Missile Defense Agency

Fiscal Year (FY) 2012 Budget Estimates

February 2011



Procurement, Defense-Wide

Missile Defense Agency

PROCUREMENT, DEFENSE-WIDE

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Defense-Wide FY 2012 President's Budget Exhibit P-1 FY 2012 President's Budget Total Obligational Authority (Dollars in Thousands)

08 Feb 2011

Appropriation	FY 2010 (Base & OCO)	FY 2011 Base Request with CR Adj*	FY 2011 OCO Request with CR Adj*	FY 2011 Total Request with CR Adj*
Procurement, Defense-Wide	835,710	952,950		952,950
Total Defense-Wide	835,710	952,950		952,950

P-1P: FY 2012 President's Budget (Published Official Position With FY 2011 CR Adjustments), as of February 8, 2011 at 14:02:52

* Reflects the FY 2011 President's Budget with an undistributed adjustment to match the Annualized Continuing Resolution funding level by appropriation.

Defense-Wide FY 2012 President's Budget Exhibit P-1 FY 2012 President's Budget Total Obligational Authority (Dollars in Thousands)

08 Feb 2011

Appropriation	FY 2011 Annualized CR Base**	FY 2011 Annualized CR OCO**	FY 2011 Annualized CR Total**
The part of a self and all this last old of all all an are	dent dats after the sales after one care year, and see fine!	gift, were read and death rates about that about signs, their had had	
Procurement, Defense-Wide	901,182		901,182
Total Defense-Wide	901,182		901,182

P-1P: FY 2012 President's Budget (Published Official Position With FY 2011 CR Adjustments), as of February 8, 2011 at 14:02:52

** Adjusts each budget line included in the FY 2011 President's Budget request proportionally to match the Annualized Continuing Resolution funding level for each appropriation. Quantities - TBD

Defense-Wide FY 2012 President's Budget Exhibit P-1 FY 2012 President's Budget Total Obligational Authority (Dollars in Thousands)

08 Feb 2011

Appropriation	FY 2012 Base	FY 2012 OCO	FY 2012 Total
Procurement, Defense-Wide	1,778.738	and the same and t	1,778,738
Total Defense-Wide	1,778,739		1,778,738

P-IP: FY 2012 President's Budget (Published Official Position With FY 2011 CR Adjustments), as of February 8, 2011 at 14:02:52

Defense-Wide FY 2012 President's Budget Exhibit P-1 FY 2012 President's Budget Total Obligational Authority (Dollars in Thousands)

08 Feb 2011

Appropriation: 0300D Procurement, Defense-Wide

					2011	FY 20			2011	
			2010		Request	OCO Req			ir.	B
Line	Ident	(Base	a & OCO)	with	CR Adj*	with CR	Adj*	with	CR Adj*	0
No Item Nomenclature	Code	Quantity	/ Cost	Quantity	Cost	Quantity	Cost	Quantity	Cost	Ç.
date 19th may plate. Our value care from their trans that has been seen that their and	and any man any maps		- marine	desig dan selep dalay new leggy seen serp-	que finé also pers	who, rapp there were give, then shift, and	Street and Salah Salah	*** *** *** *** ***	ALE VOLUME UPP	****
Budget Activity 01: Major equipment			,							
Major Equipment, Missile Defense Agency										
31 THAAD Procurement	В	26	419,004	67	858,870			67	858,870	Ü.
32 AEGIS BND Procurement	A	б	225,625	8	94,080			8	94,080	U
33 THARD	B									U
34 Aegis BMD	В									U
35 BMDS AN/TPY-2 Radars	3	1.	191,081	_						U
Total Major equipment		ĺ	835,710	~	952,950	100			952,950	
Total Procurement, Defense-Wide		•	835,710	-	952,950	44	YOU YAY, MAIN YAYS MEY, SAY, MAY	•	952,950	•

P-1P: FY 2012 President's Budget (Published Official Position With FY 2011 CR Adjustments), as of February 8, 2011 at 14:02:52

* Reflects the FY 2011 President's Budget with an undistributed adjustment to match the Annualized Continuing Resolution funding level by appropriation.

Defense-Wide FY 2012 President's Budget Exhibit F-1 FY 2012 President's Budget Total Obligational Authority (Dollars in Thousands)

98 Feb 2011

Appropriation: 0300D Procurement, Defense-Wide

		FY 20 Annual	ized	FY 20 Annual	ized	FY 20 Annual	ized	s
Line	Ident	CR Bas	e**	CR OC	0**	CR Tot	al **	e
No Item Nomenclature	Code	Quantity	Cost	Quantity	Cost	Quantity	Cost	C
view year van. Aan year vans sjon gelt till gee fang van gee han haat slad slagt slad slagt gel	ARTICLA CONT. THE STREET	and the state and and who and how	and some hard bean	alm, felt riggs seen, efts right right rings	*** *** ***	pair ship you seen ibon you you was		-
Budget Activity 01: Major equipment								
Major Equipment, Missile Defense Agency								
31 THAAD Procurement	В	8	12,213				812,213	U
32 AEGIS EMD Procurement	A		88,969				88,969	υ
33 THAAD	В							U
34 Aegis BMD	В							U
35 BMDS AN/TPY-2 Radars	B	·		and the res	s size, view, debut solar desid view, view,			ซ
Total Major equipment			01,182	ant we w	, may what days have been aren infes		01,182	
Total Procurement, Defense-Wide			01,182				01,182	

P-1P: FY 2012 President's Budget (Published Official Position With FY 2011 CR Adjustments), as of February 8, 2011 at 14:02:52

** Adjusts each budget line included in the FY 2011 President's Budget request proportionally to match the Annualized Continuing Resolution funding level for each appropriation. Quantities - TBD

Defense-Wide FY 2012 President's Budget Exhibit P-1 FY 2012 President's Budget Total Chligational Authority (Dollars in Thousands)

08 Feb 2011

Appropriation: 0300D Procurement, Defense-Wide

Line	Ident		2012 Base	FY 20			2012 otal	s e
No Item Nomenclature	Code	Quantit	y Cost	Quantity	Cost	Quantity		-
Budget Activity 01: Major equipment	man kan didi dini gali	read, gamp, mean reager and many	eere erine soke soke	Jan 164, mile war date bah hali dati	hade allow days days	The state and the state and state an	A sale you got, you	ędn.
Major Equipment, Missile Defense Agency								
31 THAAD Procurement	3							ũ
32 AEGIS BMD Procurement	A							U
33 THAAD	В	68	833,150			68	833,150	U
34 Aegis BMD	₿	45	565,393			\$ 6	565, 393	ū
35 BMDS AN/TPY-2 Radars	B	2	380,195			2	380,195	
Total Major equipment			1,778,738	dan Arig M	fi year gada fang ilabi yeky bibih man.	1	1,778,738	
Total Procurement, Defense-Wide			1,778,738	and control	an war and any are that the the		L,778,738	

P-1P: FY 2012 President's Budget (Published Official Position With FY 2011 CR Adjustments), as of February 8, 2011 at 14:02:52

Missile Defense Agency



THAAD Procurement

PROCUREMENT, DEFENSE-WIDE

<u>Missile Defense Agency</u> (\$ in Millions)

FY 2010 Estimate: 419.004
FY 2011 Estimate: 858.870
FY 2012 Estimate: 833.150

Program Overview

The Terminal High Altitude Area Defense (THAAD) is an element of the Terminal Defense Segment (TDS) of the Ballistic Missile Defense System (BMDS). The THAAD element provides the THAAD Interceptor Engage on Army Navy/Transportable Radar Surveillance - Model 2 (AN/TPY-2)(THAAD Mode) engagement sequence of the BMDS. THAAD enhances the TDS by deepening, complementing, and extending the BMDS battlespace and capability to engage ballistic targets in the late mid-course and terminal phases of their trajectory. THAAD will also be a surveillance sensor, providing sensor data to cue other elements of the BMDS. THAAD, in conjunction with the fielded PATRIOT System, provides the TDS and supports the 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.

Purpose and Scope of Work

The Terminal High Altitude Area Defense (THAAD) procurement contract provides an additional 7 Batteries. The first two batteries were funded with the RDT&E appropriation (PE 0603881C), and included a total of 50 interceptors, six launchers, and two TFCCs consisting of 2 Tactical Station Groups (TSGs) each. Current Battery definition includes a basic load of 48 interceptors, 6 launchers, and 2 TSGs each. Radars are budgeted separately. Total procurement of THAAD hardware (including RDT&E funded tactical assets) includes 477 interceptors (total interceptor procurement objective is independent of batteries), 18 TSGs, 60 launchers (9 Batteries, with 6 launchers each, plus an additional 6 launchers), and peculiar support equipment. Additionally, 1 TSG is procured for the Institutional Training Base. Given different production lead times, hardware components will be procured to optimize deliveries. Also, the THAAD procurement contract provides for the purchase and assembly of the components for 13 Range Safety Instrumentation Safety Kits (RSIS). This includes the assessment and performance of all necessary redesigns to address obsolescence issues and perform any required qualification of the redesigned electronics and ordnance assemblies. Additionally, New Equipment Training (NET) is provided to THAAD Soldiers in Batteries three through nine. The Soldiers are taught both technical and operational tasks to enable them to effectively deploy, operate, and maintain the system.

The Terminal High Altitude Area Defense (THAAD) procurement program provides for Government project office manpower to manage the breadth of programmatic activities required to acquire and deliver THAAD Batteries to the U.S. Army. THAAD government and support contractor salaries, travel, training, and supplies are provided for within this scope of effort.

Justification of Funds

FY 2010: Procurement for Lot Buys of Interceptors (26) and Ground Equipment (3 Launchers, and 2 Tactical Station Groups)

FY 2011: Procurement for Lot Buys of Interceptors (67) and Ground Equipment (15 Launchers and 4 Tactical Station Groups)

FY 2012: Procurement for Lot Buys of Interceptors (68) and Ground Equipment (6 Launchers and 1 Tactical Station Group)

P-1 Line Item No. 33 Program Overview

Exhibit P-40, Budget Item J	lustification							Date:	February 20)11	
Appropriation (Treasury) C	ode/CC/BA/BS	A/Item Co	ntrol Numl	ber:		P-1 Line It	em Nome	nclature:	1		
0300D - Procurement, Defen	se-wide/BA-01/l	3SA-17				Terminal H	ligh Altitude	e Area De	fense (THA	AD)	
Program Element for Code	B Items:					Other Rela	ated Progr	am Eleme	ents:		
	ID Code	Prior Years	FY 2010	FY 2011	FY 2012	FY 2013	FY 2014	FY 2015	FY 2016	To Complete	Total Program
Proc Qty			26	67	68	68	66	65	67		427
Gross Cost (\$M)		103.0	419.0	858.9	833.2	728.6	921.8	955.5	745.4	0.0	5,565.3
Less PY Adv Proc (\$M)											
Plus CY Adv Proc (\$M)											
Net Proc (=P-1) (\$M)		103.0	419.0	858.9	833.2	728.6	921.8	955.5	745.4	0.0	5,565.3
Initial Spares (\$M)											
Total Proc Cost (\$M)		103.0	419.0	858.9	833.2	728.6	921.8	955.5	745.4	0.0	5,565.3
Flyaway Unit Cost (\$M)		N/A	10.7	9.8	9.5	9.3	8.8	8.4	9.0	0.0	9.3
Wpn Sys Proc U/C (\$M)		N/A	16.1	12.8	12.3	10.7	14.0	14.7	11.1	0.0	13.0

Description

Procurement of THAAD Hardware as follows:

	FY10	FY 11	FY12	FY13	FY14	FY15	FY16	Total
Interceptors	26	67	68	68	66	65	67	427
Launchers	3	15	6	0	12	18	0	54
TSGs	2	4	1	0	4	4	0	15
PSE Suites	1	2	0	0	2	2	0	7

Justification

Funding shown above supports the procurement of 427 THAAD Interceptors, 54 launchers, 15 Tactical Station Groups, 30 A-2 Hemitt Transpoters and all associated peculiar support equipment to include the Mobile Spt Truck, Generator set, spares transport shelter and the Battery logistics Operation Center. RDT&E funded tactical hardware (initial two THAAD batteries) are not included in the costs above. Interceptor Flyaway Unit Cost increase in FY 2016 is due to obsolescene mitigation costs planned for FY 2016.

"Proc Qty" above represents interceptors only, but the net procurement cost includes the costs of all hardware. FY 2011, FY 2014, and FY 2015 funding includes procurement of significant numbers of ground components, which affects the Weapon System Unit Cost. Training devices are RDT&E funded, and thus not included in any of the costs shown above.

Exhibit P-5 Cost Analysis		Weapon S Terminal I	- - ligh Altitude	e Area Def	ense (THAAD)		Date:	February 2	2011	
Appropriation (Treasury) Code/CC/BA/BSA/Item	Control No	umber:		D Code:		P-1 Line Item	Nomenclatu	ıre:		
0300D - Procurement, Defense-wide/BA-01/BSA-17	7					Terminal High	Altitude Area	Defense (THAAD)	
WBS Cost Elements	Prior Years	Prior Years	FY 2010	FY 2010	FY 2011	FY 2011	FY 2012	FY 2012	FY 2013	FY 2013
	Cost	Cost	Cost	Cost	Cost	Total Cost	Unit Cost	Cost	Cost	Cost
THAAD Interceptor Qty	N/A	-	26		67		68		68	
THAAD Interceptor	N/A	88.602	10.695	287.900	9.792	584.498	9.501	646.060	9.333	634.670
THAAD Launcher Qty			3		15		6			
THAAD Launcher		-	9.000	27.000	9.100	136.500	9.133	54.800	-	-
THAAD Fire Control & Communication Tactical Stat	ion Group	Qty	2		4		1			
THAAD Fire Control & Communication Tactical Stat	ion Group	-	10.217	20.433	10.142	40.567	9.900	9.900	-	-
TSG Obsolescence Mitigation								4.000	N/A	
Peculiar Support Equipment & System Integration	N/A	14.373	N/A	83.671	N/A	97.305	N/A	61.490	N/A	46.791
A-2 HEMTT Transporter End of Life Buy							0.600	18.000		
RSIS Kits								3.900		3.900
New Equipment Training										7.500
Program Office Support								35.000		35.700
Total		102.975		419.004		858.870		833.150		728.561

Exhibit P-5 Cost Analysis (Page 2)		Weapon Sy		Area Defense	a (THAAD)	Date:	February 2011
WBS Cost Elements	FY 2014	FY 2014	FY 2015	FY 2015	FY 2016	FY 2016	
	Unit Cost	Total Cost	Unit Cost	Total Cost	Unit Cost	Total Cost	
THAAD Interceptor Qty	66		65		67		
THAAD Interceptor	8.776	579.220	8.443	548.770	8.973	601.174	
THAAD Launcher Qty	12		18				
THAAD Launcher	8.942	107.300	8.639	155.500	N/A	-	
THAAD Fire Control & Communication Tactical Station Group Qty	4		4				
THAAD Fire Control & Communication Tactical Station Group	14.475	57.900	14.150	56.600	N/A	-	
Peculiar Support Equipment & System Integration	N/A	132.361	N/A	146.144	N/A	94.856	
RSIS Kits		1.100					
New Equipment Training		7.500		11.400		11.600	
Program Office Support		36.400		37.100		37.800	
Total		921.781		955.514		745.430	

Exhibit P-5a, Procurement History and Planning					Weapon S	ystem:		Date:	February 2011		
(Page 1)					Terminal H	igh Altitude Area Defense	(THAAD)	I	February	2011	
Appropriation (Treasury) Code/CC/BA/BSA/ItemContr	ol Num	ber:				P-1 Line Item Nomencla	ature:				
0300D - Procurement, Defense-wide/BA-01/BSA-17						D)					
WBS COST ELEMENTS	Qty	Unit Cost	Location of PCO	RFP Issue Date	Contract Method & Type	Contractor & Location	Award Date	Date of First Delivery	Tech Data Available Now?	Date Revisions Available	
FY 2010											
THAAD Interceptor	26	10.695	MDA, Hsv, AL	1QFY10	SS/FPIF	LM, Sunnyvale, CA	4QFY10	4QFY12	Yes		
THAAD Launcher	3	9.000	MDA, Hsv, AL	1QFY10	SS/FFP	LM, Sunnyvale, CA	2QFY11	3QFY12	Yes		
THAAD Fire Control & Communication Tactical Station Group	2	10.217	MDA, Hsv, AL	1QFY10	SS/FFP	LM, Sunnyvale, CA	2QFY11	1QFY13	Yes		
Peculiar Support Equipment & System Integration	N/A	N/A	MDA, Hsv, AL	1QFY10	SS/FFP	LM, Sunnyvale, CA	2QFY11	N/A	Yes		
FY 2011											
THAAD Interceptor - Lot 2	22	10.526	MDA, Hsv, AL			LM, Sunnyvale, CA	- 4	4QFY13			
THAAD Interceptor - Lot 3	45	9.433	MDA, Hsv, AL			LM, Sunnyvale, CA		1QFY14			
THAAD Launcher - Lot 2 THAAD Launcher - Lot 3	9	9.100 9.100	MDA, Hsv, AL			LM, Sunnyvale, CA		4QFY12	Yes		
THAAD Fire Control & Communication Tactical Station Group	4	10.142	MDA, Hsv, AL MDA, Hsv, AL			LM, Sunnyvale, CA LM, Sunnyvale, CA		3QFY13 2QFY13	Yes Yes		
Peculiar Support Equipment & System Integration	N/A	N/A	MDA, Hsv, AL			LM, Sunnyvale, CA LM, Sunnyvale, CA	2QFY11	N/A	Yes		
FY 2012											
THAAD Interceptor	68	9.501	MDA, Hsv, AL	3QFY11	SS/FFP	LM, Sunnyvale, CA	2QFY12	4QFY14	Yes		
THAAD Launcher	6	9.133	MDA, Hsv, AL	3QFY11	SS/FFP	LM, Sunnyvale, CA	2QFY12	1QFY14	Yes		
Peculiar Support Equipment & System Integration	N/A	N/A	MDA, Hsv, AL	3QFY11	SS/FFP	LM, Sunnyvale, CA	2QFY12	N/A	Yes		
THAAD Fire Control & Communication Tactical Station Group	1	9.900	MDA, Hsv, AL			LM, Sunnyvale, CA	2QFY12	2QFY14			
TSG Obsolescence Mitigation	N/A	N/A	MDA, Hsv, AL	3QFY11	SS/FFP	LM, Sunnyvale, CA	2QFY12	N/A	Yes		
	+										
						•					

P-1 Line No. 33

Remarks:

FY 2011 will be the first year that we fully move to funded procurement purely with Procurement funding. Prior years RDTE funds were used .

Exhibit P-21, Production Schedule																Dat	e:					ı	Feb	rua	ъ́2	011				
Appropriation (Treasury) Code/CC/BA/BSA	/Item Con	trol	No:						Wea	apor	ns S	yste	m:			P-1	Line	lter	n No	mer	nclat	ure:								
0300D - Procurement, Defense-wide/BA-01/BS	SA-17								THA	AAD						Teri	nina	l Hig	h Alt	itude	e Are	a De	efens	se (T	HAA	D)				
·							P	ROD	DUCTION RATE						PF	ROC	URE	MEN	IT LI	EAD	ТІМІ	ES								
	Manufac	cture	r's N	lame	and		MSF			ON		MAX	(ΑL	T Pr									eord	er		Tota	U	nit of	
ITEM	Mariara		atior		unu			•	- "				•		10			Oct			PLT	_		fg P	-		. 0	•	_	easure
Battery Interceptors	L	MSSC	, Troy	AL			1/Mo)	4/	Мо		6/M)		0			7 Mo)	2	24 M	0	2	24 M	0	3	31 M	0		Е
Battery Fire Control/Communications (TSGs)	L	M, Ca	mden	AR		2	2/3M	0	2/3	Мо		/3 N			0			1 Mo)	2	24 M	0		24 M			25 M			Е
Battery Launchers	L	M, Ca	mden	AR			1/Mo)	1/	Мо	6	/3 N	lo		0			1 Mo)	1	8 M	0	·	18 M	0	`	19 M	0		Е
						FISCAL YEAR 2010										FIS	CAL	YEA	AR 20	011										
				CALENDAR YEAR 2010													CAL	ENI	DAR	YE/	R 2	011								
	F	S	Q	D	В	0	N	D	J	F	M	Α	M	J	J	Α	S	0	N	D	J	F	М	Α	M	J	J	Α	S	BAL
ITEM	Υ	٧	Т	Ε	Α	С	0	Е	Α	Ε	Α	Р	Α	U	U	U	Ε	С	0	Ε	Α	Ε	Α	Р	Α	U	U	U	Е	
		С	Υ	L	L	Т	٧	С	N	В	R	R	Υ	N	L	G	Р	Т	٧	С	N	В	R	R	Υ	N	L	G	Р	
Battery Interceptors	10		26	0	26															Α										26
	11		67	0	67																	Α								67
Battery Fire Control/Communications (TSGs)	10		2	0	2																	Α								2
	11		4	0	4																	Α								4
Battery Launchers	10		3	0	3																	Α								3
	11		15	0	15																	Α								15
						FIS	CAL	YE	AR 2	012								FIS	CAL	YEA	AR 20	013								
									CAI	LEN	DAR	YE	AR 20	012							CAL	ENI	DAR	YEA	R 2	013				
	F	S	Q	D	В	0	N	D	J	F	М	Α	М	J	J	Α	S	0	N	D	J	F	М	Α	M	J	J	Α	S	BAL
ITEM	Υ	٧	Т	Ε	Α	С	0	Е	Α	Е	Α	Р	Α	U	U	U	Ε	С	0	Ε	Α	Ε	Α	Р	Α	U	U	U	Е	
		С	Υ	L	L	Т	٧	С	N	В	R	R	Υ	N	L	G	Р	Т	٧	С	N	В	R	R	Y	N	L	G	Р	
Battery Interceptors*	10		26	0	26										1	1	1	1	2	2	3	3	3	3	3	3				0
·	11		67	0	67																						4	4	5	54
	12		68	0	68				Α																					68
	13		68	0	68																Α									68
Battery Fire Control/Communications (TSGs)	10		2	0	2														1	1										0
	11		4	0	4																1	1								2
	12		1	0	1				Α																					1
Battery Launchers	10		3	0	3							1	1	1																0
	11	1	15	0	15	<u> </u>	<u> </u>	<u> </u>	L_		<u> </u>				1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	0
	12		6	0	6				Α																					6

REMARKS: *Lead time for first delivery of FY 2010 funded interceptors & ground components are reduced due to long lead items procured in FY 2009. Build plan for ground components optimizes delivery dates for battery integration. Lead times for ground components support battery integration schedules. Lead times shown above are the nominal required for component integration, nominal lead times have been assessed at 18 months for launchers and 24 months for TSGs. All ground components are produced in the same facility so that manufacturing synergy can mitigate production gaps.

Exhibit P-21, Production Schedule																Dat	e:						Feb	rua	ry 2	011				
Appropriation (Treasury) Code/CC/BA/BSA/I	tem Cont	rol l	No:						Wea	apor	ıs Sy	/stei	m:			P-1	Line	Iter	n No	mei	nclat	ure:								
0300D - Procurement, Defense-wide/BA-01/BS	SA-17								THA	AAD						Ten	mina	l Hig	h Alt	itud	- Are	a D	efen	se (T	НА.	וחא				
1 Toddictiletti, Belefied Wide, Br. C 17 Be	,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,						_	D O D		ION	DAT													30 (1	11/0	(0)				
								ROD			_							URE												
	Manufa				and		MSF	₹	EC	ON		KAM	(T Pr	-	ALT	Afte				/lfg		eord		1	Tota	I		nit of
ITEM		LO	catio	n										to	10	Ct		Oct			PLT		IVI	fg P	_!				ivie	asure
Battery Interceptors	L	MSS	C, Tro	y AL			1/Mc)	4/	Мо		6/Mc)		0			7 Mo)	2	24 M	0	2	24 M	0	3	31 M	0		Е
Battery Fire Control/Communications (TSGs)	ı	LM, C	amder	n AR		2	2/3M	0	2/3	Мо	3	/3 M	lo		0			1 Mo)	2	24 M	0	2	24 M	0	2	25 M	0		Е
Battery Launchers	ı	LM, C	amder	ı AR			1/Mc)	1/	Мо	6	/3 M	lo		0			1 Mo)	1	8 M	0	1	8 M	0	1	9 M	0		E
·																														
						FIS	CAL	YEA	\R 2	014								FIS	CAL	YEA	R 20)15								
						-			1	ENI	\ D	VE	\D 2	04.4									\ D	VE	R 20	115				
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Battery Interceptors	11 12		67 68	13 0	54 68	6	6	6	6	6	6	6	6	6	6	6	6	6	6	6	6	6	5	5	5	5				0
	13		68	0	68										О	О	О	6	О	О	О	О	Э	Э	5	5	5	5	5	53
	14		66	0	66				Α																		5	5	5	66
	15		65	0	65				, ·												Α									65
Battery Fire Control/Communications (TSGs)	11		4	2	2		1	1																						0
, ,	12		1	0	1				1																					0
	14		4	0	4				Α																					4
	15		4	0	4																Α									4
Battery Launchers	12		6	0	6	1	1	1	1	1	1																			0
	14		12	0	12				Α																		1	1	1	9
	15		18	0	18																Α									18
						FIS	CAL	YEA	AR 2	016								FIS	CAL	YEA	R 20)17								
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	F	S	Q	D	В	0	N	D	J	F	М	Α	М	J	J	Α	S	0	N	D	J	F	М	Α	M	J	J	Α	S	BAL
ITEM	Υ	٧	Т	Е	Α	С	0	Е	Α	Ε	Α	Р	Α	U	U	U	Е	С	0	Ε	Α	Ε	Α	Р	Α	U	U	U	Ε	1
		С	Υ	L	L	Т	٧	С	Ν	В	R	R	Υ	N	L	G	Р	Т	٧	С	N	В	R	R	Υ	N	L	G	Р	Ī
Battery Interceptors	13		68	15	53	5	6	6	6	6	6	6	6	6																0
, i	14		66	0	66										6	6	5	6	6	5	6	6	5	5	5	5				0
	15		65	0	65																						6	6	6	47
	16		67	0	67				Α																					67
Battery Fire Control/Communications (TSGs)	14		4	0	4					1	1		1	1																0
	15		4	0	4																	1	1		1	1				0
Battery Launchers	14	\vdash	12	3	9	1	1	1	1	1	1	1	1	1	1															0
•	15		18	0	18										1	1	1	2	2	2	2	2	2	1	1	1				0
REMARKS: Build plan for ground components		s de				atter	v int	eara	tion.	Lea	ıd tin	nes f	or a	oun	d co	npor	nents							on in		ation	sch	edule	9S.	-

Exhibit P-21, Production Schedule																Dat	e:						Feb	rua	ry 2	011				
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0300D - Procurement, Defense-wide/BA-01/BS	SA-17			THA	AD						Teri	mina	l Hig	h Alti	itude	Are	a De	efens	se (T	ΉΑΑ	(D)									
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Battery Interceptors	LM	ISSC	, Tro	y AL			1/Mc)	4/1	Мо	(6/Mc)		0			7 Mo	1	2	24 Mo	0	2	24 M	0	3	31 M	0		Е
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	Manufacturer's Name and Location								_	END	DAR	YEA	R 20	018									DAR	YEA	AR 20)19				
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Battery Interceptors				18		6	6	5	5	5	5	5	5	5																0
	16		67	0	67										6	6	6	6	6	6	6	5	5	5	5	5	Ш			0
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Missile Defense Agency



Aegis BMD Procurement

PROCUREMENT, DEFENSE-WIDE

Missile Defense Agency (\$ in Millions)

FY 2010 Estimate: 225.625
FY 2011 Estimate: 94.080
FY 2012 Estimate: 565.393

Program Overview

The Aegis Ballistic Missile Defense (Aegis BMD) mission is to deliver an enduring, operationally effective and supportable Ballistic Missile Defense capability to defend the nation, deployed forces, friends and allies, and to increase this capability by delivering evolutionary improvements as part of Ballistic Missile Defense System (BMDS) upgrades. The Aegis BMD element of the BMDS capitalizes upon and evolves from the existing U.S. Navy Aegis Weapons System (AWS) and Standard Missile (SM) infrastructures. Aegis BMD provides a forward-deployable, mobile capability to detect and track Ballistic Missiles of all ranges, and the ability to destroy Short-Range Ballistic Missiles (SRBM), Medium-Range Ballistic Missiles (MRBM), and Intermediate-Range Ballistic Missiles (IRBM) in the midcourse phase of flight. In support of Homeland Defense, Aegis BMD provides a Long Range Surveillance and Track (LRS&T) capability to the BMDS. Upgrades to both the Aegis BMD Weapon System and the SM-3 configuration enable Aegis BMD provide effective, supportable defensive capability against longer range, more complex threats and an enduring Aegis Ashore defensive capability.

Purpose and Scope of Work

Standard Missile-3 was developed for Aegis Ballistic Missile Defense (BMD) as part of the Missile Defense Agency's Ballistic Missile Defense System (BMDS). The Aegis BMD system integrates SM-3 with the Aegis Weapon System (AWS) aboard U.S. Navy cruisers to provide an umbrella of protection against short to intermediate-range ballistic missile threats. SM-3 is compatible with the Mark (MK) 41 Vertical Launching System (VLS) deployed on many U.S. Navy and international surface combatants. The SM-3 is primarily used and tested by the United States Navy and also operated by the Japan Maritime Self-Defense Force. The SM-3 Block IA provides increased capability, over SM-3 Block I, to engage short-to intermediate-range ballistic missiles. The SM-3 Block IA incorporates rocket motor upgrades and computer program modifications to improve sensor performance, missile guidance and control, and lower cost. It also includes producibility and maintainability features required to qualify the missile as a tactical fleet asset. The SM-3 Block 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) is also in development to provide a more flexible and lower cost alternative to the Solid Divert Altitude System (SDACS). The SM-3 Block IIA incorporates 21-inch 2nd and 3rd stage rocket motors, providing a significant increase in engagement capability and larger defended areas. The Block IIA missile will also include a larger, more capable kinetic warhead to counter future ballistic missile threats.

Justification of Funds

FY 2010: 42 SM-3 Blk IA's utilizing RDT&E and Procurement funding **FY 2011:** Full funding for eight (8) SM-3 Blk IB's for delivery in FY 2013

FY 2012: Full funding for 46 SM-3 Blk IB's for delivery in FY 2014

P-1 Line Item No. 34 Program Overview

Exhibit P-40, Budget Item	Justificatio	n							Date:	February 20)11
Appropriation (Treasury) C	Code/CC/B/	VBSA/Item	Control No	ımber:		P-1 Line Ite	em Nomen	clature:	<u>I</u>		
0300D - Procurement, Defer	nse-wide/B <i>A</i>	A-01/BSA-17	7			Aegis BMD					
Program Element for Code	B Items:					Other Rela	ted Progra	m Element	is:		
	ID Code	Prior Years	FY 2010	FY 2011	FY 2012	FY 2013	FY 2014	FY 2015	FY 2016	To Complete	Total Program
Proc Qty		*	*	8	46	62	73	82	83		354
Gross Cost (\$M)		101.932	225.625	94.080	565.393	675.126	737.440	1,018.966	1,065.442		4,484.004
Less PY Adv Proc (\$M)			0.000	0.000	0.000	0.000	0.000	0.000	0.000		
Plus CY Adv Proc (\$M)			0.000	0.000	0.000	0.000	0.000	0.000	0.000		
Net Proc (=P-1) (\$M)		101.932	225.625	94.080	565.393	675.126	737.440	1,018.966	1,065.442		4,484.004
Initial Spares (\$M)											
Total Proc Cost (\$M)		101.932	225.625	94.080	565.393	675.126	737.440	1,018.966	1,065.442		4,484.004
Flyaway Unit Cost (\$M)			9.600	11.760	12.291	10.889	10.102	12.426	12.837		12.667
Wpn Sys Proc U/C (\$M)					•						

Note: Increase in Unit Cost in FY 2016 is due to the buy of 15 SM-3 Blk IIA.

Description

The SM-3 Block IA provides increased capability, over the SM-2 Block IV and SM-3 Block I, to engage short-to intermediate-range ballistic missiles. The SM-3 Block IA incorporates rocket motor upgrades and computer program modifications to improve sensor performance, missile guidance and control, and lower cost. It also includes producibility and maintainability features required to qualify the missile as a tactical fleet asset.

The SM-3 Block 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) is 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 is planned in FY 2011 with larger rate production in FY 2012.

Justification

* FY 2010: Prior - A total of 42 SM-3 Blk IA's appropriated in FY 2008, 2009 and 2010. The SM-3 Blk IA's were transitioned

from RDT&E to Procurement, Defense-Wide in FY 2009 utilizing funding from both appropriations. For further depiction see table on P-5.

FY 2011: Full funding for eight (8) SM-3 Blk IB's for delivery in FY 2013

FY 2012: Full funding for 46 SM-3 Blk IB's for delivery in FY 2014

P-1 Line Item No. 34 Exhibit P-40

Exhibit P-5 Cost Analysis		Weapon S	ystem:				Date:		
		Aegis BMD						February 2	2011
Appropriation (Treasury) Code/CC/BA/BSA/Item Control Nu	ımber:		D Code:		P-1 Line Ite	m Nomenc	lature:		
0300D - Procurement, Defense-wide/BA-01/BSA-17					Aegis BMD				
	Prior Year	FY	2010	FY	2011	FY 2	2012	FY 2	2013
WBS Cost Elements	Total Cost	Unit Cost	Total Cost	Unit Cost	Total Cost	Unit Cost	Total Cost	Unit Cost	Total Cost
Quantity	*	*		8		46		62	
SM-3 Blk IA Missile Hardware									
SM-3 BLK 1A Guided Missile Round	101.932	9.433	225.625						
SM-3 Blk IB Missile Hardware									
SM-3 Blk IB Guided Missile Round				11.760	94.080	12.291	565.393	10.889	675.126
Total	101.932		225.625		94.080		565.393		675.126

Note: SM-3 Blk IAs were initially funded with RDT&E, in FY 2009 the acquisition process realigned the IA's to be completed in the Procurement, D-W appropriation.

This exhibit only Procurement, D-W. This exhibit reflects the Procurement funding. Manufacturing engineering support for the Blk IA and IB and production spares, and missile surveillance program for SM - 3 Blk IB's is funded under the RDT&E appropriation. (See project MD09 PE 0603892C)

* SM-3 Blk IA Missile Breakout		
CLIN 3 Procured 24 missiles as follows:	FY 2008	61.518 RDT&E
	FY 2009	57.032 Procurement
	FY 2010	107.844 Procurement
	Total	226.394
	Unit Cost	9.433
CLIN 4 Procured 12 missiles in FY 2009 and	FY 2009	44.900 Procurement
6 additional missiles added by congress (\$57.6M) in	FY 2010	117.781 Procurement
FY 2010 as follows:	Total	162.680
	Unit Cost	9.038
Average Unit Cost	of the IA Missile	9.264

Exhibit P-5 Cost Analysis	Weapon S	ystem:				Date:		
	Aegis BMD						February 20)11
Appropriation (Treasury) Code/CC/BA/BSA/Item Co	ntrol Number	D Code:		P-1 Line Ite	m Nomencl	ature:		
0300D - Procurement, Defense-wide/BA-01/BSA-17				Aegis BMD				
WBS Cost Elements	FY:	2014	FY	2015	FY	2016	Complete	Total
	Unit Cost	Total Cost	Unit Cost	Total Cost	Unit Cost	Total Cost	Costs	Cost
Quantity	73		82		68/15			
SM-3 Blk IA Missile Hardware								
SM-3 BLK IA Guided Missile Round							327.557	327.557
Canisters - Funded in RDT&E								
SM-3 Blk IB Missile Hardware								
SM-3 BLK IB Guided Missile Round	10.102	737.440	12.426	1,018.967	9.723	661.140	3,752.146	3,752.146
SM-3 Blk IIA Missile Hardware								
SM-3 BLK IIA Guided Missile Round					24.292	364.381	364.381	364.381
Tota	al	737.440		1,018.967		1,025.521	4,444.084	4,444.084

P-1 Line Item No. 34

Exhibit P-5, Cost Analysis (Exhibit P-5, page 2 of 2)

Exhibit P-5a, Procurement History and Planning					Weapon Sy	stem:		Date:		
(Page 1)					Aegis BMD				February 2	011
Appropriation (Treasury) Code/CC/BA/BSA/Item (Control	Number:				P-1 Line Item No	menclatu	re:		
0300D - Procurement, Defense-wide/BA-01/BSA-17						Aegis BMD				
WBS COST ELEMENTS	Qty	Unit Cost	Location of PCO	RFP Issue Date	Contract Method & Type	Contractor & Location	Award Date	Date of First Delivery	Data Available Now?	Revision s Available
FY 2010										
SM-3 Blk 1A*	42	9.433	Dahlgren, Va	Jul-06	CPIF	Raytheon, Tuscon AZ	May-07	Jul-10	Yes	
FY 2011										
SM-3 Blk 1B	8	11.760	Dahlgren, Va	Mar-11	CPIF	Raytheon, Tuscon AZ	Aug-11	Jul-13	Yes	
FY 2012										
SM-3 Blk 1B	46	12.291	Dahlgren, Va	Mar-11	CPIF	Raytheon, Tucson AZ	Oct-11	Oct-13	Yes	
	+									
			1							

Remarks:

^{*} FY 2010: Prior - A total of 42 SM-3 Blk IA's appropriated in FY 2008, 2009 and 2010. The SM-3 Blk IA's were transitioned from RDT&E to Procurement, Defense-Wide in FY 2009 utilizing funding from both appropriations. For further depiction see table on P-5, page 1.

Exhibit P-21, Production Schedule																Dat	e:						Fel	brua	ry 2	011				
Appropriation (Treasury) Code/CC/	BA/BSA/Iter	n Co	ontro	ol N	o:				W	eapo	ns S	Syst	em:	!		P-1	Lir	ne It	em l	Non	nend	clati	ure:							
0300D - Procurement, Defense-wide/	BA-01/BSA-	17							Αe	gis E	BMD)				Aed	ais E	3MD												
							F	ROE	ouc	TION	RA	TE				_ `	_	URE		NT L	EAD	TIM	ES							
	Manufac	ture	r's N	lame	۶.		MS			CON		MAX	7	ΔΙ	T Pı			T Aft						eord	ler	-	Tota	ı	U	nit of
ITEM	Location								-				•		10	-		Oct			PLT	_		lfg P				•	_	easure
SM-3 Block IA Missiles	Rayth	eon.	Tucs	son	ΑZ		1/M	0	2	/Mo		8/Mc)		9 M)		0 Mc)	3	30 M	0		30 M			30 M	0		E
SM-3 Block IB Missiles	Rayth						1/M		_	/Mo		8/Mc			9 M			0 Mc			24 M	_		24 M	-		4 M	_		Ē
SM-3 Block IIA Missiles	Rayth						1/M	0	2	/Mo		2/Mc)		9 M)		0 Mc)	2	24 M	0		24 M		2	4 M	0		Е
		,				FIS	CAI	YF	AR :	2010								FIS	CAL	YF.	AR 2	011								
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SM-3 Blk IA Missiles (A = May 2007)	10	1	42	0	42			3	3	1	2				2	4	2	7						2	2	2	2	2	2	0
SM-3 Blk IB Missiles	11	l	8	0	8																							Α		8
SM-3 Blk IB Missiles	12	l	46	0	46																									46
SM-3 Blk IB Missiles	13		62	0	62																									62
SM-3 Blk IB Missiles	14		73	0	73																									73
SM-3 Blk IB Missiles	15		82	0	82																									82
SM-3 Blk IB Missiles	16		68	0	68																									68
SM-3 Blk IIA Missiles	16		15	0	15																									15
	-			-		FIS	CAL	YE	AR 2	2012				-	-			FIS	CAL	YE.	AR 2	013	-		-			-		
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	F	S	Q	D	В	0	N	D	J	F	М	Α	М	J	J	Α	S	0	N	D	J	F	М	Α	М	J	J	Α	S	BAL
	Y	٧	Т	Е	Α	С	0	E	Α	E	Α	Р	Α	U	U	U	Ε	С	0	Ε	Α	Е	Α	Р	Α	U	U	U	Е	
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SM-3 Blk IA Missiles	10	\vdash	42	36	42	2	2	2 2	+	1								\vdash												0
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SM-3 Blk IB Missiles	12	1	46	0	46	Α			T	+														T			Ħ	Ť		46
SM-3 Blk IB Missiles	13		62	0	62					t								Α						t						62
SM-3 Blk IB Missiles	14		73	0	73				l	1																				73
SM-3 Blk IB Missiles	15		82	0	82																									82
SM-3 Blk IB Missiles	16		68	0	68																									68
	16		15		15																								-	15

REMARKS: Production gap between SM-3 Blk IA and IB is being filled with the manufacturing of RDT&E SM-3 Blk IB Test Missiles (Jan 2012 - Jun 2013).

NOTE: Maximum production rate is based on 2 shifts, 8 hours per day, 5 days per week.

Exhibit P-21, Production Schedule																Dat	te:						Feb	rua	ry 2)11				
Appropriation (Treasury) Code/CC/BA/B	SA/Item Contr	ol N	o:				We	apo	ns :	Syst	em	:				P-1	Lir	e It	em	No	mer	ncla	atur	e:						
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SM-3 Block IA Missiles	Raytl	neon	, Tuc	son	ΑZ		1/Mo		2/N			3/Mc			9 Mc			0 Mc			30 M			30 N		3	30 Mc	0		Е
SM-3 Block IB Missiles	Raytl	neon	, Tuc	son	AZ		1/Mo)	4/N	Ло	8	3/Mc)		9 Mc)		O Mc)	2	24 M	0	2	24 N	lo	2	4 Mc	o		Е
SM-3 Block IIA Missiles	Raytl	neon	, Tuc	son	ΑZ		1/Mo)	2/N	Ло	2	2/Mc)		9 Mc)		O Mc)	2	24 M	0	2	24 N	lo	2	4 Mc	o		Е
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		С	Υ	L	L	Т	٧	С	N	В	R	R	Y	N	L	G	Р	Т	٧	С	N	В	R	R	Υ	N	L	G	Р	
SM-3 Blk IA Missiles	10		42	42	0																					<u> </u>		Ш		0
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SM-3 Blk IB Missiles SM-3 Blk IB Missiles	12	-	46 62	0	46 62	3	4	4	3	4	4	4	4	4	4	4	4	-	_	_	_	_	-	_	_	Ļ	H			0
SM-3 Blk IB Missiles	13 14	╂	73	0	73	Α					_							5	5	5	5	5	5	5	5	5	5	6	6	73
SM-3 Blk IB Missiles	15	1	82	0	82													Α						H	1		\vdash	$\vdash\vdash$	\vdash	82
SM-3 Blk IB Missiles	16		68	0	68													^					+		1	\vdash	\vdash	Н	Н	68
SM-3 Blk IIA Missiles	16		15	0	15																		-			┢	\vdash	$\vdash\vdash$	$\vdash\vdash$	15
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SM-3 Blk IA Missiles	10		42	42	0																							$oxed{oxed}$		0
SM-3 Blk IB Missiles	11		8	8	0																									0
SM-3 Blk IB Missiles	12		46	46	0																									0
SM-3 Blk IB Missiles	13		62	62	0																									0
SM-3 Blk IB Missiles	14		73	0	73	6	6	6	6	6	6	6	6	6	6	6	7													0
SM-3 Blk IB Missiles	15		82	0	82													6	6	6	6	7	7	7	7	8	7	7	8	0
SM-3 Blk IB Missiles	16		68	0	68	Α																								68
SM-3 Blk IIA Missiles	16		15	0	15	Α																								15

REMARKS: Production rate of 6 per month is based on 1 shift, 8 hrs day, 5 days a week; a 2nd shift would be required for a surge capability above 6 per month.

NOTE: Maximum production rate is based on 2 shifts, 8 hours per day, 5 days per week.

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0300D - Procurement, Defense-wide/BA-01/BSA-	17						Ae	gis B		IOTI	211	- A T				Aeg			M = 1	· T 1		TIR/	IFC			_				
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		С	Υ	L	L	Т	٧	С	N	В	R	R	Υ	N	L	G	Р	Т	٧	С	N	В	R	R	Υ	N	L	G	Р	
SM-3 Blk IA Missiles	10		42	42	0																									(
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SM-3 Blk IB Missiles	13		62	62	0			-																	╄	₩	<u> </u>	Щ	Ш	0
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SM-3 Blk IB Missiles	16		68	0	68	5	5	5	5	6	6	6	6	6	6	6	6								₩	₩.	<u> </u>	Ш	Ш	0
SM-3 Blk IIA Missiles	16		15	0	15														1	1	1	1	1	1	1	1	1	2	2	2
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SM-3 Blk IB Missiles	12		46	46	0	t	İ	1																				П		(
SM-3 Blk IB Missiles	13		62	62	0	t		1																	T	\vdash		\Box	\Box	(
SM-3 Blk IB Missiles	14		73	73	0	t		1																		T	T	\Box		(
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SM-3 Blk IB Missiles	16		68	68	0	t	f	1		1															\vdash	\vdash		\Box	П	
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Missile Defense Agency



BMDS AN/TPY-2 Radars Procurement

PROCUREMENT, DEFENSE-WIDE

Missile Defense Agency (\$ in Millions)

FY 2010 Estimate: 191.081
FY 2011 Estimate: N/A
FY 2012 Estimate: 380.195

Program Overview

The Ballistic Missile Defense System (BMDS) layered network of sensors includes Army Navy/Transportable Radar Surveillance - Model 2 (AN/TPY-2) Radars, that can be used as a BMDS Forward-based X-Band Radar or a Terminal High Altitude Area Defense (THAAD). These radars are transportable, adding flexibility to respond to geographical changes in threat. In a forward-based role, the AN/TPY-2 provides target detection and tracking during the boost phase, reducing uncertainty in target discrimination and reaction time, and increasing the probability of a successful BMDS engagement. In terminal mode, the AN/TPY-2 provides target acquisition, tracking, and discrimination for fire control of the THAAD Battery.

Purpose and Scope of Work

Eleven additional AN/TPY-2 Radars are needed to complete THAAD Battery procurements and support Combatant Commanders (COCOM) emergent requirements for BMDS Forward-Based Radars. Each AN/TPY-2 radar can be configured for THAAD or forward-based mode, and can be switched between modes in eight (8) hours. The Radar System includes the radar, an Antenna Equipment Unit (AEU), an Electronics Equipment Unit (EEU), a Cooling Equipment Unit (CEU), and two Prime Power Units (PPUs).

Justification of Funds

FY 2010: Procurement of one AN/TPY-2 radar

FY 2011: No Procurement (Skip Year)

FY 2012: Procurement of two AN/TPY-2 radars

P-1 Line Item No. 35 Program Overview

Page 1 of 1

Exhibit P-40, Budget Item	Justification								Date:	February 20)11
Appropriation (Treasury)	Code/CC/BA/I	BSA/Item	Control Nu	ımber:		P-1 Line It	em Nome	nclature:			
0300D - Procurement, Defe	nse-wide/BA-0	01/BSA-17	•			BMDS AN	TPY-2 Rad	dars			
Program Element for Code	e B Items:					Other Rela	ated Progr	am Eleme	nts: PE 06	03884C	
	ID Code	Prior Years	FY 2010	FY 2011	FY 2012	FY 2013	FY 2014	FY 2015	FY 2016	To Complete	Total Program
Proc Qty			1		2	2	2	2	2		11
Gross Cost (\$M)			191.081		380.195	365.559	354.175	380.715	380.250		2,051.975
Less PY Adv Proc (\$M)											
Plus CY Adv Proc (\$M)											
Net Proc (=P-1) (\$M)			191.081		380.195	365.559	354.175	380.715	380.250		2,051.975
Initial Spares (\$M)							22.669				22.669
Total Proc Cost (\$M)			191.081		380.195	365.559	376.844	380.715	380.250		2,074.644
Flyaway Unit Cost (\$M)			191.081		190.098	182.780	188.422	190.358	190.125		
Wpn Sys Proc U/C (\$M)			191.081		190.098	182.780	188.422	190.358	190.125		

Description

Procurement funding procures eleven AN/TPY-2 Radars required to complete THAAD Battery procurements and support COCOM emergent requirements for BMDS Forward-Based Radars.

Note: FY 2010 resources provided through a FY 2010 Above Threshold Reprogramming (ATR).

<u>Justification</u>

FY 2010: Procurement of one AN/TPY-2

FY 2011: No procurement (Skip Year)

FY 2012: Procurement of two AN/TYP-2 radars

Exhibit P-5 Cost Analysis			Weapon S BMDS AN	ystem: /TPY-2 Rad	dars				Date: Februa	ry 2011
Appropriation (Treasury) Code/CC/BA/BSA/Item Co	ontrol Num	ber:		D Code:		P-1 Line Ite	m Nomeno	lature:		
0300D - Procurement, Defense-wide/BA-01/BSA-17						BMDS AN	/TPY-2 Rad	dars		
, , , , , , , , , , , , , , , , , , , ,	Prior	Prior	FY	FY	FY	FY	FY	FY	FY	FY
WBS Cost Elements	Years	Years	2010	2010	2011	2011	2012	2012	2013	2013
	Unit Cost	Total Cost	Unit Cost	Total Cost	Unit Cost	Total Cost	Unit Cost	Total Cost	Unit Cost	Cost
System Quantity			1				2		2	
AN/TPY-2 Radar System										
Antenna Equipment Unit (AEU)			144.285	144.285			144.091	288.181	137.930	275.859
Cooling Equipment Unit (CEU)			7.800	7.800			7.668	15.336	7.475	14.950
Electronic Equipment Unit (EEU)			23.398	23.398			23.003	46.006	22.425	44.850
Primary Power Units (PPU 2 ea radar system)			15.598	15.598			15.336	30.672	14.950	29.900
Total				191.081				380.195		365.559

P-1 Line Item No. 35

Exhibit P-5, Cost Analysis (Exhibit P-5, page 1 of 2)

Exhibit P-5 Cost Analysis (Page 2)		Weapon Sys	stem:		Date:	February 2011	
		PY-2 Radars					
	FY	FY	FY	FY	FY	FY	
WBS Cost Elements	2014	2014	2015	2015	2016	2016	
	Unit Cost	Total Cost	Unit Cost	Total Cost	Unit Cost	Total Cost	
System Quantity	2		2		2		
AN/TPY-2 Radar System							
Antenna Equipment Unit (AEU)	134.033	268.066	147.386	294.771	147.153	294.306	
Cooling Equipment Unit (CEU)	7.286	14.572	7.162	14.324	7.162	14.324	
Electronic Equipment Unit (EEU)	21.729	43.458	21.486	42.972	21.486	42.972	
Primary Power Units (PPU 2 per radar system)	14.488	28.974	14.324	28.648	14.324	28.648	
Spares							
Cooling Equipment Unit (Spare 1)	7.286	7.286					
Prime Power Unit (Spares 2 ea)	7.244	14.488					
Total		376.844		380.715		380.250	Fuhihit B.E. Coot Analysis

P-1 Line Item No. 35

Exhibit P-5, Cost Analysis (Exhibit P-5, page 2 of 2)

Exhibit P-5a, Procurement History and Planning				Weapon Sy	vstem:		Date:	February 201	1								
(Page 1)					BMDS AN/	TPY-2 Radars											
Appropriation (Treasury) Code/CC/BA/BSA/ItemC	ontrol	Number:				P-1 Line Item Nomenclatur	e:										
0300D - Procurement, Defense-wide/BA-01/BSA-17						BMDS AN/TPY-2 Radars											
WBS COST ELEMENTS	Qty	Unit Cost	Location of PCO	RFP Issue Date	Contract Method & Type	Contractor & Location	Award Date	Date of First Delivery	Tech Data Available Now?	Date Revisions Available							
FY 2010																	
AN/TPY-2 Radar -	1		MDA, HSV, AL	3QFY10	SS/FPI	Raytheon: Woburn, MA	4QFY10	2QFY13	Y								
Antenna Equipment Unit (AEU)		144.285	MDA, HSV, AL						Υ								
Cooling Equipment Unit (CEU)		7.800	MDA, HSV, AL						Υ								
Electronic Equipment Unit (EEU)		23.398	MDA, HSV, AL						Y								
Primary Power Units (PPU 2 ea radar system)		15.598	MDA, HSV, AL						Y								
Total Cost:		191.081															
FY 2011																	
(Procurement Skip Year)																	
FY 2012																	
AN/TPY-2 Radar	2		MDA, HSV, AL	3QFY11	SS/FFP	Raytheon: Woburn, MA	1QFY12	3QFY14	Υ								
Antenna Equipment Unit (AEU)		144.091	MDA, HSV, AL						Υ								
Cooling Equipment Unit (CEU)		7.668	MDA, HSV, AL						Υ								
Electronic Equipment Unit (EEU)		23.003	MDA, HSV, AL						Υ								
Primary Power Units (PPU 2 ea radar system)		15.336	MDA, HSV, AL						Υ								
Total Cost:		190.098															
Remarks:				•	-		-		-								

Exhibit P-21, Production Schedule												Date: February 2011																					
Appropriation (Treasury) Code/CC/BA/BSA/ 0300D - Procurement, Defense-wide/BA-01/BS		trol	No:			Weapons System: BMDS AN/TPY-2 Radars										P-1 Line Item Nomenclature: BMDS AN/TPY-2 Radars																	
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						CALENDAR YEAR 2010																DAR	YE	4R 2	011								
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AN/TPY-2 Radars #9, 10	2012	D	2		2			Α																						2			
AN/TPY-2 Radars #11, 12	2013	D	2	0	2															Α										2			
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Note: Maximum production rate is based on 3	shifts, 8 h	ours	per	day,	7 da	ays p	er w	eek.																									

Exhibit P-21, Production Schedule													Date: February 2011																		
Appropriation (Treasury) Code/CC/BA/BSA/Itel	n Contro	l No:	•				Wea	Weapons System: BMDS P-1 Line Item Nomenclature:																							
0300D - Procurement, Defense-wide/BA-01/BSA-	17						BMDS AN/TPY-2 Radars									BMDS AN/TPY-2 Radars															
										PRODUCTION RATE										PROCUREMENT LEADTIMES											
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AN/TPY-2 Radars	Name and Location Raytheon; Woburn, MA							·	/yr		1/yr	_ `	4/yr		4 Mo		2 Mo			30 Mo						36 Mo				E	
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AN/TPY-2 Radar #9, 10	2012	D	2	0	2									2																0	
AN/TPY-2 Radars #11, 12	2013	D	2	0	2																					2				0	
AN/TPY-2 Radars #13, 14	2014	D	2	0	2			Α																						2	
AN/TPY-2 Radars #15, 16	2015	D	2	0	2															Α										2	
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AN/TPY-2 Radars #13, 14	2014	D	2	0	2									2																0	
AN/TPY-2 Radar #15, 16	2015	D	2	0	2																					2				0	
AN/TPY-2 Radars 17, 18	2016	D	2	0	2			Α																						2	
Note: Maximum production rate is based on 3 sh	ifts, 8 hou	rs pe	er da	y, 7 c	lays p	er w	eek.								_		-	-	-			_			_		_	_	-		