

UNCLASSIFIED

Exhibit R-2, RDT&E Budget Item Justification: PB 2011 Missile Defense Agency									DATE: February 2010		
APPROPRIATION/BUDGET ACTIVITY 0400: Research, Development, Test & Evaluation, Defense-Wide BA 4: Advanced Component Development & Prototypes (ACD&P)				R-1 ITEM NOMENCLATURE PE 0603909C: BMD EUROPEAN MIDCOURSE RADAR							
COST (\$ in Millions)	FY 2009 Actual	FY 2010 Estimate	FY 2011 Base Estimate	FY 2011 OCO Estimate	FY 2011 Total Estimate	FY 2012 Estimate	FY 2013 Estimate	FY 2014 Estimate	FY 2015 Estimate	Cost To Complete	Total Cost
Total Program Element	73.728	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0	73.728
DX48: European Capability Block 4	70.452	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0	70.452
XX48: European Capability Sustainment	3.276	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0	3.276

Note

European Midcourse Radar (EMR) upgrades began in FY 2008 in the Sensors PE 0603884C, Project DX11 - BMD radars Block 4.0. FY 2008 maintenance of the GBR-P (EMR) radar in a caretaker status is also in the Sensors PE, Project XX11 - BMD Radars Sustainment. For FY 2010 and out both efforts are contained in the European Capability PE 0603911C.

A. Mission Description and Budget Item Justification

EMR is a large, steerable, X-band phased array radar currently located at Kwajalein Missile Range, Kwajalein Atoll. EMR will be maintained in caretaker status (warm stand-by) at Kwajalein into FY 2010. The EMR back-end hardware (signal data processing equipment, etc.) will be upgraded and the entire radar deployed to a European location to provide BMDS midcourse discrimination capability.

The EMR requires a Ballistic Missile Defense System (BMDS) Communications System Complex (BCSC) that consolidates all of the communications systems: Satellite Communications (SATCOM), Defense Information Systems Network (DISN) core, campus communications (includes the Defense Systems Network (DSN), Secret Internet Protocol Router Network (SIPRNET), Non-Secure Internet Protocol Router Network (NIPRNET) to include Video Teleconferencing Internet Protocol (VTColP) capability, and unclassified telephone service), gateway, communications management, and wide area networks. This capability will provide the communications connectivity from the radar site to the BMDS Network. The EMR BCSC is a permanent facility.

EMR will provide tracking and discrimination coverage for ICBMs in the midcourse phase of flight. This will increase the BMDS probability of engagement success. A permanent BCSC facility is required to provide the communications connectivity from the radar site to the BMDS Network.

UNCLASSIFIED

R-1 Line Item #95

Page 1 of 21

UNCLASSIFIED

Exhibit R-2, RDT&E Budget Item Justification: PB 2011 Missile Defense Agency				DATE: February 2010	
APPROPRIATION/BUDGET ACTIVITY		R-1 ITEM NOMENCLATURE			
0400: Research, Development, Test & Evaluation, Defense-Wide		PE 0603909C: BMD EUROPEAN MIDCOURSE RADAR			
BA 4: Advanced Component Development & Prototypes (ACD&P)					
Complete EMR upgrade and communications suite procurement in support of BMDS Block 4.0 goal to Defend Allies & Deployed Forces in Europe from Limited Iranian Long-Range Threats, Expand Protection of U.S.					
B. Program Change Summary (\$ in Millions)					
	FY 2009	FY 2010	FY 2011 Base	FY 2011 OCO	FY 2011 Total
Previous President's Budget	76.537	0.000	0.000	0.000	0.000
Current President's Budget	73.728	0.000	0.000	0.000	0.000
Total Adjustments	-2.809	0.000	0.000	0.000	0.000
• Congressional General Reductions		0.000			
• Congressional Directed Reductions		0.000			
• Congressional Rescissions	0.000	0.000			
• Congressional Adds		0.000			
• Congressional Directed Transfers		0.000			
• Reprogrammings	-1.629	0.000			
• SBIR/STTR Transfer	-1.180	0.000			
• Other Adjustment Detail	0.000	0.000	0.000	0.000	0.000
Change Summary Explanation					
FY 2009 decrease includes SBIR/STTR & MDA adjustments.					

UNCLASSIFIED

R-1 Line Item #95

Page 2 of 21

UNCLASSIFIED

Exhibit R-2A, RDT&E Project Justification: PB 2011 Missile Defense Agency								DATE: February 2010			
APPROPRIATION/BUDGET ACTIVITY 0400: <i>Research, Development, Test & Evaluation, Defense-Wide</i> BA 4: <i>Advanced Component Development & Prototypes (ACD&P)</i>				R-1 ITEM NOMENCLATURE PE 0603909C: <i>BMD EUROPEAN</i> <i>MIDCOURSE RADAR</i>				PROJECT DX48: <i>European Capability Block 4</i>			
COST (\$ in Millions)	FY 2009 Actual	FY 2010 Estimate	FY 2011 Base Estimate	FY 2011 OCO Estimate	FY 2011 Total Estimate	FY 2012 Estimate	FY 2013 Estimate	FY 2014 Estimate	FY 2015 Estimate	Cost To Complete	Total Cost
DX48: <i>European Capability Block 4</i>	70.452	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0	70.452
Quantity of RDT&E Articles	0	0	0	0	0	0	0	0	0		
Note European Midcourse Radar (EMR) Upgrade began in FY 2008 under BMDS Radars PE 0630884C, Project DX11 BMD Radars Block 4.0. In FY 2010 EMR is under the European Capability PE 0603911C, under Project DX48, and in FY 2011 and beyond in project MD48..											
A. Mission Description and Budget Item Justification BMDS Block 4.0 defends allies and deployed forces in Europe from limited Iranian long-range threats; and continues to expand protection in the U.S. Major efforts include an upgrade and deployment of the European Midcourse Radar (EMR) to Europe to provide sensor coverage of ballistic missiles in their mid-course phase of flight. The EMR requires a Ballistic Missile Defense System (BMDS) Communications System Complex (BCSC) that consolidates all of the communications systems.											
B. Accomplishments/Planned Program (\$ in Millions)											
						FY 2009	FY 2010	FY 2011 Base	FY 2011 OCO	FY 2011 Total	
EMR Upgrade						39.828	0.000	0.000	0.000	0.000	
See Description Below											
FY 2009 Accomplishments: The European Midcourse Radar (EMR) Upgrade is a large, steerable, X-band phased array radar currently located at Kwajalein Missile Range (KMR), Kwajalein Atoll. EMR is being maintained in caretaker status (warm stand-by) at Kwajalein through FY 2010. The EMR back-end hardware (signal and data processing equipment, etc.) will be upgraded and the radar will be deployed to a European location to provide the BMDS midcourse discrimination capability in defense of the United States and Europe.											

UNCLASSIFIED

R-1 Line Item #95

Page 3 of 21

UNCLASSIFIED

Exhibit R-2A, RDT&E Project Justification: PB 2011 Missile Defense Agency				DATE: February 2010		
APPROPRIATION/BUDGET ACTIVITY 0400: Research, Development, Test & Evaluation, Defense-Wide BA 4: Advanced Component Development & Prototypes (ACD&P)		R-1 ITEM NOMENCLATURE PE 0603909C: BMD EUROPEAN MIDCOURSE RADAR		PROJECT DX48: European Capability Block 4		
B. Accomplishments/Planned Program (\$ in Millions)						
		FY 2009	FY 2010	FY 2011 Base	FY 2011 OCO	FY 2011 Total
Prepared for hardware (HW) upgrade design. Prepared for Common Software (SW) development. FY 2010 Plans: NA FY 2011 Base Plans: NA FY 2011 OCO Plans: NA						
Site Activation, Facilities Design See Description Below FY 2009 Accomplishments: European Midcourse Radar (EMR) Site design and Site Preparation efforts begin in FY 2009. Actual site construction is being funded with MILCON. Began site activation planning and site mobilization and preparation activities. Began site design. Development and design of site activation facilities. Completed site selection activities. FY 2010 Plans: NA FY 2011 Base Plans: NA		15.168	0.000	0.000	0.000	0.000

UNCLASSIFIED

R-1 Line Item #95

Page 4 of 21

UNCLASSIFIED

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B. Accomplishments/Planned Program (\$ in Millions)						
		FY 2009	FY 2010	FY 2011 Base	FY 2011 OCO	FY 2011 Total
FY 2011 OCO Plans: NA						
EMR Communications See Description Below FY 2009 Accomplishments: The Ballistic Missile Defense System (BMDS) Communications System Complex (BCSC) in support of the European Midcourse Radar (EMR) consolidates all of the communications systems in one facility: Satellite Communications (SATCOM), Defense Information Systems Network (DISN) core, campus communications (includes the Defense Systems Network (DSN), Secret Internet Protocol Router Network (SIPRNET), Non-Secure Internet Protocol Router Network (NIPRNET) to include Video Teleconferencing Internet Protocol (VTColP) capability, and unclassified telephone service), gateway, communications management, and wide area networks. This capability will provide the communications connectivity from the radar site to the BMDS Network. Engineering support to ensure the EMR BCSC integration into the overall BMDS Provided BMDS network and communications installation and support at the EMR Continued BCSC acquisition Continued acquisition of Modernization Enterprise Terminal (MET) SATCOM X/Ka-band capability Continued acquisition of Communications Power System Continued acquisition of Defense Red Switch Network (DRSN) equipment Initiated acquisition and leases of terrestrial communications capability (fiber optic cable, microwave, etc.) to support circuit requirements of the EMR FY 2010 Plans: NA		15.456	0.000	0.000	0.000	0.000

UNCLASSIFIED

R-1 Line Item #95

Page 5 of 21

UNCLASSIFIED

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B. Accomplishments/Planned Program (\$ in Millions)											
						FY 2009	FY 2010	FY 2011 Base	FY 2011 OCO	FY 2011 Total	
FY 2011 Base Plans: NA											
FY 2011 OCO Plans: NA											
Accomplishments/Planned Programs Subtotals						70.452	0.000	0.000	0.000	0.000	
C. Other Program Funding Summary (\$ in Millions)											
Line Item	FY 2009	FY 2010	FY 2011 Base	FY 2011 OCO	FY 2011 Total	FY 2012	FY 2013	FY 2014	FY 2015	Cost To Complete	Total Cost
• 0603175C: Ballistic Missile Defense Technology	117.602	189.229	132.220	0.000	132.220	236.875	239.873	197.118	197.852	0	1,310.769
• 0603881C: Ballistic Missile Defense Terminal Defense Segment	951.414	715.732	436.482	0.000	436.482	250.275	336.711	500.983	521.717	0	3,713.314
• 0603882C: Ballistic Missile Defense Mid-Course Segment	1,472.683	1,027.371	1,346.181	0.000	1,346.181	1,112.655	1,291.790	1,099.029	1,033.213	0	8,382.922
• 0603883C: Ballistic Missile Defense Boost Defense Segment	384.365	182.317	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0	566.682
• 0603884C: Ballistic Missile Defense Sensors	682.754	621.017	454.859	0.000	454.859	469.589	681.397	650.525	616.342	0	4,176.483
• 0603886C: Ballistic Missile Defense System Interceptor	308.869	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0	308.869
• 0603888C: Ballistic Missile Defense Test and Targets	906.952	823.333	1,113.425	0.000	1,113.425	1,105.959	951.371	871.929	829.608	0	6,602.577
• 0603890C: Ballistic Missile Defense Enabling Programs	402.776	358.751	402.769	0.000	402.769	468.673	457.745	473.871	488.799	0	3,053.384

UNCLASSIFIED

R-1 Line Item #95

Page 6 of 21

UNCLASSIFIED

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C. Other Program Funding Summary (\$ in Millions)											
Line Item	FY 2009	FY 2010	FY 2011 Base	FY 2011 OCO	FY 2011 Total	FY 2012	FY 2013	FY 2014	FY 2015	Cost To Complete	Total Cost
• 0603891C: SPECIAL PROGRAMS - MDA	182.998	250.185	270.189	0.000	270.189	269.040	450.645	517.486	601.315	0	2,541.858
• 0603892C: BMD AEGIS	1,054.323	1,435.717	1,467.278	0.000	1,467.278	1,021.878	1,112.668	1,076.739	923.316	0	8,091.919
• 0603893C: SPACE TRACKING & SURVEILLANCE SYSTEM	209.831	161.609	112.678	0.000	112.678	98.500	56.424	52.928	34.661	0	726.631
• 0603894C: MULTIPLE KILL VEHICLE	226.027	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0	226.027
• 0603895C: BMD SYSTEM SPACE PROGRAM	23.250	12.492	10.942	0.000	10.942	11.182	11.347	11.749	12.155	0	93.117
• 0603896C: BMD C2BMC	275.174	334.734	342.625	0.000	342.625	364.085	289.778	323.922	298.936	0	2,229.254
• 0603897C: BMD HERCULES	51.629	47.932	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0	99.561
• 0603898C: BMD JOINT WARFIGHTER SUPPORT	66.283	61.098	68.726	0.000	68.726	62.239	63.451	65.158	67.231	0	454.186
• 0603901C: DIRECTED ENERGY RESEARCH	0.000	0.000	98.688	0.000	98.688	101.371	103.449	104.572	104.141	0	512.221
• 0603904C: MISSILE DEFENSE INTEGRATION & OPERATIONS CENTER (MDIOC)	102.823	86.483	86.198	0.000	86.198	88.181	78.517	80.410	83.087	0	605.699
• 0603906C: REGARDING TRENCH	3.159	6.130	7.529	0.000	7.529	8.295	8.286	8.479	8.675	0	50.553
• 0603907C: SEA BASED X-BAND RADAR (SBX)	143.878	167.153	153.056	0.000	153.056	150.104	159.832	160.163	197.099	0	1,131.285
• 0603908C: BMD EUROPEAN INTERCEPTOR SITE	348.722	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0	348.722
• 0603911C: BMD EUROPEAN CAPABILITY	0.000	50.226	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0	50.226
• 0603912C: BMD European Comm Support	26.016	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0	26.016
	0.000	201.323	121.735	0.000	121.735	111.100	113.101	116.114	119.172	0	782.545

UNCLASSIFIED

R-1 Line Item #95

Page 7 of 21

UNCLASSIFIED

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APPROPRIATION/BUDGET ACTIVITY 0400: Research, Development, Test & Evaluation, Defense-Wide BA 4: Advanced Component Development & Prototypes (ACD&P)				R-1 ITEM NOMENCLATURE PE 0603909C: BMD EUROPEAN MIDCOURSE RADAR				PROJECT DX48: European Capability Block 4			
C. Other Program Funding Summary (\$ in Millions)											
Line Item	FY 2009	FY 2010	FY 2011 Base	FY 2011 OCO	FY 2011 Total	FY 2012	FY 2013	FY 2014	FY 2015	Cost To Complete	Total Cost
• 0603913C: ISRAELI COOPERATIVE											
• 0604880C: LAND-BASED SM-3	0.000	0.000	281.378	0.000	281.378	345.937	187.062	93.456	139.595	0	1,047.428
• 0604881C: Aegis SM-3 BLOCK IIA CO-DEVELOPMENT	0.000	255.987	318.800	0.000	318.800	405.500	416.300	337.300	227.500	0	1,961.387
• 0604883C: PRECISION TRACKING SPACE SYSTEM	0.000	0.000	66.969	0.000	66.969	123.851	184.800	348.360	482.952	0	1,206.932
• 0604884C: AIRBORNE INFRARED (ABIR)	0.000	0.000	111.671	0.000	111.671	103.636	123.591	103.668	58.773	0	501.339
• 0605502C: Small Business Innovative Research BMDO	124.788	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0	124.788
• 0901585C: Pentagon Reservation	20.146	19.709	20.482	0.000	20.482	0.000	0.000	0.000	0.000	0	60.337
• 0901598C: Management Headquarters-MDA	87.151	52.403	29.754	0.000	29.754	29.421	29.974	30.567	31.171	0	290.441
D. Acquisition Strategy											
The EMR will continue to follow the Missile Defense Agency's capability-based acquisition strategy that emphasizes testing, development and evolutionary acquisition through the use of MDA's block structure and spiral development.											
E. Performance Metrics											
NA											

UNCLASSIFIED

R-1 Line Item #95

Page 8 of 21

UNCLASSIFIED

Exhibit R-3, RDT&E Project Cost Analysis: PB 2011 Missile Defense Agency											DATE: February 2010		
APPROPRIATION/BUDGET ACTIVITY					R-1 ITEM NOMENCLATURE				PROJECT				
0400: Research, Development, Test & Evaluation, Defense-Wide BA 4: Advanced Component Development & Prototypes (ACD&P)					PE 0603909C: BMD EUROPEAN MIDCOURSE RADAR				DX48: European Capability Block 4				
Product Development (\$ in Millions)													
				FY 2010		FY 2011 Base		FY 2011 OCO		FY 2011 Total			
Cost Category Item	Contract Method & Type	Performing Activity & Location	Total Prior Years Cost	Cost	Award Date	Cost	Award Date	Cost	Award Date	Cost	Cost To Complete	Total Cost	Target Value of Contract
EMR Hardware & Software Upgrade EMR Upgrade DX48	SS/CPAF	Raytheon MA	42.637	0.000		0.000		0.000		0.000	0	42.637	42.637
EMR Site Planning & Activation Site Activation, Facilities Design DX48	TBD/TBD	MDA-DFW AL	15.168	0.000		0.000		0.000		0.000	0	15.168	15.168
EMR Communications EMR - BCSC DX48	TBD/TBD	PM DCATS VA	4.413	0.000		0.000		0.000		0.000	0	4.413	4.413
EMR Communications EMR - SATCOM DX48	TBD/TBD	DISA VA	2.356	0.000		0.000		0.000		0.000	0	2.356	2.356
EMR Communications EMR - Comms Power DX48	TBD/TBD	DISA VA	2.454	0.000		0.000		0.000		0.000	0	2.454	2.454
EMR Communications EMR - Comms Support DX48	TBD/TBD	DISA VA	0.196	0.000		0.000		0.000		0.000	0	0.196	0.196
EMR Communications EMR - Terrestrial Fiber Optic Cable DX48	TBD/TBD	DISA/USAFE VA	0.188	0.000		0.000		0.000		0.000	0	0.188	0.188
EMR Communications EMR - Comms Engineering Support DX48	SS/CPAF	Lockheed Martin Team VA	5.849	0.000		0.000		0.000		0.000	0	5.849	5.849
Subtotal			73.261	0.000		0.000		0.000		0.000	0.000	73.261	73.261

UNCLASSIFIED

R-1 Line Item #95

Page 9 of 21

UNCLASSIFIED

Exhibit R-3, RDT&E Project Cost Analysis: PB 2011 Missile Defense Agency											DATE: February 2010		
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Product Development (\$ in Millions)													
				FY 2010		FY 2011 Base		FY 2011 OCO		FY 2011 Total			
Cost Category Item	Contract Method & Type	Performing Activity & Location	Total Prior Years Cost	Cost	Award Date	Cost	Award Date	Cost	Award Date	Cost	Cost To Complete	Total Cost	Target Value of Contract
Remarks NA													
Support (\$ in Millions)													
				FY 2010		FY 2011 Base		FY 2011 OCO		FY 2011 Total			
Cost Category Item	Contract Method & Type	Performing Activity & Location	Total Prior Years Cost	Cost	Award Date	Cost	Award Date	Cost	Award Date	Cost	Cost To Complete	Total Cost	Target Value of Contract
Subtotal			0.000	0.000		0.000		0.000		0.000			
Remarks NA													
Test and Evaluation (\$ in Millions)													
				FY 2010		FY 2011 Base		FY 2011 OCO		FY 2011 Total			
Cost Category Item	Contract Method & Type	Performing Activity & Location	Total Prior Years Cost	Cost	Award Date	Cost	Award Date	Cost	Award Date	Cost	Cost To Complete	Total Cost	Target Value of Contract
Subtotal			0.000	0.000		0.000		0.000		0.000			
Remarks NA													

UNCLASSIFIED

R-1 Line Item #95

Page 10 of 21

UNCLASSIFIED

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Management Services (\$ in Millions) <table border="1" style="width:100%; border-collapse: collapse; margin-top: 10px;"> <tr> <th colspan="4"></th> <th colspan="2">FY 2010</th> <th colspan="2">FY 2011 Base</th> <th colspan="2">FY 2011 OCO</th> <th colspan="2">FY 2011 Total</th> <th colspan="2"></th> </tr> <tr> <th>Cost Category Item</th> <th>Contract Method & Type</th> <th>Performing Activity & Location</th> <th>Total Prior Years Cost</th> <th>Cost</th> <th>Award Date</th> <th>Cost</th> <th>Award Date</th> <th>Cost</th> <th>Award Date</th> <th>Cost</th> <th>Cost To Complete</th> <th>Total Cost</th> <th>Target Value of Contract</th> </tr> <tr> <td align="right" colspan="3">Subtotal</td> <td align="right">0.000</td> <td align="right">0.000</td> <td></td> <td align="right">0.000</td> <td></td> <td align="right">0.000</td> <td></td> <td align="right">0.000</td> <td></td> <td></td> <td></td> </tr> </table> Remarks NA																		FY 2010		FY 2011 Base		FY 2011 OCO		FY 2011 Total				Cost Category Item	Contract Method & Type	Performing Activity & Location	Total Prior Years Cost	Cost	Award Date	Cost	Award Date	Cost	Award Date	Cost	Cost To Complete	Total Cost	Target Value of Contract	Subtotal			0.000	0.000		0.000		0.000		0.000			
				FY 2010		FY 2011 Base		FY 2011 OCO		FY 2011 Total																																													
Cost Category Item	Contract Method & Type	Performing Activity & Location	Total Prior Years Cost	Cost	Award Date	Cost	Award Date	Cost	Award Date	Cost	Cost To Complete	Total Cost	Target Value of Contract																																										
Subtotal			0.000	0.000		0.000		0.000		0.000																																													
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			Total Prior Years Cost	FY 2010		FY 2011 Base		FY 2011 OCO		FY 2011 Total	Cost To Complete	Total Cost	Target Value of Contract																																										
Project Cost Totals			73.261	0.000		0.000		0.000		0.000	0.000	73.261	73.261																																										

UNCLASSIFIED

UNCLASSIFIED

Exhibit R-4, RDT&E Schedule Profile: PB 2011 Missile Defense Agency																								DATE: February 2010			
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UNCLASSIFIED

Exhibit R-4A, RDT&E Schedule Details: PB 2011 Missile Defense Agency			DATE: February 2010
APPROPRIATION/BUDGET ACTIVITY 0400: <i>Research, Development, Test & Evaluation, Defense-Wide</i> BA 4: <i>Advanced Component Development & Prototypes (ACD&P)</i>	R-1 ITEM NOMENCLATURE PE 0603909C: <i>BMD EUROPEAN</i> <i>MIDCOURSE RADAR</i>	PROJECT DX48: <i>European Capability Block 4</i>	

Schedule Details

Event	Start		End	
	Quarter	Year	Quarter	Year
Begin EMR Hardware Design/Long Lead Procurement	1	2009	1	2009
EMR Site Design 35% Complete	2	2009	2	2009
EMR Site Design 60% Complete	4	2009	4	2009
Begin EMR Site Preparation	4	2009	4	2009

UNCLASSIFIED

R-1 Line Item #95

Page 13 of 21

UNCLASSIFIED

Exhibit R-2A, RDT&E Project Justification: PB 2011 Missile Defense Agency								DATE: February 2010			
APPROPRIATION/BUDGET ACTIVITY 0400: <i>Research, Development, Test & Evaluation, Defense-Wide</i> BA 4: <i>Advanced Component Development & Prototypes (ACD&P)</i>				R-1 ITEM NOMENCLATURE PE 0603909C: <i>BMD EUROPEAN</i> <i>MIDCOURSE RADAR</i>				PROJECT XX48: <i>European Capability Sustainment</i>			
COST (\$ in Millions)	FY 2009 Actual	FY 2010 Estimate	FY 2011 Base Estimate	FY 2011 OCO Estimate	FY 2011 Total Estimate	FY 2012 Estimate	FY 2013 Estimate	FY 2014 Estimate	FY 2015 Estimate	Cost To Complete	Total Cost
XX48: <i>European Capability Sustainment</i>	3.276	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0	3.276
Quantity of RDT&E Articles	0	0	0	0	0	0	0	0	0		
Note FY 2008 EMR caretaker maintenance is in the Sensors PE 06030884C, Project XX11. For FY 2010 this effort is in the European Capability (EC) PE 0603911C, under the same Project XX48.											
A. Mission Description and Budget Item Justification Maintains the Ground-Based Radar-Prototype (GBR-P) radar at Kwajalein in a caretaker status until it is disassembled and upgraded to the European Midcourse Radar (EMR).											
B. Accomplishments/Planned Program (\$ in Millions)											
							FY 2009	FY 2010	FY 2011 Base	FY 2011 OCO	FY 2011 Total
GBR-P (EMR) Caretaker Support							3.276	0.000	0.000	0.000	0.000
See Description Below											
FY 2009 Accomplishments: Maintained the GBR-P radar at Kwajalein in a caretaker status until it is disassembled and upgraded to the European Midcourse Radar (EMR) configuration.											
FY 2010 Plans: NA											
FY 2011 Base Plans: NA											

UNCLASSIFIED

R-1 Line Item #95

Page 14 of 21

UNCLASSIFIED

Exhibit R-2A, RDT&E Project Justification: PB 2011 Missile Defense Agency									DATE: February 2010		
APPROPRIATION/BUDGET ACTIVITY 0400: Research, Development, Test & Evaluation, Defense-Wide BA 4: Advanced Component Development & Prototypes (ACD&P)				R-1 ITEM NOMENCLATURE PE 0603909C: BMD EUROPEAN MIDCOURSE RADAR			PROJECT XX48: European Capability Sustainment				
B. Accomplishments/Planned Program (\$ in Millions)											
							FY 2009	FY 2010	FY 2011 Base	FY 2011 OCO	FY 2011 Total
FY 2011 OCO Plans: NA											
Accomplishments/Planned Programs Subtotals							3.276	0.000	0.000	0.000	0.000
C. Other Program Funding Summary (\$ in Millions)											
Line Item	FY 2009	FY 2010	FY 2011 Base	FY 2011 OCO	FY 2011 Total	FY 2012	FY 2013	FY 2014	FY 2015	Cost To Complete	Total Cost
• 0603175C: Ballistic Missile Defense Technology	117.602	189.229	132.220	0.000	132.220	236.875	239.873	197.118	197.852	0	1,310.769
• 0603881C: Ballistic Missile Defense Terminal Defense Segment	951.414	715.732	436.482	0.000	436.482	250.275	336.711	500.983	521.717	0	3,713.314
• 0603882C: Ballistic Missile Defense Mid-Course Segment	1,472.683	1,027.371	1,346.181	0.000	1,346.181	1,112.655	1,291.790	1,099.029	1,033.213	0	8,382.922
• 0603883C: Ballistic Missile Defense Boost Defense Segment	384.365	182.317	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0	566.682
• 0603884C: Ballistic Missile Defense Sensors	682.754	621.017	454.859	0.000	454.859	469.589	681.397	650.525	616.342	0	4,176.483
• 0603886C: Ballistic Missile Defense System Interceptor	308.869	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0	308.869
• 0603888C: Ballistic Missile Defense Test and Targets	906.952	823.333	1,113.425	0.000	1,113.425	1,105.959	951.371	871.929	829.608	0	6,602.577
• 0603890C: Ballistic Missile Defense Enabling Programs	402.776	358.751	402.769	0.000	402.769	468.673	457.745	473.871	488.799	0	3,053.384
• 0603891C: SPECIAL PROGRAMS - MDA	182.998	250.185	270.189	0.000	270.189	269.040	450.645	517.486	601.315	0	2,541.858
• 0603892C: BMD AEGIS	1,054.323	1,435.717	1,467.278	0.000	1,467.278	1,021.878	1,112.668	1,076.739	923.316	0	8,091.919

UNCLASSIFIED

R-1 Line Item #95

Page 15 of 21

UNCLASSIFIED

Exhibit R-2A, RDT&E Project Justification: PB 2011 Missile Defense Agency									DATE: February 2010		
APPROPRIATION/BUDGET ACTIVITY				R-1 ITEM NOMENCLATURE				PROJECT			
0400: Research, Development, Test & Evaluation, Defense-Wide BA 4: Advanced Component Development & Prototypes (ACD&P)				PE 0603909C: BMD EUROPEAN MIDCOURSE RADAR				XX48: European Capability Sustainment			
C. Other Program Funding Summary (\$ in Millions)											
Line Item	FY 2009	FY 2010	FY 2011 Base	FY 2011 OCO	FY 2011 Total	FY 2012	FY 2013	FY 2014	FY 2015	Cost To Complete	Total Cost
• 0603893C: SPACE TRACKING & SURVEILLANCE SYSTEM	209.831	161.609	112.678	0.000	112.678	98.500	56.424	52.928	34.661	0	726.631
• 0603894C: MULTIPLE KILL VEHICLE	226.027	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0	226.027
• 0603895C: BMD SYSTEM SPACE PROGRAM	23.250	12.492	10.942	0.000	10.942	11.182	11.347	11.749	12.155	0	93.117
• 0603896C: BMD C2BMC	275.174	334.734	342.625	0.000	342.625	364.085	289.778	323.922	298.936	0	2,229.254
• 0603897C: BMD HERCULES	51.629	47.932	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0	99.561
• 0603898C: BMD JOINT WARFIGHTER SUPPORT	66.283	61.098	68.726	0.000	68.726	62.239	63.451	65.158	67.231	0	454.186
• 0603901C: DIRECTED ENERGY RESEARCH	0.000	0.000	98.688	0.000	98.688	101.371	103.449	104.572	104.141	0	512.221
• 0603904C: MISSILE DEFENSE INTEGRATION & OPERATIONS CENTER (MDIOC)	102.823	86.483	86.198	0.000	86.198	88.181	78.517	80.410	83.087	0	605.699
• 0603906C: REGARDING TRENCH	3.159	6.130	7.529	0.000	7.529	8.295	8.286	8.479	8.675	0	50.553
• 0603907C: SEA BASED X-BAND RADAR (SBX)	143.878	167.153	153.056	0.000	153.056	150.104	159.832	160.163	197.099	0	1,131.285
• 0603908C: BMD EUROPEAN INTERCEPTOR SITE	348.722	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0	348.722
• 0603911C: BMD EUROPEAN CAPABILITY	0.000	50.226	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0	50.226
• 0603912C: BMD European Comm Support	26.016	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0	26.016
• 0603913C: ISRAELI COOPERATIVE	0.000	201.323	121.735	0.000	121.735	111.100	113.101	116.114	119.172	0	782.545
• 0604880C: LAND-BASED SM-3	0.000	0.000	281.378	0.000	281.378	345.937	187.062	93.456	139.595	0	1,047.428
	0.000	255.987	318.800	0.000	318.800	405.500	416.300	337.300	227.500	0	1,961.387

UNCLASSIFIED

R-1 Line Item #95

Page 16 of 21

UNCLASSIFIED

Exhibit R-2A, RDT&E Project Justification: PB 2011 Missile Defense Agency									DATE: February 2010		
APPROPRIATION/BUDGET ACTIVITY 0400: Research, Development, Test & Evaluation, Defense-Wide BA 4: Advanced Component Development & Prototypes (ACD&P)				R-1 ITEM NOMENCLATURE PE 0603909C: BMD EUROPEAN MIDCOURSE RADAR				PROJECT XX48: European Capability Sustainment			
C. Other Program Funding Summary (\$ in Millions)											
Line Item	FY 2009	FY 2010	FY 2011 Base	FY 2011 OCO	FY 2011 Total	FY 2012	FY 2013	FY 2014	FY 2015	Cost To Complete	Total Cost
• 0604881C: Aegis SM-3 BLOCK IIA CO-DEVELOPMENT											
• 0604883C: PRECISION TRACKING SPACE SYSTEM	0.000	0.000	66.969	0.000	66.969	123.851	184.800	348.360	482.952	0	1,206.932
• 0604884C: AIRBORNE INFRARED (ABIR)	0.000	0.000	111.671	0.000	111.671	103.636	123.591	103.668	58.773	0	501.339
• 0605502C: Small Business Innovative Research BMDO	124.788	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0	124.788
• 0901585C: Pentagon Reservation	20.146	19.709	20.482	0.000	20.482	0.000	0.000	0.000	0.000	0	60.337
• 0901598C: Management Headquarters-MDA	87.151	52.403	29.754	0.000	29.754	29.421	29.974	30.567	31.171	0	290.441
D. Acquisition Strategy											
The EMR will continue to follow the Missile Defense Agency’s capability-based acquisition strategy that emphasizes testing, development and evolutionary acquisition through the use of MDA’s new block structure and spiral development.											
E. Performance Metrics											
NA											

UNCLASSIFIED

R-1 Line Item #95

Page 17 of 21

UNCLASSIFIED

Exhibit R-3, RDT&E Project Cost Analysis: PB 2011 Missile Defense Agency											DATE: February 2010		
APPROPRIATION/BUDGET ACTIVITY 0400: <i>Research, Development, Test & Evaluation, Defense-Wide</i> BA 4: <i>Advanced Component Development & Prototypes (ACD&P)</i>				R-1 ITEM NOMENCLATURE PE 0603909C: <i>BMD EUROPEAN</i> <i>MIDCOURSE RADAR</i>				PROJECT XX48: <i>European Capability Sustainment</i>					
Product Development (\$ in Millions)													
				FY 2010		FY 2011 Base		FY 2011 OCO		FY 2011 Total			
Cost Category Item	Contract Method & Type	Performing Activity & Location	Total Prior Years Cost	Cost	Award Date	Cost	Award Date	Cost	Award Date	Cost	Cost To Complete	Total Cost	Target Value of Contract
European Midcourse Radar (EMR) Sustainment GBR-P (EMR) Caretaker Support XX48	SS/CPAF	Raytheon MA	3.276	0.000		0.000		0.000		0.000	0	3.276	3.276
Subtotal			3.276	0.000		0.000		0.000		0.000	0.000	3.276	3.276
Remarks NA													
Support (\$ in Millions)													
				FY 2010		FY 2011 Base		FY 2011 OCO		FY 2011 Total			
Cost Category Item	Contract Method & Type	Performing Activity & Location	Total Prior Years Cost	Cost	Award Date	Cost	Award Date	Cost	Award Date	Cost	Cost To Complete	Total Cost	Target Value of Contract
Subtotal			0.000	0.000		0.000		0.000		0.000			
Remarks NA													

UNCLASSIFIED

R-1 Line Item #95

Page 18 of 21

UNCLASSIFIED

Exhibit R-3, RDT&E Project Cost Analysis: PB 2011 Missile Defense Agency											DATE: February 2010		
APPROPRIATION/BUDGET ACTIVITY 0400: <i>Research, Development, Test & Evaluation, Defense-Wide</i> BA 4: <i>Advanced Component Development & Prototypes (ACD&P)</i>				R-1 ITEM NOMENCLATURE PE 0603909C: <i>BMD EUROPEAN</i> <i>MIDCOURSE RADAR</i>				PROJECT <i>XX48: European Capability Sustainment</i>					
Test and Evaluation (\$ in Millions)													
				FY 2010		FY 2011 Base		FY 2011 OCO		FY 2011 Total			
Cost Category Item	Contract Method & Type	Performing Activity & Location	Total Prior Years Cost	Cost	Award Date	Cost	Award Date	Cost	Award Date	Cost	Cost To Complete	Total Cost	Target Value of Contract
Subtotal			0.000	0.000		0.000		0.000		0.000			
Remarks NA													
Management Services (\$ in Millions)													
				FY 2010		FY 2011 Base		FY 2011 OCO		FY 2011 Total			
Cost Category Item	Contract Method & Type	Performing Activity & Location	Total Prior Years Cost	Cost	Award Date	Cost	Award Date	Cost	Award Date	Cost	Cost To Complete	Total Cost	Target Value of Contract
Subtotal			0.000	0.000		0.000		0.000		0.000			
Remarks NA													
			Total Prior Years Cost	FY 2010		FY 2011 Base		FY 2011 OCO		FY 2011 Total	Cost To Complete	Total Cost	Target Value of Contract
Project Cost Totals			3.276	0.000		0.000		0.000		0.000	0.000	3.276	3.276
Remarks NA													

UNCLASSIFIED

R-1 Line Item #95

Page 19 of 21

UNCLASSIFIED

Exhibit R-4, RDT&E Schedule Profile: PB 2011 Missile Defense Agency		DATE: February 2010
APPROPRIATION/BUDGET ACTIVITY 0400: <i>Research, Development, Test & Evaluation, Defense-Wide</i> BA 4: <i>Advanced Component Development & Prototypes (ACD&P)</i>	R-1 ITEM NOMENCLATURE PE 0603909C: <i>BMD EUROPEAN</i> MIDCOURSE RADAR	PROJECT XX48: <i>European Capability Sustainment</i>

	FY 2009				FY 2010				FY 2011				FY 2012				FY 2013				FY 2014				FY 2015			
	1	2	3	4	1	2	3	4	1	2	3	4	1	2	3	4	1	2	3	4	1	2	3	4	1	2	3	4
EMR Caretaker support	■	■	■	■																								

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UNCLASSIFIED

Exhibit R-4A, RDT&E Schedule Details: PB 2011 Missile Defense Agency			DATE: February 2010	
APPROPRIATION/BUDGET ACTIVITY 0400: <i>Research, Development, Test & Evaluation, Defense-Wide</i> BA 4: <i>Advanced Component Development & Prototypes (ACD&P)</i>	R-1 ITEM NOMENCLATURE PE 0603909C: <i>BMD EUROPEAN</i> <i>MIDCOURSE RADAR</i>	PROJECT XX48: <i>European Capability Sustainment</i>		
Schedule Details				
	Start		End	
Event	Quarter	Year	Quarter	Year
EMR Caretaker support	1	2009	4	2009

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