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Exhibit R-2, RDT&E Budget Item Justification: PB 2011 Army									DATE: February 2010		
APPROPRIATION/BUDGET ACTIVITY 2040: Research, Development, Test & Evaluation, Army BA 4: Advanced Component Development & Prototypes (ACD&P)				R-1 ITEM NOMENCLATURE PE 0603327A: Air and Missile Defense Systems Engineering							
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	115.567	166.061	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0	281.628
S25: ARMY SIAP OPERATIONAL INTEGRATION	4.071	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	Continuing	Continuing
S34: AMD SYSTEM OF SYSTEMS ENGINEERING AND INTEGRATION	111.496	166.061	0.000	0.000	0.000	0.000	0.000	0.000	0.000	Continuing	Continuing

**Note**

On 23 December 2009 the Army Integrated Air & Missile Defense (AIAMD) program was approved for entry into the Engineering and Manufacturing Development phase as ACAT ID program. The approved program baseline represents a substantially lower risk approach from the initial program and resulted in a FY 2016 Initial Operational Capability (IOC). As a result of certification required by section 2366b of title 10, United States Code, the Under Secretary of Defense for Acquisition, Technology and Logistics (USD(AT&L)) waived three certification elements (Affordability, Full Funding, and Preliminary Design Review (PDR) Completion) for the Army IAMD program. With submission of the FY 2011 budget, and the associated FY 2011 FYDP, two of these waivers (Affordability & Full Funding) will no longer be necessary. The third (PDR Completion) will require additional work and is expected to be satisfied before the end of FY 2010. Details on the waivers were provided in letters to Congress in January 2010 and will be included in the December 2009 Selected Acquisition Report due to the Congress in April 2010.

**A. Mission Description and Budget Item Justification**

This program element provides funding for the integration of Army Integrated Air and Missile Defense (AIAMD). On 9 February 2006 the Army Systems Acquisition Review Council (ASARC) designated the IAMD program a Pre-Major Defense Acquisition Program (MDAP) and approved the stand-up of the IAMD Project Office (PO). Program Executive Office Missiles and Space (PEO MS) formally stood up the IAMD PO on 9 May 2006. On 23 December 2009 the Army Integrated Air & Missile Defense (AIAMD) program was approved for entry into the Engineering and Manufacturing Development phase as ACAT ID program. The mission of the AIAMD PO is twofold; To define, develop, acquire, field and sustain the Army's portion of the Joint IAMD system of systems capability to be deployed as integrated components in Army, Joint, interagency, and multi-national net-centric architectures; and to develop, acquire, field and sustain the AIAMD common battle command component of the architecture (replacing seven weapon system unique Battle Management Command, Control, Communications, Computers and Intelligence (BMC4I) components in an AMD Composite BN) and integrate externally developed sensors and shooters to provide an effective AIAMD capability. The Capability Development Document (CDD) was JROC approved on 11 December 2009 via JROCM 200-09. The AIAMD mission is derived from analysis of the Joint Air and Missile Defense (AMD) imperatives and the four mission sets that Army AMD performs. These mission sets are: Provide Air and Missile Defense, Contribute to AMD Situational Awareness/Situational Understanding, Contribute to Airspace Management, and Integrate/contribute to operational protection. The AIAMD PO is responsible for the development of an AIAMD Architecture comprised of components developed within the Project Office as well as by other PEO MS Project Offices (Phased Array Tracking to Intercept of Target (PATRIOT), Surface Launched Advanced Medium Range Air-To-Air Missile (SLAMRAAM), Improved Sentinel, and Joint Land Attack Cruise Missile

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Exhibit R-2, RDT&E Budget Item Justification: PB 2011 Army				DATE: February 2010	
APPROPRIATION/BUDGET ACTIVITY		R-1 ITEM NOMENCLATURE			
2040: Research, Development, Test & Evaluation, Army		PE 0603327A: Air and Missile Defense Systems Engineering			
BA 4: Advanced Component Development & Prototypes (ACD&P)					
Defense Elevated Netted Sensor Systems (JLENS)), PEO Command, Control and Communications - Tactical (C3T) Project Offices (Air and Missile Defense Command and Control Systems (AMDCCS)), Missile Defense Agency (MDA), and Joint organizations. As part of this responsibility, the AIAMD PO has responsibility for performing the overarching AIAMD System of Systems Architecture Systems Engineering. While the AIAMD Architecture is complex, it is itself part of a larger Joint System of Systems architecture. The AIAMD program provides the Army's part of this larger Joint IAMD Architecture.					
B. Program Change Summary (\$ in Millions)					
	FY 2009	FY 2010	FY 2011 Base	FY 2011 OCO	FY 2011 Total
Previous President's Budget	118.816	209.531	250.426	0.000	250.426
Current President's Budget	115.567	166.061	0.000	0.000	0.000
Total Adjustments	-3.249	-43.470	-250.426	0.000	-250.426
• Congressional General Reductions		-45.870			
• Congressional Directed Reductions		0.000			
• Congressional Rescissions	0.000	0.000			
• Congressional Adds		2.400			
• Congressional Directed Transfers		0.000			
• Reprogrammings	0.000	0.000			
• SBIR/STTR Transfer	-3.249	0.000			
• Adjustments to Budget Years	0.000	0.000	-250.426	0.000	-250.426
Change Summary Explanation					
FY2010: Congressional reduction of \$45.000 million for excessive project cost growth and large unobligated balances for IAMD Project S34. This was a result of the schedule slip to MS B. Army IAMD completed MS B in December 2010 and is on track to fully execute program funding to maintain an FY 2016 IOC. Congressional increase of \$2.400 million for Advanced Environmental Control Systems (\$1.600M) and Defense Systems Research (\$.800M) for SMDC Project S25. NOTE: Congressional increase of \$2.400 million for SMDC Project S25 was incorrectly added to Project S34. This funding will be moved to the correct project (S25) during FY 2010.FY2011: The Army IAMD Project S34 funding for FY 2011 and beyond was moved to Budget Activity 5 (PE 0605457A, Project Code S40) for the Engineering and Manufacturing Development phase of program.					

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Exhibit R-2A, RDT&E Project Justification: PB 2011 Army									DATE: February 2010		
APPROPRIATION/BUDGET ACTIVITY 2040: Research, Development, Test & Evaluation, Army BA 4: Advanced Component Development & Prototypes (ACD&P)				R-1 ITEM NOMENCLATURE PE 0603327A: Air and Missile Defense Systems Engineering				PROJECT S25: ARMY SIAP OPERATIONAL INTEGRATION			
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
S25: ARMY SIAP OPERATIONAL INTEGRATION	4.071	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	Continuing	Continuing
Quantity of RDT&E Articles											
A. Mission Description and Budget Item Justification This project funds the coordination of the Single Integrated Air Picture (SIAP) requirements with the operational community: verification that operational requirements exist to support technical specifications and any subsequent changes; integration and coordination of Army SIAP operational requirements with the user community and multi-service sponsor(s); provide support to development and revision of SIAP acquisition strategy with respect to Army operational requirements. These products/tasks are required to ensure a specific, focused effort that integrates SIAP with weapons, sensors, Battle Management/Command, Control, Communications, and Computers (BMC4) and concepts of operations.											
B. Accomplishments/Planned Program (\$ in Millions)											
							FY 2009	FY 2010	FY 2011 Base	FY 2011 OCO	FY 2011 Total
Program #1  Continued efforts to coordinate Integrated Air and Missile Defense (IAMD) analyses, planning, tools, and requirements for Single Integrated Air Picture (SIAP) development. Evaluated IAMD/SIAP-related acquisition strategy, operational requirements, engineering tools, and current and evolving doctrine. Assessed airspace awareness, combat identification, integrated fire control technologies, and risk mitigation approaches.  FY 2009 Accomplishments: FY 2009  FY 2010 Plans: FY 2010  FY 2011 Base Plans: FY 2011 Base							2.476	0.000	0.000	0.000	0.000

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<b>Exhibit R-2A, RDT&amp;E Project Justification:</b> PB 2011 Army				<b>DATE:</b> February 2010	
<b>APPROPRIATION/BUDGET ACTIVITY</b> 2040: <i>Research, Development, Test &amp; Evaluation, Army</i> BA 4: <i>Advanced Component Development &amp; Prototypes (ACD&amp;P)</i>		<b>R-1 ITEM NOMENCLATURE</b> PE 0603327A: <i>Air and Missile Defense Systems Engineering</i>		<b>PROJECT</b> S25: <i>ARMY SIAP OPERATIONAL INTEGRATION</i>	
<b>B. Accomplishments/Planned Program (\$ in Millions)</b>					
	<b>FY 2009</b>	<b>FY 2010</b>	<b>FY 2011 Base</b>	<b>FY 2011 OCO</b>	<b>FY 2011 Total</b>
<i>FY 2011 OCO Plans:</i> FY 2011 OCO					
Program #2  Includes Congressional adds for Border Security and Defense System Research. This effort is focused on the identification and transition of dual usetechnologies to meet critical Department of Defense (DoD) and Departmentfor Homeland Security (DHS) requirements. Specific taskswill involve miniaturized 3D electronic sensors, as well as visual sensingand image dissemination for pervasive monitoring.  <i>FY 2009 Accomplishments:</i> FY 2009  <i>FY 2010 Plans:</i> FY 2010  <i>FY 2011 Base Plans:</i> FY 2011 Base  <i>FY 2011 OCO Plans:</i> FY 2011 OCO	1.595	0.000	0.000	0.000	0.000
Accomplishments/Planned Programs Subtotals	4.071	0.000	0.000	0.000	0.000
<b>C. Other Program Funding Summary (\$ in Millions)</b> N/A					
<b>D. Acquisition Strategy</b> N/A					

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Exhibit R-2A, RDT&E Project Justification: PB 2011 Army		DATE: February 2010
APPROPRIATION/BUDGET ACTIVITY 2040: <i>Research, Development, Test &amp; Evaluation, Army</i> BA 4: <i>Advanced Component Development &amp; Prototypes (ACD&amp;P)</i>	R-1 ITEM NOMENCLATURE PE 0603327A: <i>Air and Missile Defense Systems Engineering</i>	PROJECT S25: <i>ARMY SIAP OPERATIONAL INTEGRATION</i>
<b>E. Performance Metrics</b> Performance metrics used in the preparation of this justification material may be found in the FY 2010 Army Performance Budget Justification Book, dated May 2010.		

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<b>Exhibit R-3, RDT&amp;E Project Cost Analysis: PB 2011 Army</b>											<b>DATE:</b> February 2010		
<b>APPROPRIATION/BUDGET ACTIVITY</b> 2040: <i>Research, Development, Test &amp; Evaluation, Army</i> BA 4: <i>Advanced Component Development &amp; Prototypes (ACD&amp;P)</i>				<b>R-1 ITEM NOMENCLATURE</b> PE 0603327A: <i>Air and Missile Defense Systems Engineering</i>				<b>PROJECT</b> S25: <i>ARMY SIAP OPERATIONAL INTEGRATION</i>					
<b>Product Development (\$ in Millions)</b>													
				<b>FY 2010</b>		<b>FY 2011 Base</b>		<b>FY 2011 OCO</b>		<b>FY 2011 Total</b>			
<b>Cost Category Item</b>	<b>Contract Method &amp; Type</b>	<b>Performing Activity &amp; Location</b>	<b>Total Prior Years Cost</b>	<b>Cost</b>	<b>Award Date</b>	<b>Cost</b>	<b>Award Date</b>	<b>Cost</b>	<b>Award Date</b>	<b>Cost</b>	<b>Cost To Complete</b>	<b>Total Cost</b>	<b>Target Value of Contract</b>
Execute Congressional adds	C/Various	Various Location could not be determined.	36.662	0.000		0.000		0.000		0.000	Continuing	Continuing	0
<b>Subtotal</b>			36.662	0.000		0.000		0.000		0.000			0.000
<b>Remarks</b>													
<b>Support (\$ in Millions)</b>													
				<b>FY 2010</b>		<b>FY 2011 Base</b>		<b>FY 2011 OCO</b>		<b>FY 2011 Total</b>			
<b>Cost Category Item</b>	<b>Contract Method &amp; Type</b>	<b>Performing Activity &amp; Location</b>	<b>Total Prior Years Cost</b>	<b>Cost</b>	<b>Award Date</b>	<b>Cost</b>	<b>Award Date</b>	<b>Cost</b>	<b>Award Date</b>	<b>Cost</b>	<b>Cost To Complete</b>	<b>Total Cost</b>	<b>Target Value of Contract</b>
Government support & support contracts	C/CPFF	OGAs Inhouse, Contact spt.	13.750	0.000		0.000		0.000		0.000	Continuing	Continuing	0
SIBR/STTR Costs	C	Nothing entered for Activity and Location. Location could not be determined.	0.000	0.000		0.000		0.000		0.000	Continuing	Continuing	0
<b>Subtotal</b>			13.750	0.000		0.000		0.000		0.000			0.000
<b>Remarks</b>													

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Exhibit R-3, RDT&E Project Cost Analysis: PB 2011 Army									DATE: February 2010								
APPROPRIATION/BUDGET ACTIVITY 2040: Research, Development, Test & Evaluation, Army BA 4: Advanced Component Development & Prototypes (ACD&P)					R-1 ITEM NOMENCLATURE PE 0603327A: Air and Missile Defense Systems Engineering					PROJECT S25: ARMY SIAP OPERATIONAL INTEGRATION							
		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		50.412	0.000		0.000		0.000		0.000			0.000					
Remarks																	

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<b>Exhibit R-2A, RDT&amp;E Project Justification:</b> PB 2011 Army								<b>DATE:</b> February 2010			
<b>APPROPRIATION/BUDGET ACTIVITY</b> 2040: <i>Research, Development, Test &amp; Evaluation, Army</i> BA 4: <i>Advanced Component Development &amp; Prototypes (ACD&amp;P)</i>				<b>R-1 ITEM NOMENCLATURE</b> PE 0603327A: <i>Air and Missile Defense Systems Engineering</i>				<b>PROJECT</b> S34: <i>AMD SYSTEM OF SYSTEMS ENGINEERING AND INTEGRATION</i>			
<b>COST (\$ in Millions)</b>	<b>FY 2009 Actual</b>	<b>FY 2010 Estimate</b>	<b>FY 2011 Base Estimate</b>	<b>FY 2011 OCO Estimate</b>	<b>FY 2011 Total Estimate</b>	<b>FY 2012 Estimate</b>	<b>FY 2013 Estimate</b>	<b>FY 2014 Estimate</b>	<b>FY 2015 Estimate</b>	<b>Cost To Complete</b>	<b>Total Cost</b>
S34: <i>AMD SYSTEM OF SYSTEMS ENGINEERING AND INTEGRATION</i>	111.496	166.061	0.000	0.000	0.000	0.000	0.000	0.000	0.000	Continuing	Continuing
Quantity of RDT&E Articles											

**Note**

On 23 December 2009 the Army Integrated Air & Missile Defense (AIAMD) program was approved for entry into the Engineering and Manufacturing Development phase as ACAT ID program. The approved program baseline represents a substantially lower risk approach from the initial program and resulted in a FY 2016 Initial Operational Capability (IOC). As a result of certification required by section 2366b of title 10, United States Code, the Under Secretary of Defense for Acquisition, Technology and Logistics (USD(AT&L)) waived three certification elements (Affordability, Full Funding, and Preliminary Design Review (PDR) Completion) for the Army IAMD program. With submission of the FY 2011 budget, and the associated FY 2011 FYDP, two of these waivers (Affordability & Full Funding) will no longer be necessary. The third (PDR Completion) will require additional work and is expected to be satisfied before the end of FY 2010. Details on the waivers were provided in letters to Congress in January 2010 and will be included in the December 2009 Selected Acquisition Report due to the Congress in April 2010.

**A. Mission Description and Budget Item Justification**

Funding in this project provides for the overarching Army Integrated Air and Missile Defense (AIAMD) Architecture and Army IAMD Battle Command System (IBCS) components necessary to produce an AIAMD capability. The AIAMD Program represents a shift from a traditional system-centric weapon systems acquisition to a component-based acquisition. This component-based acquisition will provide the most efficient way to acquire and integrate the components of the incremental AIAMD architecture. Unlike traditional acquisition programs that focus primarily on the development of a single system or platform, the AIAMD Program is structured to enable the development of an overarching system-of-systems capability with participating Air and Missile Defense (AMD) components functioning interdependently to provide total operational capabilities not achievable by the individual element systems. The AIAMD Program achieves this objective by establishing the incremental AIAMD architecture and developing the following products: the IBCS, the Integrated Fire Control (IFC) Network, and the Plug & Fight (P&F) Interface kits. The IBCS provides common Army IAMD Battle Command System (IBCS) Command Post (CP) that replaces seven weapon system unique Battle Management Command, Control, Communications, Computers and Intelligence (BMC4I) components in an AMD Composite BN. The IFC Network provides fire control connectivity and enabling distributed operations. The P&F Interface kit enables the multiple sensor and weapon components for netted operations. AIAMD has been designated as the Army's Pathfinder for the development of a Joint Track Management capability. As part of the new DoD 5000.02 initiative for competitive prototyping, the AIAMD program awarded two competitive contracts to teams lead by Northrop Grumman and Raytheon for the development of the Army IAMD Battle Command System (IBCS) in September 2008. During FY 2009, the two competing contractors developed prototypes of their respective designs and conducted an initial Preliminary Design Review (PDR). Competitive proposals were then submitted for the Engineering and Manufacturing Development (EMD) Phase of the program in May 2009. The down select to one contractor occurred after the Milestone B decision in December 2009. The FY 2010 funding represents the first full year of the EMD Phase of the program. During this phase,

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the IBCS contractor will be furthering their design efforts with respect to the command post, the common side of the Plug and Fight Kit, and the Integrated Fire Control Network. AIAMD funding also includes the contributing acquisition programs (Phased Array Tracking to Intercept of Target (PATRIOT), Surface Launched Advanced Medium Range Air-To-Air Missile (SLAMRAAM), Improved Sentinel, and Joint Land Attack Cruise Missile Defense Elevated Netted Sensor Systems (JLENS)) to place their respective contractors under contract for the development of the unique side of the Plug and Fight Kit which enables the weapons and sensors to be placed on the Integrated Fire Control Network. An IBCS delta Preliminary Design Review (PDR) is planned for third quarter FY 2010 with the contributing programs delta PDRs and the AIAMD delta PDR in fourth quarter FY 2010.The Army IAMD Project S34 funding for FY 2011 and beyond was moved to Budget Activity 5 (PE 0605457A, Project Code S40) for the Engineering and Manufacturing Development phase of program.Congressional increase of \$2.400 million for SMDC Project S25 was incorrectly added to Project S34. This funding will be moved to the correct project (S25) during FY 2010.						
B. Accomplishments/Planned Program (\$ in Millions)						
		FY 2009	FY 2010	FY 2011 Base	FY 2011 OCO	FY 2011 Total
Program #1  Product Development for command post, the common and unique side of the Plug and Fight kits, and the Integrated Fire Control Network. Provides for an IBCS delta PDR, contributing programs delta PDRs and the AIAMD delta PDR  FY 2009 Accomplishments: FY 2009  FY 2010 Plans: FY 2010  FY 2011 Base Plans: FY 2011 Base  FY 2011 OCO Plans: FY 2011 OCO		86.179	130.623	0.000	0.000	0.000
Program #2  Support Cost		13.020	14.464	0.000	0.000	0.000

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B. Accomplishments/Planned Program (\$ in Millions)					
	FY 2009	FY 2010	FY 2011 Base	FY 2011 OCO	FY 2011 Total
FY 2009 Accomplishments: FY 2009  FY 2010 Plans: FY 2010  FY 2011 Base Plans: FY 2011 Base  FY 2011 OCO Plans: FY 2011 OCO					
Program #3  Provides for Modeling & Simulation, Joint Interoperability Test Support , Army Evaluation Center/ Developmental Test Command/Operational Test Command support and White Sands Missile Range Test Support  FY 2009 Accomplishments: FY 2009  FY 2010 Plans: FY 2010  FY 2011 Base Plans: FY 2011 Base  FY 2011 OCO Plans: FY 2011 OCO	12.297	14.110	0.000	0.000	0.000
Program #4	0.000	4.464	0.000	0.000	0.000

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B. Accomplishments/Planned Program (\$ in Millions)						
		FY 2009	FY 2010	FY 2011 Base	FY 2011 OCO	FY 2011 Total
Small Business Innovative Research/Small Business Technology Transfer Program (SBIR/STTR)  FY 2009 Accomplishments: FY 2009  FY 2010 Plans: FY 2010  FY 2011 Base Plans: FY 2011 Base  FY 2011 OCO Plans: FY 2011 OCO						
Program #5  Advanced Environmental Control Systems/Center for Defense Systems Research  FY 2009 Accomplishments: FY 2009  FY 2010 Plans: FY 2010  FY 2011 Base Plans: FY 2011 Base  FY 2011 OCO Plans: FY 2011 OCO		0.000	2.400	0.000	0.000	0.000

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B. Accomplishments/Planned Program (\$ in Millions)												
								FY 2009	FY 2010	FY 2011 Base	FY 2011 OCO	FY 2011 Total
Accomplishments/Planned Programs Subtotals								111.496	166.061	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	
• Ord. #1: PE 0604869A, Project M06, PATRIOT/MEADS Combined Aggregate Program (CAP)	454.565	566.215	467.139	0.000	467.139	408.012	325.184	240.018	75.585	Continuing	Continuing	
• Ord. #2: PE 0605456A, Project PA3, PAC-3/MSE Missile	0.000	0.000	62.500	0.000	62.500	62.100	3.500	62.000	64.500	Continuing	Continuing	
• Ord. #3: SSN C53101, MSE Missile	0.000	0.000	0.000	0.000	0.000	607.796	534.022	516.479	503.786	Continuing	Continuing	
• Ord. #4: SSN C53201, PATRIOT/MEADS GSE	0.000	0.000	0.000	0.000	0.000	0.000	126.589	217.639	528.435	Continuing	Continuing	
• Ord. #5: PE 0102419A, Proj E55, JLENS	344.850	328.356	372.493	0.000	372.493	176.198	118.448	0.000	0.000	Continuing	Continuing	
• Ord. #6: SSN BZ0525, JLENS Production	0.000	0.000	0.000	0.000	0.000	470.661	419.801	427.731	394.325	Continuing	Continuing	
• Ord. #7: PE 0604802A, Project S23, SLAMRAAM	31.306	56.441	0.000	0.000	0.000	0.000	0.000	0.000	0.000	Continuing	Continuing	
• Ord. #8: PE 0605450A, Project S35, SLAMRAAM	0.000	0.000	23.700	0.000	23.700	17.800	53.500	7.500	7.600	Continuing	Continuing	
• Ord. #9: SSN C81002, SLAMRAAM Launcher	40.349	0.000	116.732	0.000	116.732	83.302	233.762	241.691	248.895	Continuing	Continuing	
• Ord. #10: SSN C81004, SLAMRAAM Missile	0.000	0.000	0.000	0.000	0.000	0.000	39.542	39.426	15.416	Continuing	Continuing	
• Ord. #11: PE 0603305A, Proj TR7, Protection Capability II - Intercept	0.000	0.000	4.296	0.000	4.296	21.303	74.197	93.679	94.006	Continuing	Continuing	
• Ord. #12: SSN WK5053, FAAD GBS	0.000	0.000	91.467	169.260	260.727	7.948	7.935	0.000	0.000	Continuing	Continuing	

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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
• Ord. #13: PE 0605457A, Project S40, Army Integrated Air and Missile Defense (AIAMD)	0.000	0.000	251.124	0.000	251.124	271.543	251.646	228.639	129.043	Continuing	Continuing
• Ord. #14: BZ5075, Army IAMD Battle Command System (IBCS)	0.000	0.000	0.000	0.000	0.000	0.000	0.000	24.045	99.102	Continuing	Continuing
• Ord. #15: PE 0208053, Proj 635, JOINT TACT GRD STATION-P3I (MIP)	1.949	36.005	12.403	0.000	12.403	12.630	13.038	7.982	7.947	Continuing	Continuing
• Ord. #16: BZ8401, Joint Tactical Ground Station (JTGS)	0.000	6.682	9.279	0.000	9.279	0.000	0.000	9.415	4.658	Continuing	Continuing
D. Acquisition Strategy											
<p>The Army Integrated Air and Missile Defense (AIAMD) Program will employ an evolutionary acquisition strategy consisting of multiple capability increments leading to an Increment 2 capability in FY 2016. The AIAMD Program carried two competitive prototyping developmental contractors through an initial Preliminary Design Review (PDR) with a down select after Milestone B (MS B) in December 2009 to conduct the EMD phase.Each AIAMD capability increment follows the AIAMD Capability Development Document (CDD), JROC approved 11 December 2009, and is defined as:- Increment 1 is a User-executed capability increment focused on realignment of current force systems into an AMD Composite Battalion (BN) organizational construct. (not part of the materiel development program) - Increment 2 provides the first increment of an integrated materiel solution, and is the initial acquisition program to develop the threshold AIAMD capability. The AIAMD incremental development approach provides the opportunity for technology insertions into the program throughout each increment as high-payoff technologies mature and are ready for integration. This enables an orderly and cost-effective migration from the current system-centric architecture to the AIAMD architecture. Key principles of the AIAMD acquisition approach are the following:- Migrate from system-based acquisition to component-based acquisition- Use system-of-systems acquisition approach with collaboration among AIAMD, PEO MS, PEO C3T, and Brigade Combat Team (BCT) Modernization Component Project Offices, Missile Defense Agency (MDA), and other Service Project Offices to network enable weapons and sensor components- Develop and procure common Army IAMD Battle Command System (IBCS) Command Post (CP) that replaces seven weapon system unique Battle Management Command, Control, Communications, Computers and Intelligence (BMC4I) components- Establish product lines used to evaluate and select, modify and integrate modular open systems Hardware (HW) and Software (SW) common configuration items- Conduct architecture-based System Engineering, Integration and Test (SEI&amp;T) activities for an incremental fielded configuration of the AIAMD Integrated Fire Control (IFC) Network-compatible IBCS CP, weapons and sensor system components</p>											
E. Performance Metrics											
Performance metrics used in the preparation of this justification material may be found in the FY 2010 Army Performance Budget Justification Book, dated May 2010.											

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<b>Exhibit R-3, RDT&amp;E Project Cost Analysis: PB 2011 Army</b>											<b>DATE:</b> February 2010		
<b>APPROPRIATION/BUDGET ACTIVITY</b> 2040: <i>Research, Development, Test &amp; Evaluation, Army</i> BA 4: <i>Advanced Component Development &amp; Prototypes (ACD&amp;P)</i>				<b>R-1 ITEM NOMENCLATURE</b> PE 0603327A: <i>Air and Missile Defense Systems Engineering</i>				<b>PROJECT</b> S34: <i>AMD SYSTEM OF SYSTEMS ENGINEERING AND INTEGRATION</i>					
<b>Product Development (\$ in Millions)</b>													
				<b>FY 2010</b>		<b>FY 2011 Base</b>		<b>FY 2011 OCO</b>		<b>FY 2011 Total</b>			
<b>Cost Category Item</b>	<b>Contract Method &amp; Type</b>	<b>Performing Activity &amp; Location</b>	<b>Total Prior Years Cost</b>	<b>Cost</b>	<b>Award Date</b>	<b>Cost</b>	<b>Award Date</b>	<b>Cost</b>	<b>Award Date</b>	<b>Cost</b>	<b>Cost To Complete</b>	<b>Total Cost</b>	<b>Target Value of Contract</b>
Air Space and Missile Defense (ASMD) System of Systems (SOS) Hardware-in-the- Loop Testbed	C	Multiple OGA's Inhouse and Contractor, Huntsville, AL and variou	9.912	0.000		0.000		0.000		0.000	Continuing	Continuing	0
IAMD System Engineering & Integration	C	Contractor Huntsville, AL	0.000	21.922		0.000		0.000		0.000	Continuing	Continuing	0
IBCS Concept Development	C	Contractor Huntsville, AL/ Other Locations	0.000	0.000		0.000		0.000		0.000	Continuing	Continuing	0
IBCS Engineering Manufacturing and Development	C	Contractor Huntsville, AL/ other locations	0.000	102.151		0.000		0.000		0.000	Continuing	Continuing	0
Government Furnished Equipment	C	Multiple Location could not be determined.	0.000	9.583		0.000		0.000		0.000	Continuing	Continuing	0
US Army Aviation and Missile Research Development and Engineering Center (AMRDEC)	C	AMRDEC AL	0.000	3.831		0.000		0.000		0.000	Continuing	Continuing	0
<b>Subtotal</b>			9.912	137.487		0.000		0.000		0.000			0.000
<b>Remarks</b>													

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<b>Exhibit R-3, RDT&amp;E Project Cost Analysis: PB 2011 Army</b>											<b>DATE:</b> February 2010		
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<b>Test and Evaluation (\$ in Millions)</b>													
				<b>FY 2010</b>		<b>FY 2011 Base</b>		<b>FY 2011 OCO</b>		<b>FY 2011 Total</b>			
<b>Cost Category Item</b>	<b>Contract Method &amp; Type</b>	<b>Performing Activity &amp; Location</b>	<b>Total Prior Years Cost</b>	<b>Cost</b>	<b>Award Date</b>	<b>Cost</b>	<b>Award Date</b>	<b>Cost</b>	<b>Award Date</b>	<b>Cost</b>	<b>Cost To Complete</b>	<b>Total Cost</b>	<b>Target Value of Contract</b>
Army Evaluation Center/ Developmental Test Command/Operational Test Command	C	Various Location could not be determined.	0.000	0.780		0.000		0.000		0.000	Continuing	Continuing	0
White Sands Missile Range (WSMR)	C	Nothing entered for Activity and Location. Location could not be determined.	0.000	0.075		0.000		0.000		0.000	Continuing	Continuing	0
Modeling & Sim/Joint Interoperability Test Spt	C	Huntsville AL	0.000	13.255		0.000		0.000		0.000	Continuing	Continuing	0
<b>Subtotal</b>			0.000	14.110		0.000		0.000		0.000			0.000
<b>Remarks</b> Military Interdepartmental Purchase Request (MIPR)													
<b>Management Services (\$ in Millions)</b>													
				<b>FY 2010</b>		<b>FY 2011 Base</b>		<b>FY 2011 OCO</b>		<b>FY 2011 Total</b>			
<b>Cost Category Item</b>	<b>Contract Method &amp; Type</b>	<b>Performing Activity &amp; Location</b>	<b>Total Prior Years Cost</b>	<b>Cost</b>	<b>Award Date</b>	<b>Cost</b>	<b>Award Date</b>	<b>Cost</b>	<b>Award Date</b>	<b>Cost</b>	<b>Cost To Complete</b>	<b>Total Cost</b>	<b>Target Value of Contract</b>
Government System Engineering & Program Management (SEPM)	C	Multiple OGAs Inhouse and Contractor, Huntsville, AL	0.000	14.464		0.000		0.000		0.000	Continuing	Continuing	0

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<b>Exhibit R-3, RDT&amp;E Project Cost Analysis: PB 2011 Army</b>											<b>DATE:</b> February 2010																																												
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<b>Management Services (\$ in Millions)</b> <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>FY 2011 Total</th> <th colspan="3"></th> </tr> <tr> <th>Cost Category Item</th> <th>Contract Method &amp; Type</th> <th>Performing Activity &amp; 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"><b>Subtotal</b></td> <td align="right">0.000</td> <td align="right">14.464</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 align="right">0.000</td> </tr> </table>																		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	<b>Subtotal</b>			0.000	14.464		0.000		0.000		0.000			0.000
				FY 2010		FY 2011 Base		FY 2011 OCO		FY 2011 Total																																													
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<b>Subtotal</b>			0.000	14.464		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																																										
<b>Project Cost Totals</b>			9.912	166.061		0.000		0.000		0.000			0.000																																										
<b>Remarks</b>																																																							

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Exhibit R-4, RDT&E Schedule Profile: PB 2011 Army																				DATE: February 2010			
APPROPRIATION/BUDGET ACTIVITY 2040: Research, Development, Test & Evaluation, Army BA 4: Advanced Component Development & Prototypes (ACD&P)										R-1 ITEM NOMENCLATURE PE 0603327A: Air and Missile Defense Systems Engineering										PROJECT S34: AMD SYSTEM OF SYSTEMS ENGINEERING AND INTEGRATION			

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<b>Exhibit R-4A, RDT&amp;E Schedule Details: PB 2011 Army</b>			<b>DATE:</b> February 2010
<b>APPROPRIATION/BUDGET ACTIVITY</b> 2040: <i>Research, Development, Test &amp; Evaluation, Army</i> BA 4: <i>Advanced Component Development &amp; Prototypes (ACD&amp;P)</i>	<b>R-1 ITEM NOMENCLATURE</b> PE 0603327A: <i>Air and Missile Defense Systems Engineering</i>	<b>PROJECT</b> S34: <i>AMD SYSTEM OF SYSTEMS ENGINEERING AND INTEGRATION</i>	

Schedule Details

Event	Start		End	
	Quarter	Year	Quarter	Year
Preliminary Design Reviews (PDRs) (IBCS Incr 2)	2	2009	2	2009
Preliminary Design Review (PDR) (IAMD Incr 2)	3	2009	3	2009
MS B (IAMD Incr 2)	4	2009	4	2009
Delta Preliminary Design Review (PDR) (IBCS Incr 2)	2	2010	2	2010
Delta Preliminary Design Review (PDR) (IAMD Incr 2)	3	2010	3	2010
OIPT	4	2010	4	2010
Critical Design Review (CDR) (IBCS Incr 2)	2	2011	2	2011
Critical Design Review (CDR) (IAMD Incr 2)	3	2011	3	2011
Post CDR Assessment	4	2011	4	2011
DAB IPR	4	2011	4	2011
Design Readiness Review (DRR)	4	2012	4	2012
FDE/LUT	1	2014	3	2014
MS C	4	2014	4	2014

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