Exhibit R-2, RDT&E Budget Item Justification: PB 2014 Army											DATE: April 2013	
APPROPRIATION/BUDGET ACTIVITY 2040: *Research, Development, Test & Evaluation, Army* BA 7: *Operational Systems Development*					**R-1 ITEM NOMENCLATURE** PE 0303140A: *Information Systems Security Program*							
COST ($ in Millions)	All Prior Years	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
Total Program Element	-	15.282	15.961	9.357	-	9.357	17.482	16.716	15.141	16.243	Continuing	Continuing
491: *Information Assurance Development*	-	15.282	8.380	5.113	-	5.113	9.644	9.156	8.356	9.343	Continuing	Continuing
501: *Army Key Mgt System*	-	0.000	7.581	1.306	-	1.306	2.411	2.338	2.185	2.500	Continuing	Continuing
DV4: *Key Management Infrastructure (KMI)*	-	0.000	0.000	1.502	-	1.502	2.653	2.725	2.200	2.100	Continuing	Continuing
DV5: *Crypto Modernization (Crypto Mod)*	-	0.000	0.000	1.436	-	1.436	2.774	2.497	2.400	2.300	Continuing	Continuing

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

In FY14 the following adjustments were made:

Adjustment 1: Two new projects were created under the ISSP line: DV4 Key Management Infrastructure($1.502 Million) and DV5 Crypto Modernization ($1.436 Million) for a net increase of $2.938 Million.

Adjustment 2: Army Key MGT System new funding line is 1.306 Million.

Adjustment 3: Information Assurance funding was reduced by $4.612 Million.

A. Mission Description and Budget Item Justification

Information Asurance Development supports the implementation of the National Security Agency (NSA) developed Communications Security (COMSEC) technologies into the Army by providing COMSEC system capabilities through encryption, trusted software or standard operating procedures, and integrating these mechanisms into specific systems in support of securing the National Network Enterprise. This entails architecture studies,system integration, testing, certification, and accreditation of COMSEC systems and equipment. COMSEC technology ensures total signal and data security for all Army information systems to include any operational enhancement and specialized Army configurations. The program also assesses, develops, and integrates COMSEC tools (hardware and software) which provide protection for fixed infrastructure posts, camp or station networks as well as tactical networks. The cited work is consistent with Strategic Planning Guidance and the Army Modernization Strategy.

Exhibit R-2, **RDT&E Budget Item Justification:** PB 2014 Army	**DATE:** April 2013
APPROPRIATION/BUDGET ACTIVITY 2040: *Research, Development, Test & Evaluation, Army* BA 7: *Operational Systems Development*	**R-1 ITEM NOMENCLATURE** PE 0303140A: *Information Systems Security Program*

G6 OA22 Funding supports the technical assessment and specifications documentation of cryptographic, key management and information assurance (IA) technologies developed under the direction of the National Security Agency (NSA), the Defense Information Systems Agency (DISA), Joint Services, and commercial developers to secure National Security Systems (NSS) and National Security Information (NSI). Technical evaluations assess the security, operational effectiveness and network interoperability of advanced concept technologies to identify fundamental building blocks for Army IA solutions.

Army Key Management System (AKMS) is the Army's implementation of the National Security Agency's (NSA) Electronic Key Management System (EKMS) to automate the functions of Communications Security (COMSEC) key management control and distribution, thereby limiting adversarial access to, and reducing the vulnerability of, Army Command, Control, Communications, Computers, Intelligence (C4I) systems. Numerous software applications are being fielded on separate laptops, thus, burdening the units with the management of numerous laptops. In an effort to reduce the number of laptops in the field, Joint Tactical Network Environment NetOps Toolkit (J-TNT) provides a consolidated platform that hosts the numerous planning, monitoring and network management tools onto one J-TNT box. The J-TNT AN\GYK-33 V1 system is a laptop platform comprised of a suite of Commerical off the Shelf (COTS) and Government off the Shelf (GOTS) software applications. The suite of applications provides the soldier the capability to plan, monitor and manage COMSEC, Signal Operation Instruction/Joint Communications-Electronics Operations Instructions (SOI/JCEOI), network radio waveform configurations, loadsets and spectrum. From one platform, the J-TNT system provides the soldier the essential tools needed to complete critical battlefield missions operating on the tactical network.

Key Management Infrastructure (KMI) provides an integrated, operational environment that will bring essential key management personnel and functions in-band. KMI achieves an over the network key (OTNK) management solution to support emerging cryptographically modernized systems. The KMI client nodes are the Army's subset of the National Security Agency's (NSA's) KMI System supporting DoD Global Information Grid (GIG) Net Centric and Crypto Modernization Initiatives. The Mission Planning/ Mission Support System (MP/MSS) Interface for KMI will create a secure and highly automated interface to enable transparent provisioning of KMI products. The interface shall facilitate transparent communications between MP/MSS and KMI to achieve integration by bridging the gap between provisioning services and the communications net plan of the Warfighter.

The Crypto System program supports the implementation of the National Security Agency (NSA) developed Communications Security (COMSEC) technologies into the Army by providing COMSEC system capabilities through encryption, trusted software or standard operating procedures, and integrating these mechanisms into specified systems in support of securing the National Network Enterprise in as transparent a manner as possible.

Exhibit R-2, RDT&E Budget Item Justification: PB 2014 Army				DATE: April 2013	
APPROPRIATION/BUDGET ACTIVITY 2040: *Research, Development, Test & Evaluation, Army* BA 7: *Operational Systems Development*			**R-1 ITEM NOMENCLATURE** PE 0303140A: *Information Systems Security Program*		

B. Program Change Summary ($ in Millions)	FY 2012	FY 2013	FY 2014 Base	FY 2014 OCO	FY 2014 Total
Previous President's Budget	15.684	15.961	9.725	-	9.725
Current President's Budget	15.282	15.961	9.357	-	9.357
Total Adjustments	-0.402	0.000	-0.368	-	-0.368
• Congressional General Reductions	-	-			
• Congressional Directed Reductions	-	-			
• Congressional Rescissions	-	-			
• Congressional Adds	-	-			
• Congressional Directed Transfers	-	-			
• Reprogrammings	-	-			
• SBIR/STTR Transfer	-	-			
• Other Adjustments 1	-0.402	-	2.938	-	2.938
• Other Adjustments 2	-	-	1.306	-	1.306
• Other Adjustments 3	-	-	-4.612	-	-4.612

Exhibit R-2A, RDT&E Project Justification: PB 2014 Army											DATE: April 2013	
APPROPRIATION/BUDGET ACTIVITY 2040: Research, Development, Test & Evaluation, Army BA 7: Operational Systems Development					R-1 ITEM NOMENCLATURE PE 0303140A: Information Systems Security Program					PROJECT 491: Information Assurance Development		
COST ($ in Millions)	All Prior Years	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
491: Information Assurance Development	-	15.282	8.380	5.113	-	5.113	9.644	9.156	8.356	9.343	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
PE 0303140A, project 491 includes funding for the Army CIO/G6 (OA22)and PD COMSEC (5F).

A. Mission Description and Budget Item Justification

This program supports the implementation of the National Security Agency (NSA) developed Communications Security (COMSEC) technologies into the Army by providing COMSEC system capabilities through encryption, trusted software or standard operating procedures, and integrating these mechanisms into specified systems in support of securing the National Network Enterprise in as transparent a manner as possible.

This entails architecture studies, system integration and testing, installation kits, and certification and accreditation of Automation Information Systems. The program assesses, develops and integrates information assurance (IA)/COMSEC tools (hardware and software) which provide protection for fixed infrastructure post, camp and station networks as well as efforts on tactical networks. The cited work is consistent with Strategic Planning Guidance and the Army Modernization and Strategy Plan.

Funding supports the technical assessment and specifications documentation of cryptographic, key management and information assurance (IA) technologies developed under the direction of the NSA, the Defense Information Systems Agency (DISA), Joint Services, and commercial developers to secure National Security Systems (NSS) and National Security Information (NSI). Technical evaluations assess the security, operational effectiveness and network interoperability of advanced concept technologies to identify fundamental building blocks for Army IA solutions. (G6 OA22)

Develop and publish the strategy to identify and manage the insertion of new security capabilities to bridge operational gaps, providing timely security and performance improvements to the Army's network through the performance of interoperability and standards testing, conducting IA System of System Network Vulnerability Assessments (IA SoS NVA) of Army Capability Sets, and develops and integrates IA/COMSEC capabilities to provide protections for fixed infrastructure post, camp and station networks. Develop Army migration strategies of COMSEC equipment to ensure fully IA-compliant solutions that meet the objective for LandWarNet (LWN) 2020 and beyond. (G6 OA22)

B. Accomplishments/Planned Programs ($ in Millions, Article Quantities in Each)	FY 2012	FY 2013	FY 2014
Title: Assessing emerging COMSEC hardware and software systems and products	4.827	4.942	0.000
Articles:	0	0	

Exhibit R-2A, **RDT&E Project Justification:** PB 2014 Army		**DATE:** April 2013
APPROPRIATION/BUDGET ACTIVITY 2040: *Research, Development, Test & Evaluation, Army* BA 7: *Operational Systems Development*	**R-1 ITEM NOMENCLATURE** PE 0303140A: *Information Systems Security Program*	**PROJECT** 491: *Information Assurance Development*

B. Accomplishments/Planned Programs ($ in Millions, Article Quantities in Each)	**FY 2012**	**FY 2013**	**FY 2014**
Description: This program researches, assesses, tests and plans for cryptographic and information assurance technology insertions within the existing and future network infrastructure; provides the basis for adjusting COMSEC capabilities and policies to reflect the latest technologies. Supports risk mitigation of IA networked vulnerabilities in end-to-end network operations and common operating environment. *FY 2012 Accomplishments:* This Program researches new cryptographic, information assurance, and key management technologies, perform operational assessments, concept exploration and validation to develop strategies and policies capitalizing on and leveraging emerging Cryptographic and Key Management technologies. Continuing to provide information, knowledge sharing and new equipment capabilities, limitations, and impacts on the Army network to assist in bridging the gap between the tactical edge and the Army Enterprise Network. Test proof of concept prototypes and provide infrastructure support to facilitate information assurance technology transition. Continue to provide guidance for the adjustment of COMSEC programs and ensure COMSEC policies remains in synchronization with the latest COMSEC technologies. *FY 2013 Plans:* This Program researches new cryptographic, information assurance, and key management technologies, perform operational assessments, concept exploration and validation to develop strategies and policies capitalizing on and leveraging emerging Cryptographic and Key Management technologies. Continuing to provide information, knowledge sharing and new equipment capabilities, limitations, and impacts on the Army network to assist in bridging the gap between the tactical edge and the Army Enterprise Network. Test proof of concept prototypes and provide infrastructure support to facilitate information assurance technology transition. Continue to provide guidance for the adjustment of COMSEC programs and ensure COMSEC policies remains in synchronization with the latest COMSEC technologies.			
Title: Cryptographic Systems and Key Management Test and Evaluation *Articles:*	5.955 0	3.438 0	1.914
Description: This program supports the Army Cryptographic Modernization Transformational Initiative. This is accomplished by providing test and evaluation capabilities to the COMSEC community in order to assess emerging technologies before being released and approved for Army use; testing can be performed on hardware, software, or network systems. *FY 2012 Accomplishments:* The program will continue to test and evaluate advanced prototypes and cryptographic devices to confirm capability and interoperability on Army networks and systems as well as identifying risk areas for compliance with COMSEC regulations and procedures. Continuing to evaluate performance of Cryptographic Systems (CS) compliant devices, including the initial Suite B Internet Protocol Security (IPSec) devices built based on commercial standards. This is the first step in the migration to NSA			

Exhibit R-2A, **RDT&E Project Justification:** PB 2014 Army		**DATE:** April 2013
APPROPRIATION/BUDGET ACTIVITY 2040: *Research, Development, Test & Evaluation, Army* BA 7: *Operational Systems Development*	**R-1 ITEM NOMENCLATURE** PE 0303140A: *Information Systems Security Program*	**PROJECT** 491: *Information Assurance Development*

B. Accomplishments/Planned Programs ($ in Millions, Article Quantities in Each)	**FY 2012**	**FY 2013**	**FY 2014**
approved COTS devices for Secret and below information in place of Government Off-The-Shelf (GOTS) devices. Started evaluation of Secure Smartphones based on COTS platform for Mobile secure use. Evaluating KMI CI-2, Spiral 2 initial release and migration of initial HAIPE 4.0 compliant crypto devices to KMI based key delivery. Development plan for delivery of NSA produced keys for COTS devices. Complete evaluation of the performance of initial EKMS / AKMS to KMI transition strategies. These efforts will support network operations from end-to-end throughout the force and the Common Operating Environment (COE) thus mitigating Information Assurance (IA) vulnerabilities to the national network enterprise. *FY 2013 Plans:* The program will continue to test and evaluate advanced prototypes and cryptographic devices to confirm capability and interoperability on Army networks and systems as well as identifying risk areas for compliance with COMSEC regulations and procedures. Continuing to evaluate performance of Cryptographic Modernization (CM) compliant devices, including the initial Suite B Internet Protocol Security (IPSec) devices built based on commercial standards. This is the first step in the migration to NSA approved COTS devices for Secret and below information in place of Government Off-The-Shelf (GOTS) devices. Started evaluation of Secure Smartphones based on COTS platform for Mobile secure use. Evaluating KMI CI-2, Spiral 2 initial release and migration of initial HAIPE 4.0 compliant crypto devices to KMI based key delivery. Development plan for delivery of NSA produced keys for COTS devices. Complete evaluation of the performance of initial EKMS / AKMS to KMI transition strategies. These efforts will support network operations from end-to-end throughout the force and the Common Operating Environment (COE) thus mitigating Information Assurance (IA) vulnerabilities to the national network enterprise. *FY 2014 Plans:* The Program will continue to test and evaluate advanced prototypes within the system to confirm capability and interoperability on Army networks and systems as well as identifying risk areas for compliance with COMSEC regulations and procedures. The Program will continue to test and evaluate Crypto Systems compliant devices, Suite B IPSec devices built on commercial standards, Cryptographic High Value Product (CHVP), Commercial Solutions for Classified (CSfC) Standards, and new software releases to HAIPE 4.X devices in accordance with AR 700-142 Rapid Action Revision dated October 16, 2008. Will continue to evaluate Secure Smartphone based on a COTS platform for Mobile secure use, KMI CI-2, Spiral 2 release, and migrate crypto devices to KMI based key delivery. Evaluate delivery of NSA produced keys for COTS devices. Support of EKMS during the transition to KMI. Develop interfaces and provides ways to insert Data At Rest (DAR) and Data In Transit (DIT) technology within the existing and future network infrastructure. Evaluate performance of technologies and provide direction on were technology will converge to insure the lowest impact on performance while providing the greatest protection from loss of sensitive data.			
Title: Mission Planning Mission Support System (MP/MSS) Interface ***Articles:***	4.500 0	0.000	0.000

Exhibit R-2A, RDT&E Project Justification: PB 2014 Army		DATE: April 2013
APPROPRIATION/BUDGET ACTIVITY 2040: *Research, Development, Test & Evaluation, Army* BA 7: *Operational Systems Development*	**R-1 ITEM NOMENCLATURE** PE 0303140A: *Information Systems Security Program*	**PROJECT** 491: *Information Assurance Development*

B. Accomplishments/Planned Programs ($ in Millions, Article Quantities in Each)	FY 2012	FY 2013	FY 2014
Description: The program creates a secure highly automated interface to enable transparent provisioning of Key Management Infrastructure (KMI) products. The Mission Planning Mission Support System (MP/MSS) system is to be used by both the KMI system developer and MP/MSS developers to have a standard interface to electronically exchange information, enabling Warfighter Operations; achieves integration between provisioning services and the communications net plan of the Warfighter. *FY 2012 Accomplishments:* Continue to develop additional capabilities/upgrades if Mission Planning Mission Support System (MP/MSS). Develop the capability to validate signatures of payloads from MP/MSS using the Technical Readiness Level (TRL) 6 (client) emulator.			
Title: Research and insertion of emerging cryptographic and IA technologies, operational value, and performance improvement to shape policies and guidance (G6 OA22)	0.000	0.000	3.199
Description: This program provides research, information assurance (IA) compliance oversight, guidance, and for cryptographic and information assurance technology insertions within the existing and future Army network infrastructure; provides the basis for adjusting Cryptographic and IA capabilities and policies to reflect the latest technology trends and emerging Department of Defense (DOD) enterprise architecture. Define, develop, and published IA assessment to determine maturity and viability of technologies for insertion. Assess risk mitigation of IA networked vulnerabilities in end-to-end Army network operations and Common Operating Environment. *FY 2014 Plans:* This program researches new and emerging Cryptographic and IA technologies to bridge the operational gaps to enable secure communications between the tactical edge, the Army Enterprise Network and the DoD Joint Information Environment (JIE). Review operational needs, operation assessments, identify fundamental building blocks for IA solutions and risk reduction lab test commercial products for Army insertion. Participate in DOD pilot programs. Develop strategies and policies capitalizing on leveraging emerging Cryptographic and Key Management technologies to enhance Cyber Security, prevent any undue risk and limitations and maximize performance to the Army networks. Effectively provide strategies, policies, and documentation to protect information, and knowledge sharing on the LandWarNet to secure the edge. Provide guidance for the adjustment of COMSEC programs and ensure COMSEC policies remains in synchronization with the latest COMSEC technologies. (G6 OA22)			
Accomplishments/Planned Programs Subtotals	15.282	8.380	5.113

Exhibit R-2A, **RDT&E Project Justification:** PB 2014 Army				**DATE:** April 2013
APPROPRIATION/BUDGET ACTIVITY 2040: *Research, Development, Test & Evaluation, Army* BA 7: *Operational Systems Development*		**R-1 ITEM NOMENCLATURE** PE 0303140A: *Information Systems Security Program*		**PROJECT** 491: *Information Assurance Development*

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
• DV5: *Cryptographic Systems RDTE*			1.436		1.436	2.774	2.497	2.400	2.300	Continuing	Continuing
• TA0600: *Information System Security Program - ISSP*	37.022	43.897	23.245		23.245	19.352	7.509	11.913	3.363	Continuing	Continuing
• B96002: *Cryptographic Systems OPA2*			13.890		13.890	14.140	14.394	14.653	14.889	Continuing	Continuing
• BS9716: *NON PEO-SPARES*	2.384	2.412	2.093		2.093	3.843	2.712	2.597	8.800	Continuing	Continuing

Remarks
  0303140A DV5 - Cryptographic System - RDTE funds
  TA0600 - Information System Security Program - OPA2 funds
  B96002 - Cryptographic Systems - OPA2 funds
  BS9716 - NON PEO-SPARES - OPA4 funds

D. Acquisition Strategy
  The objective of this program is to integrate and validate hardware and software solutions that will secure current and objective architecture and electronic business/ commerce transactions. The objective of the DoD Cryptographic Systems program is to provide adaptive, flexible, and programmable cryptographic systems using best practices, lessons learned and programmatic management to meet the challenge of modernizing the Army's aging cryptographic systems. The network operations effort will support the network operations from end-to-end throughout the force and the Common Operating Environment (COE) thus mitigating IA networked vulnerabilities to National information security systems.

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.

Exhibit R-3, RDT&E Project Cost Analysis: PB 2014 Army														DATE: April 2013	

APPROPRIATION/BUDGET ACTIVITY 2040: Research, Development, Test & Evaluation, Army BA 7: Operational Systems Development	R-1 ITEM NOMENCLATURE PE 0303140A: Information Systems Security Program	PROJECT 491: Information Assurance Development

Product Development ($ in Millions)

Cost Category Item	Contract Method & Type	Performing Activity & Location	All Prior Years	FY 2012		FY 2013		FY 2014 Base		FY 2014 OCO		FY 2014 Total	Cost To Complete	Total Cost	Target Value of Contract
				Cost	Award Date	Cost	Award Date	Cost	Award Date	Cost	Award Date	Cost			
System Engineering	C/FFP	CECOM RDEC:CECOM RDEC APG, MD	70.773	2.547	Feb 12	2.360		0.842	Jan 13	-		0.842	Continuing	Continuing	Continuing
Information Assurance System Engineering Support	C/FFP	DSCI Consulting:APG, MD	6.396	-		-		0.230	May 13	-		0.230	Continuing	Continuing	Continuing
Engineering Support	C/FP	CACI:APG, MD	3.100	0.500	Feb 12	1.000		0.498	Mar 13	-		0.498	Continuing	Continuing	Continuing
Engineering Support	C/CPFF	Booz Allen Hamilton:APG, MD	2.730	-		0.800		0.344	May 13	-		0.344	Continuing	Continuing	Continuing
Engineering Support	C/FP	CSC:APG, MD	14.341	2.107	Feb 12	2.170		-		-		-	0.000	18.618	0.000
IA Technical Support (G6/OA22)	C/FFP	CACI:APG, MD	0.000	-		-		1.219	Mar 2013	-		1.219	0.000	1.219	0.000
IA Engineering/Art Support (G6/OA22)	C/FFP	Booz Allen Hamilton:APG, MD	0.000	-		-		1.280	Mar 2013	-		1.280	0.000	1.280	0.000
IA SOS Vulnerability Scans (OA22)	C/TBD	SLAD:White Sand Missile Defense	0.000	-		-		0.700		-		0.700	0.000	0.700	0.000
Hardware/Software Engineering	C/FFP	CECOM RDEC:APG, MD	5.224	-		0.800		-		-		-	Continuing	Continuing	Continuing
Information Assurance System Engineering Support	C/FFP	MITRE:McLean, VA	3.178	0.150	Feb 12	-		-		-		-	Continuing	Continuing	Continuing
C2 Protect Common Tools	C/FFP	CECOM RDEC:APG, MD	9.899	-		0.450		-		-		-	Continuing	Continuing	Continuing
Engineering Support	C/FFP	VIATECH:APG, MD	6.180	1.939	Feb 12	0.800		-		-		-	Continuing	Continuing	Continuing
Mission Planning Mission Support System (MPMSS) Interface	C/IDIQ	NSA (SAIC):San Diego, CA	0.000	4.500	Feb 12	-		-		-		-	0.000	4.500	0.000
Network Operations	C/IDIQ	TBD:TBD	0.000	1.941		-		-		-		-	0.000	1.941	0.000
Subtotal			121.821	13.684		8.380		5.113		0.000		5.113			

Exhibit R-3, **RDT&E Project Cost Analysis:** PB 2014 Army												**DATE:** April 2013	

APPROPRIATION/BUDGET ACTIVITY 2040: *Research, Development, Test & Evaluation, Army* BA 7: *Operational Systems Development*	**R-1 ITEM NOMENCLATURE** PE 0303140A: *Information Systems Security Program*	**PROJECT** 491: *Information Assurance Development*

Test and Evaluation ($ in Millions)

Cost Category Item	Contract Method & Type	Performing Activity & Location	All Prior Years	FY 2012		FY 2013		FY 2014 Base		FY 2014 OCO		FY 2014 Total	Cost To Complete	Total Cost	Target Value of Contract
				Cost	Award Date	Cost	Award Date	Cost	Award Date	Cost	Award Date	Cost			
Test Support	C/CPFF	TBD:TBD	0.000	1.598		-		-		-		-	0.000	1.598	0.000
		Subtotal	0.000	1.598		0.000		0.000		0.000		0.000	0.000	1.598	0.000

Remarks
  Not Applicable

	All Prior Years	FY 2012	FY 2013	FY 2014 Base	FY 2014 OCO	FY 2014 Total	Cost To Complete	Total Cost	Target Value of Contract
Project Cost Totals	121.821	15.282	8.380	5.113	0.000	5.113			

Remarks

Exhibit R-4, **RDT&E Schedule Profile:** PB 2014 Army		**DATE:** April 2013
APPROPRIATION/BUDGET ACTIVITY 2040: *Research, Development, Test & Evaluation, Army* BA 7: *Operational Systems Development*	**R-1 ITEM NOMENCLATURE** PE 0303140A: *Information Systems Security Program*	**PROJECT** 491: *Information Assurance Development*

Exhibit R-4A, **RDT&E Schedule Details:** PB 2014 Army		**DATE:** April 2013
APPROPRIATION/BUDGET ACTIVITY 2040: *Research, Development, Test & Evaluation, Army* BA 7: *Operational Systems Development*	**R-1 ITEM NOMENCLATURE** PE 0303140A: *Information Systems Security Program*	**PROJECT** 491: *Information Assurance Development*

Schedule Details

Events	Start		End	
	Quarter	Year	Quarter	Year
TEST & EVALUATION OF LEF Family (KIV-7M)	1	2014	4	2014
TEST & EVALUATION OF INE Family (KG-250X)	1	2014	4	2016
TEST & EVALUATION OF INE Family (KG-175D)	1	2015	4	2018
TEST & EVALUATION OF INE Family (Small Tactical)	1	2014	4	2015
TEST & EVALUATION OF Secure Terminal (VIPER)	1	2014	4	2014
TEST & EVALUATION OF Secure Terminal (VACM)	1	2016	4	2017

Exhibit R-2A, RDT&E Project Justification: PB 2014 Army											DATE: April 2013	
APPROPRIATION/BUDGET ACTIVITY 2040: *Research, Development, Test & Evaluation, Army* BA 7: *Operational Systems Development*				**R-1 ITEM NOMENCLATURE** PE 0303140A: *Information Systems Security Program*						**PROJECT** 501: *Army Key Mgt System*		

COST ($ in Millions)	All Prior Years	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
501: *Army Key Mgt System*	-	0.000	7.581	1.306	-	1.306	2.411	2.338	2.185	2.500	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

A. Mission Description and Budget Item Justification

Army Key Management System (AKMS) is the Army's implementation of the National Security Agency's (NSA) Electronic Key Management System (EKMS) program automating the functions of Communications Security (COMSEC) key management control and distribution, thereby limiting adversarial access to, and reducing the vulnerability of, Army Command, Control, Communications, Computers, Intelligence (C4I) systems. NSA's aging EKMS infrastructure is being replaced with the Key Management Infrastructure (KMI) by Dec. 2017, requiring the transition of 425 Army accounts from FY2013 to FY2017. AKMS supports the transition to the Army Key Management Infrastructure (AKMI) during this timeframe. A critical component of this transition is the Mission Planning/Mission Support System (MP/MSS) which creates a secure, highly automated interface to enable transparent provisioning of KMI products. Updates to the MP/MSS Interface Specification and additional capabilities for the interface continue through FY2014. The MP/MSS Interface Specification defines the interface between the KMI Management Client Node (MGC) and the Mission Planning System operating on the Secure Internet Protocol Router Network (SIPRNET). This interface definition covers the key ordering, management, and distribution transactions that were decomposed based upon an Army Mission Planning System collaborating with KMI to fulfill mission requirements in a highly automated manner.

The additional MP/MSS capabilities projected to be developed include 1) adding the missing mission planning data fields based on the Communications-Electronics Research, Development and Engineering Center (CERDEC) evaluation of Sprint 9/Release 1, 2) completing the Release 1 backlog along with the other core software requirements related to security, and 3) adding the access controls based on the current login procedures (via medium assurance Public Key Infrastructure (PKI), Login/Password and KMI certificate).

B. Accomplishments/Planned Programs ($ in Millions, Article Quantities in Each)

	FY 2012	FY 2013	FY 2014
Title: Mission Planning Mission Support System (MP/MSS) Interface	0.000	7.581	1.306
Articles:		0	

Description: The Mission Planning Mission Support System (MP/MSS) program creates a secure, highly automated interface to enable transparent provisioning of Key Management Infrastructure (KMI) products. The MP/MSS system is to be used by both the KMI system developer and MP/MSS developers to have a standard interface to electronically exchange information, enabling Warfighter Operations; achieving integration between provisioning services and the communications net plan of the Warfighter.

FY 2013 Plans:

Exhibit R-2A, RDT&E Project Justification: PB 2014 Army		DATE: April 2013	
APPROPRIATION/BUDGET ACTIVITY 2040: Research, Development, Test & Evaluation, Army BA 7: Operational Systems Development	R-1 ITEM NOMENCLATURE PE 0303140A: Information Systems Security Program	PROJECT 501: Army Key Mgt System	

B. Accomplishments/Planned Programs ($ in Millions, Article Quantities in Each)	FY 2012	FY 2013	FY 2014
Additional Mission Planning Mission Support System (MP/MSS) capabilities projected to be developed include 1) adding missing mission planning data fields based on the Communications-Electronics Research, Development and Engineering Center (CERDEC) evaluation of Sprint 9/Release 1, 2) completing the Release 1 backlog along with other core software requirements related to security, and 3) adding the access controls based on the current login procedures (via medium assurance PKI, Login/ Password and KMI certificate).			
FY 2014 Plans: Develop Army-Specific software implementation of KMI's MP/MSS API to ensure maximum use of KMI architecture by Army's legacy ECUs, and provide a level of KMI Awareness for those devices.			
Accomplishments/Planned Programs Subtotals	0.000	7.581	1.306

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
• BA1201: *TSEC - AKMS*		23.432	13.890		13.890	34.112	34.731	35.179	35.500	Continuing	Continuing
• B96004: *Key Management Infrastructure*			10.821		10.821	9.001	9.090	9.163	9.327	Continuing	Continuing
• DV4: *Key Management Infrastructure*			1.502		1.502	2.653	2.725	2.200	2.100	Continuing	Continuing

Remarks

Line Item & Title:
BA1201: TSEC-AKMS (OPA2)
B96004: Key Management Infrastructure (OPA2)
DV4: Key Management Infrastructure (RDTE)

D. Acquisition Strategy

Army Key Management System (AKMS) Milestone III was conducted/ approved in FY 1999. Local COMSEC Management System (LCMS) completed fielding of software v5.0.3 in FY 2009 to all Communications Security (COMSEC) custodians in order to provide Encrypted Key capability. LCMS hardware refresh began 2QFY10. Current LCMS software is v5.1.0.5, which completes fielding in 2013. The AKMS acquisition strategy to procure Simple Key Loaders (SKL) was updated in an Acquisition Decision Memorandum (ADM) approved by the PEO C3T Milestone Decision Authority (MDA) 3QFY02. Science Applications International Corporation (SAIC) began SKL Post Development Software (PDSS) efforts in 1QFY09 and release software upgrades annually. In FY 2010, an Engineering Change Proposal (ECP) was initiated to modify the current SKL design in order to meet emerging requirements of modern end cryptographic units and Joint Tactical Radio Systems (JTRS). Automated Communications Engineering Software (ACES) is currently undergoing a hardware refresh. Continued enhancements and support of AKMS next

Exhibit R-2A, **RDT&E Project Justification:** PB 2014 Army		**DATE:** April 2013
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generation software tools to meet emerging Army systems' requirements are also underway. ACES is currently operating on version 3.1. SKL is currently operating on version 8.0. AKMS supports the transition from NSA's EKMS infrastructure to the new Key Management Infrastructure (KMI).

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.

Exhibit R-3, RDT&E Project Cost Analysis: PB 2014 Army													**DATE:** April 2013	

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Product Development ($ in Millions)

Cost Category Item	Contract Method & Type	Performing Activity & Location	All Prior Years	FY 2012		FY 2013		FY 2014 Base		FY 2014 OCO		FY 2014 Total	Cost To Complete	Total Cost	Target Value of Contract
				Cost	Award Date	Cost	Award Date	Cost	Award Date	Cost	Award Date	Cost			
Technical Support	C/CPFF	TBD:TBD	0.000	-		2.250		0.652		-		0.652	Continuing	Continuing	0.000
Subtotal			0.000	0.000		2.250		0.652		0.000		0.652			0.000

Support ($ in Millions)

Cost Category Item	Contract Method & Type	Performing Activity & Location	All Prior Years	FY 2012		FY 2013		FY 2014 Base		FY 2014 OCO		FY 2014 Total	Cost To Complete	Total Cost	Target Value of Contract
				Cost	Award Date	Cost	Award Date	Cost	Award Date	Cost	Award Date	Cost			
Integration Support	TBD	TBD:TBD	0.000	-		3.000		0.327		-		0.327	Continuing	Continuing	0.000
Subtotal			0.000	0.000		3.000		0.327		0.000		0.327			0.000

Test and Evaluation ($ in Millions)

Cost Category Item	Contract Method & Type	Performing Activity & Location	All Prior Years	FY 2012		FY 2013		FY 2014 Base		FY 2014 OCO		FY 2014 Total	Cost To Complete	Total Cost	Target Value of Contract
				Cost	Award Date	Cost	Award Date	Cost	Award Date	Cost	Award Date	Cost			
Technical Support	TBD	TBD:TBD	0.000	-		2.331		0.327		-		0.327	Continuing	Continuing	0.000
Subtotal			0.000	0.000		2.331		0.327		0.000		0.327			0.000

	All Prior Years	FY 2012	FY 2013	FY 2014 Base	FY 2014 OCO	FY 2014 Total	Cost To Complete	Total Cost	Target Value of Contract
Project Cost Totals	0.000	0.000	7.581	1.306	0.000	1.306			0.000

Remarks

PE 0303140A: *Information Systems Security Program*
Army

R-1 Line #174

Exhibit R-4, RDT&E Schedule Profile: PB 2014 Army		**DATE:** April 2013
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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
Mission Planning Mission Support System (MP/MSS) Interface											████	████	████	████	████	████	████	████	████	████	████	████	████	████	████	████	████	████

Exhibit R-4A, **RDT&E Schedule Details:** PB 2014 Army		**DATE:** April 2013
APPROPRIATION/BUDGET ACTIVITY 2040: *Research, Development, Test & Evaluation, Army* BA 7: *Operational Systems Development*	**R-1 ITEM NOMENCLATURE** PE 0303140A: *Information Systems Security Program*	**PROJECT** 501: *Army Key Mgt System*

Schedule Details

Events	Start		End	
	Quarter	**Year**	**Quarter**	**Year**
Mission Planning Mission Support System (MP/MSS) Interface	2	2014	4	2018

Exhibit R-2A, **RDT&E Project Justification:** PB 2014 Army										**DATE:** April 2013	
APPROPRIATION/BUDGET ACTIVITY 2040: *Research, Development, Test & Evaluation, Army* BA 7: *Operational Systems Development*				**R-1 ITEM NOMENCLATURE** PE 0303140A: *Information Systems Security Program*				**PROJECT** DV4: *Key Management Infrastructure (KMI)*			

COST ($ in Millions)	All Prior Years	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
DV4: *Key Management Infrastructure (KMI)*	-	0.000	0.000	1.502	-	1.502	2.653	2.725	2.200	2.100	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

Key Managment Infrastructure (KMI) (DV4) is a new project in FY2014 which supports infrastructure requirements in support of Key Managment.

A. Mission Description and Budget Item Justification

Key Management Infrastructure (KMI) provides an integrated, operational environment that brings essential key management personnel and functions in-band. KMI achieves an over the network keying (OTNK) management solution to support emerging cryptographically modernized systems. The KMI client nodes are the Army's subset of the National Security Agency's (NSA's) KMI System supporting Department of Defense (DoD) Global Information Grid (GIG) Net Centric and Crypto Modernization Initiatives. The Mission Planning/ Mission Support System (MP/MSS) Interface for KMI will create a secure and highly automated interface to enable transparent provisioning of KMI products. The interface shall facilitate transparent communications between MP/MSS and KMI to achieve integration by bridging the gap between provisioning services and the communications net plan of the WarFighter. Updates relative to Key Management requirements to the MP/MSS Interface Specification and additional capabilities for the interface are scheduled to begin in FY2014. The MP/MSS Interface Specification defines the interface between the KMI Management Client Node (MGC) and the Mission Planning System operating on the Secure Internet Protocol Router Network (SIPRNET). This interface definition covers the key ordering, management and distribution transactions that were decomposed based upon an Army Mission Planning System collaborating with KMI to fulfill mission requirements in a highly automated manner.

Additional MP/MSS capabilities projected to be developed include 1) registration of MP/MSS identities, 2) validations required for digital signature based on KMI and other medium assurance Public Key Infrastructure (PKI), 3) allowing the exchange of an electronic equivalent of a signed SF-153 (Hand Receipt, Destruction, Inventory, etc) and 4) integrating MP/MSS Application Program Interface (API) into the Army Mission Planner - Joint Tactical Network Environment NetOps Toolkit (JTNT).

B. Accomplishments/Planned Programs ($ in Millions)	FY 2012	FY 2013	FY 2014
Title: Key Management Infrastructure (KMI) Awareness	0.000	0.000	1.502
Description: Key Management Infrastructure Awareness initiative creates a secure, highly automated interface in providing future Over the Network Keying (OTNK) capability to legacy End Crypto Units (ECUs). This initiative will allow ECUs to receive,			

Exhibit R-2A, RDT&E Project Justification: PB 2014 Army		DATE: April 2013
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B. Accomplishments/Planned Programs ($ in Millions)	FY 2012	FY 2013	FY 2014
authenticate, and decrypt OTNK messages and increases WarFighter survivability by minimizing the need for Soldiers to travel to obtain keys. *FY 2014 Plans:* Additional Mission Planning/ Mission Support System (MP/MSS) capabilities projected to be developed include 1) registration of MP/MSS identities, 2) validations required for digital signature based on Key Management Infrastructure (KMI) and other medium assurance Public Key Infrastructure (PKI), 3) allowing the exchange of an electronic equivalent of a signed SF-153 (Hand Receipt, Destruction, Inventory, etc) and 4) integrating MP/MSS Application Program Interface (API) into the Army Mission Planner - Joint Tactical Network Environment NetOps Toolkit (JTNT).			
Accomplishments/Planned Programs Subtotals	0.000	0.000	1.502

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
• B96004: *Key Management Infrastructure*			10.821		10.821	9.001	9.090	9.163	9.327	Continuing	Continuing
• BA1201: *TSEC - Army Key Mgt Sys (AKMS)*	12.541	23.432	13.890		13.890	34.112	34.731	35.179	35.500	Continuing	Continuing
• 501: *Army Key Management System (AKMS)*			1.306		1.306	2.411	2.338	2.185	2.500	Continuing	Continuing

Remarks
Line Item & Title:
B96004: Key Management Infrastructure (OPA2)
BA1201: TSEC-AKMS (OPA2)
501: Army Key Management System (RDTE)

D. Acquisition Strategy

Army Key Management Infrastructure (AKMI) is the Army's implementation of the National Security Agency's (NSAs) Key Management Infrastructure (KMI) ACAT ID program. The initial Army Acquisition Program Baseline (APB) for its implementation of KMI was signed on 26 Jan 2012. KMI Clients purchased in FY2012 were Low Rate Initial Production (LRIP) Management Clients (MGCs). Deliveries are scheduled to begin in March 2013. KMI MGCs purchased in FY2013 will be Full Rate Production (FRP) MGCs with deliveries beginning 12 months after FRP contract award. RDTE efforts are underway to provide communication within the KMI architecture for legacy devices. Current sunset for Electronic Key Management System (EKMS) is scheduled for December 2017.

Exhibit R-2A, **RDT&E Project Justification:** PB 2014 Army		**DATE:** April 2013
APPROPRIATION/BUDGET ACTIVITY 2040: *Research, Development, Test & Evaluation, Army* BA 7: *Operational Systems Development*	**R-1 ITEM NOMENCLATURE** PE 0303140A: *Information Systems Security Program*	**PROJECT** DV4: *Key Management Infrastructure (KMI)*

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.

Exhibit R-3, RDT&E Project Cost Analysis: PB 2014 Army											DATE: April 2013		

APPROPRIATION/BUDGET ACTIVITY 2040: Research, Development, Test & Evaluation, Army BA 7: Operational Systems Development	R-1 ITEM NOMENCLATURE PE 0303140A: Information Systems Security Program	PROJECT DV4: Key Management Infrastructure (KMI)

Product Development ($ in Millions)

Cost Category Item	Contract Method & Type	Performing Activity & Location	All Prior Years	FY 2012		FY 2013		FY 2014 Base		FY 2014 OCO		FY 2014 Total	Cost To Complete	Total Cost	Target Value of Contract
				Cost	Award Date	Cost	Award Date	Cost	Award Date	Cost	Award Date	Cost			
Technical Support	C/CPFF	Science Applications International Corporation:Linthicum, MD	0.000	-		-		0.601	May 13	-		0.601	Continuing	Continuing	Continuing
Technical Support	MIPR	CERDEC:APG, MD	0.000	-		-		0.901	Jan 13	-		0.901	Continuing	Continuing	Continuing
		Subtotal	0.000	0.000		0.000		1.502		0.000		1.502			

			All Prior Years	FY 2012		FY 2013		FY 2014 Base		FY 2014 OCO		FY 2014 Total	Cost To Complete	Total Cost	Target Value of Contract
		Project Cost Totals	0.000	0.000		0.000		1.502		0.000		1.502			

Remarks

Exhibit R-4, **RDT&E Schedule Profile:** PB 2014 Army		**DATE:** April 2013
APPROPRIATION/BUDGET ACTIVITY 2040: *Research, Development, Test & Evaluation, Army* BA 7: *Operational Systems Development*	**R-1 ITEM NOMENCLATURE** PE 0303140A: *Information Systems Security Program*	**PROJECT** DV4: *Key Management Infrastructure (KMI)*

	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
KMI Awareness Development and Testing									████	████	████	████	████	████	████	████	████	████	████	████	████	████	████	████	████	████	████	████

Exhibit R-4A, **RDT&E Schedule Details:** PB 2014 Army		**DATE:** April 2013
APPROPRIATION/BUDGET ACTIVITY 2040: *Research, Development, Test & Evaluation, Army* BA 7: *Operational Systems Development*	**R-1 ITEM NOMENCLATURE** PE 0303140A: *Information Systems Security Program*	**PROJECT** DV4: *Key Management Infrastructure (KMI)*

Schedule Details

Events	Start		End	
	Quarter	**Year**	**Quarter**	**Year**
KMI Awareness Development and Testing	1	2014	4	2018

Exhibit R-2A, RDT&E Project Justification: PB 2014 Army											DATE: April 2013	
APPROPRIATION/BUDGET ACTIVITY 2040: *Research, Development, Test & Evaluation, Army* BA 7: *Operational Systems Development*					**R-1 ITEM NOMENCLATURE** PE 0303140A: *Information Systems Security Program*						**PROJECT** DV5: *Crypto Modernization (Crypto Mod)*	

COST ($ in Millions)	All Prior Years	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
DV5: *Crypto Modernization (Crypto Mod)*	-	0.000	0.000	1.436	-	1.436	2.774	2.497	2.400	2.300	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

Key Managment Infrastructure (KMI) (DV4) is a new project in FY2014 which supports infrastructure requirements in support of COMSEC.

A. Mission Description and Budget Item Justification

This program supports the implementation of the National Security Agency (NSA) developed Communications Security (COMSEC) technologies into the Army by providing COMSEC system capabilities through encryption, trusted software or standard operating procedures, and integrating these mechanisms into specified systems in support of securing the National Network Enterprise in as transparent a manner as possible.

This entails architecture studies, system integration and testing, installation kits, and certification and accreditation of Automation Information Systems. The program assesses, develops and integrates emerging information assurance (IA)/COMSEC tools (hardware and software) which provide protection for fixed infrastructure post, camp and station networks as well as efforts on tactical networks. The cited work is consistent with Strategic Planning Guidance and the Army Modernization and Strategy Plan.

B. Accomplishments/Planned Programs ($ in Millions)	FY 2012	FY 2013	FY 2014
Title: Crypto Solutions for Low Bandwidth Communications at the Tactical Edge	0.000	0.000	0.520
Description: This program creates tools that can be used with current and future methodologies in order to determine what amount of cryptographic solutions can be deployed at the tactical edge. This experimentation will allow for the WarFighter to have optimized solutions tailored for their specific program requirements while also showing trade-offs between competing solutions. Examples of common analysis to be performed are comparisons in encryption implementations, network initialization overhead, comparison of emerging Commercial Solutions for Classified architectures with COMSEC architectures, development of new network security and management protocols optimized for low-bandwidth environments and impact of emerging dynamic capabilities that evade or obstruct the adversary. *FY 2014 Plans:* Develop software for use in NS-2 and/or OPNet environments to target specific comparisons in COMSEC diversity and also comparisons with Commercial Solutions for Classified architectures. Study existing network security and management protocols			

Exhibit R-2A, RDT&E Project Justification: PB 2014 Army		DATE: April 2013
APPROPRIATION/BUDGET ACTIVITY 2040: *Research, Development, Test & Evaluation, Army* BA 7: *Operational Systems Development*	**R-1 ITEM NOMENCLATURE** PE 0303140A: *Information Systems Security Program*	**PROJECT** DV5: *Crypto Modernization (Crypto Mod)*

B. Accomplishments/Planned Programs ($ in Millions)	FY 2012	FY 2013	FY 2014
to identify areas of improvement and propose optimizations and new protocol designs. Identify optimal placement of network discovery servers and key management infrastructure. Investigate use of single packet authorization and propose improvements that make networks and hosts less detectable.			
Title: VINSON/ANDVT (Advanced Narrowband Digital Voice Terminal) Cryptograph Modernization (VACM) program *Description:* This program researches, assesses, test, plan and works to integrate VINSON/ANDVT Crypto Modernization (VACM) products for the Army. The VACM program is an NSA mandated program established to replace legacy external cryptographic devices such as the KY-57, KY-99A, KY-58, KY-100 and CV- 3591 /YV-5. In order to ensure the confidentiality, integrity and availability of classified communications, the cryptographic modules must be tested for interoperability and form fit to ensure a successful fielding. Each software release will require testing to insure comparability and interoperability. *FY 2014 Plans:* The program will continue to test and evaluate advanced prototypes of VINSON/ANDVT Crypto Modernization (VACM) within the system to confirm capability and interoperability on Army networks and systems as well as identifying risk areas for compliance with COMSEC regulations and procedures.	0.000	0.000	0.916
Accomplishments/Planned Programs Subtotals	0.000	0.000	1.436

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
• 491: *Information Assurance Development*	15.684		5.113		5.113	9.644	9.156	8.356	9.343	Continuing	Continuing
• TA0600: *Information System Security Program - ISSP*	37.022	43.987	23.245		23.245	19.352	7.509	11.913	3.363	Continuing	Continuing
• B96002: *Cryptographic Systems (Crypto Sys)*			13.890		13.890	14.140	14.394	14.653	14.889	Continuing	Continuing
• BS9716: *NON PEO-SPARES*	2.384	2.412	2.093		2.093	3.843	2.712	2.597	8.800	Continuing	Continuing

Remarks

491 - Information Assurance Developemnt - RDTE funds - 2 lines: 5F and OA22(G6)
TA0600 - Information System Security Program - OPA2 funds
B96002 - Cryptographic Systems - OPA2 funds
BS9716 - NON PEO-SPARES - OPA4 funds

Exhibit R-2A, **RDT&E Project Justification:** PB 2014 Army		**DATE:** April 2013
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D. Acquisition Strategy

The objective of this program is to integrate and validate hardware and software solutions to provide COMSEC superiority in order to protect against threats, increase battlefield survivability/lethality, and enable critical Mission Command activities. The objective of the Cryptographic Systems program is to provide adaptive, flexible, and programmable cryptographic systems using best practices, lessons learned and programmatic management to meet the challenge of modernizing the Army's aging cryptographic systems. The effort will support the network operations from end-to-end throughout the force and the Common Operating Environment (COE) thus mitigating IA networked vulnerabilities to National information security systems.

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.

Exhibit R-3, RDT&E Project Cost Analysis: PB 2014 Army				DATE: April 2013

APPROPRIATION/BUDGET ACTIVITY 2040: *Research, Development, Test & Evaluation, Army* BA 7: *Operational Systems Development*	R-1 ITEM NOMENCLATURE PE 0303140A: *Information Systems Security Program*	PROJECT DV5: *Crypto Modernization (Crypto Mod)*

Product Development ($ in Millions)

Cost Category Item	Contract Method & Type	Performing Activity & Location	All Prior Years	FY 2012 Cost	FY 2012 Award Date	FY 2013 Cost	FY 2013 Award Date	FY 2014 Base Cost	FY 2014 Base Award Date	FY 2014 OCO Cost	FY 2014 OCO Award Date	FY 2014 Total Cost	Cost To Complete	Total Cost	Target Value of Contract
System Engineering	C/FFP	CECOM RDEC:APG, MD	0.000	-		-		0.388	Jan 13	-		0.388	Continuing	Continuing	Continuing
Engineering Support	C/FP	CACI:Aberdeen Maryland	0.000	-		-		0.359	Mar 13	-		0.359	Continuing	Continuing	0.000
Engineering Support	C/CPFF	Booz Allen Hamilton (BAH):APG, MD	0.000	-		-		0.215	May 13	-		0.215	Continuing	Continuing	0.000
Engineering Support	C/CPFF	AASKI:Edgewood, Maryland	0.000	-		-		0.359	Aug 13	-		0.359	Continuing	Continuing	0.000
Information Assurance System Engineering Support	C/FFP	DSCI:Aberdeen, Maryland	0.000	-		-		0.115	May 13	-		0.115	Continuing	Continuing	0.000
Subtotal			0.000	0.000		0.000		1.436		0.000		1.436			

	All Prior Years	FY 2012	FY 2013	FY 2014 Base	FY 2014 OCO	FY 2014 Total	Cost To Complete	Total Cost	Target Value of Contract
Project Cost Totals	0.000	0.000	0.000	1.436	0.000	1.436			

Remarks

Exhibit R-4, RDT&E Schedule Profile: PB 2014 Army		**DATE:** April 2013
APPROPRIATION/BUDGET ACTIVITY 2040: *Research, Development, Test & Evaluation, Army* BA 7: *Operational Systems Development*	**R-1 ITEM NOMENCLATURE** PE 0303140A: *Information Systems Security Program*	**PROJECT** DV5: *Crypto Modernization (Crypto Mod)*

	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
VACM interoperability																												

Exhibit R-4A, **RDT&E Schedule Details:** PB 2014 Army		**DATE:** April 2013
APPROPRIATION/BUDGET ACTIVITY 2040: *Research, Development, Test & Evaluation, Army* BA 7: *Operational Systems Development*	**R-1 ITEM NOMENCLATURE** PE 0303140A: *Information Systems Security Program*	**PROJECT** DV5: *Crypto Modernization (Crypto Mod)*

Schedule Details

Events	Start		End	
	Quarter	**Year**	**Quarter**	**Year**
VACM interoperability	4	2013	4	2016