FY 2	015		
Cost Elements	QPA (Each)	Production Leadtime (Months)	Unit Cost	Contract Forecast Date	2015 Qty (Each)	For FY	Total Cost Request (\$ M)
Other							
MK72 Boosters <sup>(†)</sup>	1	29	0.429	Feb 2015	48	2016	20.580
MK 104 Dual Thrust Rocket Motors <sup>(†)</sup>	1	26	0.289	Feb 2015	48	2016	13.860
Integrated Dewar Assemblies <sup>(†)</sup>	1	35	0.376	Feb 2015	48	2016	18.060
Circuit Card Assemblies (†)	1	26	0.341	Feb 2015	48	2016	16.380
Total: Other							68.880
Total Advance Procurement/Obligation Authority							68.880

### Description:

FY2015 advance procurement funding totalling of \$68.88M to procure four long lead items for FY2016 missile buy in order to maintain the planned production schedule. These four long lead items are MK104 Dual Thrust Rocket Motors (26 month lead time), MK72 Boosters (29 month lead time), Integrated Dewar Assemblies (35 month lead time), and Circuit Card Assemblies (26 month lead time).

 $^{(\dagger)}$  indicates the presence of Contract Data presented in the associated P-5 Item's P-5a exhibit.



Exhibit P-40, Budget Line Item Justification: PB 2015 Missile Defense Agency

P-1 Line Item Number / Title:

Appropriation / Budget Activity / Budget Sub Activity:

0300D: Procurement, Defense-Wide / BA 01: Major Equipment / BSA 17: Major Equipment, Missile Defense Agency

MD11 / BMDS AN/TPY-2 Radars

ID Code (A=Service Ready, B=Not Service Ready) : B

Program Elements for Code B Items: 0603884C. 0603881C

Other Related Program Elements: 0603884C, 0603881C

Date: March 2014

Line Item MDAP/MAIS Code: 362

Item MDAP/MAIS Code(s):

Line item MBAI /MAIO GGGC: GGZ	Item MB	AI MIAIO OOC	ic(3).									
Resource Summary	Prior Years	FY 2013	FY 2014	FY 2015 Base	FY 2015 OCO <sup>#</sup>	FY 2015 Total	FY 2016	FY 2017	FY 2018	FY 2019	To Complete	Total
Procurement Quantity (Units in Each)	3	2	-	-	-	-	-	-	-	-	-	5
Gross/Weapon System Cost (\$ in Millions)	571.276	378.574	55.800	48.140	-	48.140	79.224	56.951	6.217	32.587	-	1,228.769
Less PY Advance Procurement (\$ in Millions)	-	-	-	-	-	-	-	-	-	-	-	-
Net Procurement (P1) (\$ in Millions)	571.276	378.574	55.800	48.140	-	48.140	79.224	56.951	6.217	32.587	-	1,228.769
Plus CY Advance Procurement (\$ in Millions)	-	-	-	-	-	-	-	-	-	-	-	-
Total Obligation Authority (\$ in Millions)	571.276	378.574	55.800	48.140	-	48.140	79.224	56.951	6.217	32.587	-	1,228.769
(The following	Resource Sum	mary rows are fo	or informational p	urposes only. Th	ne corresponding	g budget requests	s are documente	ed elsewhere.)	•			
Initial Spares (\$ in Millions)	-	10.901	-	-	-	-	-	-	-	-	-	10.901
Flyaway Unit Cost (\$ in Millions)	373.179	172.768	55.800	48.140	-	48.140	79.224	56.951	6.217	32.587	Continuing	Continuing
Gross/Weapon System Unit Cost (\$ in Millions)	190.425	189.287	-	-	-	-	-	-	-	-	-	245.754

<sup>&</sup>lt;sup>#</sup> The FY 2015 OCO Request will be submitted at a later date.

### Description:

The Army Navy/Transportable Radar Surveillance and Control (AN/TPY-2) radar is an integral component of the Ballistic Missile Defense System (BMDS) layered network of sensors. It is easily transported and can be configured to operate either as a Terminal High Altitude Area Defense (THAAD) Fire Unit Radar (terminal mode) or Forward-Based Radar. The forward-based AN/TPY-2 provides detection and tracking during the boost phase. This significantly reduces the uncertainty in target discrimination and reaction time, increasing the probability of a successful BMDS engagement. In forward-based mode, the AN/TPY-2 also provides acquisition and track data via the Ballistic Missile Defense System Command, Control, Battle Management and Communications (C2BMC) and Link 16 to the Aegis missile defense system for cueing. The AN/TPY-2 used in terminal mode is an integral component of the THAAD Battery. The THAAD battery radar is capable of tracking multiple threats and multiple interceptors during engagements in the terminal phase. It provides surveillance, acquisition, track, discrimination, interceptor communications, and hit assessment data collection for fire control.

Procurement funding procures five AN/TPY-2 Radars required to complete THAAD Battery acquisitions. "Procurement Quantity" and "Flyaway Unit Cost" above represent radar systems only, but the "Net Procurement" cost above plus the Initial Spares amount includes the costs of all hardware. FY 2013 funding included procurement of two (2) AN/TPY-2 Radars and four (4) additional Prime Power Units (PPUs). The FY 2013 cost for two radars is \$334.634 Million, plus \$10.901 Million for initial spares (depicted on the P-40 for BMDS Radars Initial Spares), bringing the flyaway unit cost for each radar to \$172.768 Million. For FY 2014, funding includes procurement of one Float Cooling Equipment Unit (CEU) to include reliability upgrades, one Float Electronic Equipment Unit (EEU) and critical spares.

The FY 2015 funding includes procurement of long lead Transmit/Receive Integrated Microwave Modules (TRIMMs) for the Float Antenna Equipment Unit (AEU) and one Electronic Equipment Unit (EEU) Modification Kit.

The FY 2016-2019 funding includes procurement of one Float Antenna Equipment Unit (AEU) structure, population of long lead Transmit/Receive Integrated Microwave Modules (TRIMMs) and final delivery, plus the procurement of eight Electronic Equipment Unit (EEU) Modification Kits and four Prime Power Units (PPUs).

Exhibit P-40, Budget Line Item Justification: PB 2015 Missile Defense Agency

Date: March 2014

Appropriation / Budget Activity / Budget Sub Activity:

0300D: Procurement, Defense-Wide / BA 01: Major Equipment / BSA 17: Major

P-1 Line Item Number / Title: MD11 / BMDS AN/TPY-2 Radars

Equipment, Missile Defense Agency

ID Code (A=Service Ready, B=Not Service Ready) : B

Program Elements for Code B Items: 0603884C, 0603881C

Other Related Program Elements: 0603884C, 0603881C

Line Item MDAP/MAIS Code: 362

Item MDAP/MAIS Code(s):

Exhibits Sc	hedule		Р	rior Year	's		FY 2013			FY 2014		FY	2015 Ba	ase	F۱	2015 O	co	FY	2015 To	tal
Title*	Exhibits	ID CD	Unit Cost	Qty (Each)	Total Cost (\$ M)	Unit Cost (\$ M)	Qty (Each)	Total Cost (\$ M)	Unit Cost (\$ M)	Qty (Each)	Total Cost (\$ M)	Unit Cost (\$ M)	Qty (Each)	Total Cost (\$ M)	Unit Cost (\$ M)	Qty (Each)	Total Cost (\$ M)	Unit Cost (\$ M)	Qty (Each)	Total Cost (\$ M)
Item - BMDS AN/TPY-2 Radars	P-5, P-5a, P-21	В	190.425	3	571.276	189.287	2	378.574	-	_	55.800	-	_	48.140	-	-	-	-	-	48.140
Total Gross/Weapon System Cost			190.425	3	571.276	189.287	2	378.574	-	-	55.800	-	-	48.140	-	-	-	-	-	48.140
Exhibits Sc	hedule			FY 2016			FY 2017			FY 2018			FY 2019		To	Comple	ete		Total	
Title*	Exhibits	ID CD	Unit Cost	Qty (Each)	Total Cost	Unit Cost	Qty (Each)	Total Cost (\$ M)	Unit Cost	Qty (Each)	Total Cost	Unit Cost (\$ M)	Qty (Each)	Total Cost	Unit Cost	Qty (Each)	Total Cost (\$ M)	Unit Cost	Qty (Each)	Total Cost
Item - BMDS AN/TPY-2 Radars	P-5, P-5a, P-21	В	-	-	79.224	-	-	56.951	-	-	6.217	-	-	32.587	-	-	-	245.754	5	1,228.769
Total Gross/Weapon																				

\*For Items, Title represents the Item Number / Title [DODIC].

Note: Totals in this Exhibit P-40 set may not be exact or add due to rounding.

### Justification:

FY 2013: Procure two AN/TPY-2 Radars, plus four additional Prime Power Units (PPUs)

FY 2014: Procure one Float Cooling Equipment Unit (CEU) to include reliability upgrades, one Float Electronic Equipment Unit (EEU) and critical spares

FY 2015: Procure long lead Transmit/Receive Integrated Microwave Modules (TRIMMs) for the Float Antenna Equipment Unit (AEU) and one Electronic Equipment Unit (EEU) Modification Kit

Exhibit P-5, Cost Analysis: PB 2015 Missile Defense Agency

Date: March 2014

Appropriation / Budget Activity / Budget Sub Activity:

P-1 Line Item Number / Title:

Item Number / Title [DODIC]: - / BMDS AN/TPY-2 Radars

Volume 2b - 29

0300D / 01 / 17

MD11 / BMDS AN/TPY-2 Radars

	Prior			FY 2015	FY 2015	FY 2015					То	
Resource Summary	Years	FY 2013	FY 2014	Base	OCO#	Total	FY 2016	FY 2017	FY 2018	FY 2019	Complete	Total
Procurement Quantity (Units in Each)	3	2	-	-	-	-	-	-	-	-	-	5
Gross/Weapon System Cost (\$ in Millions)	571.276	378.574	55.800	48.140	-	48.140	79.224	56.951	6.217	32.587	-	1,228.769
Less PY Advance Procurement (\$ in Millions)	-	-	-	-	-	-	-	-	-	-	-	-
Net Procurement (P1) (\$ in Millions)	571.276	378.574	55.800	48.140	-	48.140	79.224	56.951	6.217	32.587	-	1,228.769
Plus CY Advance Procurement (\$ in Millions)	-	-	-	-	-	-	-	-	-	-	-	-
Total Obligation Authority (\$ in Millions)	571.276	378.574	55.800	48.140	-	48.140	79.224	56.951	6.217	32.587	-	1,228.769
(The following	Resource Sum	mary rows are fo	or informational p	urposes only. Th	ne corresponding	g budget request	s are documente	ed elsewhere.)		•		
Initial Spares (\$ in Millions)	-	-	-	-	-	-	-	-	-	-	-	-
Gross/Weapon System Unit Cost (\$ in Millions)	190.425	189.287	-	-	-	-	-	-	-	-	-	245.754

<sup>#</sup> The FY 2015 OCO Request will be submitted at a later date.

		P	rior Years	;		FY 2013			FY 2014		FY	' 2015 Bas	se	FY	2015 OC	0	FY	2015 Tot	ιal
Cost Elements	ID CD	Unit Cost	Qty (Each)	Total Cost (\$ M)															
Hardware Cost		,	'		'						'				,				
Recurring Cost																			
Antenna Equipment Unit (AEU) <sup>(†)</sup>	В	133.204	3	399.611	126.400	2	252.800	-	-	-	-	-	-	-	-	-	-	-	-
Cooling Equipment Unit (CEU) <sup>(†)</sup>	В	7.126	3	21.378	6.802	2	13.604	-	-	-	-	-	-	-	-	-	-	-	-
Critical Spares <sup>(†)</sup>	В	-	-	-	-	-	-	18.100	1	18.100	-	-	-	-	-	-	-	-	-
Electronic Equipment Unit (EEU) <sup>(†)</sup>	В	21.377	3	64.132	20.220	2	40.440	-	-	-	-	-	-	-	-	-	-	-	-
Electronic Equipment Unit (EEU) Modification Kit <sup>(†)</sup>	В	-	-	_	_	_	-	_	_	_	2.890	1	2.890	_	-	_	2.890	1	2.8
Float Antenna Equipment Unit (AEU) <sup>(†)</sup>	В	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	_	_
Float Cooling Equipment Unit (CEU) <sup>(†)</sup>	В	7.136	1	7.136	-	-	-	16.700	1	16.700	-	-	-	-	-	-	-	-	-
Float Electronic Equipment Unit (EEU) <sup>(†)</sup>	В	20.264	1	20.264	-	-	-	21.000	1	21.000	-	-	-	-	-	-	-	-	
Forward-Based Mode Prime Power Units (PPU) <sup>(†)</sup>	В	-	-	-	10.985	4	43.940	-	_	_	-	_	_	-	-	_	_	_	

Exhibit P-5, Cost Analysis: PB 2015 Missile Defense Agency Date: March 2014 Appropriation / Budget Activity / Budget Sub Activity: Item Number / Title [DODIC]: P-1 Line Item Number / Title: - I BMDS AN/TPY-2 Radars 0300D / 01 / 17 MD11 / BMDS AN/TPY-2 Radars **Prior Years FY 2013** FY 2014 FY 2015 Base **FY 2015 OCO** FY 2015 Total Total Total Total Total Total Total ID **Unit Cost Unit Cost Unit Cost** Qty Cost **Unit Cost** Qty Cost Qty Cost **Unit Cost** Qty Cost Qty Cost **Unit Cost** Qty Cost **Cost Elements** CD (\$ M) (Each) (\$ M) Prime Power Unit (PPUs - 2 each radar system)(†) 14.252 42.755 13.895 2 27.790 Transmit/Receive Integrated Microwave Module (TRIMMs)(†) 45.250 45.250 45.250 45.250 Subtotal: Recurring Cost 555.276 378.574 55.800 48.140 48.140 Subtotal: Hardware Cost 555.276 378.574 55.800 48.140 48.140 Support Cost 16.000 1 16.000 Program Support\* Subtotal: Support Cost 16.000 \_ -Gross/Weapon System 190.425 571.276 189.287 378.574 55.800 Cost 48.140 48.140 FY 2016 **FY 2017** FY 2018 FY 2019 To Complete **Total Cost** Total Total Total Total Total Total ID **Unit Cost Unit Cost** Qty Cost Qty Cost **Unit Cost** Qty Cost **Unit Cost** Qty Cost **Unit Cost** Qty Cost **Unit Cost** Qty Cost **Cost Elements** CD (Each) (Each) (\$ M) (\$ M) (\$ M) (Each) (\$ M) (\$ M) (Each) (\$ M) (\$ M) (Each) (\$ M) (\$ M) (\$ M) (\$ M) (Each) (\$ M) Hardware Cost Recurring Cost Antenna Equipment В Unit (AEU)(†) 130.482 652.411 Cooling Equipment Unit (CEU)(†) 6.996 34.982 Critical Spares(†) 18.100 18.100 Electronic Equipment Unit (EEU)(†) 20.914 104.572 Electronic Equipment Unit (EEU) Modification Kit(†) 2.962 5.924 3.035 6.070 3.109 6.217 3.184 6.367 3.052 27,468 2 2 2 2 Float Antenna В Equipment Unit (AEU)<sup>(†)</sup> 73.300 73.300 73.300 73.300 Float Cooling Equipment Unit (CEU)<sup>(†)</sup> 11.918 23.836 Float Electronic В Equipment Unit (EEU)<sup>(†)</sup> 20.632 2 41.264

LI MD11 - BMDS AN/TPY-2 Radars Missile Defense Agency

**UNCLASSIFIED** Page 4 of 20

P-1 Line #31

Exhibit P-5, Cost Analysis: PB 2015 Missile Defense Agency

Appropriation / Budget Activity / Budget Sub Activity:

0300D / 01 / 17

Date: March 2014

| P-1 Line Item Number / Title: | Item Number / Title [DODIC]: | - / BMDS AN/TPY-2 Radars

			FY 2016			FY 2017			FY 2018			FY 2019		To	o Comple	te		Total Cost	į
Cost Elements	ID CD	Unit Cost	Qty (Each)	Total Cost (\$ M)	Unit Cost	Qty (Each)	Total Cost (\$ M)	Unit Cost	<b>Qty</b> (Each)	Total Cost (\$ M)	Unit Cost	Qty (Each)	Total Cost (\$ M)	Unit Cost	Qty (Each)	Total Cost (\$ M)	Unit Cost	Qty (Each)	Total Cost (\$ M)
Forward-Based Mode Prime Power Units (PPU) <sup>(†)</sup>	В	-	-	-	12.720	4	50.881	-	-	-	13.110	2	26.220	-	-	-	12.104	10	121.041
Prime Power Unit (PPUs - 2 each radar system) <sup>(†)</sup>	В	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	14.109	5	70.545
Transmit/Receive Integrated Microwave Module (TRIMMs) <sup>(†)</sup>	В	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	45.250	1	45.250
Subtotal: Recurring Cost		-	-	79.224	-	-	56.951	-	-	6.217	-	-	32.587	-	-	-	-	-	1,212.769
Subtotal: Hardware Cost		-	-	79.224	-	-	56.951	-	-	6.217	-	-	32.587	-	-	-	-	-	1,212.769
Support Cost																			
Program Support*		-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	16.000	1	16.000
Subtotal: Support Cost		-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	16.000
Gross/Weapon System Cost		-	-	79.224	-	-	56.951	-	-	6.217	-	-	32.587	-	-	-	245.754	5	1,228.769

### Remarks:

N/A

<sup>(†)</sup> indicates the presence of a P-5a

Exhibit P-5a, Procurement History and Planning: PB 2015 Missile Defense Agency

Appropriation / Budget Activity / Budget Sub Activity: P-1 Line Item Number / Title:

0300D / 01 / 17

MD11 / BMDS AN/TPY-2 Radars

Item Number / Title [DODIC]:
- / BMDS AN/TPY-2 Radars

Date: March 2014

1000D T 0 1 T 1 T				VID I I I DIVIDO AIVI				, 51415	O ANTI I	<u> </u>		
Cost Elements	0 C 0	FY	Contractor and Location	Method/Type or Funding Vehicle	Location of PCO	Award Date	Date of First Delivery	Qty (Each)	Unit Cost	Specs Avail Now?	Date Revision Available	RFP Issue Date
Antenna Equipment Unit (AEU) <sup>(†)</sup>		2010	Raytheon / Woburn, MA	SS/FFP	MDA, Huntsville, AL	Jun 2010	Dec 2012	1	144.290	Υ		
Antenna Equipment Unit (AEU) <sup>(†)</sup>		2012	Raytheon / Woburn, MA	SS / FFP	MDA, Huntsville, AL	Dec 2011	Jun 2014	2	144.090	Υ		
Antenna Equipment Unit (AEU) - 1 <sup>(†)</sup>		2013	Raytheon / Woburn, MA	SS / FFP	MDA, Huntsville, AL	Dec 2012	Jun 2015	1	126.400	Y		
Antenna Equipment Unit (AEU) - 2 <sup>(†)</sup>		2013	Raytheon / Woburn, MA	SS/FFP	MDA, Huntsville, AL	Dec 2013	Jun 2016	1	126.400	Y		
Cooling Equipment Unit (CEU) <sup>(†)</sup>		2010	Raytheon / Woburn, MA	SS / FFP	MDA, Huntsville, AL	Jun 2010	Dec 2012	1	7.800	Υ		
Cooling Equipment Unit (CEU) <sup>(†)</sup>		2012	Raytheon / Woburn, MA	SS / FFP	MDA, Huntsville, AL	Dec 2011	Jun 2014	2	7.668	Y		
Cooling Equipment Unit (CEU) - 1 <sup>(†)</sup>		2013	Raytheon / Woburn, MA	SS / FFP	MDA, Huntsville, AL	Dec 2012	Jun 2015	1	6.802	Υ		
Cooling Equipment Unit (CEU) - 2 <sup>(†)</sup>		2013	Raytheon / Woburn, MA	SS / FFP	MDA, Huntsville, AL	Dec 2013	Jun 2016	1	6.802	Υ		
Critical Spares <sup>(†)</sup>		2014	Raytheon / Woburn, MA	SS / FFP	MDA, Huntsville, AL	Jun 2014	Jun 2015	1	18.100	Υ		
Electronic Equipment Unit (EEU) <sup>(†)</sup>		2010	Raytheon / Woburn, MA	SS / FFP	MDA, Huntsville, AL	Jun 2010	Dec 2012	1	23.400	Υ		
Electronic Equipment Unit (EEU) <sup>(†)</sup>		2012	Raytheon / Woburn, MA	SS / FFP	MDA, Huntsville, AL	Dec 2011	Jun 2014	2	23.000	Υ		
Electronic Equipment Unit (EEU) - 1 <sup>(†)</sup>		2013	Raytheon / Woburn, MA	SS/FFP	MDA, Huntsville, AL	Dec 2012	Jun 2015	1	20.220	Y		
Electronic Equipment Unit (EEU) - $2^{(\dagger)}$		2013	Raytheon / Woburn, MA	SS/FFP	MDA, Huntsville, AL	Dec 2013	Jun 2016	1	20.220	Y		
Electronic Equipment Unit (EEU) Modification Kit <sup>(†)</sup>		2015	Raytheon / Woburn, MA	SS/FFP	MDA, Huntsville, AL	Dec 2014	Jun 2015	1	2.890	Y		
Electronic Equipment Unit (EEU) Modification Kit <sup>(†)</sup>		2016	Raytheon / Woburn, MA	SS/FFP	MDA, Huntsville, AL	Dec 2015	Jun 2016	2	2.962	Y		
Electronic Equipment Unit (EEU) Modification Kit <sup>(†)</sup>		2017	Raytheon / Woburn, MA	SS/FFP	MDA, Huntsville, AL	Dec 2016	Jun 2017	2	3.035	Y		
Electronic Equipment Unit (EEU) Modification Kit <sup>(†)</sup>		2018	Raytheon / Woburn, MA	SS/FFP	MDA, Huntsville, AL	Dec 2017	Jun 2018	2	3.109	Y		
Electronic Equipment Unit (EEU) Modification Kit <sup>(†)</sup>		2019	Raytheon / Woburn, MA	SS/FFP	MDA, Huntsville, AL	Dec 2018	Jun 2019	2	3.184	Y		
Float Antenna Equipment Unit (AEU) <sup>(†)</sup>		2016	Raytheon / Woburn, MA	SS/FFP	MDA, Huntsville, AL	Dec 2015	Jun 2018	1	73.300	N		
Float Cooling Equipment Unit (CEU) <sup>(†)</sup>		2012	Raytheon / Woburn, MA	SS/FFP	MDA, Huntsville, AL	Dec 2011	Jun 2014	1	7.140	Y		
Float Cooling Equipment Unit (CEU) <sup>(†)</sup>		2014	Raytheon / Woburn, MA	SS/FFP	MDA, Huntsville, AL	Jun 2014	Dec 2016	1	16.700	Y		

Exhibit P-5a, Procurement History and Planning: PB 2015 Missile Defense Agency

Appropriation / Budget Activity / Budget Sub Activity:

0300D / 01 / 17

Date: March 2014

P-1 Line Item Number / Title:

MD11 / BMDS AN/TPY-2 Radars

- / BMDS AN/TPY-2 Radars

Cost Elements	0 0	FY	Contractor and Location	Method/Type or Funding Vehicle	Location of PCO	Award Date	Date of First Delivery	Qty	Unit Cost	Specs Avail Now?	Revision	RFP Issue Date
Float Electronic Equipment Unit (EEU) <sup>(†)</sup>		2012	Raytheon / Woburn, MA	SS / FFP	MDA, Huntsville, AL	Dec 2011		(Each)	(\$ M) 20.260	Y	Available	Date
Float Electronic Equipment Unit (EEU) <sup>(†)</sup>		2014	Raytheon / Woburn, MA	SS / FFP	MDA, Huntsville, AL	Jun 2014	Dec 2016	1	21.000	Y		
Forward-Based Mode Prime Power Units (PPU) <sup>(†)</sup>		2013	Raytheon / Woburn, MA	SS / FFP	MDA, Huntsville, AL	Dec 2012	Dec 2014	4	10.985	Y		
Forward-Based Mode Prime Power Units (PPU) <sup>(†)</sup>		2017	Raytheon / Woburn, MA	SS / FFP	MDA, Huntsville, AL	Dec 2016	Dec 2018	4	12.720	Y		
Forward-Based Mode Prime Power Units (PPU) <sup>(†)</sup>		2019	Raytheon / Woburn, MA	SS / FFP	MDA, Huntsville, AL	Dec 2018	Dec 2020	2	13.110	Y		
Prime Power Unit (PPUs - 2 each radar system) <sup>(†)</sup>		2010	Raytheon / Woburn, MA	SS / FFP	MDA, Huntsville, AL	Jun 2010	Dec 2012	1	15.600	Y		
Prime Power Unit (PPUs - 2 each radar system) <sup>(†)</sup>		2012	Raytheon / Woburn, MA	SS / FFP	MDA, Huntsville, AL	Dec 2011	Jun 2014	2	15.336	Y		
Prime Power Unit (PPUs - 2 each radar system) - 1 <sup>(†)</sup>		2013	Raytheon / Woburn, MA	SS/FFP	MDA, Huntsville, AL	Dec 2012	Jun 2015	1	13.895	Y		
Prime Power Unit (PPUs - 2 each radar system) - 2 <sup>(†)</sup>		2013	Raytheon / Woburn, MA	SS / FFP	MDA, Huntsville, AL	Dec 2013	Jun 2016	1	13.895	Y		
Transmit/Receive Integrated Microwave Module (TRIMMs) <sup>(†)</sup>		2015	Raytheon / Woburn, MA	SS/FFP	MDA, Huntsville, AL	Dec 2014	Jun 2016	1	45.250	Y		

<sup>(†)</sup> indicates the presence of a P-21

Remarks:

N/A

Ext	nibit	P-21, Pr	oducti	on Sc	hedul	le: PE	3 201	5 Mis	sile D	efens	e Age	ency											Date	e: Ma	rch 20	)14				
<b>Ap</b> <sub>0</sub>	prop 00D/	<b>riation</b> / 01 / 17	Budge	t Acti	vity /	Budg	get Sı	ub Ac	tivity	<b>'</b> :																				
											Fiscal Y	ear 2010	)										Fiscal Y	ear 2011						
													(	Calendar	Year 201	10								Caler	ndar Year	r 2011				
O F	= R	SERVICE	PROC	TO 1 OCT	DUE AS OF	0 C T	N O V	D E C	J A N	F E B	M A R	A P R	M A Y	J	J J	A U G	S E P	0 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	A U G	S E P	B A L
C   R     PROC   OCT   AS OF   C   O   E   A   E   A   P   A   U   U   U   E   C   O   E   A   E   A   P   A   U   U   U   E   A																														
				_	1									-	-	T -	-	-	-	-	-	-	-	-	_	-	-	-	-	
					2																									1
				-	1																									
				-	1																									
			CEU)																											
				-	1									-	-	-	-	-	-	-	-	-	-	-	_	-	-	-	-	
_	_			-	2																									- :
			EU) - 1																								ļ			
				-	1																									
			EU) - 2														l			ļ					l					
				-	1																									
																	l								l					
			1	-	1																									
			(EEU)																											
			1 /	-	1									-	_	l -	-	-	-	_	_	-	-	-	_	_	-	-	-	
		1	2	-	2																									
																									l					
			<u> </u>	_	1																									
			(EEU) - 2														l								l					
		· . ·	<del>`</del>	-	1																									
			(EEU) Mod	ification Ki	t																				I					
			1																											
_			2	-	2																									
_				-																										
_		_																												
																														- :
				-	1																									
			Jnit (CEU)																											
				-	1																									
		1	1			0	N	D	J	F	М	Α	М	J	J	Α	S	0	N	D	J	F	М	Α	М	J	J	Α	S	В
						C T	0 V	E	A N	E B	A R	P R	A Y	U N	U L	U G	E P	C T	0 V	E	A N	E B	A R	P R	A Y	U N	U L	U G	E P	A L
					l	ı	V	C	N	В	K	K	Y	N	L	G	۲	ı	V	L L	N	В	K	K	Y	N	L	G	Р	

LI MD11 - BMDS AN/TPY-2 Radars Missile Defense Agency UNCLASSIFIED Page 8 of 20

Exl	nibit F	P-21, Pro	ducti	on Sc	hedul	e: PE	3 201	5 Mis	sile D	efens	e Age	encv											Date	: Mar	rch 20	)14				
Аp	propr	i <b>ation / E</b> 01 / 17									P-1	Line	Item BMDS						_							<b>Title</b> PY-2				
		Cost El									Fiscal Y	ear 2010	)										Fiscal Y	ear 2011						
			,	ACCEPT									C	alendar	Year 201	0								Calen	dar Year	2011				
0 I	: ?	SERVICE	PROC QTY	PRIOR TO 1 OCT 2009	BAL DUE AS OF 1 OCT	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	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
7	2014	MDA	1	-	1																									
Floa	t Electron	c Equipment I	Jnit (EEU	)																										
8	2012	MDA	1	-	1																									
8	2014	MDA	1	-	1																									
Forv	ard-Base	d Mode Prime	Power U	nits (PPU)																										
_	2013	MDA	4	-	4																									
9			4	-	4																									
9			2		2																									
		Jnit (PPUs - 2	each rada	ar system)																										
_	0 2010		1	-	1									-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	
_	0 2012		2		2																									:
		Jnit (PPUs - 2	each rada	ar system)	- 1																									
	0 2013		1	-	1																									
		Jnit (PPUs - 2	each rada	ar system)	- 2																									
	0 2013		1	-	1																									
		eive Integrated			(TRIMMs	)			1				1						ĭ											
_   1	1 2015	MDA	1	-	1																									
						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	U J	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

Exhibit l	P-21, Pr	oducti	on Sc	hedul	le: PE	3 201	5 Mis	sile D	efens	e Age	ency											Date	e: Ma	rch 20	)14				
<b>Appropi</b> 0300D /	riation / 01 / 17	Budge	t Acti	vity /	Budg	jet Si	ub Ac	tivity	<b>'</b> :	- 1	<b>Line</b> 11 / E													nber / AN/T					
		lements in Each)								Fiscal Y	ear 2012											Fiscal Y	ear 2013						
	10////0	Lucin	ACCEPT				_			1 10001 1	001 2012		Calendar	Year 201	12							1100011		ndar Year	2013				$\vdash$
М			PRIOR	BAL			1 _									_	_		_							_	_		
O F C R FY	SERVICE	PROC QTY	TO 1 OCT 2011	DUE AS OF 1 OCT	O C T	N O V	D E C	J A N	F E B	M A R	P R	M A Y	N N J	n n	U G	S E P	O C T	N O V	D E C	J A N	F E B	M A R	P R	M A Y	J U N	U L	A U G	S E P	A L
Antenna Equi	ipment Unit (A	AEU)													-														
	MDA	1	-	1	-	-	-	-	-	-	-	-	-	-	-	-	-	-	1										-
1 2012	MDA	2	-	2			-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	
Antenna Equi	ipment Unit (A	NEU) - 1																				Į.							
1 2013	MDA	1	-	1															-	-	-	-	-	-	-	-	-	-	
Antenna Equi	ipment Unit (A	NEU) - 2							,																				
1 2013	MDA	1	-	1																									
Cooling Equip	oment Unit (C	EU)																											
2 2010	MDA	1	-	1	-	-	-	-	-	-	-	-	-	-	-	-	-	-	1										-
2 2012	MDA	2	-	2			-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	
Cooling Equip	oment Unit (C	EU) - 1													1							ļ.				Į.			
2 2013	MDA	1	-	1															-	-	-	-	-	-	-	-	-	-	
Cooling Equip	oment Unit (C	EU) - 2								-												ļ							
2 2013	MDA	1	-	1																									
Critical Spare	s						•	•	•	•										·									
3 2014	MDA	1	-	1																									
Electronic Eq	uipment Unit	(EEU)								•														•					
4 2010	MDA	1	-	1	-	-	-	-	-	-	-	-	-	-	-	-	-	-	1										-
4 2012	MDA	2	-	2			-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	
Electronic Eq	uipment Unit	(EEU) - 1																						,					
4 2013	MDA	1	-	1															-	-	-	-	-	-	-	-	-	-	
Electronic Eq		(EEU) - 2								•								,											
4 2013	MDA	1	-	1																									
Electronic Eq	uipment Unit	(EEU) Mod	ification Ki	t																				,					
5 2015	MDA	1	-	1																									
5 2016	MDA	2	-	2																									
5 2017	MDA	2	-	2																									
5 2018	MDA	2	-	2																									
5 2019	MDA	2	-	2																									
Float Antenna	a Equipment l	Jnit (AEU)																						•					
6 2016		1	-	1																									$\Box$
Float Cooling	Equipment U	nit (CEU)																						•					
7 2012	MDA	1	-	1			-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	
					0	N	D	J	F	М	Α	М	J	J	А	S	0	N	D	J	F	М	Α	М	J	J	Α	s	В
					C T	O V	E	A N	E B	A R	P R	A Y	U N	U	U G	E P	C T	0 V	E	A N	E B	A R	P R	A Y	U N	U	U G	E P	A L
							U	IN	_ P	Γ.	Γ.	ı	IN		U	Г	•	v	U	IN	D	Γ.	, r	1	IN	L L	G	г	ᆣ

LI MD11 - BMDS AN/TPY-2 Radars Missile Defense Agency UNCLASSIFIED
Page 10 of 20

Ex	chibit	: P-21, Pr	oducti	on Sc	hedul	le: PE	3 201	5 Mis	sile D	efens	e Age	ency											Date	e: Ma	rch 20	)14				
		oriation / / 01 / 17	Budge	et Acti	vity /	Budg	get Sı	ıb Ac	tivity	<b>':</b>			Item BMDS													Title PY-2				
			Elements in Each)								Fiscal Y	ear 2012	<u>.</u>										Fiscal Y	ear 2013						
				ACCEPT										alendar	Year 201	12								Caler	dar Yea	2013				
000	R	SERVICE	PROC QTY	PRIOR TO 1 OCT 2011	BAL DUE AS OF 1 OCT	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	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	A U G	S E P	B A L
	7 201	I4 MDA	1	-	1																									
Flo	at Electr	onic Equipmen	t Unit (EEU	)					•																					
	8 201	12 MDA	1	-	1			-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-		
	8 201	I4 MDA	1	-	1																									
For	rward-Ba	ased Mode Prin	ne Power U	nits (PPU)						,					,					'										
	9 201	I3 MDA	4	-	4															-	-	-	-	-	-	-	-	-		
	9 201	17 MDA	4	-	4																									
	9 201	19 MDA	2	-	2																									
Pri	me Powe	er Unit (PPUs -	2 each rad	ar system)						•	•					•														
	10 201	IO MDA	1	-	1	-	-	-	-	-	-	-	-	-	-	-	-	-	-	1										-
	10 201	12 MDA	2	-	2			-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	
Pri	me Powe	er Unit (PPUs -	2 each rad	ar system)	- 1			,																						
	10 201	I3 MDA	1	-	1															-	-	-	-	-	-	-	-	-	-	
Pri	me Powe	er Unit (PPUs -	2 each rad	ar system)	- 2				·																		,			
	10 201	I3 MDA	1	-	1																									
Tra	ansmit/Re	eceive Integrate	ed Microwa	ve Module	(TRIMMs	;)			·																					
	11 201	I5 MDA	1	-	1																									
						O C T	N O V	D E C	J A N	F E B	M A R	A P R	M A Y	N U	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	T U	A U G	S E P	B A L

Exhibit F	P-21, Pr	oducti	on Sc	hedul	e: PE	3 201	5 Mis	sile D	efens	e Age	ency											Date	e: Ma	rch 20	)14				
<b>Appropr</b> 0300D /	riation / 01 / 17	Budge	t Acti	vity /	Budg	get S	ub Ac	tivity	:	- 1	<b>Line</b> 11 / E					ars								n <b>ber</b> / AN/T					
		lements in Each)							,	Fiscal Y	ear 2014											Fiscal Y	ear 201	5					
	T ,	<u> </u>	ACCEPT										alendar	Year 20	14								Cale	ndar Yea	2015				
M O F C R O # FY	SERVICE	PROC QTY	PRIOR TO 1 OCT 2013	BAL DUE AS OF 1 OCT	0 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 1	A U G	S E P	0 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	J U L	A U G	S E P	B A L
Antenna Equi			2013	1001	<u>'</u>	, v	C	IN	Ь	K	K	1	N		G	F	'	V		IN		K	K	1	IN	<u> </u>	G	г	
	MDA	1	1	-																									T -
	MDA	2	- '	2		_	_	_	_	_	-	_	2	]															-
Antenna Equi			-			_	-	-	-	-	_	-				-													
	MDA	1	_	1		_	_	1	_	_		_		_	1									1	1				-
Antenna Equi				1	-			-			-	-	-		-	-	-	-	-	-	-	-	-	-	1				
1 2013	1	1	_	1				_	_	_	_	-	_	-	_	_	-	_	_	_ [	_	-	_	T -	_	_	_	-	
												-					-	-			-	_					-	-	
Cooling Equip			1																										_
		1				1				1	1			1															
2 2012		2	-	2	-	-	-	-	-	-	-	-	2																-
Cooling Equip				1			1	1		1	1				1	1								1		1			
2 2013		1	-	1	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	1				-
Cooling Equip											1											1	1	_					
2 2013		1	-	1			-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	
Critical Spare																													
3 2014		1	-	1									-	-	-	-	-	-	-	-	-	-	-	-	1				
Electronic Eq	<del>_</del>	(EEU)																											
4 2010		1	1	-		1	1		,				1	1															-
4 2012	MDA	2	-	2	-	-	-	-	-	-	-	-	2																-
Electronic Eq	uipment Unit	(EEU) - 1																											
4 2013	MDA	1	-	1	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	1				-
Electronic Eq	uipment Unit	(EEU) - 2																											
4 2013	MDA	1	-	1			-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	
Electronic Equ	uipment Unit	(EEU) Modi	ification Ki	t			-						•			•						•							
5 2015	MDA	1	-	1															-	-	-	-	-	-	1				-
5 2016	MDA	2	-	2																									
5 2017	MDA	2	-	2																									
5 2018	MDA	2	-	2																									
5 2019	MDA	2	-	2																									
Float Antenna	Equipment l	Jnit (AEU)																				ļ							
6 2016	_	1	-	1																									
Float Cooling		nit (CEU)	1	- 1																									
7 2012		1	_	1		_	-	_	_	_	_	-	1																-
. 20,2	1=			<del>' '</del>	0	N	D	J	F	М	Α	М	J	J	Α	S	0	N	D	J	F	М	Α	М	J	J	Α	S	В
					C T	O V	E	A N	E B	A R	P	A Y	Ü	Ŭ	Ü	E P	C T	o V	E	A	E B	A R	PR	A	Ü	Ü	Ü	Ë P	A
				Į	•					L.,	L.,	•					•	•					L	<u>.                                    </u>			_	•	

LI MD11 - BMDS AN/TPY-2 Radars Missile Defense Agency UNCLASSIFIED
Page 12 of 20

Ex	hibit F	P-21, Pro	ducti	on Sc	hedul	le: PE	3 201	5 Mis	sile D	efens	e Age	ency											Date	: Ma	rch 20	014				
		i <b>ation / I</b> 01 / 17	Budge	et Acti	vity /	Budg	jet Si	ub Ac	tivity	:			Item BMDS													Title PY-2				
		Cost El (Units i									Fiscal Y	ear 2014											Fiscal Y	ear 2015						
				ACCEPT									С	alendar	Year 201	4								Caler	ıdar Yeaı	r 2015				
0 0	R	SERVICE	PROC QTY	PRIOR TO 1 OCT 2013	BAL DUE AS OF 1 OCT	0 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	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
	7 2014	MDA	1	-	1									-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	
Floa	t Electron	c Equipment	Unit (EEU	)																										
	3 2012		1	-	1	-	-	-	-	-	-	-	-	1																-
	3 2014	MDA	1	-	1									-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	
Fon	ward-Base	d Mode Prime	Power U	nits (PPU)																										
	9 2013	MDA	4	-	4	-	-	-	-	-	-	-	-	-	-	-	-	-	-	3										
	9 2017	MDA	4	-	4																									
	2019	MDA	2	1	2																									
Prin	ne Power I	Jnit (PPUs - 2	each rada	ar system)																										
	10 2010	MDA	1	1	-																									-
	10 2012	MDA	2	-	2	-	-	-	-	-	-	-	-	2															1	-
Prin	ne Power I	Jnit (PPUs - 2	each rada	ar system)	- 1																									
	10 2013	MDA	1	-	1	-	-	-	-	-	-	-	-	-	-	-		-	-	-	-	-	-	-	-	1				-
Prin	ne Power I	Jnit (PPUs - 2	each rada	ar system)	- 2																									
	10 2013	MDA	1	-	1			-	-	-	-	-	-	-	-	-		-	-	-	-	-	-	-	-	-	-	-	-	
Trai	nsmit/Rece	ive Integrated	Microwa	ve Module	(TRIMMs	)																								
	11 2015	MDA	1	-	1															-	-	-	-	-	-	-	-	-	-	
						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	J J	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	N N J	U U	A U G	S E P	B A L

																1 166														
Exh	ibit F	P-21, Pr	oducti	on Sc	hedu	le: PE	201	5 Mis	sile D	efens	e Age	ency											Date	e: Ma	rch 20	014				
<b>App</b> 030	oropr 0D/0	<b>iation /</b> 01 / 17	Budge	et Acti	vity /	Budg	jet Sı	ıb Ac	tivity	:	- 1		Item BMDS						_							Title PY-2				
			Elements in Each)								Fiscal Y	/oar 201											Fiscal Y	oar 2017						
		Onnis	Lacin	ACCEPT	1						i iscai i	eai 201		`alondar	Year 201	16				_			i iscai i		ndar Yea	r 2017				
М				PRIOR	BAL									aieridai			_	_												
0 F C R O #		SERVICE	PROC QTY	TO 1 OCT 2015	AS OF 1 OCT	O C T	N O V	E C	J A N	F E B	M A R	P R	M A Y	N N	U L	U G	S E P	O C T	N O V	E C	J A N	F E B	M A R	A P R	M A Y	N U J	n T	U G	S E P	B A L
Anter	na Equip	pment Unit (A	AEU)																					,						
1	2010	MDA	1	1	-																									-
1	2012	MDA	2	2	-	]																								-
Anter	na Equip	oment Unit (A	AEU) - 1																											
1	2013	MDA	1	1	-																									-
Anter	na Equip	oment Unit (A	AEU) - 2																											
1	2013	MDA	1	-	1	-	-	-	-	-	-	-	-	1																-
Cooli	ng Equip	ment Unit (C	EU)																											
2	2010	MDA	1	1	-																									-
2	2012	MDA	2	2	-																									-
Cooli	ng Equip	ment Unit (C	EU) - 1																											
2	2013	MDA	1	1	-																									-
		ment Unit (C	EU) - 2																											
2	2013	MDA	1	-	1	-	-	-	-	-	-	-	-	1																-
Critic	al Spares	3		,																										
3	2014	MDA	1	1	-																									-
Elect	ronic Equ	uipment Unit	(EEU)																											
4	2010	MDA	1	1	-																									-
4	2012	MDA	2	2	-	]																								-
Elect	ronic Equ	ipment Unit	(EEU) - 1																											
4	2013	MDA	1	1	-																									-
Elect	ronic Equ	ipment Unit	(EEU) - 2																											
4	2013	MDA	1	-	1	-	-	-	-	-	-	-	-	1																-
Elect	ronic Equ	ipment Unit	(EEU) Mod	ification Ki	t						•																			
5	2015	MDA	1	1	-																									-
5	2016	MDA	2	-	2			-	-	-	-	-	-	1	-	-	1													-
5	2017	MDA	2	-	2															-	-	-	-	-	-	1	-	-	1	-
5	2018	MDA	2	-	2																									2
5	2019	MDA	2	-	2																									2
Float	Antenna	Equipment l	Unit (AEU)	•																										
6	2016	MDA	1	-	1			-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	1
Float	Cooling	Equipment U	Jnit (CEU)																											
7	2012	MDA	1	1	-																									-
,						0	N	D	J	F	М	Α	М	J	J	Α	S	0	N	D	J	F	М	Α	М	J	J	Α	S	В
						C	O V	E	A N	E B	A R	P R	A Y	U N	U L	U	E P	C T	O V	E	A N	E B	A R	P R	A Y	U N	U L	U G	E P	A L
						<u>'</u>							<u>'</u>	.,,				_ '							<u>'</u>			J	•	

LI MD11 - BMDS AN/TPY-2 Radars Missile Defense Agency UNCLASSIFIED
Page 14 of 20

P-1 Line #31

Part															FIED		<b>U</b>	• • •													
Main				14	ch 20	: Mar	Date												ncy	e Age	efens	sile D	5 Mis	2015	e: PE	nedul	on Scl	ductio	-21, Pro	bit P	Exh
Transition   Tra																					:	tivity	ıb Ac	et Su	Budg	/ity /	t Activ	Budge			
Name						ar 2017	Fiscal Y												ear 2016	Fiscal Ye											
National Column				.017	lar Year	Calen									6	Year 201	alendar '	C													
Float   Electronic   Equipment Unit (EEU)     8	S E A	U	U	U	Α	Р	Α	E	Α		E	0	С	E	U	Ü	Ŭ	Α	Р	Α	E	A	E	0	С	DUE AS OF	TO 1 OCT		SERVICE	FY	O F
No column   No c										1		-	-	-	-	-	-	-	-	-	-	-	-	-	-	1	-	1	MDA	2014	7
No column   No c																												Jnit (EEU)	Equipment	lectronic	Float I
Second   Forward   Forwa																										-	1	1	MDA	2012	8
9   2013   MDA										1		-	-	-	-	-	-	-	-	-	-	-	-	-	-	1	-	1	MDA	2014	8
9   2017   MDA																											its (PPU)	Power Un	Mode Prime	d-Based	Forwa
9   2019   MDA   2   -   2																										1	3	4	MDA	2013	9
Prime   Power   Unit (  PPUs - 2   each radar   system)     10   2010   MDA	-	-	-	-	-	-	-	-	-	-	-															4	-	4			
10   2010   MDA																										2	-				
10   2012   MDA   2   2   3																											system)	each rada			
Prime Power Unit (PPUs - 2 each radar system) - 1  10 2013 MDA																										-				_	
10   2013   MDA																															
Prime Power Unit (PPUs - 2 each radar system) - 2         10       2013       MDA       1       -       1       -       -       -       -       -       1         Transmit/Receive Integrated Microwave Module (TRIMMs)																										1	system) -	each rada			
10       2013       MDA       1       -       1       -       -       -       -       -       1         Transmit/Receive Integrated Microwave Module (TRIMMs)																											1	.			
Transmit/Receive Integrated Microwave Module (TRIMMs)																						ĭ .				2	system) -				
																	1	-	-	-	-	-	-	-	-		-	•			
11  2015  MDA																						T				TRIMMs)	Module (				
																	1		-	-						1	-	1	MDA	2015	11
O         N         D         J         F         M         A         M         J         J         A         S         O         N         D         J         F         M         A         M         J         J         A           C         O         E         A         E         A         P         A         U         U         U         E         C         O         E         A         E         A         P         A         U         U         U         U         U         U         U         U         U         U         U         U         U         D         D         J         F         M         A         M         J         J         A         A         D         D         J         F         M         A         M         J         J         A         A         D         A         D	S E E A P L	A U G		J U N		P		F E B		)	D E C	0	С	S E P	U	Ü	Ü	Α	Р	Α			E	0	С						

Exhibit P	P-21, Prod	ductio	on Sc	hedul	le: PE	3 201	5 Mis	sile D	efens	se Age	ency											Date	: Ma	rch 20	)14				
<b>Appropri</b> 0300D / 0		udge	t Acti	vity /	Budg	get Si	ub Ad	ctivity	<b>':</b>			ltem BMDS												nber / AN/T					
	Cost Elen									Fiscal Y	oar 2019	2										Fiscal Y	ar 2010						
	(Units in t		ACCEPT							FISCAL	ear 2016		Calendar	Voor 20	10				_			FISCAI 1		ıdar Year	2010				$\vdash$
м			PRIOR	BAL								<del>- `</del>	Jaienuai	Teal 20	10								Calei		2019				$\vdash$
O F C R O # FY		PROC QTY	TO 1 OCT 2017	AS OF 1 OCT	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	A L
Antenna Equip	ment Unit (AEL	J)																'						,					
1 2010	MDA	1	1	-																									-
1 2012	MDA	2	2	-																									-
Antenna Equip	ment Unit (AEL	J) - 1																											
1 2013	MDA	1	1	-																									-
Antenna Equip	ment Unit (AEL	J) - 2																											
1 2013	MDA	1	1	-																									-
Cooling Equipr	ment Unit (CEU	)																											
2 2010	MDA	1	1	-																									-
2 2012	MDA	2	2	-																									-
Cooling Equipr	ment Unit (CEU	) - 1																											
2 2013	MDA	1	1	-																									-
	ment Unit (CEU	) - 2																											
2 2013	MDA	1	1	-																									-
Critical Spares	•																												
3 2014	MDA	1	1	-																									-
Electronic Equ	ipment Unit (EE	EU)																											
4 2010	MDA	1	1	-																									-
4 2012	MDA	2	2	-																									-
Electronic Equ	ipment Unit (EE	EU) - 1																											
4 2013	MDA	1	1	-																									-
Electronic Equ	ipment Unit (EE	EU) - 2																											
4 2013	MDA	1	1	-																									-
Electronic Equ	ipment Unit (EE	EU) Modit	fication Ki	t																									
5 2015	MDA	1	1	-																									_
5 2016	MDA	2	2	-																									-
5 2017	MDA	2	2	-																									-
5 2018	MDA	2	-	2			-	-	-	-	-	-	1	-	-	1													-
5 2019	MDA	2	-	2																-	-	-	-	-	1	-	-	1	-
Float Antenna	Equipment Unit	t (AEU)																											
6 2016	MDA	1	-	1	-	-	-	-	-	-	-	-	1																-
Float Cooling E	Equipment Unit	(CEU)																											
7 2012	MDA	1	1	-																									-
					0 C	N O	D E	J A N	F E	M A	A P	M A Y	J	n 1	A U	S E	0 C	N O	D E C	J A N	F E	M A	A P	M A Y	J	- n r	A U	S E	B A
				Į	Т	V	С	N	В	R	R	Y	N	L	G	Р	Т	V	Ü	N	В	R	R	Y	N	L	G	Р	L

LI MD11 - BMDS AN/TPY-2 Radars Missile Defense Agency UNCLASSIFIED
Page 16 of 20

														UI	NCL	ASS	IFIE	D													
Exl	nib	it F	P-21, P	roduct	ion Sc	hedu	le: Pl	B 20 <sup>2</sup>	15 Mis	sile D	efens	e Ag	ency											Dat	e: Ma	rch 2	014				
Аp	pro	pr		/ Budg								P-	1 Line				/ <b>Title</b>											[ <b>DOI</b> Rada			
				t Elements								Fiscal	Year 201	8	,									Fiscal	Year 2019						
				,	ACCEPT			_	_		_				Calend	ar Year 2	018						_		Cale	ndar Yea	r 2019				
0 I	₹	FY	SERVIC	PROC E QTY	PRIOR TO 1 OCT 2017	BAL DUE AS OF 1 OCT	O C T	N O V	D E C	J A N	F E B	M A R	A P R	M A Y	Ŋ	J U L	A U G	S E P	C	0	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
7	20	014	MDA	1	1	-		'							_	,				,				,					,		-
Floa	t Elec	ctroni	ic Equipme	ent Unit (EEl	J)																										
			MDA	1	1	-																									-
8	2	014	MDA	1	1	-																									_
	_			ime Power l	Jnits (PPU)																										
_		013	MDA	4	-	1									_																
9			MDA	4		4	-	-	-	-	-	-	-	-	-	-	-	-			4										-
_	_		MDA	2		2															-	-	-	-	-	-	-	-	-	-	
				- 2 each rad	dar system)	1																									
_			MDA	1		_																									_
_			MDA	2																											_
	_			- 2 each rad	<del> </del>	- 1																									
			MDA	1	<u> </u>	-																									-
				- 2 each rad	dar system)	- 2																									
			MDA	1	1	-		_																							-
				ated Microwa	_	<u> </u>	)																								
	1 2	015	MDA	1	1	-					_			1							1 -	1 .	_	1	1 -		Τ.				<u> </u>
							O C T	N O V	D E C	A N	F E B	M A R	P R	M A Y	N N	n n	U G	S E P	C	; o	D E C	J A N	F E B	M A R	A P R	M A Y	N U	U L	A U G	S E P	B A L

																1 166														
Ext	nibit l	P-21, Pr	oduct	ion Sc	hedu	le: PE	3 201	5 Mis	sile D	efens	e Age	ency											Date	e: Ma	rch 20	014				
<b>Ap</b> <sub>1</sub> 030	oropi 0D/	riation / 01 / 17	Budge	et Acti	vity /	Budç	get Su	ub Ac	ctivity	:					iber / TPY-2											Title PY-2				
			Elements in Each)								Fiscal Y	ear 2020	1						,				Fiscal Y	ear 2021						
	Т	(Office	liii Lacii)	ACCEPT			-				i iscai i	eai 2020		alondar	Year 202	20				_			i iscai i		ndar Yea	r 2021				
N				PRIOR	BAL									Jaieridai	1001 202					1				Oalei		2021				
O F C R O #	:	SERVICE	PROC QTY	TO 1 OCT 2019	AS OF 1 OCT	O C T	N O V	E C	J A N	F E B	M A R	P R	M A Y	U N	J U L	U G	S E P	O C T	N O V	D E C	J A N	F E B	M A R	P R	M A Y	U N	U L	U G	S E P	B A L
Ante		ipment Unit (/	AEU)			l	1				1											<u> </u>				1				
1	2010	MDA	1	1	-																									-
1	2012	MDA	2	2	-																									-
Ante	nna Equ	ipment Unit (/	AEU) - 1																											
1	2013	MDA	1	1	-																									-
Ante	nna Equ	ipment Unit (/	AEU) - 2																											
1	2013	MDA	1	1	-																									-
Cool	ng Equi	pment Unit (C	EU)																											
2	2010	MDA	1	1	-																									-
2	2012	MDA	2	2	-																									-
Cool	ng Equi	pment Unit (C	EU) - 1																											,
2	2013	MDA	1	1	-																									-
		pment Unit (C	EU) - 2																											
2	2013	MDA	1	1	-																									-
Critic	al Spare	es																												
3	2014	MDA	1	1	-																									-
Elect	ronic Eq	uipment Unit	(EEU)																											
4	2010	MDA	1	1	-																									-
4	2012	MDA	2	2	-																									-
Elect	ronic Eq	uipment Unit	(EEU) - 1																											
4	2013	MDA	1	1	-																									-
Elect	ronic Eq	uipment Unit	(EEU) - 2		1		_																							
4	2013	MDA	1	1	-																									-
Elect	ronic Eq	uipment Unit	(EEU) Mod	dification Ki	t																									
5	2015	MDA	1	1	-																									-
5	2016	MDA	2	2	-																									-
5	2017	MDA	2	2	-																									-
5	2018	MDA	2	2	-																									-
5	2019	MDA	2	2	-																									-
Float	Antenna	a Equipment	Unit (AEU)																											
6	2016	MDA	1	1	-																									-
Float	Cooling	Equipment L	Jnit (CEU)																											
7	2012	MDA	1	1	-																									-
						0	N	D	J	F	М	Α	M	J	J	Α	S	0	N	D	J	F	М	Α	М	J	J	Α	S	В
						C	O V	E	A N	E B	A R	P R	A Y	U N	U L	U G	E P	C T	O V	E	A N	E B	A R	P R	A Y	U N	U L	U G	E P	A L
						<u>'</u>			<u> </u>								<u> </u>								<u> </u>				•	

LI MD11 - BMDS AN/TPY-2 Radars Missile Defense Agency UNCLASSIFIED
Page 18 of 20

C # FY SERVICE QTY 2019 1 OCT T V C N  7 2014 MDA 1 1 -  Float Electronic Equipment Unit (EEU)  8 2012 MDA 1 1 -  8 2014 MDA 1 1 -  8 2014 MDA 1 1 -  Forward-Based Mode Prime Power Units (PPU)  9 2013 MDA 4 3 1 9 2017 MDA 4 4 - 9 2019 MDA 2 - 2  Prime Power Unit (PPUs - 2 each radar system)  10 2010 MDA 1 1 -  10 2013 MDA 2 2 2 -  Prime Power Unit (PPUs - 2 each radar system) - 1  10 2013 MDA 1 1 1 -	P-1 Line Item Number / Title:
Cunits in Each    Construction   Cunits in Each	Calendar Year 2020  F M A M J J A S O N D J F M A M J J A S E A P A U U U E C O E A E A P A U U U E E C N B R R Y N L G P
PRIOR   TO 1	F         M         A         M         J         J         A         S         O         N         D         J         F         M         A         M         J         J         J         A         S           E         A         P         A         U
Fraction   Processing Processin	E     A     P     A     U     U     U     E     C     O     E     A     E     A     P     A     U     U     U     U     G     P
Float Electronic Equipment Unit (EEU)    8	
8   2012   MDA	
8   2014   MDA	
Forward-Based Mode Prime Power Units (PPU)  9 2013 MDA	2
9 2017 MDA 4 4	2
9 2017 MDA 4 4	
9 2019 MDA 2 - 2   Prime Power Unit (PPUs - 2 each radar system)  10 2010 MDA 1 1 -   10 2012 MDA 2 2 2 -   Prime Power Unit (PPUs - 2 each radar system) - 1  10 2013 MDA 1 1 -   Prime Power Unit (PPUs - 2 each radar system) - 2	2
Prime Power Unit (PPUs - 2 each radar system)         10       2010       MDA       1       1       -         10       2012       MDA       2       2       -         Prime Power Unit (PPUs - 2 each radar system) - 1         10       2013       MDA       1       1       -         Prime Power Unit (PPUs - 2 each radar system) - 2	
10   2010   MDA	
10   2012   MDA   2   2   -	
Prime Power Unit (PPUs - 2 each radar system) - 1           10         2013         MDA         1         1         -           Prime Power Unit (PPUs - 2 each radar system) - 2	
10   2013   MDA	
Prime Power Unit (PPUs - 2 each radar system) - 2	
10 2013 MDA 1 1 -	
Transmit/Receive Integrated Microwave Module (TRIMMs)	
11 2015 MDA 1 1 -	
O N D J C O E A T V C N	F         M         A         M         J         J         A         S         O         N         D         J         F         M         A         M         J         J         J         A         S           E         A         P         A         U         U         U         U         U         U         U         U         E         A         P         A         U         U         U         U         E         A         P         A         U         U         U         U         E         A         P         A         U         U         U         E         A         P         A         U         U         U         U         E         A         P         A         U         U         U         E         A         P         A         U         U         U         U         E         A         P         A         U         U         U         U         U         D         D         D         D         D         D         D         D         D         D         D         D         D         D         D         D         D         D

Exhibit P-21, Production Schedule: PB 2015 Missile Defense Agency

Appropriation / Budget Activity / Budget Sub Activity:

0300D / 01 / 17

Date: March 2014

P-1 Line Item Number / Title:

MD11 / BMDS AN/TPY-2 Radars

- / BMDS AN/TPY-2 Radars

	Product	ion Rates (Each /	Month)				Procurement Le	adtime (Months)			
MFR				_	Init	tial			Reo	rder	
Ref # MFR Name - Location	MSR	1-8-5	MAX	ALT Prior to Oct 1	ALT After Oct 1	Mfg PLT	Total After Oct 1	ALT Prior to Oct 1	ALT After Oct 1	Mfg PLT	Total After Oct 1
1 Raytheon - Woburn, MA	1.00	1.00	4.00	4	2	30	32	-	-	-	-
2 Raytheon - Woburn, MA	1.00	1.00	4.00	4	2	30	32	-	-	-	-
3 Raytheon - Woburn, MA	1.00	1.00	4.00	4	2	12	14	-	-	-	-
4 Raytheon - Woburn, MA	1.00	1.00	4.00	4	2	30	32	-	-	-	-
5 Raytheon - Woburn, MA	1.00	1.00	3.00	4	2	6	8	-	-	-	-
6 Raytheon - Woburn, MA	1.00	1.00	4.00	4	2	30	32	-	-	-	-
7 Raytheon - Woburn, MA	1.00	1.00	4.00	4	2	30	32	-	-	-	-
8 Raytheon - Woburn, MA	1.00	1.00	4.00	4	2	30	32	-	-	-	-
9 Raytheon - Woburn, MA	1.00	1.00	4.00	4	2	30	32	-	-	-	-
10 Raytheon - Woburn, MA	1.00	1.00	4.00	4	2	30	32	-	-	-	-
11 Raytheon - Woburn, MA	1.00	1.00	4.00	4	2	19	21	-	-	-	-

The first non-gray cell in the Delivery Schedule indicates the Contract Award Date.

Note: Due to space limitations, quantities in the Exhibit P-21 delivery calendar are truncated and rounded based on the maximum quantity in the calendar as follows. If the maximum quantity is less than or equal to than 9,999, all quantities are shown in thousands. If the maximum quantity is between 1,000,000 and 999,999,999 all quantities are shown in millions (rounded to the nearest thousand). If the maximum quantity is equal or greater than 1,000,000,000 all quantities are shown in billions (rounded to the nearest million).

Exhibit P-40, Budget Line Item Justification: PB 2015 Missile Defense Agency

P-1 Line Item Number / Title:

Appropriation / Budget Activity / Budget Sub Activity: 0300D: Procurement, Defense-Wide / BA 01: Major Equipment / BSA 17: Major

Equipment, Missile Defense Agency

MD73 / Aegis Ashore Phase III

ID Code (A=Service Ready, B=Not Service Ready) : A

Program Elements for Code B Items: 0208866C

Other Related Program Elements: 0208866C

Date: March 2014

Line Item MDAP/MAIS Code: 362

Item MDAP/MAIS Code(s):

			(-)-									
Resource Summary	Prior Years	FY 2013	FY 2014	FY 2015 Base	FY 2015 OCO <sup>#</sup>	FY 2015 Total	FY 2016	FY 2017	FY 2018	FY 2019	To Complete	Total
Procurement Quantity (Units in Each)	-	-	1	-	-	-	-	-	-	-	-	1
Gross/Weapon System Cost (\$ in Millions)	-	-	131.400	225.774	-	225.774	36.861	63.655	71.600	-	-	529.290
Less PY Advance Procurement (\$ in Millions)	-	-	-	-	-	-	-	-	-	-	-	-
Net Procurement (P1) (\$ in Millions)	-	-	131.400	225.774	-	225.774	36.861	63.655	71.600	-	-	529.290
Plus CY Advance Procurement (\$ in Millions)	-	-	-	-	-	-	-	-	-	-	-	_
Total Obligation Authority (\$ in Millions)	-	-	131.400	225.774	-	225.774	36.861	63.655	71.600	-	-	529.290
(The following	g Resource Sum	mary rows are f	or informational p	urposes only. Th	ne corresponding	g budget requests	s are documente	ed elsewhere.)				
Initial Spares (\$ in Millions)	-	-	-	-	-	-	-	-	-	-	-	_
Flyaway Unit Cost (\$ in Millions)	-	-	-	-	-	-	-	-	-	-	-	-
Gross/Weapon System Unit Cost (\$ in Millions)	-	-	131.400	-	-	-	-	-	-	-	-	529.290

<sup>&</sup>lt;sup>#</sup> The FY 2015 OCO Request will be submitted at a later date.

### **Description:**

This program supports the procurement of Aegis Ashore. On 17 September 2009, the President announced an overarching policy to provide regional missile defense to U.S. deployed forces, allies and partners in Europe called the European Phased Adaptive Approach (EPAA). Within this policy, a European PAA specifically addresses a timeline to deploy a mix of afloat and land-based Ballistic Missile Defense (BMD) capabilities. Aegis Ashore represents one of these land-based capabilities.

Phase III of EPAA (2018 timeframe): Deploys a land based Aegis Ashore in Poland, and introduces an upgraded Standard Missile, the SM-3 Block IIA. This missile brings improved coverage against medium and intermediate range ballistic threats, and extends coverage to the bulk of the European continent.

Aegis Ashore is a key component of Phases II and III in the European PAA and will provide Aegis Missile Defense capability against short and medium range ballistic missiles in an ashore configuration. It will be similar to the Aegis At-Sea BMD capability inherent in the new Arleigh Burke-class Aegis destroyers (DDG-113 and following ships) to facilitate training and logistical support by the lead service, Navy, Aegis Ashore re-hosts the required BMD components of a Navy Destroyer in an ashore configuration to include a Deckhouse structure and weapon system comprised of a SPY radar, Vertical Launch System (VLS), computing infrastructure. Command. Control. Communications. Computers and Intelligence (C4I) systems, and operator consoles. It will provide sophisticated engagement strategies. Aegis Ashore can adapt to the threat and can be deployed/redeployed worldwide to areas needed to provide persistent coverage for the Geographic Combatant Commanders.

Exhibits Sch	nedule		Р	rior Yea	rs		FY 2013			FY 2014		FY	2015 Ba	se	FY	2015 O	co	FY	2015 To	tal
Title*	Exhibits	ID CD	Unit Cost (\$ M)	Qty (Each)	Total Cost (\$ M)	Unit Cost (\$ M)	Qty (Each)	Total Cost (\$ M)	Unit Cost (\$ M)	<b>Qty</b> (Each)	Total Cost (\$ M)	Unit Cost (\$ M)	Qty (Each)	Total Cost (\$ M)	Unit Cost (\$ M)	Qty (Each)	Total Cost (\$ M)	Unit Cost (\$ M)	Qty (Each)	Total Cost (\$ M)
Item - Aegis Ashore Poland, Equipment and Deckhouse	P-5	Α	-	-	-	-	-	-	131.400	1	131.400	-	-	225.774	-	-	-	-	-	225.774

UNCLASSIFIED Page 1 of 4

Exhibit P-40, Budget Line Item Justification: PB 2015 Missile Defense Agency

Date: March 2014

Appropriation / Budget Activity / Budget Sub Activity:

0300D: Procurement, Defense-Wide / BA 01: Major Equipment / BSA 17: Major

Equipment, Missile Defense Agency

**P-1 Line Item Number / Title:** MD73 / Aegis Ashore Phase III

ID Code (A=Service Ready, B=Not Service Ready) : A

Program Elements for Code B Items: 0208866C

Other Related Program Elements: 0208866C

Line Item MDAP/MAIS Code: 362

Item MDAP/MAIS Code(s):

Line item MBAI /MAIC					Alo oout	. ( - ) -														
Exhibits Sch	edule		P	rior Year	rs		FY 2013			FY 2014		FY	' 2015 Ba	ise	FY	2015 O	co	FY	2015 To	tal
Title*	Exhibits	ID CD	Unit Cost (\$ M)	Qty (Each)	Total Cost (\$ M)	Unit Cost (\$ M)	Qty (Each)	Total Cost (\$ M)	Unit Cost (\$ M)	Qty (Each)	Total Cost (\$ M)	Unit Cost (\$ M)	Qty (Each)	Total Cost (\$ M)	Unit Cost (\$ M)	Qty (Each)	Total Cost (\$ M)	Unit Cost (\$ M)	Qty (Each)	Total Cost
Total Gross/Weapon System Cost			-	-	-		-	-	131.400	1	131.400	-	-	225.774	-	-	-	-	-	225.774
Exhibits Sch	edule			FY 2016			FY 2017			FY 2018			FY 2019		To	Comple	ete		Total	
Title*	Exhibits	ID CD	Unit Cost (\$ M)	Qty (Each)	Total Cost	Unit Cost (\$ M)	Qty (Each)	Total Cost	Unit Cost	Qty (Each)	Total Cost	Unit Cost	Qty (Each)	Total Cost	Unit Cost (\$ M)	Qty (Each)	Total Cost	Unit Cost (\$ M)	Qty (Each)	Total Cost
Item - Aegis Ashore Poland, Equipment and Deckhouse	P-5	Α	-	-	36.861	-	-	63.655	-	-	71.600	-	-	-	-	-	-	529.290	1	529.290
Total Gross/Weapon System Cost			-	-	36.861	-	-	63.655	-	-	71.600	-	_	-	-	_	-	529.290	1	529.290

\*For Items, Title represents the Item Number / Title [DODIC].

Note: Totals in this Exhibit P-40 set may not be exact or add due to rounding.

### Justification:

The Aegis Ashore to be installed in Poland contains a Deckhouse structure and weapon system comprised of a SPY radar, Vertical Launch System (VLS), computing infrastructure, Command, Control, Communications, Computers and Intelligence (C4I) systems, and operator consoles with very diverse procurement lead times from multiple contracts. The funding profile addresses the multiple actions required to field the Aegis Ashore end item in Poland in 2018 and keep the individual components up to date with the Navy's destroyer modernization plan.

FY 2014 procure Long Lead Aegis Weapon System components

FY 2015 procure remainder of the Aegis Ashore Weapon System components, Vertical Launching System (VLS), Command, Control, Communications, Computers and Intelligence (C4I) systems, and Aegis Ashore Deckhouse structure. Start site preparations in Poland.

FY 2016 Start site activation and assembly of Aegis Ashore Deckhouse structure in Poland.

FY 2017 Pack and ship all Weapon System components to Poland. Install Aegis Ashore Weapon System in the Aegis Ashore Deckhouse structure in Poland.

FY 2018 Conduct final configuration test validation

Date: March 2014 Exhibit P-5, Cost Analysis: PB 2015 Missile Defense Agency Appropriation / Budget Activity / Budget Sub Activity: P-1 Line Item Number / Title: Item Number / Title [DODIC]: 0300D / 01 / 17

MD73 / Aegis Ashore Phase III

- / Aegis Ashore Poland, Equipment and Deckhouse

	Prior			FY 2015	FY 2015	FY 2015					То	
Resource Summary	Years	FY 2013	FY 2014	Base	OCO#	Total	FY 2016	FY 2017	FY 2018	FY 2019	Complete	Total
Procurement Quantity (Units in Each)	-	-	1	-	-	-	-	-	-	-	-	1
Gross/Weapon System Cost (\$ in Millions)	-	-	131.400	225.774	-	225.774	36.861	63.655	71.600	-	-	529.290
Less PY Advance Procurement (\$ in Millions)	-	-	-	-	-	-	-	-	-	-	-	-
Net Procurement (P1) (\$ in Millions)	-	-	131.400	225.774	-	225.774	36.861	63.655	71.600	-	-	529.290
Plus CY Advance Procurement (\$ in Millions)	-	-	-	-	-	-	-	-	-	-	-	-
Total Obligation Authority (\$ in Millions)	-	-	131.400	225.774	-	225.774	36.861	63.655	71.600	-	-	529.290
(The following	g Resource Sum	mary rows are fo	or informational p	urposes only. Th	ne corresponding	g budget request	s are documente	ed elsewhere.)		:		
Initial Spares (\$ in Millions)	-	-	-	-	-	-	-	-	-	-	-	
Gross/Weapon System Unit Cost (\$ in Millions)	-	-	131.400	-	-	-	-	-	-	-	-	529.290
, ,	-	-	131.400	-	-	-	-	-	-	-	-	529.29

<sup>&</sup>lt;sup>#</sup> The FY 2015 OCO Request will be submitted at a later date.

		F	Prior Years	5		FY 2013			FY 2014		F١	/ 2015 Ba	se	FY	2015 OC	o	F١	2015 Tot	al
Cost Elements	ID CD	Unit Cost	Qty (Each)	Total Cost (\$ M)															
Flyaway Cost	,			•	•		•							,		,			
Recurring Cost																			
Aegis Ashore Poland, Equipment and Deckhouse	A	-	-	-	-	-	-	131.400	1	131.400	225.774	1	225.774	-	-	-	225.774	1	225.774
Subtotal: Recurring Cost		-	-	-	-	-	-	-	-	131.400	-	-	225.774	-	-	-	-	-	225.774
Subtotal: Flyaway Cost		-	-	-	-	-	-	-	-	131.400	-	-	225.774	-	-	-	-	-	225.774
Gross/Weapon System Cost		-	-	-	-	-	-	131.400	1	131.400	-	-	225.774	-	-	-	-	-	225.774

			FY 2016			FY 2017			FY 2018			FY 2019		To	Complet	te	-	Total Cost	:
Cost Elements	ID CD	Unit Cost	Qty (Each)	Total Cost (\$ M)															
Flyaway Cost																			
Recurring Cost																			
Aegis Ashore Poland, Equipment and Deckhouse	A	36.861	1	36.861	63.655	1	63.655	71.600	1	71.600	-	-	-	-	-	-	105.858	5	529.290
Subtotal: Recurring Cost		-	-	36.861	- 1	-	63.655	-	-	71.600	-	-	-	-	-	-	-	-	529.290
Subtotal: Flyaway Cost		-	-	36.861	-	-	63.655	-	-	71.600	-	-	-	-	-	-	-	-	529.290
Gross/Weapon System Cost		-	-	36.861	-	-	63.655	-	-	71.600	-	-	-	-	-	-	529.290	1	529.290

LI MD73 - Aegis Ashore Phase III Missile Defense Agency

**UNCLASSIFIED** Page 3 of 4

P-1 Line #32

Exhibit P-5, Cost Analysis: PB 2015 Missile Defense Agen	су	Date: March 2014
Appropriation / Budget Activity / Budget Sub Activity: 0300D / 01 / 17	P-1 Line Item Number / Title: MD73 / Aegis Ashore Phase III	Item Number / Title [DODIC]: - / Aegis Ashore Poland, Equipment and Deckhouse
Remarks: N/A		·

LI MD73 - Aegis Ashore Phase III Missile Defense Agency UNCLASSIFIED
Page 4 of 4

P-1 Line #32 Volume 2b - 50

Exhibit P-40, Budget Line Item Justification: PB 2015 Missile Defense Agency

Appropriation / Budget Activity / Budget Sub Activity:

P-1 Line Item Number / Title:

0300D: Procurement, Defense-Wide / BA 01: Major Equipment / BSA 17: Major

MD77 / Radar Spares

Equipment, Missile Defense Agency ID Code (A=Service Ready, B=Not Service Ready) : B

Program Elements for Code B Items: 0603884C

Other Related Program Elements: 0603884C

Date: March 2014

Line Hom MDAD/MAIC Code: 262

Line Item MDAP/MAIS Code: 362	Item MD	DAP/MAIS Cod	le(s):									
Resource Summary	Prior Years	FY 2013	FY 2014	FY 2015 Base	FY 2015 OCO <sup>#</sup>	FY 2015 Total	FY 2016	FY 2017	FY 2018	FY 2019	To Complete	Total
Procurement Quantity (Units in Each)	-	-	-	-	-	-	-	-	-	-	-	-
Gross/Weapon System Cost (\$ in Millions)	-	10.901	-	-	-	-	-	-	-	-	-	10.901
Less PY Advance Procurement (\$ in Millions)	-	-	-	-	-	-	-	-	-	-	-	-
Net Procurement (P1) (\$ in Millions)	-	10.901	-	-	-	-	-	-	-	-	-	10.901
Plus CY Advance Procurement (\$ in Millions)	-	-	-	-	-	-	-	-	-	-	-	-
Total Obligation Authority (\$ in Millions)	-	10.901	-	-	-	-	-	-	-	-	-	10.901
(The following	g Resource Sum	nmary rows are fo	or informational μ	ourposes only. Ti	he corresponding	g budget reques	ts are document	ed elsewhere.)	•			
Initial Spares (\$ in Millions)	-	10.901	-	-	-	-	-	-	-	-	-	10.901
Flyaway Unit Cost (\$ in Millions)	-	-	-	-	-	-	-	-	-	-	-	-
Gross/Weapon System Unit Cost (\$ in Millions)	_	_	_	_	_	_	_	_	_	_	_	_

<sup>&</sup>lt;sup>#</sup> The FY 2015 OCO Request will be submitted at a later date.

# **Description:**

Procure initial spares for Army Navy/Transportable Radar Surveillance and Control (AN/TPY-2) BMDS radars.

No FY 2015 funds are requested.

Exhibits Sc	hedule		Р	rior Yea	rs		FY 2013	1		FY 2014	ļ	FY	′ 2015 Ba	ase	FY	′ 2015 O	СО	FY	2015 To	otal
Title*	Exhibits	ID CD	Unit Cost	Qty (Each)	Total Cost	Unit Cost	Qty (Each)	Total Cost	Unit Cost	Qty (Each)	Total Cost									
P-18 - Initial Spares	P-18				-			10.901			-			-			-			-
Total Gross/Weapon System Cost			-	-	-	-	-	10.901	_	-	-	-	-	_	_	-	_	-	-	-
Exhibits Sc	hedule			FY 2016	;		FY 2017	,		FY 2018	;		FY 2019	1	To	Comple	ete		Total	
Title*	Exhibits	ID CD	Unit Cost	Qty (Each)	Total Cost	Unit Cost (\$ M)	Qty (Each)	Total Cost	Unit Cost	Qty (Each)	Total Cost									
P-18 - Initial Spares	P-18				-			-			-			-			-			10.901
Total Gross/Weapon System Cost			-	-	-	-	-	_	-	-	_	-	-	-	-	-	-	-	-	10.901

\*For the P-18, Title represents the P18 Title.

Exhibit P-40, Budget Line Item Jus	tification: PB 2015 Missile Defense Agency		Date: March 2014
Equipment, Missile Defense Agency	/ BA 01: Major Equipment / BSA 17: Major	P-1 Line Item Num MD77 / Radar Spare	
D Code (A=Service Ready, B=Not Service Ready) : B	Program Elements for Code E	Items: 0603884C	Other Related Program Elements: 0603884C
Line Item MDAP/MAIS Code: 362	Item MDAP/MAIS Code(s):		
Note: Totals in this Exhibit P-40 set may not be exact	or add due to rounding.		
<b>Justification:</b> FY 2013: Initial spares for one AN/TPY-2 BM	DS radar.		

LI MD77 - Radar Spares Missile Defense Agency UNCLASSIFIED Page 2 of 3

P-1 Line #33

Exhibit P-18, Initial and Replen	ishment Sp	are and Re	pair Parts	s Justificatio	n: PB 2015	5 Missile De	efense Agen	су	Date: M	larch 2014		
Appropriation / Budget Activity 0300D / 01 / 17	y / Budget S	ub Activity		<b>-1 Line Item I</b> D77 / Radar S		itle:			Name: Initial Sp	pares		
End Item Line Item Number / Name [MDAP/MAIS]	Prior Years	FY 2013 (\$ M)	FY 2014 (\$ M)	FY 2015 Base (\$ M)	FY 2015 OCO (\$ M)	FY 2015 Total (\$ M)	FY 2016 (\$ M)	FY 2017 (\$ M)	FY 2018 (\$ M)	FY 2019 (\$ M)	To Complete (\$ M)	Total (\$ M)
Initial												
BA 01 - Major Equipment												

-

-

10.901

10.901

-

10.901

-

-

-

Total Cost (Initial + Replenishment)
Remarks:

Subtotal: Initial

1 / Initial Spares

Total Exempt Spares

Total Working Capital Fund Spares

Procure initial spares for one AN/TPY-2 BMDS radar.

10.901

10.901

10.901

-



Exhibit P-40, Budget Line Item Justification: PB 2015 Missile Defense Agency

Date: March 2014

Appropriation / Budget Activity / Budget Sub Activity:

P-1 Line Item Number / Title:

0300D: Procurement, Defense-Wide / BA 01: Major Equipment / BSA 17: Major

MD83 / Iron Dome

Equipment, Missile Defense Agency

ID Code (A=Service Ready, B=Not Service Ready): A

Program Elements for Code B Items:

Other Related Program Elements: 0603913C

Line Item MDAP/MAIS Code: 362

Item MDAP/MAIS Code(s):

			- ( - ) -									
Resource Summary	Prior Years	FY 2013	FY 2014	FY 2015 Base	FY 2015 OCO <sup>#</sup>	FY 2015 Total	FY 2016	FY 2017	FY 2018	FY 2019	To Complete	Total
Procurement Quantity (Units in Each)	1	1	1	1	-	1	-	-	-	-	-	4
Gross/Weapon System Cost (\$ in Millions)	203.868	194.481	220.309	175.972	-	175.972	-	-	-	-	-	794.630
Less PY Advance Procurement (\$ in Millions)	-	-	-	-	-	-	-	-	-	-	-	-
Net Procurement (P1) (\$ in Millions)	203.868	194.481	220.309	175.972	-	175.972	-	-	-	-	-	794.630
Plus CY Advance Procurement (\$ in Millions)	-	-	-	-	-	-	-	-	-	-	-	-
Total Obligation Authority (\$ in Millions)	203.868	194.481	220.309	175.972	-	175.972	-	-	-	-	-	794.630
(The following	Resource Sumi	mary rows are fo	or informational p	ourposes only. Ti	ne correspondin	g budget request	s are document	ed elsewhere.)	1			
Initial Spares (\$ in Millions)	-	-	-	-	-	-	-	-	-	-	-	-
Flyaway Unit Cost (\$ in Millions)	-	-	-	-	-	-	-	-	-	-	-	-
Gross/Weapon System Unit Cost (\$ in Millions)	203.868	194.481	220.309	175.972	-	175.972	-	-	-	-	-	198.658

<sup>\*</sup>The FY 2015 OCO Request will be submitted at a later date.

## **Description:**

Provides funding to the Government of Israel to procure Iron Dome batteries and Tamir Missiles to counter short-range rocket threats.

Quantities are classified. The unit quantity of one is used as a proxy in each Fiscal Year with funding.

Exhibits Sch	nedule		Р	rior Year	's		FY 2013			FY 2014		FY	′ 2015 Ba	ase	FY	2015 O	co	FY	2015 To	tal
Title*	Exhibits	ID CD	Unit Cost (\$ M)	Qty (Each)	Total Cost (\$ M)	Unit Cost (\$ M)	Qty (Each)	Total Cost (\$ M)	Unit Cost (\$ M)	Qty (Each)	Total Cost (\$ M)	Unit Cost (\$ M)	Qty (Each)	Total Cost (\$ M)	Unit Cost (\$ M)	Qty (Each)	Total Cost (\$ M)	Unit Cost (\$ M)	Qty (Each)	Total Cost (\$ M)
Item - Iron Dome	P-5	Α	203.868	1	203.868	194.481	1	194.481	220.309	1	220.309	175.972	1	175.972	-	-	-	175.972	1	175.972
Total Gross/Weapon System Cost			203.868	1	203.868	194.481	1	194.481	220.309	1	220.309	175.972	1	175.972	-	-	-	175.972	1	175.972
Exhibits Sch																				
EXHIBITS SCI	nedule			FY 2016			FY 2017			FY 2018			FY 2019		To	Comple	ete		Total	
Title*	nedule Exhibits	ID CD	Unit Cost	Qty (Each)	Total Cost		Qty (Each)	Total Cost		Qty (Each)	Total Cost		Qty (Each)			•	Total Cost	Unit Cost	Qty (Each)	Total Cost
			Unit Cost	Qty	Total Cost	Unit Cost	Qty		Unit Cost	Qty	Total Cost	Unit Cost	Qty	Total Cost	Unit Cost	Qty	Total Cost		Qty	

\*For Items, Title represents the Item Number / Title [DODIC].

	0.1102	, toon ieb		
Exhibit P-40, Budget Line Item Justification: PE	3 2015 Missile Defense Agency		Date: March 2	2014
Appropriation / Budget Activity / Budget Sub A 0300D: Procurement, Defense-Wide / BA 01: Majo Equipment, Missile Defense Agency		P-1 Line Item Nu MD83 / Iron Dom		
ID Code (A=Service Ready, B=Not Service Ready) : A	Program Elements for Code B	Items:	Other Related Program Elements	: 0603913C
Line Item MDAP/MAIS Code: 362 Item MDAP/MA	AIS Code(s):			
Note: Totals in this Exhibit P-40 set may not be exact or add due to rour	ding.			
Justification: FY 2014: Procurement for batteries of the Iron Dome weapon	system.			
FY 2015: Continued procurement of batteries and Tamir Interc	eptors of the Iron Dome weapon system			

LI MD83 - Iron Dome Missile Defense Agency UNCLASSIFIED Page 2 of 4

P-1 Line #34

Exhibit P-5, Cost Analysis: PB 2015 Missile Defense Agency

Appropriation / Budget Activity / Budget Sub Activity:

0300D / 01 / 17

Date: March 2014

| Item Number / Title [DODIC]:
|-- / Iron Dome

	Prior			FY 2015	FY 2015	FY 2015					То	
Resource Summary	Years	FY 2013	FY 2014	Base	OCO#	Total	FY 2016	FY 2017	FY 2018	FY 2019	Complete	Total
Procurement Quantity (Units in Each)	1	1	1	1	-	1	-	-	-	-	-	4
Gross/Weapon System Cost (\$ in Millions)	203.868	194.481	220.309	175.972	-	175.972	-	-	-	-	-	794.630
Less PY Advance Procurement (\$ in Millions)	-	-	-	-	-	-	-	-	-	-	-	-
Net Procurement (P1) (\$ in Millions)	203.868	194.481	220.309	175.972	-	175.972	-	-	-	-	-	794.630
Plus CY Advance Procurement (\$ in Millions)	-	-	-	-	-	-	-	-	-	-	-	-
Total Obligation Authority (\$ in Millions)	203.868	194.481	220.309	175.972	-	175.972	-	-	-	-	-	794.630
(The following	Resource Sum	mary rows are fo	or informational p	ourposes only. Th	ne corresponding	p budget request	s are documente	ed elsewhere.)	•			
Initial Spares (\$ in Millions)	-	-	-	-	-	-	-	-	-	-	-	-
Gross/Weapon System Unit Cost (\$ in Millions)	203.868	194.481	220.309	175.972	-	175.972	-	-	-	-	-	198.658

<sup>#</sup> The FY 2015 OCO Request will be submitted at a later date.

		Prior Years			FY 2013		FY 2014			FY 2015 Base			FY 2015 OCO			FY 2015 Total			
Cost Elements	ID CD	Unit Cost	Qty (Each)	Total Cost (\$ M)	Unit Cost	Qty (Each)	Total Cost (\$ M)	Unit Cost	Qty (Each)	Total Cost (\$ M)	Unit Cost	Qty (Each)	Total Cost (\$ M)	Unit Cost	Qty (Each)	Total Cost (\$ M)	Unit Cost	Qty (Each)	Total Cost (\$ M)
Hardware Cost																			
Non Recurring Cost																			
Iron Dome	Α	203.868	1	203.868	194.481	1	194.481	220.309	1	220.309	175.972	1	175.972	-	-	-	175.972	1	175.972
Subtotal: Non Recurring Cost		-	-	203.868	-	-	194.481	-	-	220.309	-	-	175.972	-	-	-	-	-	175.972
Subtotal: Hardware Cost		-	-	203.868	-	-	194.481	-	-	220.309	-	-	175.972	-	-	-	-	-	175.972
Gross/Weapon System Cost		203.868	1	203.868	194.481	1	194.481	220.309	1	220.309	175.972	1	175.972	-	-	-	175.972	1	175.972

		FY 2016			FY 2017			FY 2018			FY 2019			To Complete			Total Cost		
	ID CD	Unit Cost	Qty (Each)	Total Cost (\$ M)	Unit Cost	Qty (Each)	Total Cost (\$ M)	Unit Cost	Qty (Each)	Total Cost (\$ M)									
Hardware Cost				•															
Non Recurring Cost																			
Iron Dome	Α	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	198.658	4	794.63
Subtotal: Non Recurring Cost		-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	794.63
Subtotal: Hardware Cost		-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	794.63
Gross/Weapon System Cost		-	=	-	_	_	-	_	-	-	_	_	_	-	-	-	198.658	4	794.63

### Remarks:

Quantities are classified. The unit quantity of one is used as a proxy in each Fiscal Year with funding.

LI MD83 - Iron Dome Missile Defense Agency UNCLASSIFIED
Page 3 of 4

P-1 Line #34

Exhibit P-5, Cost Analysis: PB 2015 Missile Defense Agen	Date: March 2014					
Appropriation / Budget Activity / Budget Sub Activity: 0300D / 01 / 17	P-1 Line Item Number / Title: MD83 / Iron Dome	Item Number / Title [DODIC]: - / Iron Dome				

LI MD83 - Iron Dome Missile Defense Agency UNCLASSIFIED
Page 4 of 4

P-1 Line #34 Volume 2b - 58