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**Exhibit R-2, RDT&E Budget Item 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 0604798A: <i>Brigade Analysis, Integration and Evaluation</i>							
<b>COST (\$ in Millions)</b>	<b>All Prior Years</b>	<b>FY 2012</b>	<b>FY 2013<sup>#</sup></b>	<b>FY 2014 Base</b>	<b>FY 2014 OCO <sup>##</sup></b>	<b>FY 2014 Total</b>	<b>FY 2015</b>	<b>FY 2016</b>	<b>FY 2017</b>	<b>FY 2018</b>	<b>Cost To Complete</b>	<b>Total Cost</b>
Total Program Element	-	0.000	214.270	193.748	-	193.748	205.000	204.570	204.120	204.104	Continuing	Continuing
DU8: <i>Systems Under Evaluation (SUE) Analysis</i>	-	0.000	45.489	0.000	-	0.000	0.000	0.000	0.000	0.000	Continuing	Continuing
DU9: <i>System Of Systems Engineering</i>	-	0.000	10.109	0.000	-	0.000	0.000	0.000	0.000	0.000	Continuing	Continuing
DV1: <i>BCT Equipping Integration And Experimentation</i>	-	0.000	158.672	0.000	-	0.000	0.000	0.000	0.000	0.000	Continuing	Continuing
DY3: <i>NIE Test &amp; Evaluation</i>	-	0.000	0.000	29.697	-	29.697	33.947	33.768	33.795	33.773	Continuing	Continuing
DY4: <i>Network Integration Support</i>	-	0.000	0.000	25.863	-	25.863	20.830	20.788	20.777	20.773	Continuing	Continuing
DY5: <i>Production/Field Coordination for Capability Sets</i>	-	0.000	0.000	7.829	-	7.829	8.949	8.902	8.909	8.904	Continuing	Continuing
DY6: <i>Brigade and Platform Integration Support</i>	-	0.000	0.000	97.790	-	97.790	106.813	106.724	106.326	106.344	Continuing	Continuing
DY7: <i>Army Systems Engineering, Architecture &amp; Analysis</i>	-	0.000	0.000	18.929	-	18.929	20.029	19.986	19.943	19.941	Continuing	Continuing
DZ6: <i>Army Integration Management &amp; Coordination</i>	-	0.000	0.000	13.640	-	13.640	14.432	14.402	14.370	14.369	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**

The increase supports the continuation of effort across all of the projects within PE Brigade Analysis, Integration and Evaluation

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

The FY 2013 President's Budget submission was broken down into three projects to support the initial concept of execution of the Army's Agile process, they are:

Project DV1; BCT Equipment Integration and Experimentation, in FY 2013 it provided funds for development of the NIE architecture, Lab Based Risk Reduction, systems integration engineering for the NIE of both platforms and the Network, A-Kit development and vehicle integration, coordination of the NIE events, risk reduction

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<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 0604798A: <i>Brigade Analysis, Integration and Evaluation</i>
<p>activities, NIE test activities and data collection and analysis, and troubleshooting/fixing integration and network problems in support of the Network Integration Evaluation events.</p> <p>Project DU8; Systems Under Evaluation Analysis and Integration, in FY 2013 it provided funding for the Industry and government programs that meet or exceed known technological gaps and funds prototypes (if required), FSR support, and platform and network integration into the Army's Network Integration Evaluation (NIE) Events.</p> <p>Project DU9; System of Systems Engineering, in FY 2013 in provided for the development of the Army's Baseline System of System Architecture and associated standards and guidelines, the supporting System of Systems Engineering to develop the standards and guidelines for the Army and the development and implementation of the Army's Common Operating Environment (COE) standards and validation and verification of systems against these standards.</p> <p>The FY 2014 funding supports all of the efforts to plan and execute NIE 14.2 and 15.1 and Tactical Capability Set Synchronized Fielding Events. The specific evaluation requirements for these NIEs will be derived from the gaps identified by the users in the Afghanistan Theater and the lessons learned from NIEs 13.2 and 14.1. Current technologies are selected for integration into each tactical capability set based upon its operational maturity relative to the Army's needs and its cost and schedule.</p> <p>Project DY3; NIE Test &amp; Evaluation, in FY 2014 and beyond, it provides for the planning and conduct of detailed experiments (NIE evaluations), tests and evaluation of potential Network, Software and Hardware systems for procurement and integration into the Army's Warfighter system. It includes all test support activities such as Blade time for Helicopters, Satellite time for the network, med evacuation, and protection for the soldier.</p> <p>Project DY4; Network Integration Support, in FY 2014 and beyond, it provides for Network Integration of all Network Systems Under Evaluation (SUE) (industry and government) Hardware/Software into existing Communications Electronics Research, Development and Engineering Center (CERDEC) System Integration Laboratories at Aberdeen Proving Ground (APG) to simulate the Brigade Network for NIE and determine if new capabilities successfully resolve know gaps. It includes the refinement of US Army Training and Doctrine Command (TRADOC) developed requirements and development of the sources sought, Request For Proposal (RFP) and Horseblanket in support of upcoming NIE Events. It also conducts evaluations in the labs of industry and government SUEs to ensure they meet requirements and are integrated into the network prior to going to the field base evaluation. Lab Based risk reduction is also funded by this line to improve Network performance prior and when in the field. It also includes any hardware and Field Service Representative (FSR) support required to support the lab based integration and risk reduction,</p> <p>Project DY5; Production/Fielding Coordination for Tactical Capability Sets, in FY 2014 and beyond, it provides for the development and coordination of Programs to produce, integrate, and field the NIE evaluated Brigade improvements to the Brigade Combat Teams (BCTs). This effort does not fund the production, or integration, or fielding of the tactical capability set, but it does fund the coordination of requirements and integration along with scheduling of all activities for the Army through the supporting Program Executive Offices (PEOs), Program Managers (PMs) and Research, Development and Engineering Command (RDECOMs).</p> <p>Project DY6; Brigade and Platform Integration Support, in FY 2014 and beyond, it provides for the integration of the lab developed network solution onto soldier and vehicle systems to ensure an integrated network across the Brigade and battle field and the facility support requirements to complete these efforts. This includes contractor, FSR and Government support to conduct vehicle integration along with integration of the network and vehicles into a Brigade Combat Team (BCT) for the</p>		

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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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<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 0604798A: <i>Brigade Analysis, Integration and Evaluation</i>
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NIE test. This project funds the hardware and FSR support from contractors to support integration and evaluation. This includes the support for the four phases of integration and test evaluation conducted at the NIE. It also includes de-modification of vehicles after completion of the event.

Project DY7; Army System Engineering, Architecture & Analysis,

<b>B. Program Change Summary (\$ in Millions)</b>	<b><u>FY 2012</u></b>	<b><u>FY 2013</u></b>	<b><u>FY 2014 Base</u></b>	<b><u>FY 2014 OCO</u></b>	<b><u>FY 2014 Total</u></b>
Previous President's Budget	0.000	214.270	45.903	-	45.903
Current President's Budget	0.000	214.270	193.748	-	193.748
Total Adjustments	0.000	0.000	147.845	-	147.845
• Congressional General Reductions	-	-			
• Congressional Directed Reductions	-	-			
• Congressional Rescissions	-	-			
• Congressional Adds	-	-			
• Congressional Directed Transfers	-	-			
• Reprogrammings	-	-			
• SBIR/STTR Transfer	-	-			
• Other Adjustments 1	-	-	147.845	-	147.845

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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 0604798A: Brigade Analysis, Integration and Evaluation				PROJECT DU8: Systems Under Evaluation (SUE) Analysis			
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
DU8: Systems Under Evaluation (SUE) Analysis	-	0.000	45.489	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 project (DU8) was created to support the Army's Brigade Analysis, Integration and Evaluation mission. The FY 2013 President Budget submission reflects Program Element (PE) 604798A broken down into three projects; DV1, DU8, and DU9. Beginning with FY 2014 Presidents Budget submission this PE is now broken down into six projects to better align the funding with the progressive changes to the development and execution of both Network Integration Events (NIE) and Tactical Capability Set-Synchronized Fielding (CS-SF) missions. These projects are: DY3; NIE Test Evaluation, DY4; Network Integration Support, DY5; Production /Fielding Coordination for Capability Sets, DY6; Brigade and Platform Integration Support, DY7; Army System Engineering, Architecture & Architecture & Analysis, and DZ6; Army Integration Management & Coordination. Beginning in FY 2014 the activities within this project are divided among all of the new Projects as outlined above.												
A. Mission Description and Budget Item Justification												
This project supports the integration of both industry and DOD emerging and existing technologies into the current Army force structure. It includes all integration and test support efforts for the Network Integration Evaluation (NIE)s, which includes; Lab Based Risk Reduction for Network Integration, Platform Integration of Network Components, Software loading exercises and checkout (LOADEX), and comprehensive communication exercises (COMMEX), culminating in the Army's NIE. The specific evaluation requirements for these NIEs will be derived from the gaps identified by the user based on lessons learned from Iraq, and Afghanistan and previous NIEs.												
For industry SUEs, this project will integrate the industry SUE into the Network and onto a platform, if required. It will also purchase any additional hardware and support above and beyond the contractors proposed support. For Government SUEs, this project funds integration support that consists of FSRs to support integration and the test. If the NIE program requires additional prototypes above and beyond the Program of Record it will also purchase this equipment. This project also funds keeping the Network baseline up to date so that integration is always into the baseline network.												
B. Accomplishments/Planned Programs (\$ in Millions, Article Quantities in Each)									FY 2012	FY 2013	FY 2014	
Title: Systems Under Evaluation (SUE) Integrations									0.000	45.489	0.000	
Articles:										0		
Description: Funding is provided for the following effort: To support integration of both industry and DOD emerging and existing technologies into the current Army force structure. This includes all integration support and test support for 13.2 and 14.1 SUEs.												

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<b>Exhibit R-2A, RDT&amp;E Project Justification:</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 0604798A: <i>Brigade Analysis, Integration and Evaluation</i>	<b>PROJECT</b> DU8: <i>Systems Under Evaluation (SUE) Analysis</i>
<b>B. Accomplishments/Planned Programs (\$ in Millions, Article Quantities in Each)</b>		<b>FY 2012</b>	<b>FY 2013</b>
<b><i>FY 2013 Plans:</i></b> Provides funding to support integration and evaluation, twice a year, of approximately 40 - 50 industry and government technologies which are being selected as Systems Under Evaluation (SUE) for participation into the Army's Network Integration Evaluation (NIE). These funds cover the NIE participant_s (Emerging and existing technologies, PMs and contractors) costs for travel, and shipment of equipment, Contractor Field Service Representatives (CFSRs) and Government Subject Matter Experts (GSMEs) required to support integration activities, integration A-kit development, and the purchase of additional prototypes when needed to effectively complete detailed evaluations of the complete network architecture. Includes costs for development and fabrication of integration hardware and software. The participating units then deploy to the tactical training/evaluation area, White Sands Missile Range (WSMR) to complete a comprehensive rehearsal (4 weeks) in preparation for the detailed Network Integration Evaluation (2 weeks) event.			
<b>Accomplishments/Planned Programs Subtotals</b>		0.000	45.489
<b>C. Other Program Funding Summary (\$ in Millions)</b>			
N/A			
<b>Remarks</b>			
<b>D. Acquisition Strategy</b>			
During the planning of NIE 11.1 through NIE 13.1 the government will focus on identifying and evaluating systems against the Army's known gaps and will utilize a Sources Sought solicitation to invite industry's participation in each NIE, which results in industry's participation at No Cost to the government. Beginning with NIE 13.2 the government will continue to focus on identifying and evaluating against the Army's identified gaps. For FY 2013 and out the government will use one of two acquisition strategies. First the government will issue a sources sought request to fill the known gaps. The government will then use either an existing government contract or an Request for Proposal (RFP) as the means of solicitation for industry's participation in the NIE, and will also include the participant's production options.			
<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:</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 0604798A: <i>Brigade Analysis, Integration and Evaluation</i>					<b>PROJECT</b> DU8: <i>Systems Under Evaluation (SUE) Analysis</i>			
<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>
LBRR SUE HW & Integration Support	TBD	Various Note:1:TBD	0.000	-		5.881	Oct 2012	-		-		-	0.000	5.881	0.000
NIE SUE HW & Integration Support	TBD	Various Note: 1:TBD	0.000	-		39.608	Oct 2012	-		-		-	0.000	39.608	0.000
<b>Subtotal</b>			0.000	0.000		45.489		0.000		0.000		0.000	0.000	45.489	0.000
<b>Remarks</b> Note: 1 - All funding executed form SoSI (Warren) - Program Activities performed at FT Bliss (TX), White Sands Missile Range (NM), Aberdeen Proving Ground (MD), TACOM (Warren MI) - Program Integration support through various PMs, PEOs, RDECOM, and a multitude of small support and industry contractors.															
			<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		45.489		0.000		0.000		0.000	0.000	45.489	0.000
<b>Remarks</b>															

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**Exhibit R-4, RDT&E Schedule Profile: 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 0604798A: *Brigade Analysis, Integration and Evaluation*

**PROJECT**

DU8: *Systems Under Evaluation (SUE) Analysis*

	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
NIE 13.2 Planning - Execution																												
NIE 13.2 Industry Day																												
NIE 13.2 Decision Point 1																												
NIE 13.2 Decision Point 2																												
NIE 13.2 Lab Integration / Testing																												
NIE 13.2 LoadEx / ValEx																												
NIE 13.2 CommEx (1 week)																												
NIE 13.2 Event																												
NIE 13.2 Event Analysis & Summary																												
NIE 14.1 Planning - Execution																												
NIE 14.1 Industry Day																												
NIE 14.1 Decision Point 1																												
NIE 14.1 Decision Point 2																												
NIE 14.1 Lab Integration / Testing																												
NIE 14.1 LoadEx / ValEx																												
NIE 14.1 CommEx (1 week)																												
NIE 14.1 Event																												
NIE 14.1 Event Analysis & Summary																												

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**Exhibit R-4A, RDT&E Schedule Details:** 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 0604798A: *Brigade Analysis, Integration and Evaluation*

## PROJECT

DU8: *Systems Under Evaluation (SUE) Analysis*

## Schedule Details

Events	Start		End	
	Quarter	Year	Quarter	Year
NIE 13.2 Planning - Execution	2	2012	3	2013
NIE 13.2 Industry Day	4	2012	4	2012
NIE 13.2 Decision Point 1	4	2012	4	2012
NIE 13.2 Decision Point 2	1	2013	1	2013
NIE 13.2 Lab Integration / Testing	1	2013	3	2013
NIE 13.2 LoadEx / ValEx	2	2013	3	2013
NIE 13.2 CommEx (1 week)	3	2013	3	2013
NIE 13.2 Event	3	2013	3	2013
NIE 13.2 Event Analysis & Summary	3	2013	3	2013
NIE 14.1 Planning - Execution	3	2012	1	2014
NIE 14.1 Industry Day	2	2013	2	2013
NIE 14.1 Decision Point 1	2	2013	2	2013
NIE 14.1 Decision Point 2	3	2013	3	2013
NIE 14.1 Lab Integration / Testing	3	2013	1	2014
NIE 14.1 LoadEx / ValEx	4	2013	4	2013
NIE 14.1 CommEx (1 week)	4	2013	4	2013
NIE 14.1 Event	1	2014	1	2014
NIE 14.1 Event Analysis & Summary	1	2014	1	2014



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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 0604798A: Brigade Analysis, Integration and Evaluation				PROJECT DU9: System Of Systems Engineering			
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
DU9: System Of Systems Engineering	-	0.000	10.109	0.000	-	0.000	0.000	0.000	0.000	0.000	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

This project (DU9) was created to support the Army's Brigade Analysis, Integration and Evaluation mission. The FY 2013 President Budget submission reflected Program Element (PE) 604798A broken down into three projects; DV1, DU8, and DU9. Beginning with the FY 2014 Presidents Budget submission this PE is now broken down into six projects to better align the funding with the progressive changes to the development and execution of both Network Integration Events (NIE) and Tactical Capability Set-Synchronized Fielding (CS-SF) missions. These projects are: DY3; NIE Test Evaluation, DY4; Network Integration Support, DY5; Production / Fielding Coordination for Capability Sets, DY6; Brigade and Platform Integration Support, DY7; Army System Engineering, Architecture & Architecture & Analysis, and DZ6; Army Integration Management & Coordination. Beginning in FY 2014 the activities within this project are divided among all of the new Projects as outlined above.

## A. Mission Description and Budget Item Justification

This project provides the Army's leadership and materiel developers with the necessary system of systems analysis defining engineering and architectural products to manage and shape the Army's materiel portfolio; to ensure Systems Engineering discipline across the Materiel developer community throughout the acquisition life cycle and grow the System Engineering capability within the Army through education, engineering policy, guidelines and adoption of best industry practices. Create an environment that empowers the Acquisition Community through an unsurpassed agile, collaborative, productive, lean and trusted information enterprise.

This project establishes the capability to develop & deliver the architecture products that facilitate analysis & trades and provide timely relevant information to inform decision makers and guide the Army's efforts. This project provides for the development and implementation of a comprehensive set of system architectures & analysis results that can shape the Army's priorities and processes, and ensures that the analysis & architecture development capability across ASA (ALT) is cohesive within the Agile process. It provides for the overarching view of the Army's Reference System Architecture requirements and organizational responsibility, it provides for single authority within ASA (ALT) for Reference System Architecture oversight to manage governance and approvals of emerging designs, it also ensures the linkage of architecture products to events, processes, and customer requirements. It further establishes Reference Architectures for all Key components of the Network Architecture and all Army formations, across time, that form the basis for representing and communicating the Army's programmed plan to Program Executive Officers / Program Managers (PEOs/PMs). It also enables trades and analyses that use these architecture data to support informed systems acquisition decisions across the life cycle. The data is organized in order to support views and analysis across organizational, portfolio, and budgeting bins.

In early 2012 the U.S. Army ASA(ALT) formally unveiled its Common Operating Environment (COE) Implementation Plan designed to help industry partners and Army program managers by offering an approved set of network standards, processes and products, designed to enable them to quickly and efficiently develop and

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APPROPRIATION/BUDGET ACTIVITY 2040: Research, Development, Test & Evaluation, Army BA 5: System Development & Demonstration (SDD)	R-1 ITEM NOMENCLATURE PE 0604798A: Brigade Analysis, Integration and Evaluation	PROJECT DU9: System Of Systems Engineering		
field interoperable software capabilities. The plan helps establishes and makes public Army Network technical standards, which any sized vendor can understand, internalize and build towards. This will help increase competition and help lower software and hardware integration burden and costs. The implementation plan is a living document that will remain flexible as the Army continues to evolve its network standards and fielding methods. The Army will continuously seek industry and service input as they transition to the COE. This project provides for technical support to oversee the execution of the COE Implementation plan, COE Orchestration, Verification and Validation (V&V), and Governance. It also provides for the development and execution of COE integration policies and procedures, the development and implementation of backwards capability testing, integration checklists and their verification, test hardware development and implementation support. Provides for COE architecture validation, design baseline validation, and the verification of COE reference architecture compliance. Provides for the accreditation, certification and refinement of test plans and events.				
B. Accomplishments/Planned Programs (\$ in Millions, Article Quantities in Each)		FY 2012	FY 2013	FY 2014
<b>Title:</b> Army Systems Engineering & (COE) Development/Validation to Provide Technical Support for the Execution of the Army System Engineering and Architecture in COE Implementation  <b>Articles:</b>  <b>Description:</b> To provide technical support for the execution of the Army's Systems Engineer Architecture for COE.  <b>FY 2013 Plans:</b> The funds provide: Technical support to oversee the execution of the COE Implementation plan, COE Orchestration, Governance, Cross-Cutting Capabilities Definition, Implementation Plan Updates, Software Build (SWB)/COE Configuration Control Board (CCB) and Test Support transition, Integrated Master Schedule, Government oversight of the Army's Strategic Software Improvement Program (ASSIP), Coordination with Army Staff, Technical Reference Model, Metrics for assessing compliance, Technical Advisory Board (TAB), Chief Engineer (CE) compliance, COE assessment criteria, Assess systems during the System Under Evaluation (SUE) Technical Interface Meeting (TIM), System software configuration baseline data collection, System software configuration baseline updates, Control Point/Interface Definition and Agreements, Afghan Mission Network, Ops/ Intel Convergence , Transport Convergence, Network Synchronization Working Group , Joint Interoperability & Mission Thread Architecture Office of Secretary Defense (OSD) Director Defense Research and Engineering (DDR&E), Integrated Base Defense, Basing and Basing Computing/Communications Analysis, Host Based Security System (HBSS), GNEC Implementation Plan, Radio Procurement Requests, Organizing & Synchronizing of the Architecture space, Establish Technical foundation for Army Network Architecture, Network Architecture Analysis for BCT formations, SoS Engineering Construct for the Network, Organizing the SoS Engineering trade space for Platforms, Standards for the Platforms (VICTORY & FACE), Size Weight and Power (SWAP) working group, Software Blocking (SW), NIE Gaps, Candidate Assessment for Upcoming NIE, and Technologies assessment, Systems Engineering Plan (SEP) policy, Program Protection Plan (PPP) reviews, Reliability policy technical support, Standards & Speciation adoption across ASA(ALT), (OSD/Joint), Development Planning model, IBD, Basing Pilot). It also provides for the development and execution of COE integration policies and procedures, the development and implementation of backwards capability testing, integration checklists and their verification, test hardware development and implementation support. The		0.000	10.109 0	0.000

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<b>Exhibit R-2A, RDT&amp;E Project Justification:</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 0604798A: <i>Brigade Analysis, Integration and Evaluation</i>	<b>PROJECT</b> DU9: <i>System Of Systems Engineering</i>
<b>B. Accomplishments/Planned Programs (\$ in Millions, Article Quantities in Each)</b>		<b>FY 2012</b>	<b>FY 2013</b>
development and effective utilization of emulator and integration tools. Provides for COE/CE architecture validation, design baseline validation, and the verification of COE reference architecture compliance. The verification of COE critical enabler implementation, conducting risk assessments and analysis, accreditation and certification process refinement, and verification of technical test harness and tool development. Provides for the accreditation, certification and refinement of test plans and events.			
<b>Accomplishments/Planned Programs Subtotals</b>		0.000	10.109
<b>C. Other Program Funding Summary (\$ in Millions)</b> N/A			
<b>Remarks</b>			
<b>D. Acquisition Strategy</b> Not applicable for this item.			
<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:</b> PB 2014 Army													<b>DATE:</b> April 2013		
<b>APPROPRIATION/BUDGET ACTIVITY</b> 2040: Research, Development, Test & Evaluation, Army BA 5: System Development & Demonstration (SDD)							<b>R-1 ITEM NOMENCLATURE</b> PE 0604798A: Brigade Analysis, Integration and Evaluation					<b>PROJECT</b> DU9: System Of Systems Engineering			
<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>
Architecture	TBD	ASA(ALT); Various Locations	0.000	-		2.054	Dec 2012	-		-		-	0.000	2.054	0.000
System Engineering and COE	TBD	ASA(ALT); Various Locations	0.000	-		8.055	Dec 2012	-		-		-	0.000	8.055	0.000
<b>Subtotal</b>			0.000	0.000		10.109		0.000		0.000		0.000	0.000	10.109	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		10.109		0.000		0.000		0.000	0.000	10.109	0.000
<b>Remarks</b>															

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<b>Exhibit R-4, RDT&amp;E Schedule Profile:</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 0604798A: <i>Brigade Analysis, Integration and Evaluation</i>										<b>PROJECT</b> DU9: <i>System Of Systems Engineering</i>									

  

	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
FY13 Execution of COE Mission																												
FY13 Execution of COE Implementation Plan																												
FY13 Fielding of COE Version 1.0																												

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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 0604798A: <i>Brigade Analysis, Integration and Evaluation</i>	<b>PROJECT</b> DU9: <i>System Of Systems Engineering</i>	

Schedule Details

Events	Start		End	
	Quarter	Year	Quarter	Year
FY13 Execution of COE Mission	1	2013	4	2013
FY13 Execution of COE Implementation Plan	1	2013	3	2013
FY13 Fielding of COE Version 1.0	4	2013	4	2013

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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 0604798A: Brigade Analysis, Integration and Evaluation				PROJECT DV1: BCT Equipping Integration And Experimentation			
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
DV1: BCT Equipping Integration And Experimentation	-	0.000	158.672	0.000	-	0.000	0.000	0.000	0.000	0.000	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**

This project (DV1) was created to support the Army's Brigade Analysis, Integration and Evaluation mission. The Program Element 604798A is broken into three projects; Project DV1, includes all System of Systems Integration (SoSI) management effort and associated integrated support required to build the Brigade Network, integrate these capabilities on a brigade's tactical vehicles, and then evaluate the operational effectiveness of this brigade. Project DU8 provides funding for industry and government Systems Under Evaluation (SUEs) to bring new technologies to integrate into the brigade. Project DU9 funds the Army's development of the Division and Brigade architecture and standards to enable integration, commonality and compatibility. Project DV1's, R2a Exhibit "Accomplishments/Planned Program" has been restructured to better represent the activities required for network integration, platform integration, brigade integration, brigade evaluation, and eventual production and fielding.

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

This project includes government and contractor efforts to integrate and validate that the Army is fielding platforms, components and software that are integrated together to provide increased capabilities for the soldier that are supportable and trainable. This project includes efforts associated with designing the Army's integrated network and associated architecture, developing the infrastructure and test plans, conducting the integration and risk reduction activities, evaluating the potential solutions, and determining the final solution set for the next Capability Package. It includes all integration and test/evaluations efforts for the Network Integration Evaluation (NIE)s 13.2 and 14.1 events, which includes Lab Based Risk Reduction (LBRR), Network Integration , Software loading exercises and checkout (LOADEX), comprehensive communication exercises (COMMEX), culminating in the Army's and Network Integration Evaluation (NIE). The specific evaluation requirements for these NIEs will be derived from the gaps identified by the users in the Afghanistan Theater and the lessons learned from previous NIEs.

The Agile Process consists of the following phases which are coordinated and executed by the System of Systems Integration Directorate, Brigade Modernization Command (BMC and Army Test and Evaluation Command (ATEC). In Phase 0 Training and Doctrine Command (TRADOC) will define near-term gaps in current operational capabilities using existing Operational Needs Statements and relevant assessments from ongoing and past analyses. This analysis will be the bases for requirement sets for future Capability Packages. Network test and evaluation will focus on improving and integrating emerging and existing technologies to minimize existing operational gaps. During Phase I the System of System Integration Directorate solicits potential solutions from existing Army programs, tech base programs, and industry. Also during this phase SoSI, obtains buy-in from stakeholders, funding and support, establishes initial objectives, solidifies architecture objectives, and establishes the viable candidate list for Network Integration Evaluation. During Phase II, SoSI compiles the list of potential solutions that could meet the identified gaps and begins to develop the integration and testing concepts for the next capability package. Phase III includes the coordinated efforts between BMC, ATEC and SoSI

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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 0604798A: Brigade Analysis, Integration and Evaluation	PROJECT DV1: BCT Equipping Integration And Experimentation		
to finalize the brigade architecture, integration and test plans, training materials and combat mission evaluations. Phase III also includes the initial integration phase where industry and DOD network hardware and software are integrated and initially evaluated for follow-on consideration at a government integration and test facility at Aberdeen Proving Ground (APG). The results of this initial evaluation will determine which industry and DOD SUEs will continue in the NIE process. It also develops the initial Network configuration that will be used in the Phase V NIE. During Phase IV, SoSI details plans and executes the integration of all hardware and software into the brigade network. The integration is validated and verified through the NIE process. And in Phase V, SoSI executes the in-depth Network Integration Evaluation (NIE). The results of the NIE will address and answer senior Army leadership's questions about force makeup and effectiveness and provides Army leadership recommendations for improving operational requirements and enhancing technical specifications. As a result of Phase V, during Phase VI , the Army will determine which systems to procure and field to improve the Army's Network.					
This project includes the following government efforts: System of system architecture and design standards for the NIE, BCT Integration to support the NIE (hardware and software), A Kit development and fabrication to support Network Integration on to platforms, integration of program of record, and non-program of record equipment and systems (both hardware and software) into a single synchronized network, Brigade Combat Team (BCT) simulation to determine solution sets to potentially fill gaps, BCT experimentation and testing to validate and verify the increased capability for the soldier, BCT Synchronized Fielding (logistics and training). Based on feedback from integration and testing, provides input and changes to both operational requirements and technical specification for improved operational capabilities. This project includes support to other DOD agencies for joint programs and collaboration efforts with SoSI and Capability Package portfolio integration. The government effort includes cost for salaries, travel, overtime, training, supplies, facilities, and IT support.					
FY 2014 will continue the NIE gaps and evaluation process. For example, during NIE 12.2 there were 3 SUTs and 41 SUEs to be evaluated against one of the Army's five NIE 12.2 gaps. The NIE 12.2 gaps were: (1) Multichannel Radio, (2) Low-Cost-Low-SWaP Tactical Cross Domain Solution, (3) Small Form Factor, Modular Transit Case Based Company Command Post, (4) Improved Operational Energy, and (5) Tactical Router. Out of the 96 Systems Under Evaluation (SUE) candidates that responded to the solicitation for NIE 13.1, the number of systems being evaluated is 5 Systems Under Test (SUTs) and 24 SUEs. These systems will be evaluated against one of the Army's nine gaps identified for NIE 13.1. The NIE 13.1 gaps are: (1) Multi-Channel Tactical Radio, (2) Mission Command on the Move (MCOTM), (3) Low-Cost-Low-Size Weight and Power (SWaP) Tactical Cross Domain Solution, (4) Joint Participation Capability (US & Allies), (5) Aviation Extension, (6) Tactical Command Post, (7) Mission Command In-Garrison Training, (8) Improved Operational Energy, and (9) Integrate Capability Set configuration items into heavy platforms. The NIE 13.2 gaps are: (1) Commander's Applications for Mobile and Handheld Platforms, (2) Brigade S6 Staff Element Working Group, (3) Command Post Collaboration and Visualization, (4) Company Information Architecture, (5) Network Operations Visualized in the COP, (6) Aerial Layer Network - Air Ground Integration, (7) Cyber Electromagnetic (CEM) Staff Element, and (8) Integrated Employment of LandWarNet					
B. Accomplishments/Planned Programs (\$ in Millions, Article Quantities in Each)			FY 2012	FY 2013	FY 2014
Title: Test Experimentation			0.000	58.885	0.000
Articles:				0	
Description: Funding is provided for the following effort:					
FY 2013 Plans:					
Plan and conduct detailed experiments, tests and evaluations of potential Network, Software and Hardware systems for					



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<b>Exhibit R-2A, RDT&amp;E Project Justification:</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 0604798A: <i>Brigade Analysis, Integration and Evaluation</i>		<b>PROJECT</b> DV1: <i>BCT Equipping Integration And Experimentation</i>	
<b>B. Accomplishments/Planned Programs (\$ in Millions, Article Quantities in Each)</b>			<b>FY 2012</b>	<b>FY 2013</b>	<b>FY 2014</b>
procurement and integration into the Army's Warfighter system. Complete test planning, coordination of requirements, assets planning, range planning and soldier planning. Conduct test planning and management which includes, conduct coordination of requirements with Army Evaluation Command (AEC), Operational Test Center (OTC), and Developmental Test Command (DTC). This coordination includes; development and procurement of modeling and simulation tools, instrumentation for data collection, facilities required to store and maintain equipment, facilities required to integrate capabilities, other test equipment, REDFORCE systems. Conduct experimentation, tests, and evaluation by coordinating and procuring range resources to include range time, range personnel, test engineering support, operators and subject matter experts on systems under evaluation. Includes costs of management of the test/experiment and support all demonstrations experiments and tests. Includes costs for distributed networking capability (i.e. DREN, I/O Range, circuits, etc) and other electronic infrastructure data transfer medias between APG, EPG, FT Bliss and White Sands Missile Range. Conduct coordination with AEC on the development of System Evaluation Plans (SEP) and Operational Milestone Assessment Reports (OMAR) and maintain all data bases of evaluation analysis.					
<b>Title:</b> Integration Efforts: System of Systems Integration Directorate (SoSI)  <b>Articles:</b>  <b>Description:</b> Provides for SoSI staff and facilities that supports the following three main operations: Capability Package Future: planning for future NIE events. Capability Package Current: planning and execution of current NIE events. Headquarters management and oversight of the complete Agile process.  <b>FY 2013 Plans:</b> Conduct planning with government and contract personnel to develop the overarching plans for Network Integration Evaluation (NIE). Complete Capability Package (CP) development which includes; defining what is affordable and defining what can be realistically accomplished within the Network Integration Evaluation (NIE) window. Conduct requirements traces across the NIE portfolio by conducting current requirements analysis, identifying gaps and overlaps, and identifying solution sets. Conduct Network Analysis for NIE by completing initial and high level fidelity reviews. In support of the NIE; conduct sources sought procedures, Request for Proposal (RFP), complete evaluation of submissions, plan vignettes, complete architecture analysis, develop and publish what systems will participate in NIE as either a System Under Test (SUT) or a System Under Evaluation (SUE) and define what the Tech Base capabilities will be will also be included in the evaluation. Conduct data and configuration management. Conduct vehicle integration and Size, Weight, and Power (SWaP) analysis in support of NIE. Complete development of standardization of hardware and software to optimize integration and interoperability. Develop Network Operations (NETOPS) by defining communications settings, interfaces, and configuration which includes; Traffic Engineering (Shared Networks) for Software Services & Communications in order to maximize the use of bandwidth. Develop and manage an Integrated Master Schedule (IMS). Develop budget and manage budget execution. Develop Knowledge Management plans and procedures in to the NIE. Conduct security planning and technology services. Conduct logistics development and planning			0.000	66.223 0	0.000

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<b>Exhibit R-2A, RDT&amp;E Project Justification:</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 0604798A: <i>Brigade Analysis, Integration and Evaluation</i>		<b>PROJECT</b> DV1: <i>BCT Equipping Integration And Experimentation</i>	
<b>B. Accomplishments/Planned Programs (\$ in Millions, Article Quantities in Each)</b>			<b>FY 2012</b>	<b>FY 2013</b>	<b>FY 2014</b>
<p>in support of the NIE. Coordinate with ASAALT as they assign PMs to be Non-Program of Record (POR) SUE sponsors and as they determine which POR/SUEs are in each NIE. Conduct daily operations and the execution of the NIE plan by; maintaining a daily battle rhythm, synchronized calendar, conducting operational meetings, developing and submitting reports, tracking and maintaining accountability of all assets and the operational scheduling of assets and personnel. Develop brigade level architecture from the top level plan provided by CP Future which includes; the development of detailed network designs for the Systems Under Test and Systems Under Evaluation which are assigned to the maneuver brigades during the Network Integration Evaluation, conduct detailed planning and development of the architecture and vignettes, and information assurance. Establish metrics and measures across the SUTs/SUEs, and identify and implement tools, data points and data collection measures for the NIE. Complete analysis and assessment of integrated experimental systems to determine optimal brigade configuration and best solutions to fill the known requirements gaps. Conduct Information Assurance (IA) which includes; plan/execute C4ISR/vehicle/platform integration, system checkout, and the coordination of system support between training and logistics assets. Coordinate Contractor Field Support Representatives (CFSRs) and Government Subject Matter Experts (GSME), to integrate hardware and software in support of the NIE events. Conducted infrastructure and facilities management which includes; establish/maintain &amp; track communications during NIE within a 7,600 square mile footprint, maintain IT and equipment support within buildings disbursed over 7,600 square miles. Setup and maintain security access for over an estimated 7,000 soldiers, government, contracted and industry personnel during the NIE. Conduct international, integration and interoperability procedures. Conduct Information Assurance (AI), accreditation and certification which includes; test but verify, coordinating for DAA approvals, and all technology services. Conduct After Action Review (AAR) to provide Army leadership recommendation for improving operational requirements and enhancing technical specifications. Conduct command and control and staff support for the complete agile process to include: Program Management, Administrative, Tech Services, IT, Graphics, Defense Travel System (DTS) support, Facilities Execution, Knowledge Management Execution, Security Execution, Business Management, and Acquisition Management. Develop and support budget submittals and all program inquiries. Conduct personnel management support for the SoSI. Coordinate all higher headquarters, congressional, and media inquiries, questions and audits.</p>					
<p><b>Title:</b> Architecture Development and System Engineering</p> <p align="right"><b>Articles:</b></p> <p><b>Description:</b> Funding is provided for the following effort: Provides government and contractor support staff to System of Systems Integration Director (SoSI) to support their technological specialty in completing the Agile Process, NIE Architecture, NIE System Engineering, and NIE Systems Integration.</p> <p><b>FY 2013 Plans:</b> Subject Matter Expertise from other Army PEOs and PMs that support SoSI in conducting the following: Assists in developing and defining what is affordable and can be realistically accomplished within the integration and test NIE window to support future Capability Sets. Conduct requirements traces across the various Brigade Combat Team (BCT) portfolios by conducting</p>			0.000	15.604 0	0.000

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<b>Exhibit R-2A, RDT&amp;E Project Justification:</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 0604798A: <i>Brigade Analysis, Integration and Evaluation</i>		<b>PROJECT</b> DV1: <i>BCT Equipping Integration And Experimentation</i>	
<b>B. Accomplishments/Planned Programs (\$ in Millions, Article Quantities in Each)</b>			<b>FY 2012</b>	<b>FY 2013</b>	<b>FY 2014</b>
current requirements analysis, identifying gaps and overlaps, and identifying solution sets. In support of the Agile processes, participate in sources sought procedures, completing evaluation of submissions, planning vignettes, and completing architecture analysis. Assists in the development of the Network Operations (NETOPS) by defining communications settings, interfaces, and configuration which includes; Traffic Engineering (Shared Networks) for Software Services & Communications in order to maximize the use of bandwidth. Support Information Assurance (IA) coordination. Participates in System Under Test/System Under Evaluation (SUT/SUE) network integration assessments and analysis for NIE. Support the development of the brigade level network architecture for the NIE events. Support the detailed planning of the architecture and vignettes, and information assurance plan. Support the establishment of metrics and measures across the SUTs/SUEs, and identify and implement tools, data points and data collection measures for the NIE. Assist in integrating hardware and software from different systems into existing platforms. Support the development of test tools and instrumentation to support data analysis, Army force structure and recommendations. Support Information Assurance which includes; plan/execute, Command, Control, Communications, Computers, Intelligence, Surveillance and Reconnaissance, (C4ISR)/vehicle/platform integration, system checkout, and the coordination of system support between training and logistics assets. Coordinate Contractor Field Support Representatives (CFSRs) and Government Subject Matter Experts (GSME), to integrate hardware and software in support of the NIE events. Conduct Information Assurance accreditation and certification which includes; test but verify, coordinating for Designated Approving Authority (DAA) approvals, and all technology services. Apply lessons learned from the previous test cycle to improve tools, processes and procedures, while informing the Requirements, Budgeting and Acquisition processes.					
<b>Title:</b> NIE Infrastructure  <b>Description:</b> Provides for Infrastructure, (facilities, Information Technology (IT) support, computers, Black Berries, program IA, etc.) at all SOSI locations.  <b>FY 2013 Plans:</b> Provides for setup, utilities, furniture, equipment and maintenance, of all facilities at Fort Bliss TX, (FTBX), White Sands Missile Range NM (WSMR) , Warren MI, Aberdeen Proving Ground, MD (APG), and Washington Capital Region. Includes lease and support maintenance of Government Service Administration (GSA)/Government Furnished Equipment (GFX) vehicles that support the /NIE mission at FTBX/WSMR Purchase or lease, integrate, and maintain telecommunications, routers, network management software, blackberries and PDAs, computers, Antennas, display screens, radios, and associated mounting hardware and cables to support NIE mission. Purchases and integrates computer software to support scheduling, Agile Request For Information (RFI) selection and evaluation process, budget process, integration analysis, modeling and simulation, network analysis, data collection, and analyzing test results. Includes costs of facilities required to store/maintain/integrate capabilities on to military platforms.			0.000	17.960 0	0.000
<b>Accomplishments/Planned Programs Subtotals</b>			0.000	158.672	0.000

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<b>Exhibit R-2A, RDT&amp;E Project Justification:</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 0604798A: <i>Brigade Analysis, Integration and Evaluation</i>	<b>PROJECT</b> DV1: <i>BCT Equipping Integration And Experimentation</i>
<b>C. Other Program Funding Summary (\$ in Millions)</b> N/A		
<b>Remarks</b>		
<b>D. Acquisition Strategy</b> During the planning of NIE 13.2 the government will focus on identifying and evaluating systems against the Army's known gaps and will utilize a Sources Sought solicitation to invite industry's participation in each NIE, which results in industry's participation at No Cost to the government. For FY13 and out the government will use one of two acquisition strategies; First the government will issue a sources sought request to fill the known gaps (utilizing current practices), or the government will use either an existing government contract or a Request for Proposal (RFP) as the means of solicitation for industry's participation in the NIE, the RFP and contracts this will include a participant's production option.		
<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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Exhibit R-3, RDT&E Project Cost Analysis: 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 0604798A: Brigade Analysis, Integration and Evaluation				PROJECT DV1: BCT Equipping Integration And Experimentation					
Product Development (\$ in Millions)				FY 2012		FY 2013		FY 2014 Base		FY 2014 OCO		FY 2014 Total			
Cost Category Item	Contract Method & Type	Performing Activity & Location	All Prior Years	Cost	Award Date	Cost	Award Date	Cost	Award Date	Cost	Award Date	Cost	Cost To Complete	Total Cost	Target Value of Contract
Network Design, Arch	TBD	Various Note:1:TBD	0.000	-		9.703	Oct 2012	-		-		-	0.000	9.703	0.000
Network Integration	TBD	Various Note: 1:TBD	0.000	-		19.224	Oct 2012	-		-		-	0.000	19.224	0.000
Platform/BDE Integration	TBD	Various Note: 1:TBD	0.000	-		61.207	Oct 2012	-		-		-	0.000	61.207	0.000
Prod Coord and SYNC Fielding	TBD	Various Note: 1:TBD	0.000	-		7.663	Oct 2012	-		-		-	0.000	7.663	0.000
SoSI SPM and Integration	TBD	Various Note:1:TBD	0.000	-		19.341	Oct 2012	-		-		-	0.000	19.341	0.000
Subtotal			0.000	0.000		117.138		0.000		0.000		0.000	0.000	117.138	0.000
Remarks Note:1 - All funding executed from SoSI (Warren MI) - Program Activities performed at Ft Bliss (TX), White Sands Missile Range (NM), Aberdeen Proving Ground (MD), TACOM (Warren MI) - Program Integration support through various PMs, PEOs, RDECOM, and a multitude of small support and industry contractors.															
Support (\$ in Millions)				FY 2012		FY 2013		FY 2014 Base		FY 2014 OCO		FY 2014 Total			
Cost Category Item	Contract Method & Type	Performing Activity & Location	All Prior Years	Cost	Award Date	Cost	Award Date	Cost	Award Date	Cost	Award Date	Cost	Cost To Complete	Total Cost	Target Value of Contract
Infrastructure Support	Allot	Various Note: 1:TBD	0.000	-		6.904	Oct 2012	-		-		-	0.000	6.904	0.000
Subtotal			0.000	0.000		6.904		0.000		0.000		0.000	0.000	6.904	0.000
Remarks Note:1 - All funding executed from SoSI (Warren MI) - Program Activities performed at Ft Bliss (TX), White Sands Missile Range (NM), Aberdeen Proving Ground (MD), TACOM (Warren MI)															
Test and Evaluation (\$ in Millions)				FY 2012		FY 2013		FY 2014 Base		FY 2014 OCO		FY 2014 Total			
Cost Category Item	Contract Method & Type	Performing Activity & Location	All Prior Years	Cost	Award Date	Cost	Award Date	Cost	Award Date	Cost	Award Date	Cost	Cost To Complete	Total Cost	Target Value of Contract
Test Event/Optempo	TBD	Various Note:1:TBD	0.000	-		34.630	Oct 2012	-		-		-	0.000	34.630	0.000
Subtotal			0.000	0.000		34.630		0.000		0.000		0.000	0.000	34.630	0.000

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PE 0604798A: *Brigade Analysis, Integration and Evaluation*  
Army

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<b>Exhibit R-4, RDT&amp;E Schedule Profile: 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 0604798A: <i>Brigade Analysis, Integration and Evaluation</i>		
			<b>PROJECT</b> DV1: <i>BCT Equipping Integration And Experimentation</i>		

	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
NIE 13.2 Planning - Execution																												
NIE 13.2 Industry Day																												
NIE 13.2 Decision Point 1																												
NIE 13.2 Decision Point 2																												
NIE 13.2 Lab Integration / Testing																												
NIE 13.2 LoadEx / ValEx																												
NIE 13.2 CommEx (1 week)																												
NIE 13.2 Event																												
NIE 13.2 Event Analysis & Summary																												
NIE 14.1 Planning - Execution																												
NIE 14.1 Industry Day																												
NIE 14.1 Decision Point 1																												
NIE 14.1 Decision Point 2																												
NIE 14.1 Lab Integration / Testing																												
NIE 14.1 LoadEx / ValEx																												
NIE 14.1 CommEx (1 week)																												
NIE 14.1 Event																												
NIE 14.1 Event Analysis & Summary																												
CS13 Architecture Design																												
CS 13 Build & Integration																												
CS 13 New Equipment Training (Upto 7 BDEs)																												
CS 13 New Equipment Fielding (Upto 7 BDEs)																												

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**Exhibit R-4A, RDT&E Schedule Details:** 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 0604798A: *Brigade Analysis, Integration and Evaluation*

## PROJECT

DV1: *BCT Equipping Integration And Experimentation*

## Schedule Details

Events	Start		End	
	Quarter	Year	Quarter	Year
NIE 13.2 Planning - Execution	2	2012	3	2013
NIE 13.2 Industry Day	4	2012	4	2012
NIE 13.2 Decision Point 1	4	2012	4	2012
NIE 13.2 Decision Point 2	1	2013	1	2013
NIE 13.2 Lab Integration / Testing	1	2013	3	2013
NIE 13.2 LoadEx / ValEx	2	2013	3	2013
NIE 13.2 CommEx (1 week)	3	2013	3	2013
NIE 13.2 Event	3	2013	3	2013
NIE 13.2 Event Analysis & Summary	3	2013	3	2013
NIE 14.1 Planning - Execution	3	2012	1	2014
NIE 14.1 Industry Day	2	2013	2	2013
NIE 14.1 Decision Point 1	2	2013	2	2013
NIE 14.1 Decision Point 2	3	2013	3	2013
NIE 14.1 Lab Integration / Testing	3	2013	1	2014
NIE 14.1 LoadEx / ValEx	4	2013	4	2013
NIE 14.1 CommEx (1 week)	4	2013	4	2013
NIE 14.1 Event	1	2014	1	2014
NIE 14.1 Event Analysis & Summary	1	2014	1	2014
CS13 Architecture Design	3	2012	4	2012
CS 13 Build & Integration	4	2012	4	2013
CS 13 New Equipment Training (Upto 7 BDEs)	1	2013	4	2014
CS 13 New Equipment Fielding (Upto 7 BDEs)	1	2013	4	2014



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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 0604798A: Brigade Analysis, Integration and Evaluation				PROJECT DY3: NIE Test & Evaluation			
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
DY3: NIE Test & Evaluation	-	0.000	0.000	29.697	-	29.697	33.947	33.768	33.795	33.773	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

This project (DY3) was created to support the Army's Brigade Analysis, Integration and Evaluation mission. The FY 2013 President Budget submission reflects Program Element (PE) 604798A broken down into three projects; DV1, DU8, and DU9. Beginning with FY 2014 Presidents Budget submission this PE is now broken down into six projects to better align the funding with the development and execution of both Network Integration Events (NIE) and Tactical Capability Set-Synchronized Fielding (TCS-SF) missions. These projects are: DY3; NIE Test Evaluation, DY4; Network Integration Support, DY5; Production /Fielding Coordination for Capability Sets, DY6; Brigade and Platform Integration Support, DY7; Army System Engineering, Architecture & Architecture & Analysis, and DZ6; Army Integration Management & Coordination. Beginning in FY 2014 the activities within this project is divided among all of the new Projects as outlined above.

## A. Mission Description and Budget Item Justification

This project supports test and evaluation portion of Phase V of the Army's Agile Network Integration process. The project will conduct the actual Network Integration Evaluation at White Sands Missile Range, NM which evaluates the integrated soldier and weapon systems operational impact on the brigade. The results of Phase V will address and answer senior Army leadership's questions about force makeup and effectiveness and provides Army leadership recommendations for improving operational requirements and enhancing technical specifications. The Army leadership will then determine which systems to procure and field in future Tactical Capability Sets to improve the Army's Network and Brigade Capability. This project includes government and contractor efforts to develop detailed test scenarios and evaluation criteria for field based evaluations of the Brigade Combat Team, and then conduct the evaluations and verifications of the Brigade as part of that NIE. As part of the test process, this project includes the development of the data collection plan, the instrumentation of the systems in the Brigade, and also the data collectors and analysis of the test results. This project also includes the development and distribution of the detailed, technical evaluation reports which provides the ability to identify which equipment; needs further development, is ready for NIE participation, or is ready for integration into a future Tactical Capability Set. Lastly, this project includes all the costs for supporting the test, such as, but not limited to; SATCOM satellite time, MEDEVAC support during test, Helicopter blade time, POL and other test support materials, equipment, personnel and facilities.

FY 2014 will continue the NIE gap and evaluation process for NIE 14.2 and NIE 15.1. For example, out of the 106 SUE candidates that responded to the solicitation for NIE 13.1, 7 SUTs and 25 SUEs were evaluated. These systems were evaluated against one of the Army's nine gaps identified for NIE 13.1 For NIE 13.2: against 11 gaps, 4 SUTs and 5 SUEs were selected for field evaluation and 4 SUEs were selected for Lab Base evaluation only. For NIE 14.1: 30 SUEs were submitted against the following 19 Gaps: (1) Brigade/Battalion Command Post (CP) Mobility and Scalability, (2) CDR Applications for Mobile/Handhelds (HH), (3) Network Visualization on the Common Operational Picture (COP), (4) Integrated LandWarNet, Installation Networks & Training Resources, (5) Aerial Layer Network Extension, (6) Air-Ground Network Architecture, (7) Enterprise Network Capabilities (e-mail), (8) Integrated Network Assurance - Network Access Control (NAC), (9) Integrated Network

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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 0604798A: Brigade Analysis, Integration and Evaluation	PROJECT DY3: NIE Test & Evaluation		
Assurance - Network Intrusion Prevention System, (10) Integrated Network Assurance - Information Assurance Vulnerability Mgmt, (11) Integrated Network Assurance - Security Information Management System, (12) Host Based Security System, (13) Integrated Trouble Ticketing, (14) Unified Communications Capability, (15) Evaluate instrumented Home Station Small Unit Training to include AARs, (16) Operational Energy - Commonality of Soldier Carried Energy Sources, (17) Operational Energy - Energy Sources with Extended Duration and Power, (18) Operational Energy - Monitor and Manage System Power, supply and Demand, and (19) Operational Energy - Reduce Reliance on Petroleum Based Energy.				
B. Accomplishments/Planned Programs (\$ in Millions)		FY 2012	FY 2013	FY 2014
Title: NIE ATEC Test and Evaluation Costs		0.000	0.000	22.011
Description: ATEC's budget requirements to plan and conduct detailed experiments, tests and evaluations of potential Network, Software and Hardware systems for procurement and integration into the Army's Warfighter system.				
FY 2014 Plans: Complete test planning, coordination of requirements, assets planning, range planning and soldier planning. Conduct test planning and management which includes, conduct coordination of requirements with Army Evaluation Command (AEC), Operational Test Center (OTC), Electronic Command Center (ECC), Developmental Test Command-White Sands Missile Range, (DTC-WSMR). This coordination includes; development and procurement of modeling and simulation tools, instrumentation for data collection, facilities required to store and maintain equipment, facilities required to integrate capabilities, other test equipment, and REDFORCE systems. Conduct experimentation, tests, and evaluation by coordinating and procuring range resources to include range time, range personnel, test engineering support, operators and subject matter experts on systems under evaluation. Includes costs of management of the test/experiment and support all demonstrations experiments and tests. Includes costs for distributed networking capability (i.e. Defense Research Engineering (DREN), I/O Range, circuits, etc) and other electronic infrastructure data transfer medias between Aberdeen Proving Grounds (APG), Electronic Proving Grounds (EPG), FT Bliss and White Sands Missile Range. Conduct coordination with AEC on the development of System Evaluation Plans (SEP) and Operational Milestone Assessment Reports (OMAR) and maintain all data bases of evaluation analysis.				
Title: Non ATEC Support Cost		0.000	0.000	7.686
Description: Non ATEC support required for NIE Event.				
FY 2014 Plans: Procure and manage satellite time, POL, security support, facilities, MEDEVAC support, blade time for helicopters, and others services, equipment and maintenance of facilities to ensure a successful evaluation/test.				
Accomplishments/Planned Programs Subtotals		0.000	0.000	29.697

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<b>Exhibit R-2A, RDT&amp;E Project Justification:</b> PB 2014 Army										<b>DATE:</b> April 2013	
<b>APPROPRIATION/BUDGET ACTIVITY</b> 2040: Research, Development, Test & Evaluation, Army BA 5: System Development & Demonstration (SDD)				<b>R-1 ITEM NOMENCLATURE</b> PE 0604798A: Brigade Analysis, Integration and Evaluation				<b>PROJECT</b> DY3: NIE Test & Evaluation			
<b>C. Other Program Funding Summary (\$ in Millions)</b>											
<b>Line Item</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>FY 2015</b>	<b>FY 2016</b>	<b>FY 2017</b>	<b>FY 2018</b>	<b>Cost To Complete</b>	<b>Total Cost</b>
• DY4: DY4 Network Integration Support			25.863		25.863	20.830	20.788	20.777	20.773	Continuing	Continuing
• DY5: DY5 Production/Fielding Coordination for Capability Sets			7.829		7.829	8.949	8.902	8.909	8.904	Continuing	Continuing
• DY6: DY6 Brigade and Platform Integration Support			97.790		97.790	106.813	106.724	106.326	106.344	Continuing	Continuing
• DY7: DY7 Army Systems Engineering, Architecture and Analysis			18.929		18.929	20.029	19.986	19.943	19.941	Continuing	Continuing
• DZ6: DZ6 Army Integration & Coordination Management			13.640		13.640	14.432	14.402	14.370	14.369	Continuing	Continuing
<b>Remarks</b>											
<b>D. Acquisition Strategy</b>											
This project includes Army Test Evaluation Center competitive contracts for test support services. Additional competitive contracts are awarded by Defense Information Systems Agency (DISA) for satellite support.											
<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:</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 0604798A: <i>Brigade Analysis, Integration and Evaluation</i>					<b>PROJECT</b> DY3: <i>NIE Test &amp; Evaluation</i>			

  

<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>
Non ATEC Support Costs	TBD	Various Note:1:TBD	0.000	-		-		7.686	Nov 2013	-		7.686	0.000	7.686	0.000
<b>Subtotal</b>			0.000	0.000		0.000		7.686		0.000		7.686	0.000	7.686	0.000

**Remarks**  
 Note: 1  
 - All funding executed from SoSE&I (Warren MI)  
 - Program Activities performed, Aberdeen Proving Grounds (MD), FT Bliss (TX), White Sands Missile Range (NM).  
 - Includes support services from DISA (for satellite time) and other governments agencies

  

<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>
NIE ATEC Test and Evaluation Costs	TBD	Various Note:1:TBD	0.000	-		-		22.011	Nov 2013	-		22.011	0.000	22.011	0.000
<b>Subtotal</b>			0.000	0.000		0.000		22.011		0.000		22.011	0.000	22.011	0.000

**Remarks**  
 Note: 1  
 - All funding executed from SoSE&I (Warren MI)  
 - Program Activities performed at Aberdeen Proving Ground (MD), Electronic Proving Grounds (AZ), FT Bliss (TX), White Sands Missile Range (NM).  
 - Program Test support through ATEC

  

	<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	0.000	29.697	0.000	29.697	0.000	29.697	0.000

**Remarks**

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<b>Exhibit R-4, RDT&amp;E Schedule Profile: 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 0604798A: <i>Brigade Analysis, Integration and Evaluation</i>		
			<b>PROJECT</b> DY3: <i>NIE Test &amp; Evaluation</i>		

	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
NIE 14.2 Planning - Execution																												
NIE 14.2 Industry Day																												
NIE 14.2 DP 1																												
NIE 14.2 DP 2																												
NIE 14.2 Lab Integration/Testing																												
NIE 14.2 Candidate Solution Integration																												
NIE 14.2 LoadEx																												
NIE 14.2 CommEx																												
NIE 14.2 Pilot																												
NIE 14.2 Event																												
NIE 14.2 Event Analysis & Summary																												
NIE 15.1 Planning - Execution																												
NIE 15.1 Industry Day																												
NIE 15.1 DP 1																												
NIE 15.1 DP 2																												
NIE 15.1 Lab Integration/Testing																												
NIE 15.1 Candidate Solution Integration																												
NIE 15.1 LoadEx																												
NIE 15.1 CommEx																												

# UNCLASSIFIED

**Exhibit R-4A, RDT&E Schedule Details:** 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 0604798A: *Brigade Analysis, Integration and Evaluation*

## PROJECT

DY3: *NIE Test & Evaluation*

## Schedule Details

Events	Start		End	
	Quarter	Year	Quarter	Year
NIE 14.2 Planning - Execution	2	2013	2	2013
NIE 14.2 Industry Day	3	2013	3	2013
NIE 14.2 DP 1	4	2013	4	2013
NIE 14.2 DP 2	1	2014	1	2014
NIE 14.2 Lab Integration/Testing	1	2014	3	2014
NIE 14.2 Candidate Solution Integration	2	2014	2	2014
NIE 14.2 LoadEx	2	2014	3	2014
NIE 14.2 CommEx	3	2014	3	2014
NIE 14.2 Pilot	3	2014	3	2014
NIE 14.2 Event	3	2014	3	2014
NIE 14.2 Event Analysis & Summary	3	2014	3	2014
NIE 15.1 Planning - Execution	3	2013	1	2014
NIE 15.1 Industry Day	1	2014	1	2014
NIE 15.1 DP 1	2	2014	2	2014
NIE 15.1 DP 2	3	2014	3	2014
NIE 15.1 Lab Integration/Testing	3	2014	1	2015
NIE 15.1 Candidate Solution Integration	3	2014	4	2014
NIE 15.1 LoadEx	4	2014	4	2014
NIE 15.1 CommEx	4	2014	1	2015

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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 0604798A: Brigade Analysis, Integration and Evaluation				PROJECT DY4: Network Integration Support			
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
DY4: Network Integration Support	-	0.000	0.000	25.863	-	25.863	20.830	20.788	20.777	20.773	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

This project (DY4) was created to support the Army's Brigade Analysis, Integration and Evaluation mission. The FY 2013 President Budget submission reflects Program Element (PE) 604798A broken down into three projects; DV1, DU8, and DU9. Beginning with FY 2014 Presidents Budget submission this PE is now broken down into six projects to better align the funding with the development and execution of both Network Integration Events (NIE) and Tactical Capability Set-Synchronized Fielding (TCS-SF) missions. These projects are: DY3; NIE Test Evaluation, DY4; Network Integration Support, DY5; Production /Fielding Coordination for Capability Sets, DY6; Brigade and Platform Integration Support, DY7; Army System Engineering, Architecture & Architecture & Analysis, and DZ6; Army Integration Management & Coordination. Beginning in FY 2014 the activities within this project is divided among all of the new Projects as outlined above.

## A. Mission Description and Budget Item Justification

This project supports Phases I through IV of the Army's Agile process. Phase I solicits potential solutions from existing Army programs, tech base programs, and industry. It establishes initial objectives, solidifies the architecture baseline and will establish a viable candidate list for Network Integration Evaluation (NIE). During Phase II, the project supports the compilations of potential solutions that could meet the US Army Training and Doctrine Command (TRADOC) identified gaps and begins to develop the integration and testing concepts for the NIE. Phase III includes the coordinated efforts between System of Systems Integration (SOSI), Brigade Modernization Command (BMC) at Ft Bliss and the Army Test and Evaluation Command (ATEC) to finalize the brigade architecture "horseblanket", integration and test plans, training materials and combat mission evaluations. Phase III also includes the initial integration phase where industry and government System Under Evaluation (SUE) hardware and software are integrated and initially evaluated for follow-on consideration at Aberdeen Proving Ground's (APG) Communications Electronics Research, Development and Engineering Center (CERDEC) labs through the Lab Based Risk Reduction (LBRR) process. This effort continues into Phase IV as the network matures and becomes functional in the Lab. The results of this detailed lab based testing/evaluations will determine which industry and government SUEs will continue in the NIE (Phases IV/V of the Army's Agile Network Integration process) and develops the initial Network configuration that will be used in NIE. It also reduces risk to NIE execution by testing the Network in the lab, resolving issues found in the Network lab test and optimizing the Networks performance. This is done in a lab environment that facilitates very efficient, cost effective determination of problems, and their subsequent corrections. This project provides for Network Integration of all SUEs (industry and government) Hardware/Software into existing CERDEC System Integration Laboratories at APG to simulate the Brigade Network for NIE and it determines if new capabilities successfully resolve known gaps and meets network performance requirements.

For industry SUEs, this project will integrate the industry SUE into the Network at the CERDEC labs which helps industry to include small businesses, interface and integrate with Government programs of record with unique military secure interfaces and protocols. Purchase of any additional hardware and support above

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<b>Exhibit R-2A, RDT&amp;E Project Justification:</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 0604798A: <i>Brigade Analysis, Integration and Evaluation</i>	<b>PROJECT</b> DY4: <i>Network Integration Support</i>
<p>and beyond the contractors proposed support if required for Lab Based Risk Reduction is also funded within this project. For Government SUEs, this project funds integration support at the CERDEC Labs. If the NIE program requires additional prototypes above and beyond the Program of Record for the Lab based Risk Reduction, it will also purchase this equipment. This project also funds keeping the Network baseline up to date so that integration is always into the current baseline network.</p> <p>FY 2014 will continue the NIE gap and evaluation process for NIE 14.2 and NIE 15.1. For example, out of the 106 SUE candidates that responded to the solicitation for NIE 13.1, 7 SUTs and 25 SUEs were evaluated. These systems were evaluated against one of the Army's nine gaps identified for NIE 13.1 For NIE 13.2: against 11 gaps, 4 SUTs and 5 SUEs were selected for field evaluation and 4 SUEs were selected for Lab Base evaluation only. For NIE 14.1: 30 SUEs were submitted against the following 19 Gaps: (1) Brigade/Battalion Command Post (CP) Mobility and Scalability, (2) CDR Applications for Mobile/Handhelds (HH), (3) Network Visualization on the Common Operational Picture (COP), (4) Integrated LandWarNet, Installation Networks &amp; Training Resources, (5) Aerial Layer Network Extension, (6) Air-Ground Network Architecture, (7) Enterprise Network Capabilities (e-mail), (8) Integrated Network Assurance - Network Access Control (NAC), (9) Integrated Network Assurance - Network Intrusion Prevention System, (10) Integrated Network Assurance - Information Assurance Vulnerability Mgmt, (11) Integrated Network Assurance - Security Information Management System, (12) Host Based Security System, (13) Integrated Trouble Ticketing, (14) Unified Communications Capability, (15) Evaluate instrumented Home Station Small Unit Training to include After Action Reports (AARs), (16) Operational Energy - Commonality of Soldier Carried Energy Sources, (17) Operational Energy - Energy Sources with Extended Duration and Power, (18) Operational Energy - Monitor and Manage System Power, supply and Demand, and (19) Operational Energy - Reduce Reliance on Petroleum Based Energy.</p>			
<b>B. Accomplishments/Planned Programs (\$ in Millions)</b>		<b>FY 2012</b>	<b>FY 2013</b>
<b>Title:</b> NIE Network Integration and Lab Based Risk Reduction		0.000	0.000
<b>Description:</b> These funds provide for the following: Network Integration of all industry and government SUEs, SUTs, and baseline Hardware/Software into existing CERDEC System Integration Laboratories at Aberdeen Proving Grounds (APG) to simulate the Brigade Network for NIE and determine if SUE's capabilities successfully resolve known gaps.			
<b>FY 2014 Plans:</b> The funding provides for the Lab Based Network Analysis and evaluations for NIE 14.2 and NIE 15.1 Brigade Network. In the CERDEC labs, engineers create a representative NIE network architecture incorporating radios, satellite-based systems, handheld devices, mission command applications, routers, software, cables and other network components. Through a combination of actual and simulated hardware and software they recreate the end-to-end NIE network, allowing industry and government organizations the ability to "plug" their systems into the NIE architecture for early assessment and integration risk mitigation. This effort plans and conducts detailed Network experiments, and evaluations of potential Software and Hardware systems for integration into the Army's network to resolve known Network Gaps. The lab activity validates the NIE network architecture products and network configurations using a Brigade-scale network consisting of a mixture of live and virtualized hardware and software. Products include plans/execution/reports of the following: system level specification verification, instrumentation verification, pattern of analysis, pre-event analysis, Network Integration Requirements Levels, Measures of Performance, communication load plan, automated performance assessment of technical and operational measures, transport			13.636



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<b>Exhibit R-2A, RDT&amp;E Project Justification:</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 0604798A: <i>Brigade Analysis, Integration and Evaluation</i>	<b>PROJECT</b> DY4: <i>Network Integration Support</i>	
<b>B. Accomplishments/Planned Programs (\$ in Millions)</b>		<b>FY 2012</b>	<b>FY 2013</b>
and software basis of issue, instrumentation plan, field troubleshooting and reach back support during event execution, routing design for NIE, and technical input to the reports to industry of system performance and issues.			<b>FY 2014</b>
<b>Title:</b> NIE and LBRR Requirements Definition Support  <b>Description:</b> These funds provide for all government and contract personnel and equipment which work with TRADOC and Army G-3/5/7 to finalize the architecture, requirements, and horseblanket for each NIE.  <b>FY 2014 Plans:</b> This effort includes working with TRADOC and G-3/5/7 directorates to finalize the operational gaps and then to develop either sources sought or Requests For Proposals (RFP)s to competitively select industry and government SUEs to resolve these gaps. This also includes the development of Scope of works, evaluation and down-selection criteria and then evaluation of any and all sources sought and RFP proposals to include black box testing to verify that the hardware/software performs to the requirement. This effort includes management of the down-selections for each event, delivery of the final horseblanket architecture and design for each NIE. It also includes all program, information, security, business, schedule, personal management, network integration, evaluation, and reporting efforts required to support phases 1-3 of the NIE process.		0.000	4.451
<b>Title:</b> NIE SUE Hardware/Software for Lab & FSR Support for Network Integration  <b>Description:</b> The effort includes procurement of Hardware and Software required by the Lab to fully simulate the Brigade Network it includes the FSR Support from Contractors to fully integrate their systems into the Network.  <b>FY 2014 Plans:</b> Provides funding to support Network integration and evaluation at the CERDEC Lab at APG. This supports semi-annual Network Integration of industry and government technologies which are being selected as Systems Under Evaluation (SUE) for participation into the Army's Network Integration Evaluations (NIE) 14.2 & 15.1. These funds cover the selected SUE's participation in the lab integration event. This includes contractor's costs for travel, and shipment of equipment, Contractor Field Service Representatives (CFSRs) required to support Network integration activities, and the purchase of additional prototypes required for the CERDEC Lab when needed to effectively complete detailed evaluations of the complete brigade network architecture.		0.000	6.574
<b>Title:</b> Facilities and IT Support  <b>Description:</b> Provides funding for infrastructure/facilities and IT support.  <b>FY 2014 Plans:</b>		0.000	1.202

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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 0604798A: Brigade Analysis, Integration and Evaluation				PROJECT DY4: Network Integration Support				
B. Accomplishments/Planned Programs (\$ in Millions)										FY 2012	FY 2013	FY 2014
Provides funding for infrastructure/facilities. In addition it includes the cost for IT support from Network connectivity for purchasing/leasing hardware, software, computers, communications equipment and services for the government staff.												
Accomplishments/Planned Programs Subtotals										0.000	0.000	25.863
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	
• DY3: DY3 NIE Test & Evaluation			29.697		29.697	33.947	33.768	33.795	33.773	Continuing	Continuing	
• DY5: DY5 Production/Fielding Coordination for Capability Sets			7.829		7.829	8.949	8.902	8.909	8.904	Continuing	Continuing	
• DY6: DY6 Brigade and Platform Integration Support			97.790		97.790	106.813	106.724	106.326	106.344	Continuing	Continuing	
• DY7: DY7 Army Systems Engineering, Architecture and Analysis			18.929		18.929	20.029	19.986	19.943	19.941	Continuing	Continuing	
• DZ6: DZ6 Army Integration & Coordination Management			13.640		13.640	14.432	14.402	14.370	14.369	Continuing	Continuing	
Remarks												
D. Acquisition Strategy												
During the planning of NIE 13.2 the government will focus on identifying and evaluating systems against the Army's known gaps and will utilize a Sources Sought solicitation to invite industry's participation in each NIE. Industry's initial white paper submissions for participation at NIE generally result in no Cost to the government. But there are exceptions, which yield cost such as ensuring small business can participate and if the government needs additional FSR support or hardware to fully represent the Brigade requirements. For FY 2013 and out, the government will use one of two acquisition strategies; First the government will issue a sources sought request to fill the known gaps (utilizing current practices), or the government will use either an existing government contract or a Request for Proposal (RFP) as the means of solicitation for industry's participation in the NIE, the RFP and contracts this will include a participant's production option. The Sources Sought process will be used to help clarify gaps definition and solution sets, where as RFPs will be used when the government's technical community can define the commodity desired to fill a gap with clear and concise selection criteria. The Army is developing a DA PAM to document this process.												
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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Exhibit R-3, RDT&E Project Cost Analysis: PB 2014 Army												DATE: April 2013			
APPROPRIATION/BUDGET ACTIVITY								R-1 ITEM NOMENCLATURE				PROJECT			
2040: Research, Development, Test & Evaluation, Army BA 5: System Development & Demonstration (SDD)								PE 0604798A: Brigade Analysis, Integration and Evaluation				DY4: Network Integration Support			
Product Development (\$ in Millions)				FY 2012		FY 2013		FY 2014 Base		FY 2014 OCO		FY 2014 Total			
Cost Category Item	Contract Method & Type	Performing Activity & Location	All Prior Years	Cost	Award Date	Cost	Award Date	Cost	Award Date	Cost	Award Date	Cost	Cost To Complete	Total Cost	Target Value of Contract
NIE Network Integration and Lab Based Risk Reduction	TBD	Various Note: 1:TBD	0.000	-		-		13.636	Nov 2013	-		13.636	0.000	13.636	0.000
Subtotal			0.000	0.000		0.000		13.636		0.000		13.636	0.000	13.636	0.000
Remarks															
Note:1 - All funding executed from SoSE&I (Warren MI) - Program Activities performed at Aberdeen Proving Ground (MD), TACOM (Warren MI), Taylor Bldg, (Crystal City, VA), FT Bliss (TX), . - Program Integration support through various PMs, PEOs, RDECOM, and a multitude of small support and industry contractors.															
Support (\$ in Millions)				FY 2012		FY 2013		FY 2014 Base		FY 2014 OCO		FY 2014 Total			
Cost Category Item	Contract Method & Type	Performing Activity & Location	All Prior Years	Cost	Award Date	Cost	Award Date	Cost	Award Date	Cost	Award Date	Cost	Cost To Complete	Total Cost	Target Value of Contract
NIE and LBRR Requirements Definition Support	TBD	Various Note: 1:TBD	0.000	-		-		4.451	Nov 2013	-		4.451	0.000	4.451	0.000
NIE SUE Hardware/ Software for Lab & FSR Support for Network Integration	TBD	Various Note: 1:TBD	0.000	-		-		6.574	Nov 2013	-		6.574	0.000	6.574	0.000
Facilities and IT Support	TBD	Various Note: 1:TBD	0.000	-		-		1.202	Nov 2013	-		1.202	0.000	1.202	0.000
Subtotal			0.000	0.000		0.000		12.227		0.000		12.227	0.000	12.227	0.000
Remarks															
Note: 1 - All funding executed from SoSE&I (Warren MI) - Program Activities performed at Aberdeen Proving Ground (MD), TACOM (Warren MI), Taylor Bldg, (Crystal City, VA)															
			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		25.863		0.000		25.863	0.000	25.863	0.000

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Exhibit R-3, RDT&E Project Cost Analysis: PB 2014 Army							DATE: April 2013			
APPROPRIATION/BUDGET ACTIVITY			R-1 ITEM NOMENCLATURE			PROJECT				
2040: Research, Development, Test & Evaluation, Army			PE 0604798A: Brigade Analysis, Integration			DY4: Network Integration Support				
BA 5: System Development & Demonstration (SDD)			and Evaluation							
	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	

Remarks

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<b>Exhibit R-4, RDT&amp;E Schedule Profile: 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 0604798A: <i>Brigade Analysis, Integration and Evaluation</i>		
			<b>PROJECT</b> DY4: <i>Network Integration Support</i>		

	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
NIE 14.2 Planning - Execution																												
NIE 14.2 Industry Day																												
NIE 14.2 DP 1																												
NIE 14.2 DP 2																												
NIE 14.2 Lab Integration/Testing																												
NIE 14.2 Candidate Solution Integration																												
NIE 14.2 LoadEx																												
NIE 14.2 CommEx																												
NIE 14.2 Pilot																												
NIE 14.2 Event																												
NIE 14.2 Event Analysis & Summary																												
NIE 15.1 Planning - Execution																												
NIE 15.1 Industry Day																												
NIE 15.1 DP 1																												
NIE 15.1 DP 2																												
NIE 15.1 Lab Integration/Testing																												
NIE 15.1 Candidate Solution Integration																												
NIE 15.1 LoadEx																												
NIE 15.1 CommEx																												
NIE 15.1 Pilot																												
NIE 15.1 Event																												
NIE 15.1 Event Analysis & Summary																												

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Exhibit R-4A, RDT&E Schedule Details: 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 0604798A: Brigade Analysis, Integration  
and Evaluation

## PROJECT

DY4: Network Integration Support

## Schedule Details

Events	Start		End	
	Quarter	Year	Quarter	Year
NIE 14.2 Planning - Execution	2	2013	3	2014
NIE 14.2 Industry Day	3	2013	3	2013
NIE 14.2 DP 1	4	2013	4	2013
NIE 14.2 DP 2	1	2014	1	2014
NIE 14.2 Lab Integration/Testing	1	2014	3	2014
NIE 14.2 Candidate Solution Integration	2	2014	2	2014
NIE 14.2 LoadEx	2	2014	3	2014
NIE 14.2 CommEx	3	2014	3	2014
NIE 14.2 Pilot	3	2014	3	2014
NIE 14.2 Event	3	2014	3	2014
NIE 14.2 Event Analysis & Summary	3	2014	3	2014
NIE 15.1 Planning - Execution	3	2013	1	2015
NIE 15.1 Industry Day	1	2014	1	2014
NIE 15.1 DP 1	2	2014	2	2014
NIE 15.1 DP 2	3	2014	3	2014
NIE 15.1 Lab Integration/Testing	3	2014	1	2015
NIE 15.1 Candidate Solution Integration	3	2014	4	2014
NIE 15.1 LoadEx	4	2014	4	2014
NIE 15.1 CommEx	4	2014	1	2015
NIE 15.1 Pilot	1	2015	1	2015
NIE 15.1 Event	1	2015	1	2015
NIE 15.1 Event Analysis & Summary	1	2015	1	2015

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Exhibit R-2A, RDT&E Project Justification: PB 2014 Army										DATE: April 2013		
APPROPRIATION/BUDGET ACTIVITY					R-1 ITEM NOMENCLATURE				PROJECT			
2040: Research, Development, Test & Evaluation, Army BA 5: System Development & Demonstration (SDD)					PE 0604798A: Brigade Analysis, Integration and Evaluation				DY5: Production/Field Coordination for Capability Sets			
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
DY5: Production/Field Coordination for Capability Sets	-	0.000	0.000	7.829	-	7.829	8.949	8.902	8.909	8.904	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**

This project (DY5) was created to support the Army's development, coordination and execution of the plan to take the results of previous Network Integration Events (NIE) and produce, integrate, and field these Brigade improvements to selected Brigade Combat Teams. The FY 2013 President Budget submission reflects Program Element (PE) 604798A broken down into three projects; DV1, DU8, and DU9. Beginning with FY 2014 Presidents Budget submission this PE is now broken down into six projects to better align the funding with the progressive changes to the development and execution of both Network Integration Events (NIE) and Tactical Capability Tactical Capability Set-Synchronized Fielding (TCS-SF) missions. These projects are: DY3; NIE Test Evaluation, DY4; Network Integration Support, DY5; Production / Fielding Coordination for Capability Sets, DY6; Brigade and Platform Integration Support, DY7; Army System Engineering, Architecture & Architecture & Analysis, and DZ6; Army Integration Management & Coordination. Beginning in FY 2014 the activities within this project is divided among all of the new Projects as outlined above.

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

This project provides for the development of a coordinated plan for the Production (Integrating components onto vehicle systems) and Fielding (logistics and training) of those Brigade components (both hardware/software in A and/or B Kits) and Division/Corps components (used primarily on the Command Post computing environment) that successfully passed the Network Integration Evaluation (NIE) and have been certified as interoperable for fielding through Army Interoperability Certification events and were approved by the Army's Leadership to be incorporated in subsequent Tactical Capability Sets (TCS). This project request funds for the coordination of the required activity plan with the applicable Program of Records (PEOs/PMs). This project does not fund the actual production, integration, nor fielding costs associated with the Tactical Capability Set. This project includes government and contractor efforts to integrate and validate that the Army is fielding platforms, components and software that are integrated together to provide increased capabilities for the soldier that are supportable and trainable.

This project includes the following efforts: Provides oversight and direct coordination between participating PEOs, PMs, RDECOMs and the Army's Brigade Combat Teams (BCT) receiving the Tactical Capability Set package, throughout all phases of the Vehicle Integration and Synchronized Fielding process. This begins with strategic design development and coordination and configuration management of the integrated network components onto weapon systems. This includes the Tactical Capability Set's Network Architecture Design and the final Tactical Capability Set Configuration, the design, development and production of each product's "Integration Kit" (IK), the design, development and production of each platform's A-Kit, the synchronized integration of all products onto the Brigade Combat Team's war fighting platforms. This project also includes the direct support during each of the unit's "New Equipment Training" and "New Equipment Fielding", along with the preparation for the BTC's rotation through one of the Army's Combat Training Centers, (Joint Readiness Training Center (JRTC) or National Training Center (NTC). Upon completion of the Combat Training Center (CTC) rotation the support teams provide oversight to ensure that all training assets are reset and moved to the

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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 0604798A: Brigade Analysis, Integration and Evaluation	PROJECT DY5: Production/Field Coordination for Capability Sets		
follow-on BCT and that all After Action activities are closed out. This project also includes coordination with DA staff for synchronization of NIE with Integration and Interoperability events leading to Army Interoperability Certification and coordinating mission command Army Interoperability Certification (AIC) baseline to support fielding.					
The FY 2014 funding is supporting the TCS fielding in CY 2014 and also conducting the planning for TCS 15 through the POM. During FY 2014 the Army's plan is to conduct four (4) Capability Set-Sync Fielding events utilizing two TCS-SF teams.					
B. Accomplishments/Planned Programs (\$ in Millions)			FY 2012	FY 2013	FY 2014
Title: Production/Fielding Coordination for Capability Sets			0.000	0.000	7.300
Description: These funds provide for the following: Development, coordination and execution of the plan to take the results of previous NIEs and produce, integrate, and field these Brigade improvements to the BCTs. This effort does not fund the production, or integration, or fielding of the tactical capability set, but it does fund the coordination of this activity for the Army through the supporting Program Managers (PMs), Program Executive Officers (PEOs), and Research, Development, Engineering Command (RDECOMs).					
FY 2014 Plans: Synchronize, integrate and coordinate Tactical Capability Set Fielding for TCS-14 thru TCS-19 to receiving Brigade Combat Teams (BCTs). Synchronize integration of a single integrated architecture consisting of multiple systems, on multiple configurations of STRYKER, MRAPS, HMMWV and Heavy Armor vehicle platforms, at several different locations, integrated into multiple gaining Army Units. Coordinate a synchronized Integrated Master Schedule (IMS) for fielding of TCS-14 to all gaining units. Integrate design by platforms, by role, by echelon, and by BCT. Begin TCS-15 requirements definition finalization and development of the integrated master schedule. This includes coordinating A-Kit design, development and production and the B-Kit's Integration Kit (IK) design, between system and platforms PEOs and PMs. It also includes Prototype and Productions build coordination and delivery. Configuration Management (CM) of Platform Architectural implementations, Design, A-Kit, B-Kit and the IMS. Systems Engineering (SE) to include: design maturation, decomposition of network architecture into platform specific implementations network architecture, prototype/production build, integrated testing, configuration of integrated baseline and an integrated schedule for component management. Synchronize acquisition strategy and planning to include: synchronized production deliveries, fielding and support (with sponsoring PMs) to maintain the ARFORGEN Cycle. Coordinate funding requirements and delivery/production schedules to ensure production schedules are met to field selected systems. Complete funding coordination with DA and prioritized requirements at Weapons Systems Reviews (WSR) to support the POM. Align funding requirements for PMs to make updates to their PORs as a result of integrating concepts that affect engineering architecture data products, training packages, logistics packages, etc. Coordinate New Equipment Training (NET) and New Equipment Fielding (NEF) for all TCS-14 components/products across all receiving Units.					
Title: Facilities and IT Support			0.000	0.000	0.529



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<b>Exhibit R-2A, RDT&amp;E Project Justification:</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 0604798A: <i>Brigade Analysis, Integration and Evaluation</i>				<b>PROJECT</b> DY5: <i>Production/Field Coordination for Capability Sets</i>			
<b>B. Accomplishments/Planned Programs (\$ in Millions)</b>								<b>FY 2012</b>	<b>FY 2013</b>	<b>FY 2014</b>	
<b>Description:</b> Provides funding for infrastructure/facilities and IT support.											
<b>FY 2014 Plans:</b> Provides funding for infrastructure/facilities. In addition it includes the cost for IT support from Network connectivity for purchasing/leasing hardware, software, computers, communications equipment and services for the government staff.											
<b>Accomplishments/Planned Programs Subtotals</b>								0.000	0.000	7.829	
<b>C. Other Program Funding Summary (\$ in Millions)</b>											
			<u><b>FY 2014</b></u>	<u><b>FY 2014</b></u>	<u><b>FY 2014</b></u>					<u><b>Cost To</b></u>	
<u><b>Line Item</b></u>	<u><b>FY 2012</b></u>	<u><b>FY 2013</b></u>	<u><b>Base</b></u>	<u><b>OCO</b></u>	<u><b>Total</b></u>	<u><b>FY 2015</b></u>	<u><b>FY 2016</b></u>	<u><b>FY 2017</b></u>	<u><b>FY 2018</b></u>	<u><b>Complete</b></u>	<u><b>Total Cost</b></u>
• DY3: <i>DY3 NIE Test &amp; Evaluation</i>			29.697		29.697	33.947	33.768	33.795	33.773	Continuing	Continuing
• DY4: <i>DY4 Network Integration Support</i>			25.863		25.863	20.830	20.788	20.777	20.773	Continuing	Continuing
• DY6: <i>DY6 Brigade and Platform Integration Support</i>			97.790		97.790	106.813	106.724	106.326	106.344	Continuing	Continuing
• DY7: <i>DY7 Army Systems Engineering, Architecture and Analysis</i>			18.929		18.929	20.029	19.986	19.943	19.941	Continuing	Continuing
• DZ6: <i>DZ6 Army Integration &amp; Coordination Management</i>			13.640		13.640	14.432	14.402	14.370	14.369	Continuing	Continuing
<b>Remarks</b>											
<b>D. Acquisition Strategy</b> This project does not have any requirement for direct procurement of hardware or software.											
<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 0604798A: <i>Brigade Analysis, Integration and Evaluation</i>						<b>PROJECT</b> DY5: <i>Production/Field Coordination for Capability Sets</i>			
<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>
Production/Fielding Coordination for Capability Sets	TBD	Various Note: 1:TBD	0.000	-		-		7.300	Nov 2013	-		7.300	0.000	7.300	0.000
<b>Subtotal</b>			0.000	0.000		0.000		7.300		0.000		7.300	0.000	7.300	0.000
<b>Remarks</b> Note: 1 - All funding executed from SoSE&I (Warren MI) - Program Activities performed at, TACOM (Warren MI). - Program Integration support through various PMs, PEOs, RDECOM.															
<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>
Facilities and IT Support	TBD	Various Note:1:TBD	0.000	-		-		0.529	Nov 2013	-		0.529	0.000	0.529	0.000
<b>Subtotal</b>			0.000	0.000		0.000		0.529		0.000		0.529	0.000	0.529	0.000
<b>Remarks</b> Note: 1 - All funding executed from SoSE&I (Warren MI) - Program Activities performed at, TACOM (Warren MI).															
			<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		0.000		7.829		0.000		7.829	0.000	7.829	0.000
<b>Remarks</b>															

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<b>Exhibit R-4, RDT&amp;E Schedule Profile: PB 2014 Army</b>	<b>DATE:</b> April 2013
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<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 0604798A: <i>Brigade Analysis, Integration and Evaluation</i>	<b>PROJECT</b> DY5: <i>Production/Field Coordination for Capability Sets</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
TCS13 Tactical Capability Set																												
TCS13 Architecture Design																												
TCS13 Build & Integration																												
TCS13 NEW Equipment Training (NET)																												
TCS13 NEW Equipment Fielding (NEF)																												
TCS14 Tactical Capability Set																												
TCS14 Architecture Design																												
TCS14 Build & Integration																												
TCS14 NEW Equipment Training (NET)																												
TCS14 NEW Equipment Fielding (NEF)																												
TCS15 Tactical Capability Set																												
TCS15 Architecture Design																												

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<b>Exhibit R-4A, RDT&amp;E Schedule Details: 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 0604798A: <i>Brigade Analysis, Integration and Evaluation</i>	<b>PROJECT</b> DY5: <i>Production/Field Coordination for Capability Sets</i>	

**Schedule Details**

<b>Events</b>	<b>Start</b>		<b>End</b>	
	<b>Quarter</b>	<b>Year</b>	<b>Quarter</b>	<b>Year</b>
TCS13 Tactical Capability Set	2	2012	2	2014
TCS13 Architecture Design	2	2012	4	2012
TCS13 Build & Integration	4	2012	4	2012
TCS13 NEW Equipment Training (NET)	1	2013	1	2014
TCS13 NEW Equipment Fielding (NEF)	2	2013	2	2014
TCS14 Tactical Capability Set	3	2013	2	2015
TCS14 Architecture Design	4	2012	3	2013
TCS14 Build & Integration	3	2013	1	2014
TCS14 NEW Equipment Training (NET)	1	2014	1	2015
TCS14 NEW Equipment Fielding (NEF)	1	2014	2	2015
TCS15 Tactical Capability Set	1	2014	4	2015
TCS15 Architecture Design	1	2014	4	2014

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Exhibit R-2A, RDT&E Project Justification: PB 2014 Army										DATE: April 2013		
APPROPRIATION/BUDGET ACTIVITY					R-1 ITEM NOMENCLATURE				PROJECT			
2040: Research, Development, Test & Evaluation, Army BA 5: System Development & Demonstration (SDD)					PE 0604798A: Brigade Analysis, Integration and Evaluation				DY6: Brigade and Platform Integration Support			
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
DY6: Brigade and Platform Integration Support	-	0.000	0.000	97.790	-	97.790	106.813	106.724	106.326	106.344	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

This project (DY6) was created to support the Army's Brigade Analysis, Integration and Evaluation mission. The FY 2013 President Budget submission reflects Program Element (PE) 604798A broken down into three projects; DV1, DU8, and DU9. Beginning with FY 2014 Presidents Budget submission this PE is now broken down into six projects to better align the funding with the progressive changes to the development and execution of both Network Integration Events (NIE) and Tactical Capability Set-Synchronized Fielding (TCS-SF) missions. These projects are: DY3; NIE Test Evaluation, DY4; Network Integration Support, DY5; Production /Fielding Coordination for Capability Sets, DY6; Brigade and Platform Integration Support, DY7; Army System Engineering, Architecture & Architecture & Analysis, and DZ6; Army Integration Management & Coordination. Beginning in FY 2014 the activities within this project is divided among all of the new Projects as outlined above.

## A. Mission Description and Budget Item Justification

This project supports Phase IV through Phase VI of the Army's Agile Network Integration process. Based on developed baseline Brigade level architectures, System of Systems Integration (SOSI) will develop detailed plans and final architectures and horseblankets (to include Basis of Issue Plans (BOIPs)) to execute the integration of all hardware and software onto Soldier and vehicle systems to ensure an integrated network across the Brigade battlespace. This project includes government and contractor efforts to integrate (build A-Kits for vehicles) and validate that the Army is fielding platforms, components and software that are integrated together in order to provide increased capabilities for the Soldier that are trainable and maintainable. This project includes efforts associated with the integration of lab developed network solution on to Soldier and vehicle systems; the testing, verification and correction of the network components in preparation for hardware installation supporting the Network Integration Evaluation (NIE); the funding for selected Systems Under Evaluation (SUEs) (Hardware and Field Service Representative (FSR) support) to participate in NIE during Phase V of the Army's Agile process; the coordination and execution of LoadEX, COMMX, Pilot and the NIE evaluation, the de-modification of vehicles after completion of the event; and for the infrastructural support of these efforts at Ft Bliss TX and White Sands Missile Range, NM.

FY 2014 will continue the NIE gap and evaluation process for NIE 14.2 and NIE 15.1. For example, out of the 106 SUE candidates that responded to the solicitation for NIE 13.1, 7 Systems Under Test (SUTs) and 25 SUEs were evaluated. These systems were evaluated against one of the Army's nine gaps identified for NIE 13.1 For NIE 13.2: against 11 gaps, 4 SUTs and 5 SUEs were selected for field evaluation and 4 SUEs were selected for Lab Base evaluation only. For NIE 14.1: 30 SUEs were submitted against the following 19 Gaps: (1) Brigade/Battalion Command Post (CP) Mobility and Scalability, (2) CDR Applications for Mobile/Handhelds (HH), (3) Network Visualization on the Common Operational Picture (COP), (4) Integrated LandWarNet, Installation Networks & Training Resources, (5) Aerial Layer Network Extension, (6) Air-Ground Network Architecture, (7) Enterprise Network Capabilities (e-mail), (8) Integrated Network Assurance - Network Access Control (NAC), (9) Integrated Network Assurance - Network Intrusion Prevention System, (10) Integrated Network Assurance - Information Assurance Vulnerability Mgmt, (11) Integrated

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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 0604798A: Brigade Analysis, Integration and Evaluation	PROJECT DY6: Brigade and Platform Integration Support		
Network Assurance - Security Information Management System, (12) Host Based Security System, (13) Integrated Trouble Ticketing, (14) Unified Communications Capability, (15) Evaluate instrumented Home Station Small Unit Training to include After Action Reports (AARs), (16) Operational Energy - Commonality of Soldier Carried Energy Sources, (17) Operational Energy - Energy Sources with Extended Duration and Power, (18) Operational Energy - Monitor and Manage System Power, supply and Demand, and (19) Operational Energy - Reduce Reliance on Petroleum Based Energy.				
B. Accomplishments/Planned Programs (\$ in Millions)		FY 2012	FY 2013	FY 2014
Title: Platform Integration Support  Description: These funds provide for the integration of lab developed network solution onto soldier and vehicle systems to ensure an integrated network across the brigade and battle field.  FY 2014 Plans: Vehicle integration: Based on Brigade level architectures, develop the Bases of Issue Plan (BOIP) for each platform and develop the integrated vehicle designs and installation plans for all platform systems to install network components and the associated instrumentation to collect data from the test phase. This design needs to ensure that all technical platform requirements are not degraded and that both the Network and the Vehicle systems meet all of their system requirements. The design must address all size, weight, power, electromagnetic, safety, interference and all other associated technical requirements. The platforms then must pass all safety certification requirements prior to being used in the experiment. This funding includes the design, fabrication, and installation (and after the test the de-installation) of the brackets, mounts, cables, etc. that is required as part of the installation A-Kit. It also includes the installation cost for installing B-Kits (Radios, antennas, filters, etc.). It also includes the safety certification testing for each vehicle configuration.		0.000	0.000	21.417
Title: Brigade Integration Support  Description: These funds provide for the testing and verification and correction of the network components and platforms and soldiers into a Brigade Combat Team in preparation for the Network Integration Evaluation (NIE).  FY 2014 Plans: Brigade Integration: Once the vehicles have all A and B Kits installed, the next step is to conduct the network validation exercise consisting of a four phase approach: load, established, integrate and thread validation. Load is the initial stage where the Network software, firmware, Operating System (OS), Internal Protocol (IP) and configuration are installed and validated on the platform. Once this is completed the test/fix/test process begins to verify that the hardware is fully assembled and ensure that the brigade level Network is fully operational. This requires government and industry level Subject Matter Experts (SME) to work efforts such as key loading, network data initialization, radio calibration, Joint Battle Command-Platform (JBC-P) legacy system integration and testing, tactical network integration and testing, mission command integration and testing, company command post integration and testing. These efforts when combined usually result in software updates and system corrections to improve performance, connectivity and availability of the Network. This effort also includes training of the soldiers who will be using this new brigade network as part of the Network Integration Evaluation Event. This effort manages and conducts all daily operations		0.000	0.000	19.889

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<b>Exhibit R-2A, RDT&amp;E Project Justification:</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 0604798A: <i>Brigade Analysis, Integration and Evaluation</i>		<b>PROJECT</b> DY6: <i>Brigade and Platform Integration Support</i>	
<b>B. Accomplishments/Planned Programs (\$ in Millions)</b>			<b>FY 2012</b>	<b>FY 2013</b>	<b>FY 2014</b>
and the execution of the NIE plan by; maintaining a daily battle rhythm, synchronized calendar, conducting operational meetings, developing and submitting reports, tracking and maintaining accountability of all assets and the operational scheduling of assets and personnel. It includes the day to day project management of the NIE and coordination between the SOSI organization, Army Test and Evaluation Command (ATEC) and Brigade Modernization Command (BMC) to ensure all organizations are coordinated to ensure the NIE event runs successfully an on schedule. It also includes conducting After Action Review (AAR) to provide Army leadership recommendation for improving operational requirements and enhancing technical specifications.					
<b>Title:</b> Network Integration Support  <b>Description:</b> These funds provide for the field setup, validation, verification and correction of the network for the NIE.  <b>FY 2014 Plans:</b> Network Integration funds for data product builds for all transport layer communication devises. It includes the development of the Lightweight Data Interchange Format (LDIF) file for the network. It includes all NETOPS synchronization and coordination. Funds for the Network Sync Center verifying the network works throughout the whole brigade. Funds for Government Subject Matter Experts (SME) to assist in communication hardware integration in to the brigade. Includes the development of company command post configuration, training, management. It includes both government SME and contractor FSR support to ensure the network is operational during LOADEX, COMEX, VALEX (Pilot), and the NIE evaluation.			0.000	0.000	19.500
<b>Title:</b> NIE Infrastructure  <b>Description:</b> Provides for Infrastructure (facilities) at FT Bliss TX and WSMR.  <b>FY 2014 Plans:</b> Provides for setup, utilities, furniture, equipment and maintenance (of all equipment and facilities), at Fort Bliss TX, (FBTX), White Sands Missile Range NM (WSMR). Includes lease and support maintenance of Government Service Administration (GSA) vehicles that support the NIE mission at FBTX/WSMR.			0.000	0.000	5.562
<b>Title:</b> Network Integration Evaluation SUE support(NIE)  <b>Description:</b> These funds provide for the following effort: To fund selected SUEs to participate in NIE during Phase V of the Army's Agile process.  <b>FY 2014 Plans:</b> Provides funding to support integration and evaluation, to support semi-annual events of industry and government technologies which are being selected as Systems Under Evaluation (SUE) for participation into the Army's Network Integration Evaluations (NIE) 14.2 & 15.1. These funds cover the NIE participant's (Emerging and existing technologies, and contractors) costs for travel, and shipment of equipment, Contractor Field Service Representatives (CFSRs) integration A-kit development, and the purchase			0.000	0.000	27.471

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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 0604798A: Brigade Analysis, Integration and Evaluation				PROJECT DY6: Brigade and Platform Integration Support			
B. Accomplishments/Planned Programs (\$ in Millions)									FY 2012	FY 2013	FY 2014
of additional prototypes when needed to effectively complete detailed evaluations of the complete network architecture. Includes costs for development of integration hardware and software (A-KIT design support). In preparation for the NIE, the selected units participate in a comprehensive four phased Validation Exercise (LOADEX, Established, integration and thread validation (4 weeks) at FT Bliss Texas (FBTX). The participating units then deploy to the tactical training/evaluation area, White Sands Missile Range (WSMR) to complete the detailed NIE event (4 weeks).											
Title: Platform/BDE Integration Management Support									0.000	0.000	3.951
Description: These funds provide for all government and contract personnel who provide direct support to the Platform and Brigade Integration efforts at Ft Bliss and WSMR in support of the NIE.											
FY 2014 Plans: This effort includes all program, information, security, business, and personal management efforts required to support the Network Integration teams. It includes the following types of activities: Program management, schedule development and management, contracting, financial management, cost analysis, personnel management, operations, security management, NIE event management, Information Assurance, information management, database and IT support, facilities and infrastructure management, knowledge management. In addition to people it include cost for all IT support from Network connectivity to purchasing/leasing hardware, software, computers, communications equipment and services.											
Accomplishments/Planned Programs Subtotals									0.000	0.000	97.790
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
• DY3: DY3 NIE Test & Evaluation			29.697		29.697	33.947	33.768	33.795	33.773	Continuing	Continuing
• DY4: DY4 Network Integration Support			25.863		25.863	20.830	20.788	20.777	20.773	Continuing	Continuing
• DY5: DY5 Production/Fielding Coordination for Capability Sets			7.829		7.829	8.949	8.902	8.909	8.904	Continuing	Continuing
• DY7: DY7 Army Systems Engineering, Architecture and Analysis			18.929		18.929	20.029	19.986	19.943	19.941	Continuing	Continuing
• DZ6: DZ6 Army Integration & Coordination Management			13.640		13.640	14.432	14.402	14.370	14.369	Continuing	Continuing
Remarks											



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<b>Exhibit R-2A, RDT&amp;E Project Justification:</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 0604798A: <i>Brigade Analysis, Integration and Evaluation</i>	<b>PROJECT</b> DY6: <i>Brigade and Platform Integration Support</i>
<p><b><u>D. Acquisition Strategy</u></b></p> <p>During the planning of NIE 13.2 the government will focus on identifying and evaluating systems against the Army's known gaps and will utilize a Sources Sought solicitation to invite industry's participation in each NIE. Industry's initial white paper submissions for participation at NIE generally result in no Cost to the government. But there are exceptions, which yield cost such as ensuring small business can participate and if the government needs additional FSR support or hardware to fully represent the Brigade requirements. For FY 2013 and out, the government will use one of two acquisition strategies; First the government will issue a sources sought request to fill the known gaps (utilizing current practices), or the government will use either an existing government contract or a Request for Proposal (RFP) as the means of solicitation for industry's participation in the NIE, the RFP and contracts this will include a participant's production option. The Sources Sought process will be used to help clarify gaps definition and solution sets, where as RFPs will be used when the government's technical community can define the commodity desired to fill a gap with clear and concise selection criteria. The Army is developing a DA PAM to document this process.</p> <p><b><u>E. Performance Metrics</u></b></p> <p>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.</p>		

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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 0604798A: <i>Brigade Analysis, Integration and Evaluation</i>						<b>PROJECT</b> DY6: <i>Brigade and Platform Integration Support</i>			
<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>
Platform Integration Support	TBD	Various Note: 1:TBD	0.000	-		-		21.417	Nov 2013	-		21.417	0.000	21.417	0.000
Brigade Integration Support	TBD	Various Note: 1:TBD	0.000	-		-		19.889	Nov 2013	-		19.889	0.000	19.889	0.000
Network Integration Support	TBD	Various Note: 1:TBD	0.000	-		-		19.500	Nov 2013	-		19.500	0.000	19.500	0.000
Network Integration Evaluation SUE support (NIE)	TBD	Various Note: 1:TBD	0.000	-		-		27.471	Nov 2013	-		27.471	0.000	27.471	0.000
Platform/BDE Integration Management Support	TBD	Various Note: 1:TBD	0.000	-		-		3.951	Nov 2013	-		3.951	0.000	3.951	0.000
<b>Subtotal</b>			0.000	0.000		0.000		92.228		0.000		92.228	0.000	92.228	0.000
<b>Remarks</b> Note: 1 - All funding executed from SoSE&I (Warren MI) - Program Activities performed at TACOM (Warren MI), FT Bliss (TX), White Sands Missile Range (NM). - Program Integration support through various PMs, PEOs, RDECOM, and a multitude of small support and industry contractors.															
<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>
Infrastructure Support	TBD	Various Note: 1:TBD	0.000	-		-		5.562	Nov 2013	-		5.562	0.000	5.562	0.000
<b>Subtotal</b>			0.000	0.000		0.000		5.562		0.000		5.562	0.000	5.562	0.000
<b>Remarks</b> Note: 1 - All funding executed from SoSE&I (Warren MI) - Program Activities performed at FT Bliss (TX), White Sands Missile Range (NM). - Program Integration support through various PMs, PEOs, RDECOM, and a multitude of small support and industry contractors.															

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Exhibit R-3, RDT&E Project Cost Analysis: 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 0604798A: Brigade Analysis, Integration and Evaluation					PROJECT DY6: Brigade and Platform Integration Support			
	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		97.790		0.000		97.790	0.000	97.790	0.000

Remarks

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Exhibit R-4, RDT&E Schedule Profile: PB 2014 Army																DATE: April 2013			
APPROPRIATION/BUDGET ACTIVITY								R-1 ITEM NOMENCLATURE								PROJECT			
2040: Research, Development, Test & Evaluation, Army								PE 0604798A: Brigade Analysis, Integration and Evaluation								DY6: Brigade and Platform Integration Support			
BA 5: System Development & Demonstration (SDD)																			

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Exhibit R-4A, RDT&E Schedule Details: PB 2014 Army		DATE: April 2013
APPROPRIATION/BUDGET ACTIVITY 2040: <i>Research, Development, Test &amp; Evaluation, Army</i> BA 5: <i>System Development &amp; Demonstration (SDD)</i>	R-1 ITEM NOMENCLATURE PE 0604798A: <i>Brigade Analysis, Integration and Evaluation</i>	PROJECT DY6: <i>Brigade and Platform Integration Support</i>

Schedule Details

Events	Start		End	
	Quarter	Year	Quarter	Year
NIE 14.2 Planning - Execution	2	2013	3	2014

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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 0604798A: Brigade Analysis, Integration and Evaluation				PROJECT DY7: Army Systems Engineering, Architecture & Analysis			
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
DY7: Army Systems Engineering, Architecture & Analysis	-	0.000	0.000	18.929	-	18.929	20.029	19.986	19.943	19.941	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**

This project (DY7) was created to support the Army's Brigade Analysis, Integration and Evaluation mission. The FY 2013 President Budget submission reflects Program Element (PE) 604798A broken down into three projects; DV1, DU8, and DU9. Beginning with FY 2014 Presidents Budget submission this PE is now broken down into six projects to better align the funding with the progressive changes to the development and execution of both Network Integration Events (NIE) and Tactical Capability Set-Synchronized Fielding (TCS-SF) missions. These projects are: DY3; NIE Test Evaluation, DY4; Network Integration Support, DY5; Production /Fielding Coordination for Capability Sets, DY6; Brigade and Platform Integration Support, DY7; Army System Engineering, Architecture & Architecture & Analysis, and DZ6; Army Integration Management & Coordination. Beginning in FY 2014 the activities within this project is divided among all of the new Projects as outlined above.

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

This project provides the Army's leadership and materiel developers with the necessary system of systems engineering (SOSE) analysis and architectural products to manage and shape the Army's materiel portfolio (5 and 30 year plans); to shape future tactical capability sets and corresponding NIEs; to ensure Systems Engineering discipline across the Materiel developer community throughout the acquisition life, engineering policy and system standards, guidelines. It creates an environment that empowers the Acquisition Community through an unsurpassed agile, collaborative, productive, lean and trusted information enterprise. This project includes support to other DOD and international agencies for joint programs and collaboration efforts with NIE and Tactical Capability Package portfolio integration. The Government effort includes costs for salaries, travel, overtime, training, supplies, facilities, and IT support.

This project establishes the capability to develop and deliver the system of system engineering, analysis and architecture products that facilitate analysis & trades and provide timely relevant information to inform decision makers and guide the Army's efforts. This project provides for the development and implementation of a comprehensive set of system architectures and analysis results that can shape the Army's priorities and processes, and ensures that the analysis and architecture development capability across Assistant Secretary of the Army (Acquisition, Logistics, and Technology) (ASA (ALT)) is cohesive within the agile process. It provides for the overarching view of the Army's System of Systems (SOS) Reference Architecture requirements; it provides for single authority within ASA(ALT) for System of Systems Implementation Architecture oversight to manage governance and approvals of emerging designs, it also ensures the linkage of architecture products to events (NIE, TCS, and Program Objective Memorandum (POM)), processes, and customer requirements. It establishes SOS Reference Architectures for all Key components of the Network Architecture and all Army formations, across time, that form the basis for representing and communicating the Army's programmed plan to Program Executive Officers/Program Managers (PEOs/PMs). It enables trades and analyses that use the reference architecture design data to inform

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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 0604798A: Brigade Analysis, Integration and Evaluation		PROJECT DY7: Army Systems Engineering, Architecture & Analysis		
implementation architectures and support informed systems acquisition decisions across the life cycle. The data is organized in order to support views and analysis across organizational, portfolio, and budgeting bins.						
One of the first products/processes developed from the SOSE was the Common Operation Environment (COE) vision for the Army. In 2012, ASA(ALT) formally unveiled its COE Implementation Plan designed to help industry partners and Army program managers by offering an approved set of network standards, processes and products, designed to enable them to quickly and efficiently develop and field interoperable software capabilities. The plan establishes and makes public the Army's Network technical standards, which any sized vendor can understand, internalize and build towards. This efficiency helps increase competition and helps lower software and hardware integration burden and costs. The implementation plan is a living document that will remain flexible as the Army continues to evolve its network standards and fielding methods. The Implementation Plan calls for the Army to continuously seek industry and service's input throughout the COE life cycle. This project provides for technical support to oversee the execution of the COE Implementation plan, COE Orchestration, Verification and Validation (V&V), and Governance. It also provides for the development and execution of COE integration policies and procedures, the development and implementation of backwards capability testing, integration checklists and their verification, test hardware development and implementation support. It provides for COE architecture validation, design baseline validation, and the verification of COE reference architecture compliance. Finally, it provides for the accreditation, certification and refinement of test plans and events.						
B. Accomplishments/Planned Programs (\$ in Millions)				FY 2012	FY 2013	FY 2014
Title: Army System of System Engineering and Analysis				0.000	0.000	14.869
Description: To develop System of System Brigade Reference and Implementation Architectures to support NIE, Tactical Capability Sets and Army POM and 30 year plans. This effort begins with TRADOC's and Army G-6's operational and technical architecture requirements.						
FY 2014 Plans: The funds provide the following: Synchronizing ongoing System-of-Systems (SoS) engineering and analysis to develop the following products: - Develop standards for NetOps System Architecture - Continue development of TCS15 Reference Architecture - Begin development of TCS16 Reference Architecture - Develop the NIE reference and implementation architecture baselines for NIE 14.2, 15.1, 15.2 and 16.1 - Develop and deliver Waveform Roadmap documents - Develop and deliver Spectrum Roadmap - Develop and deliver Radio Investment Strategy - Develop and deliver Cyber Strategy - Develop and deliver Informational Assurance Strategy - Develop and deliver Sensor standards compliance policy - Develop and deliver Sensor standards specification documents						

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<b>Exhibit R-2A, RDT&amp;E Project Justification:</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 0604798A: <i>Brigade Analysis, Integration and Evaluation</i>	<b>PROJECT</b> DY7: <i>Army Systems Engineering, Architecture &amp; Analysis</i>	
<b>B. Accomplishments/Planned Programs (\$ in Millions)</b>		<b>FY 2012</b>	<b>FY 2013</b>
<ul style="list-style-type: none"> <li>- Develop and deliver Sensor reference architecture</li> <li>- Develop and deliver Sensor Initial Capabilities Document</li> <li>- Continue to refine the Aerial Layer Transition To TCS 15 Architecture</li> <li>- Continue to develop and deliver the Implementation Plan for TCS 15 Network Design</li> <li>- Continue to develop and deliver the SBCT Analysis for TCS 15-19</li> <li>- Continue to develop and deliver the ABCT Analysis for TCS 17-19</li> <li>- Develop and deliver the BUS architecture (VICTORY)</li> <li>- Continue AIC Mission thread refinement</li> <li>- Develop and deliver initial reference architecture for Integrated Base Defense (IBD) OCONUS Installations for FY 2018 fielding</li> <li>- Develop and deliver initial IBD Movement Corridor reference architecture for FY 2018 fielding</li> <li>- Continue to develop and deliver Integrated Base Defense Installations reference and implementation architectures for FY 2016 &amp; FY 2017 fielding</li> <li>- Develop and deliver initial Communication &amp; Computing Infrastructure (CCI) Installation reference architectures</li> </ul>			
<b>Title:</b> Common Operating Environment (COE)  <b>Description:</b> Army Systems Engineering & (COE) Development/Validation to Provide Technical Support for the Execution of the Army System Engineering in COE Implementation.  <b>FY 2014 Plans:</b> The funds provide: Technical support to oversee the execution of the COE Implementation plan, COE Orchestration, Governance, Cross-Cutting Capabilities Definition, Implementation Plan Updates, Software Build (SWB)/COE Configuration Control Board (CCB) and Test Support transition, Integrated Master Schedule, Government oversight of the Army's Strategic Software Improvement Program (ASSIP), Coordination with Army Staff, Technical Reference Model, Metrics for assessing compliance, Technical Advisory Board (TAB), Chief Engineer (CE) compliance, COE assessment criteria, Assess systems during the System Under Evaluation (SUE) Technical Interface Meeting (TIM), System software configuration baseline data collection, System software configuration baseline updates, Control Point/Interface Definition and Agreements, Afghan Mission Network, Ops/ Intel Convergence, Transport Convergence, Network Synchronization Working Group , Joint Interoperability & Mission Thread Architecture Office of Secretary Defense (OSD) Director Defense Research and Engineering (DDR&E), Integrated Base Defense, Basing and Basing Computing/Communications Analysis, Host Based Security System (HBSS), Global Network Enterprise Construct (GNEC) Implementation Plan, Radio Procurement Requests, SoS Engineering Construct for the Network, Organizing the SoS Engineering trade space for Platforms, Standards for the Platforms (VICTORY & FACE), Size Weight and Power (SWAP) working group, Software Blocking (SW), NIE Gaps, Candidate Assessment for NIEs 14.2 and 15.1, and Technologies assessment, Systems Engineering Plan (SEP) policy, Program Protection Plan (PPP) reviews, Reliability policy technical support, Standards & Speciation adoption across ASA(ALT), (OSD/Joint), Development Planning model, IBD, Basing Pilot). It also		0.000	0.000
			3.287



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<b>Exhibit R-2A, RDT&amp;E Project Justification:</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 0604798A: <i>Brigade Analysis, Integration and Evaluation</i>				<b>PROJECT</b> DY7: <i>Army Systems Engineering, Architecture &amp; Analysis</i>			
<b>B. Accomplishments/Planned Programs (\$ in Millions)</b>								<b>FY 2012</b>	<b>FY 2013</b>	<b>FY 2014</b>	
provides for the development and execution of COE integration policies and procedures, the development and implementation of backwards capability testing, integration checklists and their verification, test hardware development and implementation support. The development and effective utilization of emulator and integration tools. Provides for COE/CE architecture validation, design baseline validation, and the verification of COE reference architecture compliance. The verification of COE critical enabler implementation, conducting risk assessments and analysis, accreditation and certification process refinement, and verification of technical test harness and tool development. Provides for the accreditation, certification and refinement of test plans and events.											
<b>Title:</b> Facilities and IT Support								0.000	0.000	0.773	
<b>Description:</b> Provides funding for infrastructure/facilities and IT support.											
<b>FY 2014 Plans:</b> Provides funding for infrastructure/facilities. It includes the cost for government IT support from Network connectivity to purchasing/leasing hardware, software, computers, communications equipment and services.											
<b>Accomplishments/Planned Programs Subtotals</b>								0.000	0.000	18.929	
<b>C. Other Program Funding Summary (\$ in Millions)</b>											
<b>Line Item</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>FY 2015</b>	<b>FY 2016</b>	<b>FY 2017</b>	<b>FY 2018</b>	<b>Cost To Complete</b>	<b>Total Cost</b>
• DY3: <i>DY3 NIE Test &amp; Evaluation</i>			29.697		29.697	33.947	33.768	33.795	33.773	Continuing	Continuing
• DY4: <i>DY4 Network Integration Support</i>			25.863		25.863	20.830	20.788	20.777	20.773	Continuing	Continuing
• DY5: <i>DY5 Production/Fielding Coordination for Capability Sets</i>			7.829		7.829	8.949	8.902	8.909	8.904	Continuing	Continuing
• DY6: <i>DY6 Brigade and Platform Integration Support</i>			97.790		97.790	106.813	106.724	106.326	106.344	Continuing	Continuing
• DZ6: <i>DZ6 Army Integration &amp; Coordination Management</i>			13.640		13.640	14.432	14.402	14.370	14.369	Continuing	Continuing
<b>Remarks</b>											
<b>D. Acquisition Strategy</b>											
This project does not have any requirement for direct procurement of hardware or software.											
<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 0604798A: <i>Brigade Analysis, Integration and Evaluation</i>						<b>PROJECT</b> DY7: <i>Army Systems Engineering, Architecture &amp; Analysis</i>			
<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>
Army System of System Engineering and Analysis	TBD	Various Note: 1:TBD	0.000	-		-		14.869	Nov 2013	-		14.869	0.000	14.869	0.000
Common Operating Environment (COE)	TBD	Various Note: 1:TBD	0.000	-		-		3.287	Nov 2013	-		3.287	0.000	3.287	0.000
<b>Subtotal</b>			0.000	0.000		0.000		18.156		0.000		18.156	0.000	18.156	0.000
<b>Remarks</b> Note: 1 - All funding executed from SoSE&I (Warren MI) - Program Activities performed at Aberdeen Proving Ground (MD), Taylor Bldg, (Crystal City, VA), Pentagon, (Washington DC), TACOM (Warren, MI)															
<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>
Facility and IT Support	TBD	Various: Note: 1:TBD	0.000	-		-		0.773	Nov 2013	-		0.773	0.000	0.773	0.000
<b>Subtotal</b>			0.000	0.000		0.000		0.773		0.000		0.773	0.000	0.773	0.000
<b>Remarks</b> Note:1 - All funding executed from SoSE&I (Warren MI) - Program Activities performed at Aberdeen Proving Ground (MD), Taylor Bldg, (Crystal City, VA), Pentagon, (Washington DC), TACOM (Warren, MI)															
			<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		0.000		18.929		0.000		18.929	0.000	18.929	0.000
<b>Remarks</b>															

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<b>Exhibit R-4, RDT&amp;E Schedule Profile:</b> PB 2014 Army	<b>DATE:</b> April 2013
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<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 0604798A: <i>Brigade Analysis, Integration and Evaluation</i>	<b>PROJECT</b> DY7: <i>Army Systems Engineering, Architecture &amp; Analysis</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
Provide engineering, analytical and architectural oversight																												
CS14 - Develop and Deliver CS14 SBCT Reference Architecture																												
CS15 - Develop and Deliver CS 15 ABCT Reference Architecture																												
Continue development of IBD CONUS Installations refer. arch. for FY16 & 17																												
Continue development of IBD OCONUS Base Camps refer. archt. for FY15-17 fielding																												
Develop and deliver CCI OCONUS Base Camp refer. Arch.for FY16 & FY17 fielding																												
CS15 - Develop and Deliver CS15 IBCT Reference Architecture																												
Develop initial ref. arch. for IBD OCONUS Installations for FY18 fielding																												
Dev. & deliver CCI CONUS Installation refer. Arch. for FY17 & FY18 fielding																												
Dev. initial IBD Movement Corridor reference architecture for FY18 fielding																												
Dev. initial CCI OCONUS Installation refer. Arch. for FY18 fielding																												
CS16 - Develop and Deliver CS16 IBCT Reference Architecture																												
CS16 - Develop and Deliver CS16 ABCT Reference Architecture																												

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Exhibit R-4, RDT&E Schedule Profile: PB 2014 Army																								DATE: April 2013													
APPROPRIATION/BUDGET ACTIVITY										R-1 ITEM NOMENCLATURE										PROJECT																	
2040: Research, Development, Test & Evaluation, Army BA 5: System Development & Demonstration (SDD)										PE 0604798A: Brigade Analysis, Integration and Evaluation										DY7: Army Systems Engineering, Architecture & Analysis																	
										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
CS16 - Develop and Deliver CS16 SBCT Reference Architecture										<div></div>																											

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<b>Exhibit R-4A, RDT&amp;E Schedule Details: 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 0604798A: <i>Brigade Analysis, Integration and Evaluation</i>	<b>PROJECT</b> DY7: <i>Army Systems Engineering, Architecture &amp; Analysis</i>	

## Schedule Details

Events	Start		End	
	Quarter	Year	Quarter	Year
Provide engineering, analytical and architectural oversight	2	2012	1	2015
CS14 - Develop and Deliver CS14 SBCT Reference Architecture	4	2012	3	2013
CS15 - Develop and Deliver CS 15 ABCT Reference Architecture	3	2013	2	2014
Continue development of IBD CONUS Installations refer. arch. for FY16 & 17	3	2013	4	2014
Continue development of IBD OCONUS Base Camps refer. archt. for FY15-17 fielding	3	2013	4	2014
Develop and deliver CCI OCONUS Base Camp refer. Arch.for FY16 & FY17 fielding	3	2013	4	2014
CS15 - Develop and Deliver CS15 IBCT Reference Architecture	4	2013	3	2014
Develop initial ref. arch. for IBD OCONUS Installations for FY18 fielding	1	2014	4	2014
Dev. & deliver CCI CONUS Installation refer. Arch. for FY17 & FY18 fielding	1	2014	4	2014
Dev. initial IBD Movement Corridor reference architecture for FY18 fielding	1	2014	4	2014
Dev. initial CCI OCONUS Installation refer. Arch. for FY18 fielding	1	2014	4	2014
CS16 - Develop and Deliver CS16 IBCT Reference Architecture	3	2014	3	2015
CS16 - Develop and Deliver CS16 ABCT Reference Architecture	4	2014	3	2015
CS16 - Develop and Deliver CS16 SBCT Reference Architecture	4	2014	3	2015

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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 0604798A: Brigade Analysis, Integration and Evaluation				PROJECT DZ6: Army Integration Management & Coordination			
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
DZ6: Army Integration Management & Coordination	-	0.000	0.000	13.640	-	13.640	14.432	14.402	14.370	14.369	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

This project (DZ6) was created to support the Army's Brigade Analysis, Integration and Evaluation mission. The FY 2013 President Budget submission reflects Program Element (PE) 604798A broken down into three projects; DV1, DU8, and DU9. Beginning with FY 2014 Presidents Budget submission this PE is now broken down into six projects to better align the funding with the progressive changes to the development and execution of both Network Integration Events (NIE) and Tactical Capability Set-Synchronized Fielding (TCS-SF) missions. These projects are: DY3; NIE Test Evaluation, DY4; Network Integration Support, DY5; Production /Fielding Coordination for Capability Sets, DY6; Brigade and Platform Integration Support, DY7; Army System Engineering, Architecture & Architecture & Analysis, and DZ6; Army Integration Management & Coordination. Beginning in FY 2014 the activities within this project is divided among all of the new Projects as outlined above.

## A. Mission Description and Budget Item Justification

This project will support the management and coordination of all six Phases of the Army's Agile Network Integration process along with the Army System of System engineering and analysis architecture development for the Army. The project will fund the "shared" resources that support the technical and management (i.e. headquarters, resource management, acquisition, affordability, human resources, operations, etc.) aspects of the Army's Agile Network Integration process and coordination of Production Integration and Fielding of the Tactical Capability Set (TCS). The "shared" resources reduce overall cost to the program by spreading this support for three directorates, sharing the personnel and cost for direct support.

FY 2014 will continue the NIE gap and evaluation process for NIE 14.2 and NIE 15.1. For example, out of the 106 SUE candidates that responded to the solicitation for NIE 13.1, 7 SUTs and 30 SUEs were evaluated. These systems were evaluated against one of the Army's nine gaps identified for NIE 13.1 For NIE 13.2: against 11 gaps, 4 SUTs and 5 SUEs were selected for field evaluation and 4 SUEs were selected for Lab Base evaluation only. For NIE 14.1: 30 SUEs were submitted against the following 19 Gaps: (1) Brigade/Battalion Command Post (CP) Mobility and Scalability, (2) CDR Applications for Mobile/Handhelds (HH), (3) Network Visualization on the Common Operational Picture (COP), (4) Integrated LandWarNet, Installation Networks & Training Resources, (5) Aerial Layer Network Extension, (6) Air-Ground Network Architecture, (7) Enterprise Network Capabilities (e-mail), (8) Integrated Network Assurance - Network Access Control (NAC), (9) Integrated Network Assurance - Network Intrusion Prevention System, (10) Integrated Network Assurance - Information Assurance Vulnerability Mgmt, (11) Integrated Network Assurance - Security Information Management System, (12) Host Based Security System, (13) Integrated Trouble Ticketing, (14) Unified Communications Capability, (15) Evaluate instrumented Home Station Small Unit Training to include AARs, (16) Operational Energy - Commonality of Soldier Carried Energy Sources, (17) Operational Energy - Energy Sources with Extended Duration and Power, (18) Operational Energy - Monitor and Manage System Power, supply and Demand, and (19) Operational Energy - Reduce Reliance on Petroleum Based Energy.

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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 0604798A: Brigade Analysis, Integration and Evaluation				PROJECT DZ6: Army Integration Management & Coordination			
B. Accomplishments/Planned Programs (\$ in Millions)									FY 2012	FY 2013	FY 2014
Title: SoSE&I Program Management and Integration									0.000	0.000	9.800
Description: This effort funds for all "shared" resources that supports the Brigade Analysis, Integration and Evaluation program.											
FY 2014 Plans: This effort includes program, information, security, business, and personal management efforts required to support the SoSI integration teams. It includes the following types of activities: Program management, contracting, financial management, cost analysis, personnel management, operations, security management, information management, facilities and infrastructure management, Pentagon liaison, knowledge management.											
Title: Facilities and IT Support									0.000	0.000	3.840
Description: Provides funding for infrastructure/facilities and IT support.											
FY 2014 Plans: Provides funding for infrastructure/facilities, and government personnel IT support from Network connectivity to purchasing/leasing hardware, software, computers, communications equipment and services.											
Accomplishments/Planned Programs Subtotals									0.000	0.000	13.640
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
• DY3: DY3 NIE Test & Evaluation			29.697		29.697	33.947	33.768	33.795	33.773	Continuing	Continuing
• DY4: DY4 Network Integration Support			25.863		25.863	20.830	20.788	20.777	20.773	Continuing	Continuing
• DY5: DY5 Production/Fielding Coordination for Capability Sets			7.829		7.829	8.949	8.902	8.909	8.904	Continuing	Continuing
• DY6: DY6 Brigade and Platform Integration Support			97.790		97.790	106.813	106.724	106.326	160.344	Continuing	Continuing
• DY7: DY7 Army Systems Engineering, Architecture and Analysis			18.929		18.929	20.029	19.986	19.943	19.941	Continuing	Continuing
Remarks											

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<b>Exhibit R-2A, RDT&amp;E Project Justification:</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 0604798A: <i>Brigade Analysis, Integration and Evaluation</i>	<b>PROJECT</b> DZ6: <i>Army Integration Management &amp; Coordination</i>
<p><b><u>D. Acquisition Strategy</u></b></p> <p>This project includes the purchase of IT hardware, software and service support; general office and operational supplies.</p> <p><b><u>E. Performance Metrics</u></b></p> <p>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.</p>		



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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 0604798A: <i>Brigade Analysis, Integration and Evaluation</i>					<b>PROJECT</b> DZ6: <i>Army Integration Management &amp; Coordination</i>			

  

<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>
SoSE&I Program Management and Integration	TBD	Various Note: 1:TBD	0.000	-		-		9.800	Nov 2013	-		9.800	0.000	9.800	0.000
<b>Subtotal</b>			0.000	0.000		0.000		9.800		0.000		9.800	0.000	9.800	0.000

  

**Remarks**  
 Note: 1  
 - All funding executed from SoSE&I (Warren MI)  
 - Program Activities performed at Aberdeen Proving Ground (MD), TACOM (Warren MI), Taylor Bldg. (Crystal City, VA), Pentagon, (Washington DC).

  

<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>
Facilities and IT Support	TBD	Various Note: 1:TBD	0.000	-		-		3.840	Nov 2013	-		3.840	0.000	3.840	0.000
<b>Subtotal</b>			0.000	0.000		0.000		3.840		0.000		3.840	0.000	3.840	0.000

  

**Remarks**  
 Note:1  
 - All funding executed from SoSE&I (Warren MI)  
 - Program Activities performed at Aberdeen Proving Ground (MD), TACOM (Warren MI), Taylor Bldg. (Crystal City, VA), Pentagon, (Washington DC), FT Bliss (TX), White Sands Missile Range (NM).

  

	<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	0.000	13.640	0.000	13.640	0.000	13.640	0.000

  

**Remarks**

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Exhibit R-4, RDT&E Schedule Profile: PB 2014 Army																DATE: April 2013			
APPROPRIATION/BUDGET ACTIVITY								R-1 ITEM NOMENCLATURE								PROJECT			
2040: Research, Development, Test & Evaluation, Army								PE 0604798A: Brigade Analysis, Integration and Evaluation								DZ6: Army Integration Management & Coordination			
BA 5: System Development & Demonstration (SDD)																			

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Exhibit R-4A, RDT&E Schedule Details: PB 2014 Army		DATE: April 2013
APPROPRIATION/BUDGET ACTIVITY 2040: <i>Research, Development, Test &amp; Evaluation, Army</i> BA 5: <i>System Development &amp; Demonstration (SDD)</i>	R-1 ITEM NOMENCLATURE PE 0604798A: <i>Brigade Analysis, Integration and Evaluation</i>	PROJECT DZ6: <i>Army Integration Management &amp; Coordination</i>

Schedule Details

Events	Start		End	
	Quarter	Year	Quarter	Year
NIE 14.2 Planning - Execution	2	2013	3	2014