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<b>Exhibit R-2, RDT&amp;E Budget Item Justification:</b> PB 2014 Army	<b>DATE:</b> April 2013
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APPROPRIATION/BUDGET ACTIVITY					R-1 ITEM NOMENCLATURE							
2040: <i>Research, Development, Test &amp; Evaluation, Army</i> BA 5: <i>System Development &amp; Demonstration (SDD)</i>					PE 0605457A: <i>Army Integrated Air and Missile Defense (AIAMD)</i>							
COST (\$ in Millions)	All Prior Years	FY 2012	FY 2013 <sup>#</sup>	FY 2014 Base	FY 2014 OCO <sup>##</sup>	FY 2014 Total	FY 2015	FY 2016	FY 2017	FY 2018	Cost To Complete	Total Cost
Total Program Element	-	262.032	277.374	364.649	-	364.649	382.869	221.306	141.908	79.338	Continuing	Continuing
DU4: <i>Advanced Electronic Protection Enhancements AEPE</i>	-	0.000	15.163	0.000	-	0.000	0.000	0.000	0.000	0.000	Continuing	Continuing
S40: <i>Army Integrated Air and Missile Defense</i>	-	262.032	262.211	364.649	-	364.649	382.869	221.306	141.908	79.338	Continuing	Continuing

<sup>#</sup> FY 2013 Program is from the FY 2013 President's Budget, submitted February 2012

<sup>##</sup> The FY 2014 OCO Request will be submitted at a later date

**Note**

FY14 adjustment reflects The Office of the Secretary of Defense (OSD) Cost Assessment and Program Evaluation (CAPE) Independent Cost Estimate (ICE).

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

This system is an integral part of the overall Air and Missile Defense (AMD) architecture and will provide for an Integrated Air and Missile Defense Fire Control System/ capability for all Army Air and Missile Defense echelons from Brigade Combat Team Air Defense Airspace Management (ADAM) cells to Army Air and Missile Defense Command (AAMDC) headquarters. Funding in this program element 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 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 Defense Artillery (ADA) components functioning interdependently to provide total operational capabilities not achievable by the individual element systems. The AIAMD Program achieves this objective by establishing the AIAMD architecture and developing the following products: the IBCS, the Integrated Fire Control Network (IFCN), and the Plug & Fight (P&F) Interface kits. The IBCS provides a common Army IAMD Battle Command System (IBCS) Engagement Operations Center (EOC) that replaces seven current weapon system unique Mission Command (MC) components. The IFCN provides fire control connectivity and enabled distributed operations. A P&F Interface kit enables 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.

The Army IAMD Program Restructure was approved via the Acquisition Program Baseline (APB) dated 20 November 2012. The restructured program includes integrating AIAMD capability into the following additional systems: Terminal High Altitude Area Defense (THAAD), Air Defense Artillery Brigades (ADA Bde), Army Air and Missile Defense Command (AAMDC), Indirect Fire Protection Capability (IFPC) within IFPC/Avenger Composite Battalions and ADAM cells. The restructured program consists of two Product Improvements. Product Improvement 1 includes fielding the AIAMD capability to AAMDC, ADA Bde, and ADAM cells, and placing Patriot radars directly on the Integrated Fire Control Network (IFCN) and will employ a common set of MC tools across ADA formations with a First Unit Equipped (FUE) in FY18. Product Improvement 2 will integrate THAAD on the IFCN. FY14 funding will provide for continued Modeling and Simulation, development testing, and initial development of Product Improvement 1.

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Exhibit R-2, RDT&E Budget Item Justification: PB 2014 Army				DATE: April 2013		
APPROPRIATION/BUDGET ACTIVITY		R-1 ITEM NOMENCLATURE				
2040: Research, Development, Test & Evaluation, Army		PE 0605457A: Army Integrated Air and Missile Defense (AIAMD)				
BA 5: System Development & Demonstration (SDD)						
B. Program Change Summary (\$ in Millions)		FY 2012	FY 2013	FY 2014 Base	FY 2014 OCO	FY 2014 Total
Previous President's Budget		270.180	277.374	349.231	-	349.231
Current President's Budget		262.032	277.374	364.649	-	364.649
Total Adjustments		-8.148	0.000	15.418	-	15.418
• Congressional General Reductions		-	-			
• Congressional Directed Reductions		-	-			
• Congressional Rescissions		-	-			
• Congressional Adds		-	-			
• Congressional Directed Transfers		-	-			
• Reprogrammings		-	-			
• SBIR/STTR Transfer		-8.126	-			
• Adjustments to Budget Years		-	-	15.418	-	15.418
• Other Adjustments 1		-0.022	-	-	-	-

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Exhibit R-2A, RDT&E Project Justification: PB 2014 Army									DATE: April 2013			
APPROPRIATION/BUDGET ACTIVITY 2040: Research, Development, Test & Evaluation, Army BA 5: System Development & Demonstration (SDD)					R-1 ITEM NOMENCLATURE PE 0605457A: Army Integrated Air and Missile Defense (AIAMD)				PROJECT DU4: Advanced Electronic Protection Enhancements AEPE			
COST (\$ in Millions)	All Prior Years	FY 2012	FY 2013 <sup>#</sup>	FY 2014 Base	FY 2014 OCO <sup>##</sup>	FY 2014 Total	FY 2015	FY 2016	FY 2017	FY 2018	Cost To Complete	Total Cost
DU4: Advanced Electronic Protection Enhancements AEPE	-	0.000	15.163	0.000	-	0.000	0.000	0.000	0.000	0.000	Continuing	Continuing
Quantity of RDT&E Articles												
# FY 2013 Program is from the FY 2013 President's Budget, submitted February 2012												
## The FY 2014 OCO Request will be submitted at a later date												
Note												
This funding provides for a new start in FY13.												
A. Mission Description and Budget Item Justification												
The advanced electronic protection (EP) enhancement program funds efforts to assess and initiate development of fixes to the Army's air and missile defense systems vulnerability to deceptive electronic attack (EA). The assessment effort includes both radars and Radio Frequency (RF) data links and will incorporate the latest threat information, comparable work being executed by the other services and conceptual EP solutions. The conceptual solutions will be a combination of direct individual sensor mitigation techniques and multiple sensor network approaches. The tasks are: (1) Conduct individual radar and RF guided missile digital simulations capable of assessing system performance when exposed to current and future deceptive EA techniques. (2) Purchase and modify commercial and military off-the-shelf injection units to insert actual high fidelity EA signals into the radar's and guided missile's receivers. (3) In conjunction with the Joint Electronic Protection for Air Combat (JEPAC) unit and the Army Research Laboratory's Survivability Assessment Directorate conduct and evaluate field tests of deceptive EA against Army air and missile defense systems. Use results to formulate near term tactics, technique and procedures for immediate fielding and to identify the highest priority areas to concentrate future development efforts. (4) Develop and implement models of Army air and missile defense systems and electronic attack effects to be used to the Extended Air Defense Simulation (EADSIM) for initial assessment of deceptive EA effects on the overall defense capability and potential network-based solutions. (5) Based on the results obtained from the simulations and field tests initiate the development of countermeasure EP techniques for air and missile defense radars and guided missile seekers.												
B. Accomplishments/Planned Programs (\$ in Millions, Article Quantities in Each)									FY 2012	FY 2013	FY 2014	
Title: Advanced Electronic Protection Enhancements  Articles:  Description: Funding is provided for the following effort  FY 2013 Plans: Conducting Threat Assessments and Modeling and Simulation to formulate near term tactics, technique and procedures for immediate fielding and to identify the highest priority areas to concentrate future development efforts.									0.000	15.163 0	0.000	
Accomplishments/Planned Programs Subtotals									0.000	15.163	0.000	

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Exhibit R-2A, RDT&E Project Justification: PB 2014 Army		DATE: April 2013
<b>APPROPRIATION/BUDGET ACTIVITY</b> 2040: <i>Research, Development, Test &amp; Evaluation, Army</i> BA 5: <i>System Development &amp; Demonstration (SDD)</i>	<b>R-1 ITEM NOMENCLATURE</b> PE 0605457A: <i>Army Integrated Air and Missile Defense (AIAMD)</i>	<b>PROJECT</b> DU4: <i>Advanced Electronic Protection Enhancements AEPE</i>
<b>C. Other Program Funding Summary (\$ in Millions)</b> N/A		
<b>Remarks</b> Not applicable for this item.		
<b>D. Acquisition Strategy</b> N/A		
<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 2014 Army</b>													<b>DATE:</b> April 2013		
<b>APPROPRIATION/BUDGET ACTIVITY</b> 2040: <i>Research, Development, Test &amp; Evaluation, Army</i> BA 5: <i>System Development &amp; Demonstration (SDD)</i>							<b>R-1 ITEM NOMENCLATURE</b> PE 0605457A: <i>Army Integrated Air and Missile Defense (AIAMD)</i>				<b>PROJECT</b> DU4: <i>Advanced Electronic Protection Enhancements AEPE</i>				
<b>Management Services (\$ in Millions)</b>				<b>FY 2012</b>		<b>FY 2013</b>		<b>FY 2014 Base</b>		<b>FY 2014 OCO</b>		<b>FY 2014 Total</b>			
<b>Cost Category Item</b>	<b>Contract Method &amp; Type</b>	<b>Performing Activity &amp; Location</b>	<b>All Prior Years</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>Award Date</b>	<b>Cost</b>	<b>Cost To Complete</b>	<b>Total Cost</b>	<b>Target Value of Contract</b>
Other Government Agencies & Government Program Management	Various	various:various	0.000	-		2.252		-		-		-	Continuing	Continuing	Continuing
<b>Subtotal</b>			0.000	0.000		2.252		0.000		0.000		0.000			
<b>Product Development (\$ in Millions)</b>				<b>FY 2012</b>		<b>FY 2013</b>		<b>FY 2014 Base</b>		<b>FY 2014 OCO</b>		<b>FY 2014 Total</b>			
<b>Cost Category Item</b>	<b>Contract Method &amp; Type</b>	<b>Performing Activity &amp; Location</b>	<b>All Prior Years</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>Award Date</b>	<b>Cost</b>	<b>Cost To Complete</b>	<b>Total Cost</b>	<b>Target Value of Contract</b>
System Integration Assessment	Various	various:various	0.000	-		1.218		-		-		-	Continuing	Continuing	Continuing
Concept Solutions	Various	various:various	0.000	-		1.531		-		-		-	Continuing	Continuing	Continuing
<b>Subtotal</b>			0.000	0.000		2.749		0.000		0.000		0.000			
<b>Support (\$ in Millions)</b>				<b>FY 2012</b>		<b>FY 2013</b>		<b>FY 2014 Base</b>		<b>FY 2014 OCO</b>		<b>FY 2014 Total</b>			
<b>Cost Category Item</b>	<b>Contract Method &amp; Type</b>	<b>Performing Activity &amp; Location</b>	<b>All Prior Years</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>Award Date</b>	<b>Cost</b>	<b>Cost To Complete</b>	<b>Total Cost</b>	<b>Target Value of Contract</b>
Component Assessments & Research and Trade Studies	Various	various:various	0.000	-		5.137		-		-		-	Continuing	Continuing	Continuing
Modeling and Simulation	Various	various:various	0.000	-		5.025		-		-		-	Continuing	Continuing	Continuing
<b>Subtotal</b>			0.000	0.000		10.162		0.000		0.000		0.000			
			<b>All Prior Years</b>	<b>FY 2012</b>	<b>FY 2013</b>		<b>FY 2014 Base</b>		<b>FY 2014 OCO</b>		<b>FY 2014 Total</b>	<b>Cost To Complete</b>	<b>Total Cost</b>	<b>Target Value of Contract</b>	
<b>Project Cost Totals</b>			0.000	0.000		15.163		0.000		0.000		0.000			
<b>Remarks</b>															

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Exhibit R-2A, RDT&E Project Justification: PB 2014 Army										DATE: April 2013		
APPROPRIATION/BUDGET ACTIVITY 2040: Research, Development, Test & Evaluation, Army BA 5: System Development & Demonstration (SDD)					R-1 ITEM NOMENCLATURE PE 0605457A: Army Integrated Air and Missile Defense (AIAMD)				PROJECT S40: Army Integrated Air and Missile Defense			
COST (\$ in Millions)	All Prior Years	FY 2012	FY 2013 <sup>#</sup>	FY 2014 Base	FY 2014 OCO <sup>##</sup>	FY 2014 Total	FY 2015	FY 2016	FY 2017	FY 2018	Cost To Complete	Total Cost
S40: Army Integrated Air and Missile Defense	-	262.032	262.211	364.649	-	364.649	382.869	221.306	141.908	79.338	Continuing	Continuing
Quantity of RDT&E Articles												

<sup>#</sup> FY 2013 Program is from the FY 2013 President's Budget, submitted February 2012

<sup>##</sup> The FY 2014 OCO Request will be submitted at a later date

**Note**

Beginning in FY11, this funding was transferred from the Army IAMD Program Element (PE) 0603327A, Project Code S34, to continue funding the Engineering and Manufacturing Development (EMD) phase of the program.

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

This system is an integral part of the overall Air and Missile Defense (AMD) architecture and will provide for an Integrated Air and Missile Defense Fire Control System/capability for all Army Air and Missile Defense echelons from Brigade Combat Team Air Defense Airspace Management (ADAM) cells to Army Air and Missile Defense Command (AAMDC) headquarters. Funding in this program element 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 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 Defense Artillery (ADA) components functioning interdependently to provide total operational capabilities not achievable by the individual element systems. The AIAMD Program achieves this objective by establishing the AIAMD architecture and developing the following products: the IBCS, the Integrated Fire Control Network (IFCN), and the Plug & Fight (P&F) Interface kits. The IBCS provides a common Army IAMD Battle Command System (IBCS) Engagement Operations Center (EOC) that replaces seven current weapon system unique Mission Command (MC) components. The IFCN provides fire control connectivity and enabled distributed operations. A P&F Interface kit enables 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.

The Army IAMD Program Restructure was approved via the Acquisition Program Baseline (APB) dated 20 November 2012. The restructured program includes integrating AIAMD capability into the following additional systems: Terminal High Altitude Area Defense (THAAD), Air Defense Artillery Brigades (ADA Bde), Army Air and Missile Defense Command (AAMDC), Indirect Fire Protection Capability (IFPC) within IFPC/Avenger Composite Battalions and ADAM cells. The restructured program consists of two Product Improvements. Product Improvement 1 includes fielding the AIAMD capability to AAMDC, ADA Bde, and ADAM cells, and placing Patriot radars directly on the Integrated Fire Control Network (IFCN) and will employ a common set of MC tools across ADA formations with a First Unit Equipped (FUE) in FY18. Product Improvement 2 will integrate THAAD on the IFCN. FY14 funding will provide for continued Modeling and Simulation, development testing, and initial development of Product Improvement 1.

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Exhibit R-2A, RDT&E Project Justification: PB 2014 Army		DATE: April 2013		
APPROPRIATION/BUDGET ACTIVITY 2040: Research, Development, Test & Evaluation, Army BA 5: System Development & Demonstration (SDD)	R-1 ITEM NOMENCLATURE PE 0605457A: Army Integrated Air and Missile Defense (AIAMD)	PROJECT S40: Army Integrated Air and Missile Defense		
B. Accomplishments/Planned Programs (\$ in Millions, Article Quantities in Each)		FY 2012	FY 2013	FY 2014
Title: Product Development  Description: Funding is provided for the following effort  FY 2012 Accomplishments: Continuing product development for Engagement Operations Center (EOC), the common and unique side of the Plug and Fight (P&F) kits, and the Integrated Fire Control Network (IFCN). Provides for a Post Critical Design Review (CDR) Assessment and Defense Acquisition Board In Process Review (DAB IPR), and documentation revisions in support of ADM.  FY 2013 Plans: Continuing product development in support of Prototype Deliveries of EOCs and P&F kits. Completion of Software Build version 2.0. Risk Reduction test.  FY 2014 Plans: Continuing product development in support of Prototype Deliveries of EOCs and P&F kits. Completion of Software Build version 3.0. Initiate development of Planned Product Improvement 1. Risk reduction test.		238.392 Articles: 0	219.824 0	300.691
Title: Government Program Management  Description: Funding is provided for the following effort  FY 2012 Accomplishments: Government Program Management in support of developing the P&F kits, IFCN, Post CDR Assessment and the DAB IPR. Other contracts and Other Government Agencies (OGAs) support of Engineering Manufacturing and Development (EMD) phase activities.  FY 2013 Plans: Government Program Management in support of developing the P&F kits, IFCN, and Modeling and Simulation. Other contracts and OGAs support of EMD phase activities.  FY 2014 Plans: Government Program Management in support of developing the P&F kits, IFCN, and Modeling and Simulation. Other contracts and OGAs support of the EMD phase and Planned Product Improvement 1. Risk reduction test.		5.385 Articles: 0	5.642 0	6.521
Title: Test and Evaluation		18.255 Articles: 0	36.745 0	57.437

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APPROPRIATION/BUDGET ACTIVITY 2040: Research, Development, Test & Evaluation, Army BA 5: System Development & Demonstration (SDD)				R-1 ITEM NOMENCLATURE PE 0605457A: Army Integrated Air and Missile Defense (AIAMD)				PROJECT S40: Army Integrated Air and Missile Defense				
B. Accomplishments/Planned Programs (\$ in Millions, Article Quantities in Each)										FY 2012	FY 2013	FY 2014
Description: Funding is provided for the following effort												
FY 2012 Accomplishments: Provides for Modeling and Simulation, Joint Interoperability Test Support, Army Evaluation Center/Developmental Test Command/Operational Test Command support and White Sands Missile Range Test Support												
FY 2013 Plans: Provides for Modeling and Simulation, Joint Interoperability Test Support, Army Evaluation Center/Developmental Test Command/Operational Test Command support and White Sands Missile Range Test Support												
FY 2014 Plans: Provides for Modeling and Simulation, Joint Interoperability Test Support, Army Evaluation Center/Developmental Test Command/Operational Test Command support and White Sands Missile Range Test Support to include design testing. Risk reduction test. Range activation preparation. Target preparation.												
Accomplishments/Planned Programs Subtotals										262.032	262.211	364.649
C. Other Program Funding Summary (\$ in Millions)												
Line Item	FY 2012	FY 2013	FY 2014 Base	FY 2014 OCO	FY 2014 Total	FY 2015	FY 2016	FY 2017	FY 2018	Cost To Complete	Total Cost	
• PE 0604869A, Project M06: PE 0604869A, Project M06, PATRIOT/MEADS Combined Aggregate Program (CAP)	377.610	400.861								0.000	778.471	
• PE 0605456A, Project PA3: PE 0605456A, Project PA3, PAC- 3/ MSE Missile	86.139	69.029	68.843		68.843	129.627	63.506	65.179	65.734	Continuing	Continuing	
• SSN C53101: SSN C53101, MSE Missile	74.953	12.850	540.401		540.401	540.520	559.623	566.757	655.184	Continuing	Continuing	
• PE 0102419A, Proj E55: PE 0102419A, Proj E55, JLENS	317.382	190.422	98.450		98.450	46.600	47.450	37.830	2.600	0.000	740.734	
• PE 0605455A, Project S35: PE 0605450A, Project S35, SLAMRAAM	1.186									0.000	1.186	



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APPROPRIATION/BUDGET ACTIVITY 2040: Research, Development, Test & Evaluation, Army BA 5: System Development & Demonstration (SDD)				R-1 ITEM NOMENCLATURE PE 0605457A: Army Integrated Air and Missile Defense (AIAMD)				PROJECT S40: Army Integrated Air and Missile Defense			
C. Other Program Funding Summary (\$ in Millions)											
Line Item	FY 2012	FY 2013	FY 2014 Base	FY 2014 OCO	FY 2014 Total	FY 2015	FY 2016	FY 2017	FY 2018	Cost To Complete	Total Cost
• PE 0604319A, Proj DU3: PE 0604319A, Proj DU3, IFPC2 (FY12 PE0603305A IFPC II- Intercept)	8.834	76.039	79.232		79.232	107.587	146.463	151.769	159.700	Continuing	Continuing
• BZ5075: BZ5075, Army IAMD Battle Command System (IBCS)			21.200		21.200	100.700	315.370	482.640	446.130	Continuing	Continuing
• PE 0604820A, Proj E10: PE 0604820A, Proj E10, SENTINEL	3.093	3.486	1.549		1.549	5.264	5.911	6.307	6.053	Continuing	Continuing
• PE 0604741A, Proj 126, 146, 149: PE 0604741A, Proj 126, 146, 149, Counter-Rockets, Artillery and Mortar (C-RAM)	57.050	73.333	18.294		18.294	20.898	20.557	18.009	11.015	Continuing	Continuing
Remarks											
This program is an integral part of the Army Integrated Air and Missile Defense (AIAMD) architecture. It provides for development of a common Mission Command (MC) through an open architecture approach allowing for integration of Air Defense Artillery (ADA) components as they become available. This approach enables the AIAMD program to pursue its baseline program independent of fluctuation of other programs.											
D. Acquisition Strategy											
The AIAMD acquisition strategy, revised in conjunction with the 2011 Army and Office of the Secretary of Defense (OSD)-approved program restructure, is to deliver an Initial Operational Capability (IOC) in FY16 and to deliver a set of follow-on product and capability improvements with a First Unit Equipped (FUE) date in FY18. The Product Improvement capabilities are delivered through the fielding of the IAMD Battle Command System (IBCS) Engagement Operations Center (EOC)-based AIAMD architecture including the IBCS EOC, Sentinel, Patriot (through an Radar Interface Unit (RIU) interface), and Joint Land Attack Cruise Missile Defense Elevated Netted Sensor (JLENS) components connected via an Integrated Fire Control Network (IFCN), working in an integrated manner. The Product Improvement capabilities are delivered through employing the Patriot radar directly on the IFCN, eliminating the RIU from the architecture. Additional capabilities include the incorporation of IBCS functionality into Air Defense Airspace Management (ADAM) Cells, ADA Brigade Headquarters and Army Air and Missile Defense Command (AAMDC) Headquarters. Future additional capabilities include incorporation of Terminal High Altitude Area Defense (THAAD) batteries and other Army and Joint net-centric architectures to ensure compatibility.											
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											

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<ul style="list-style-type: none"> <li>- Develop and procure common Army IAMD Battle Command System (IBCS) Engagement Operations Center (EOC) that replaces seven weapon system unique Battle Management Command, Control, Communications, Computers and Intelligence (BMC4I) components</li> <li>- Establish product lines used to evaluate and select, modify and integrate modular open systems hardware (HW) and software (SW) common configuration items</li> <li>- 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 EOC, weapons and sensor system components</li> </ul>		
<b><u>E. Performance Metrics</u></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 2014 Army</b>												<b>DATE:</b> April 2013			
<b>APPROPRIATION/BUDGET ACTIVITY</b> 2040: <i>Research, Development, Test &amp; Evaluation, Army</i> BA 5: <i>System Development &amp; Demonstration (SDD)</i>						<b>R-1 ITEM NOMENCLATURE</b> PE 0605457A: <i>Army Integrated Air and Missile Defense (AIAMD)</i>						<b>PROJECT</b> S40: <i>Army Integrated Air and Missile Defense</i>			
<b>Management Services (\$ in Millions)</b>				<b>FY 2012</b>		<b>FY 2013</b>		<b>FY 2014 Base</b>		<b>FY 2014 OCO</b>		<b>FY 2014 Total</b>			
<b>Cost Category Item</b>	<b>Contract Method &amp; Type</b>	<b>Performing Activity &amp; Location</b>	<b>All Prior Years</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>Award Date</b>	<b>Cost</b>	<b>Cost To Complete</b>	<b>Total Cost</b>	<b>Target Value of Contract</b>
Government Program Management	TBD	Various:Huntsville, AL	4.632	5.385	Dec 2011	5.642		6.521		-		6.521	Continuing	Continuing	Continuing
<b>Subtotal</b>			4.632	5.385		5.642		6.521		0.000		6.521			
<b>Product Development (\$ in Millions)</b>				<b>FY 2012</b>		<b>FY 2013</b>		<b>FY 2014 Base</b>		<b>FY 2014 OCO</b>		<b>FY 2014 Total</b>			
<b>Cost Category Item</b>	<b>Contract Method &amp; Type</b>	<b>Performing Activity &amp; Location</b>	<b>All Prior Years</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>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/CPFF	Various:Huntsville, AL and multiple other locations	17.697	-		-		-		-		-	0.000	17.697	0.000
AIAMD System Engineering & Integration	C/CPFF	Contractor:Huntsville, AL	17.015	18.361	Dec 2011	16.155		18.731		-		18.731	Continuing	Continuing	Continuing
IAMD Engineering Manufacturing and Development	C/CPIF	Northrop Grumman, Raytheon and Other:Huntsville, AL and Various other locations	181.516	207.853	Dec 2011	187.212		264.688		-		264.688	Continuing	Continuing	Continuing
Government Furnished Equipment	TBD	Various:Multiple	5.705	5.215	Dec 2011	7.740		4.526		-		4.526	Continuing	Continuing	Continuing
Government Systems Engineering and Logistics	TBD	Various:Huntsville, AL	3.129	6.963	Dec 2011	8.717		12.746		-		12.746	Continuing	Continuing	Continuing
<b>Subtotal</b>			225.062	238.392		219.824		300.691		0.000		300.691			
<b>Test and Evaluation (\$ in Millions)</b>				<b>FY 2012</b>		<b>FY 2013</b>		<b>FY 2014 Base</b>		<b>FY 2014 OCO</b>		<b>FY 2014 Total</b>			
<b>Cost Category Item</b>	<b>Contract Method &amp; Type</b>	<b>Performing Activity &amp; Location</b>	<b>All Prior Years</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>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	TBD	Various:Multiple Locations	0.811	2.296	Dec 2011	0.956		2.563		-		2.563	Continuing	Continuing	Continuing

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<b>Exhibit R-3, RDT&amp;E Project Cost Analysis: PB 2014 Army</b>												<b>DATE:</b> April 2013			
<b>APPROPRIATION/BUDGET ACTIVITY</b> 2040: <i>Research, Development, Test &amp; Evaluation, Army</i> BA 5: <i>System Development &amp; Demonstration (SDD)</i>						<b>R-1 ITEM NOMENCLATURE</b> PE 0605457A: <i>Army Integrated Air and Missile Defense (AIAMD)</i>						<b>PROJECT</b> S40: <i>Army Integrated Air and Missile Defense</i>			
<b>Test and Evaluation (\$ in Millions)</b>				<b>FY 2012</b>		<b>FY 2013</b>		<b>FY 2014 Base</b>		<b>FY 2014 OCO</b>		<b>FY 2014 Total</b>			
<b>Cost Category Item</b>	<b>Contract Method &amp; Type</b>	<b>Performing Activity &amp; Location</b>	<b>All Prior Years</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>Award Date</b>	<b>Cost</b>	<b>Cost To Complete</b>	<b>Total Cost</b>	<b>Target Value of Contract</b>
Command/Operational Test Command															
Modeling & Sim/Joint Interoperability Test Spt	MIPR	SED:Huntsville, AL	16.061	13.670	Dec 2011	31.886		42.891		-		42.891	Continuing	Continuing	Continuing
White Sands Missile Range (WSMR)	TBD	WSMR:White Sands, NM	0.125	2.289	Dec 2011	3.903		11.983		-		11.983	Continuing	Continuing	Continuing
<b>Subtotal</b>			16.997	18.255		36.745		57.437		0.000		57.437			
			<b>All Prior Years</b>	<b>FY 2012</b>		<b>FY 2013</b>		<b>FY 2014 Base</b>		<b>FY 2014 OCO</b>		<b>FY 2014 Total</b>	<b>Cost To Complete</b>	<b>Total Cost</b>	<b>Target Value of Contract</b>
<b>Project Cost Totals</b>			246.691	262.032		262.211		364.649		0.000		364.649			
<b>Remarks</b>															

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**Exhibit R-4, RDT&E Schedule Profile: PB 2014 Army** **DATE:** April 2013

<b>APPROPRIATION/BUDGET ACTIVITY</b> 2040: <i>Research, Development, Test &amp; Evaluation, Army</i> BA 5: <i>System Development &amp; Demonstration (SDD)</i>	<b>R-1 ITEM NOMENCLATURE</b> PE 0605457A: <i>Army Integrated Air and Missile Defense (AIAMD)</i>	<b>PROJECT</b> S40: <i>Army Integrated Air and Missile Defense</i>
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	FY 2012				FY 2013				FY 2014				FY 2015				FY 2016				FY 2017				FY 2018			
	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
Critical Design Review (CDR) (IBCS Incr 2)																												
Critical Design Review (CDR) (IAMD Incr 2)																												
Post Critical Design Review (CDR) Assessment																												
Defense Acquisition Board In Process Review (DAB IPR)																												
Modeling and Simulation																												
Planned Product Improvement 1																												
Force Development Experimentation/Limited User Test (FDE/LUT), EMD DT																												
Product Readiness Review (PRR)																												
Milestone C (MS C)																												
Force Development Test/Initial Op T&E/HWIL (FDT/IOT&E/HWIL)																												
First Unit Equipped (FUE)																												
Initial Operational Capability (IOC)																												

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<b>Exhibit R-4A, RDT&amp;E Schedule Details:</b> PB 2014 Army			<b>DATE:</b> April 2013
<b>APPROPRIATION/BUDGET ACTIVITY</b> 2040: <i>Research, Development, Test &amp; Evaluation, Army</i> BA 5: <i>System Development &amp; Demonstration (SDD)</i>	<b>R-1 ITEM NOMENCLATURE</b> PE 0605457A: <i>Army Integrated Air and Missile Defense (AIAMD)</i>	<b>PROJECT</b> S40: <i>Army Integrated Air and Missile Defense</i>	

## Schedule Details

Events	Start		End	
	Quarter	Year	Quarter	Year
Critical Design Review (CDR) (IBCS Incr 2)	3	2012	3	2012
Critical Design Review (CDR) (IAMD Incr 2)	3	2012	3	2012
Post Critical Design Review (CDR) Assessment	4	2012	4	2012
Defense Acquisition Board In Process Review (DAB IPR)	4	2012	4	2012
Modeling and Simulation	1	2013	4	2017
Planned Product Improvement 1	1	2014	2	2017
Force Development Experimentation/Limited User Test (FDE/LUT), EMD DT	2	2014	2	2015
Product Readiness Review (PRR)	1	2015	1	2015
Milestone C (MS C)	3	2015	3	2015
Force Development Test/Initial Op T&E/HWIL (FDT/IOT&E/HWIL)	2	2016	4	2016
First Unit Equipped (FUE)	2	2016	2	2016
Initial Operational Capability (IOC)	4	2016	4	2016