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Exhibit R-2, RDT&E Budget Item Justification: PB 2012 Army **DATE:** February 2011

APPROPRIATION/BUDGET ACTIVITY				R-1 ITEM NOMENCLATURE							
2040: <i>Research, Development, Test & Evaluation, Army</i> BA 5: <i>Development & Demonstration (SDD)</i>				PE 0604661A: <i>FCS Systems of Systems Engr & Program Mgmt</i>							
COST (\$ in Millions)	FY 2010	FY 2011	FY 2012 Base	FY 2012 OCO	FY 2012 Total	FY 2013	FY 2014	FY 2015	FY 2016	Cost To Complete	Total Cost
Total Program Element	847.011	568.711	383.872	-	383.872	490.045	518.188	648.502	352.069	Continuing	Continuing
FC2: <i>BCT SYSTEM OF SYSTEMS ENGR & PROGRAM MGMT</i>	847.011	568.711	383.872	-	383.872	490.045	518.188	648.502	352.069	Continuing	Continuing

Note

FY12 and FY13: Program was restructured to meet emerging requirements and the funds were used for higher priority requirements.

A. Mission Description and Budget Item Justification

This Program Element (PE) includes contractor and government scope to ensure that the Army is fielding platforms, components and software that are integrated together to provide increased capability for the soldier that are supportable and trainable. The PE includes effort associated with developing the infrastructure, architecture, and design of the Army's integrated network. This project includes the following government effort: System of system architecture and design standards for the Army, BCT Integration, BCT simulation, BCT testing and experimentation, BCT logistics, and BCT training. This project includes support to other DOD agencies for joint programs and collaboration efforts with PEO Integration and Capability Package portfolio integration.

Beginning in FY 2010, this Program Element includes all SoS (engineering, test, logistics, training and program management) cost associated with IBCT Increment 1 and future BCT Integration, experimentation, and test. Beginning in FY11 all prime contractor fee is moved to appropriate platform funding Program Element. Beginning in FY12 platform System Engineering & Program Management is accounted for in the appropriate platform funding Program Element. The Government support costs includes funding for government personnel labor, travel, training, supplies, other support costs (support contractors, Automated Data Processing (ADP), communications, supplies, and equipment), and platform unique testing.

Immediately after the completion of SoS PDR, all remaining FCS Brigade Combat Team (BCT) effort was terminated in FY10. System Engineering efforts to support the future BCT Modernization efforts will continue through the Network CDR. After completion of the Network CDR the remaining contractor system of system engineering effort will be terminated and transferred to the government in logical cost effective manner. The government will then manage all system of system engineering requirements and efforts for the Army to ensure the most cost effective and timely management of integration activities and BCT fieldings.

Supports other services for Joint Programs, Multinational Project Arrangements, and collaborative efforts. Includes the procurement of Government Furnished Equipment/Items/Data/property (GFX). GFX is used when procurement of an item is not available to the contractor other than through the Government, or the Government can provide this service or item at lower cost.

FY11 funding represented in this document does not reflect the restructure to the program as a result of the recently signed Acquisition Decision Memorandum

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B. Program Change Summary (\$ in Millions)	FY 2010	FY 2011	FY 2012 Base	FY 2012 OCO	FY 2012 Total
Previous President's Budget	912.399	568.711	566.378	-	566.378
Current President's Budget	847.011	568.711	383.872	-	383.872
Total Adjustments	-65.388	-	-182.506	-	-182.506
• Congressional General Reductions		-			
• Congressional Directed Reductions		-			
• Congressional Rescissions	-	-			
• Congressional Adds		-			
• Congressional Directed Transfers		-			
• Reprogrammings	-34.400	-			
• SBIR/STTR Transfer	-	-			
• Adjustments to Budget Years	-	-	-182.506	-	-182.506
• Other Adjustments 1	-30.988	-	-	-	-

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APPROPRIATION/BUDGET ACTIVITY 2040: Research, Development, Test & Evaluation, Army BA 5: Development & Demonstration (SDD)				R-1 ITEM NOMENCLATURE PE 0604661A: FCS Systems of Systems Engr & Program Mgmt				PROJECT FC2: BCT SYSTEM OF SYSTEMS ENGR & PROGRAM MGMT			
COST (\$ in Millions)	FY 2010	FY 2011	FY 2012 Base	FY 2012 OCO	FY 2012 Total	FY 2013	FY 2014	FY 2015	FY 2016	Cost To Complete	Total Cost
FC2: BCT SYSTEM OF SYSTEMS ENGR & PROGRAM MGMT	847.011	568.711	383.872	-	383.872	490.045	518.188	648.502	352.069	Continuing	Continuing
Quantity of RDT&E Articles											
A. Mission Description and Budget Item Justification											
<p>This Program Element (PE) includes contractor and government scope to ensure that the Army is fielding platforms, components and software that are integrated together to provide increased capability for the soldier that are supportable and trainable. The PE includes effort associated with developing the infrastructure, architecture, and design of the Army’s integrated network. This project includes the following government effort: System of system architecture and design standards for the Army, BCT Integration, BCT simulation, BCT testing and experimentation, BCT logistics, and BCT training. This project includes support to other DOD agencies for joint programs and collaboration efforts with PEO Integration and Capability Package portfolio integration.</p> <p>Beginning in FY 2010, this Program Element includes all SoS (engineering, test, logistics, training and program management) cost associated with IBCT Increment 1 and future BCT Integration, experimentation, and test. Beginning in FY11 all prime contractor fee is moved to appropriate platform funding Program Element. Beginning in FY12 platform System Engineering & Program Management is accounted for in the appropriate platform funding Program Element. The Government support costs includes funding for government personnel labor, travel, training, supplies, other support costs (support contractors, Automated Data Processing (ADP), communications, supplies, and equipment), and platform unique testing.</p> <p>Immediately after the completion of SoS PDR, all remaining FCS Brigade Combat Team (BCT) effort was terminated in FY10. System Engineering efforts to support the future BCT Modernization efforts will continue through the Network CDR. After completion of the Network CDR the remaining contractor system of system engineering effort will be terminated and transferred to the government in logical cost effective manner. The government will then manage all system of system engineering requirements and efforts for the Army to ensure the most cost effective and timely management of integration activities and BCT fieldings.</p> <p>Supports other services for Joint Programs, Multinational Project Arrangements, and collaborative efforts. Includes the procurement of Government Furnished Equipment/Items/Data/property (GFX). GFX is used when procurement of an item is not available to the contractor other than through the Government, or the Government can provide this service or item at lower cost.</p>											
B. Accomplishments/Planned Programs (\$ in Millions, Article Quantities in Each)								FY 2010	FY 2011	FY 2012	
Title: CONTRACTOR SYSTEM OF SYSTEM ENGINEERING & PROGRAM MANAGEMENT - IBCT INCREMENT1								53.240	0.095	-	
Articles:								0	0		
Description: Implemented processes, models, tools & management structure to integrate all subcontractor partners into one team to meet cost, schedules, and technical performance requirements in the contract to include program overview, Earned Value Management, briefings, technology reviews, reports, program risk, subcontract management, data, operation management,											

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B. Accomplishments/Planned Programs (\$ in Millions, Article Quantities in Each)		FY 2010	FY 2011	FY 2012
contract management, procurement and acquisition management along with Small and Minority Business Integration, SDD Affordability/CAIV/ Life Cycle Management and development of program baseline & Integrated Master Schedule. FY10 includes Program Management for the remainder of Increment 1 effort through LUT 10. FY11 supports the Customer Test. FY 2010 Accomplishments: See narrative above. FY 2011 Plans: See narrative above.				
Title: CONTRACTOR SUPPORTABILITY/LOGISTICS - IBCT INCREMENT 1 Articles: Description: Provided test support for equipment testing and demonstrations for Increment 1 systems supportability performance verification. Validate Maneuver Sustainment and other applicable support concepts during testing, demonstrations, and validations. Ensure sensor collection of data for logistics decision support system software is adequate to support logistics modeling verification and validation efforts. Complete integration of logistics requirements for the IBCT Increment 1 systems. Ensure Supportability architectures and requirements are implemented during design, development, fabrication and test of IBCT Increment 1 platforms/systems to achieve Transportability, Deployability and Operational Availability. Complete data products for supportability planning, PBL planning, IETM development, Level of Repair Analysis, Logistics Management Information (LMI) Logistics Demonstrations, UID Implementation, Core Logistics Analysis and Source of Repair Analysis and diagnostic models. Complete ILS assessments to ensure that requirements for RAM-T and supportability are met. Provide support for Logistics Demonstration Planning and readiness reviews, 4QFY10. FY 2010 Accomplishments: See narrative above. FY 2011 Plans: See narrative above.		3.965 0	1.132 0	-
Title: CONTRACTOR SOS INTEGRATION - IBCT INCREMENT 1 Articles: Description: Funding is provided for the following effort FY 2010 Accomplishments:		8.869 0	-	-

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B. Accomplishments/Planned Programs (\$ in Millions, Article Quantities in Each)			FY 2010	FY 2011	FY 2012
Conducted the Increment 1 delta CDR, conducted Industrial Capability Assessment for all major suppliers in support of PRR, and support MS C Decision review. Planned and conducted all system level IQT, develop, test integrated releases of SOSCOE Battle Command and other software applications at the NSQT. Implemented engineering changes to correct faults, detected from FY09 TFT/FDT&E/LUT, improved system reliability, and conducted FY10 TT (Technical Test)/FDT&E/LUT.					
Title: CONTRACTOR TRAINING SPECS AND PRODUCTS - IBCT INCREMENT 1 Description: Funding is provided for the following effort FY 2010 Accomplishments: Designed and developed Interactive Multimedia Instruction (IMIs) and Job Aids to enable individual and collective training and to support the technical field tests (TFT), FDT&E and LUT. Update the currently fielded TADSS to support training of the evaluation force in preparation for and during LUT.			2.447 0	-	-
Title: CONTRACTOR SOS TEST AND M&S - IBCT INCREMENT 1 Description: Funding is provided for the following effort FY 2010 Accomplishments: Planned and executed qualification testing of the new form factor U/T-UGS, updated Network Integration Kit (NIK) - formerly B-kit, updated SUGV, and Class I Block 0 UAV at various ATEC test ranges. Developed and executed detailed Technical Test (TT) Plan in a classified network environment. Technical Test is executed by a team of 300+ engineers over two month period of test execution and regression testing. Supported integration of Increment 1 SW and HW in support of the TT. Provided data analysis and final TT test report to support December 2010 DAB Update. Provided support to the FY10 FDTE and LUT.			25.716 0	-	-
Title: CONTRACTOR FEE - IBCT INCREMENT 1 Description: This includes both the Boeing incentive and fixed fee. Beginning in FY11 fee is included in each PE. Therefore fee in FY11 is for only SoS Engineering and Program Management effort. Fee is calculated only on new effort not cost overruns. FY 2010 Accomplishments: See narrative above. FY 2011 Plans:			29.100 0	0.123 0	-

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B. Accomplishments/Planned Programs (\$ in Millions, Article Quantities in Each)		FY 2010	FY 2011	FY 2012
See narrative above.				
Title: GOVERNMENT: (SYSTEMS ENGI & PM - INC 1) & (BCT Tech Integration Support & Facility - WSMR) Articles: Description: Funding is provided for the following effort. FY 2010 Accomplishments: Participated and ensured the government and soldiers best interest/values were considered in the following: System of System (SoS) reviews, trade studies, architectural mgt, requirements decomposition, requirements flow down, development of specifications, interface definitions, configuration mgt oversight, specialty engineering, analysis and verification of integrated force effectiveness, Software, Risk, M&S, Simulation, Performance/Product/Producibility Assurance, Integration & Verification, Technology and Experimentation Management. FY10 included system engineering and analysis effort required to support integration and testing. The following integration and test events occurred in FY10: Initial Qualification Test for each system, Technical Test, Field Development Test & Experimentation, Platoon and Company Situational Training Exercise, Limited User Test. FY11 supports the Customer Test. PROGRAM MANAGEMENT: Provide integrated program management (i.e. planning, directing, tools and controlling functions), for all development activities to include data and supplier management, program control, government training, procurement and contracts management, operations management for incremental BCTs and new combat vehicle development. Provide Congressional Title 10 oversight, cost analysis and management, budget development, justification and tracking, Earned Value Management, Integrated Master Schedule development and management, Complementary Program management and operations management associated with contractor management. Also includes TRADOC support for requirement analysis, AoA support, and Milestone C and associated decision point reviews. FY 2011 Plans: See narrative above.		53.224 0	9.101 0	-
Title: GOVERNMENT: (SYS TEST & EVAL -STE- & M&S - IBCT INC 1) & (NK Integration M&S) Articles: Description: Funding is provided for the following efforts. FY 2010 Accomplishments: Continued to fund and support APS, NIK, UAV, UGS and UGV testing at ATEC test centers. Provided for range support for IBCT Increment 1 platform qualification testing, IBCT Increment 1 Technical Tests and the LUT 10. Provided SME support to the contractor and surge engineering support as required to support specific IBCT Increment 1 test events. Funded the development and modification of modeling and simulation test tools for future test events. These tools include test event design tools as well		83.534 0	76.365 0	-

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B. Accomplishments/Planned Programs (\$ in Millions, Article Quantities in Each)		FY 2010	FY 2011
<p>as test data collection capabilities. Funds the operational and maintenance and hardware (HW) refresh costs of the Common Control Nodes and WSMR and APG. Funded for infrastructure and test facilities that supported the IBCT Increment 1 testing. Funded DREN connectivity to selected contractor sites. Continue modifications to M&S GFX to include OneSAF v5.0, White Sands Missile Range digital terrain databases, three dimensional visualization tools, and Night Vision Laboratory's Toolset to accurately represent Increment 1 systems, networks and Battle Command in a realistic synthetic environment. Executed 6 M&S Integration Events to federate the M&S simulations and stimulators required for execution of FY10 TT and LUT events. Starts development of Brigade-scale simulation environment that will be required to support the FY11 IOT&E, to include comparative evaluation of IBCTs with and without Increment 1 material in a validated and realistic operational and threat environment.</p> <p>FY 2011 Plans: Fund and support NIK, CPD threshold Class I UAV, UGS and CPD threshold UGV production verification testing at ATEC test centers. Funds the planning and conduct of Government Technical Tests, Increment 1 Initial Operational Test and Comparative Test to include range support, threat, data collection and analysis. Detail plan range support for production verification testing of IBCT Increment 1 systems. Funds overarching M&S integration activity within the Government, to include responsibility for integration of M&S GFX and VV&A in support of Army-led Increment 1 comparative IOT&E. Provides operationally relevant and realistic brigade and above scale environment to allow a single live CAB to conduct IOT&E operations in coordination with soldiers controlling two additional CABs, the Brigade headquarters, and elements of the above Brigade force in simulation environment.</p>			
<p>Title: GOVERNMENT OTHER -</p> <p align="right">Articles:</p> <p>Description: Funding is provided for the following efforts.</p> <p>FY 2010 Accomplishments: This includes support to both PM and non-PM government support offices that provide technical expertise (PEO C3T, TRADOC, UAMBL, ARL, FFID, etc). This also includes other technical support contracts like the Sandia Labs - MITRE, Software Steering Committee from University South California and University of Maryland which also reviews software performance, logistics products, network requirements and capabilities. It includes all electronic hardware and software required for government personnel (computers, Blackberry, software, internet and ACE software agreements). CIO and Security management within the PM.</p> <p>FY 2011 Plans: See narrative above.</p>		32.472 0	10.204 0
<p>Title: BCT PLATFORM A-KIT DEVELOPMENT - IBCT INCREMENT 1</p> <p align="right">Articles:</p>		3.810 0	- -

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B. Accomplishments/Planned Programs (\$ in Millions, Article Quantities in Each)		FY 2010	FY 2011	FY 2012
Description: Funding is provided for the following effort FY 2010 Accomplishments: Provided for the continuation of the design effort of the A-Kits for the current production configurations of the 1151 and 1165 HMMWV variants. Funded the development of Technical Data packages for both A-Kit variants to include installation drawings as well as updating all Technical Bulletins containing installation instructions. Funded the Installation of the A-Kit, any Legacy equipment as well as supporting the NIK installations on all HMMWV test vehicles. Funded the A-Kit contractor support to all required testing.				
Title: GOVERNMENT GFX - IBCT INCREMENT 1 Description: Funding is provided for the following effort FY 2010 Accomplishments: PEO STRI Technical Management Integration (TMI) support to the Boeing Training IPT, managing the technical activities of development, system engineering, modeling, design support, integration and test, and delivery of the Training Common Components (TCC) software to the prime contractor.		Articles: 2.309 0	-	-
Title: CONTRACTOR SYSTEM OF SYSTEM ENGINEERING & PROGRAM MANAGEMENT - CP 13/14 Description: Implement processes, models, tools & management structure to integrate all subcontractor partners into one team to meet cost, schedules, and technical performance requirements in the contract to include program overview, Earned Value Management, briefings, technology reviews, reports, program risk, subcontract management, data, operation management, contract management, procurement and acquisition management along with Small and Minority Business Integration, SDD Affordability/CAIV/ Life Cycle Management and development of program baseline & Integrated Master Schedule. CP 13/14 effort began in FY10. FY 2010 Accomplishments: See narrative above. FY 2011 Plans: See narrative above.		Articles: 115.087 0	104.153 0	-
Title: CONTRACTOR - SUPPORTABILITY/LOGISTICS - CP13/14 Articles:		22.945 0	21.060 0	-

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B. Accomplishments/Planned Programs (\$ in Millions, Article Quantities in Each)			FY 2010	FY 2011	FY 2012
<p>Description: Funding is provided for the following effort.</p> <p>FY 2010 Accomplishments: Defined, developed & integrated requirements for the CP 13/14 platforms and systems. Ensured Supportability architectures and requirements are implemented during design, development, fabrication and test of CP 13/14 and platforms/systems to achieve Transportability, Deployability and Operational Availability. Initiated CDR planning data products for CP 13/14 systems for supportability planning, PBL planning, IETM development, Level of Repair Analysis, Logistics Management Information (LMI) Logistics Demonstrations, UID Implementation, Core Logistics Analysis and Source of Repair Analysis and diagnostic models. Identified the logistics test requirements for the soldier or warfighter level health tests and the requirements for integration testing with multiple systems and platforms as well as the system of system level testing. Planned, prepared and completed CDR ILS assessments for CP 13/14 systems to ensure that requirements for RAM-T and supportability were met. Provided Logistics Demonstration Plan.</p> <p>FY 2011 Plans: Define, develop & integrate requirements for the CP 13/14 platforms and systems. Ensure Supportability architectures and requirements are implemented during design, development, fabrication and test of CP 13/14 platforms/systems to achieve Transportability, Deployability and Operational Availability. Plan for , review and provide SoS CDR and IQT data products for supportability planning, PBL planning, IETM development, Level of Repair Analysis, Logistics Management Information (LMI) Logistics Demonstrations, UID Implementation, Core Logistics Analysis and Source of Repair Analysis and diagnostic models. Identify the logistics test requirements for the soldier or warfighter level health tests, and the requirements for integration testing with multiple systems and platforms as well as the system of system level testing. Plan, prepare for and complete CDR and IQT ILS assessments to ensure that requirements for RAM-T and supportability are met. Provide Logistics Demonstration Plan.</p>					
<p>Title: CONTRACTOR SOS INTEGRATION - CP 13/14</p> <p align="right">Articles:</p> <p>Description: Funding is provided for the following effort</p> <p>FY 2010 Accomplishments: Managed the execution Integrated System Level Critical Design Reviews (CDRs for CPD objective Class I Unmanned Air Vehicles (UAV), Common Controller, CPD objective Small Unmanned Ground Vehicle (SUGV), ARV(L), Autonomous Navigation System (ANS), NIK and Network; and Build Readiness Checkpoint for CP 13/14 Battle Command. Hardware and software simulation to improve design and get soldier based assessments. Updated the Integrated Analysis Plan and execute assessments in the areas of KPP achievability, MANPRINT, Manpower Estimate, Human Systems Integration, Safety, Information Assurance and force effectiveness in support of the SoS CDR. Update Program National Environment Policy Act (NEPA) Assessment and complete</p>			42.120 0	37.219 0	-

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B. Accomplishments/Planned Programs (\$ in Millions, Article Quantities in Each)			FY 2010	FY 2011	FY 2012
a Programmatic Environmental Safety Occupational Health (ESOH) Evaluation. Conducted requirements decomposition for CP 13/14 and develop ASPEC. FY 2011 Plans: Continue systems engineering architecture/decomposition of TRADOC's requirements currently being staffed at system level CDD and development of CP 13/14 Performance Specification: Manage the integration of the CPD objective Class I Unmanned Aerial Vehicles (UAV), Common Controller, CPD objective Small Unmanned Ground Vehicle (SUGV), ARV-A (L), Autonomous Navigation System (ANS) and the Network. Complete the SoS Critical Design Review 3QFY11 and demonstrate ability to meet the required capabilities. Substantiate, via Integrated Platform/Network Analysis and requirements traceability, achievement of the Key Performance Parameters. Complete Human Systems Integration assessments to ensure the Soldier can effectively operate the provided systems in a safe and effective manner.					
Title: CONTRACTOR TRAINING SPECS & PRODUCTS - CP 13/14 Description: Funding is provided for the following effort FY 2010 Accomplishments: Designed and developed initial increment of Embedded Training capability for CP 13/14. Updated the currently fielded TADSS to maintain concurrency with BCS and SOSCOE to facilitate training of the evaluation force in preparation for and during LUT. Completed the design of the CL1 training capability to enable live and virtual training, including interoperability with MILES. FY 2011 Plans: Complete the platform design of the ARV-A(L), SUGV, CCD, and NIK/Network training capability, to enable interoperability with Combat Training Center Instrumentation System (CTC-IS), Home Station Instrumented Training Systems (HITS), DRTS, Close Combat Tactical Trainer (CCTT), JLCCTC, Army Training Information Architecture _ Migrated (ATIA-M), and I-MILES. Initiate the development of Live, Virtual, and Constructive training capabilities for the CL1, ARV-A(L), SUGV, CCD, and NIK/Network. Update IMIs and Job Aides based on post-test system modifications to support training for FY11 test events. Update the currently fielded TADSS to maintain concurrency with BCS and SOSCOE to facilitate training of the IOT&E unit prior to test event.			23.497 0 Articles:	25.856 0	-
Title: CONTRACTOR SOS TEST AND M&S - CP 13/14 Description: Funding is provided for the following effort FY 2010 Accomplishments:			26.913 0 Articles:	36.938 0	-

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B. Accomplishments/Planned Programs (\$ in Millions, Article Quantities in Each)			FY 2010	FY 2011	FY 2012
Initiated the development of the detailed test plan, test procedures, and test training plans for the Network Maturation Scalability Assessment (NMSA) laboratory and field phase to demonstrate scalability of CP13/14 SW and network. Developed and delivered Test Resource Requirements Document to the USG for NMSA. Initiated the development of the detailed test plan, test procedures, and test training plans for the Technical Test.					
FY 2011 Plans: Complete detailed planning of the qualification testing of the CP 13/14 platforms (improved CPD objective SUGV, CPD objective Class I UAV, ARV-A(L), Common Controller, UGS, Improved NIK with upgraded Battle Command Software). Complete detailed test planning for the CP 13/14 Technical Test Conduct Pre-Test Readiness Review for Technical Test Conduct Benchmarks and Checkouts for Network Maturation Scalability Assessment (NMSA) (Laboratory and Field phases). Continue development of Brigade Combat Team synthetic environment for use in NMSA and software integration. Execute field integration tests of the Common Controller for each platform type tied to the command post.					
Title: CONTRACTOR FEE - CP 13/14			84.905	22.523	-
Articles:			0	0	
Description: This includes both the Boeing incentive and fixed fee. Beginning in FY11 fee is included in each PE. The PE in FY11 and out only includes fee for Systems of Systems Engineering/PM activity. Fee is calculated only on new effort, not cost overruns.					
FY 2010 Accomplishments: See narrative above.					
FY 2011 Plans: See narrative above.					
Title: TERMINATION COSTS			36.352	-	-
Articles:			0		
Description: Funding is provided for the following effort					
FY 2010 Accomplishments: Special Termination Costs for MGV, Class IV and MULE These costs are paid to the contractor and subcontractors as per FAR 31.205 for; Severance Pay, Reasonable costs continuing after termination, Settlement of expenses, and the costs to return field service personnel from remote or liaison sites. In addition to the FAR termination costs this element includes Disposition of Terminated Material to other Army agencies. These funds also					

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B. Accomplishments/Planned Programs (\$ in Millions, Article Quantities in Each)		FY 2010	FY 2011
include all cost for packaging, transporting, and short and long term storage of selected materials IAW FAR 45/49. All Secure equipment was dispositioned IAW NSA requirements.			
Title: GOVERNMENT - SYSTEM ENGINEERING & PROGRAM MANAGEMENT - CP 13/14 AND BEYOND Articles: Description: SYS ENG: Participate and ensure the government and soldiers best interest/values are considered in the following: System of System (SoS) reviews, trade studies, architectural management, requirements decomposition, requirements flow down, development of specifications, interface definitions, configuration management oversight, specialty engineering, analysis and verification of integrated force effectiveness, Software, Risk, M&S, Simulation, Performance/Product/Producibility Assurance, Integration & Verification, Technology & Experimentation Management. FY10, FY11 & FY12 includes system engineering and analysis effort required to support CP 13/14 CDR and begin preparation for CP 15/16. This includes the following: Develop architecture for brigade level integrated materiel solution to user identified capability gaps. Decompose brigade level architectures into interface and performance requirements. Identify Integrated Materiel portfolio solution set for CP 13/14 and beyond. Configuration manage SoS baseline for CP13/14. Develop integration/interface standards for CP 13/14. Plan SoS Integration analysis, demonstrations and experiments. Develop SoS Capability Package integration standards and toolsets. Establish SoS level systems engineering products (architectures, interfaces, requirements) for specific functional Brigade level materiel solutions such as Integrated Base Defense, NetOPs and HW/SW integration. PROG MGT: Provide integrated program management (i.e. planning, directing, tools and controlling functions), for all development activities to include data and supplier management, program control, government training, procurement and contracts management, operations management for incremental BCTs. Provide Congressional Title 10 oversight, cost analysis and management, budget development, justification and tracking, Earned Value Management, IMS development and management, Capability Package Portfolio Integration management and operations mgt associated with contractor management. Also includes TRADOC support for requirement analysis, AoA support, and MS C and associated decision point reviews. FY 2010 Accomplishments: See narrative above. FY 2011 Plans: See narrative above.		68.187 0	87.012 0
Title: GOVERNMENT - SYSTEM TEST & EVALUATION (STE) AND M&S - CP 13/14 Articles: Description: Funding is provided for the following effort		20.238 0	47.148 0

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B. Accomplishments/Planned Programs (\$ in Millions, Article Quantities in Each)		FY 2010	FY 2011
<p>FY 2010 Accomplishments: Initiated test planning for NIK, CPD objective Class I UAV, UGS and CPD objective SUGV testing at ATEC test centers. Verified and validated WNW waveform models that will be used to evaluate the CP 13/14 network performance at Brigade and higher level. Continued funding of modifications to M&S GFX software to accurately represent CP 13/14 systems, networks and Battle Command. Established Government capability to execute top-level M&S integration, execution and support to allow soldiers to exercise and evaluate CP 13/14 systems, networks and Battle Command software in an operationally relevant and realistic environment.</p> <p>FY 2011 Plans: Continue to fund and support NIK, CPD objective Class I UAV, UGS and CPD objective UGV testing at ATEC test centers. Provide SME support to the contractor and surge engineering support as required to support specific CP 13/14 test events. Provides range support and threat representation to support contractor Technical Test. Develop and modify modeling and simulation test tools to include Role Player Work Station, JDCARS (Joint Digital Collection, Analysis, and Review System), RICS2 (Remotely Reconfigurable Integrated Instrumentation Command and Control Simulator, Stimulator), TCRS (Test Conduct and Reporting System), TestTalk, and CTTK-DRA(C4ISR Test Toolkit _Data Reduction and Analysis) suite that will aid in integration and support of CP13/14 Technical Tests. Funds the operational and maintenance and hardware (HW) refresh costs of the Common Control Node at APG. Secures facilities planned for future CP13/14 testing at WSMR. Funds DREN connectivity to selected contractor sites. Enhancements of OneSAF to support: adaptation to incremental releases of Integrated Battle Command/Network software; updated representations of CP 13/14 equipment; and updated unit-level representations of CP 13/14 units. Funds overarching M&S integration activity within the Government, to include responsibility for integration of M&S GFX and VV&A in support of Army Brigade level integration exercise. Initiates in support of Army-led annual integration exercises transition of lifecycle responsibility and product management of the Communications Effect Server (CES) from the prime contractor to the Government, to support Army BCT Modernization network analysis, assessment and test. Continue platform simulation development supporting: BCS and Network Software integration and test; Brigade level integration and test; design and analysis trade studies; technology readiness demonstrations; laboratory and field test events; and soldier training.</p>			
<p>Title: BCT INTEGRATION EXERCISES (BCTIE) - CP 13/14</p> <p align="right">Articles:</p> <p>Description: Funding is provided for the following effort</p> <p>FY 2010 Accomplishments: Rapid System of Systems (SoS) Integration of current force and emerging systems to fill TRADOC-defined operational capability gaps. Demonstratee and assessed brigade level integrated materiel solution to accelerate Integrated Materiel portfolio solution set for CP 13/14 and beyond. Planned, integrated, demonstrated, assessed, and reported warfighting capabilities as performed by</p>		8.000 0	9.000 0
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B. Accomplishments/Planned Programs (\$ in Millions, Article Quantities in Each)		FY 2010	FY 2011
<p>soldiers. The following integration and test events occurred in FY10: The exercise successfully demonstrated an initial integrated (horizontal and vertical) BCT Network (dismount to BCT Commander) operating across a three communications layers (terrestrial, aerial and space) in complex terrain. BCTIE FY10 operated across the spectrum of operations starting with the most austere dismounted environment (Tier 1), thru the addition of vehicles (Tier 2: air and ground) and finally the buildup of a significant Forward Operating Base (FOB) infrastructure (Tier 3) building combat power as the BCT begins to conduct sustained and prolonged operations. A total of 8 separate network operational vignettes were run over a two week period. The exercise was conducted hand-in-hand with the Army's Operational Test Command (OTC) who conducted a Forward Operational Assessment (FOA).</p> <p>FY 2011 Plans: Rapid System of Systems (SoS) Integration of current force and emerging systems to fill TRADOC-defined operational capability gaps. Demonstrate and assess brigade level integrated materiel solution to accelerate Integrated Materiel portfolio solution set for CP 13/14 and beyond. Plan, integrate, demonstrate, assess, and report warfighting capabilities as performed by soldiers. The following integration and test events are planned for FY11: Refine robust digital connectivity down to the Soldier level, enhance horizontal and vertical communications (voice, data, imagery and video) throughout the BCT formation, improve integration of Soldier-Leaders (NETT Warrior/GSS) and the BCT sensor layer at Company/Platoon and below, enhance Company Command Posts with improved communications and strategic reach back (WIN-T Increment 2) and Mission Command applications, enhance a network aerial layer (surge and persistent) for communications and sensor extension, demonstrate maturity of advanced radios and waveforms to form the network and connect all the nodes and provide digital distribution of ISR information, real-time battle tracking, integration of Army attack aviation with ground forces, reach-back (WIN-T) into National Intelligence Database from the Company level, digital posting, distribution and archiving of combat reports and digital medical evacuation requests from soldier leader to higher headquarters. Support integration with Theater Provided Equipment (TPE) in tactical vehicles including force protection systems at the platform level.</p>			
<p>Title: GOVERNMENT OTHER - CP 13/14</p> <p align="right">Articles:</p> <p>Description: This includes support to both PM and non-PM government support offices that provide technical expertise (PEO C3T, TRADOC, UAMBL, ARL, FFID, etc). This also includes other technical support contracts like the Sandia Labs MITRE, Software Steering Committee from University South California and University of Maryland which also reviews software performance, logistics products, network requirements and capabilities. It includes all electronic hardware and software required for government personnel (computers, Blackberry, software, internet and ACE software agreements). CIO and Security management within the PM.</p> <p>FY 2010 Accomplishments:</p>		66.708 0	58.440 0
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B. Accomplishments/Planned Programs (\$ in Millions, Article Quantities in Each)		FY 2010	FY 2011
See narrative above.			
FY 2011 Plans: See narrative above.			
Title: BCT PLATFORM A-KIT DEVELOPMENT - CP 13/14		4.875	5.000
Articles:		0	0
Description: Funding is provided for the following effort			-
FY 2010 Accomplishments: Provided for the integration of BCT capabilities (ICS, GPCS, GMR) into various MRAP variants. Funded the start of development for the integration, material and labor to build the prototype A-Kits, and modify the MRAP variants (the configuration of which includes all Theater Packaged Equipment (TPE)) to accept the NIK. Development also includes all required training/logistics products needed to field and maintain these MRAPS. Funded the A-Kit contractor support to all required testing.			
FY 2011 Plans: Provides for the integration of BCT enhanced capabilities (ICS, GPCS, GMR) into the MRAP and HMMWV and other potential vehicle/variants. Funds the start of development for the integration kit, procurement of material and labor to build prototype A-Kits and modify any other platform required to accept the ICS and GPCS. Also includes development of any training materials as well as supportability and fielding plans. Funds the A-Kit contractor support to all required testing.			
Title: GOVERNMENT GFX - CP 13/14		28.498	17.342
Articles:		0	0
Description: Continue Technical Management Integration support throughout the development of the Training Common Components (TCC) efforts (OneSAF, OneTESS, Common Training Instrumentation Architecture and SE Core). SMEs develop strategies to transition TCCs into Warfighter Machine Interface (WMI) and Battle Command software, Deliver TCC CP 13/14, Phase 1 in Jul 10. Continue development of TCC Software Architecture and Software for CP 13/14, Phase II. Deliver CP 13/14, Phase II in 4QFY10. Fully integrate TCCs with Warfighter Machine Interfaces and applications running as a single SOSCOE application. Continue Live/Virtual/Constructive interoperability between Live and Constructive training capabilities (AAR, TM, EM, LTTEs, DL) for an integrated WMI solution. Provide Government oversight of additional TCC construction and Live/Constructive Integration.			-
FY 2010 Accomplishments: See narrative above.			
FY 2011 Plans:			

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B. Accomplishments/Planned Programs (\$ in Millions, Article Quantities in Each)			FY 2010	FY 2011	FY 2012
See narrative above.					
Title: BCT Technical Integration Support and Facility Description: Funding is provided for the following effort FY 2012 Plans: Facilitate earlier soldier involvement in integrated network evaluations. Support field demonstrations; integration exercises; integrated test and evaluation events; and fielding of integrated BCT. Provide technical and troubleshooting support and interoperability confirmation/checkouts for modernized BCTs equipped with Program of Record (POR) systems and Theater Provided Equipment (TPE). Enable timely and responsive assessment, insertion, and refresh of operationally relevant integrated network capabilities into modernized BCT architecture. Inform requirements by demonstration of new systems and technologies capable of addressing operational deficiencies found within integrated BCT networks in Army and Joint, Inter-agency, and Multi-national (JIM). Support and enable on-site evaluation of technical and systems architectures developed for modernized and integrated Infantry, Stryker, and Heavy BCT tactical networks. Enable rapid demonstration, verification, analysis, test, and, if needed, fielding of hardware and software. Support Army and Joint interoperability assessments and certification efforts. Support local and distributed development, analysis, integration, verification, testing, and evaluation of network hardware and software technologies, components, subsystems, systems, and System of Systems/Family of Systems (SoS/FoS) concepts, technologies, systems, and SoS/FoS that enhance integrated network performance. Monitor the performance of integrated BCTs deployed in testing and operational environments; maintain ?lessons learned? database to influence development of near-term, relevant enhancements for operational forces and follow-on CPs.			-	-	30.000
Title: BCT Technical Integration Support and Facility (WSMR) Description: Funding is provided for the following effort FY 2012 Plans: Purchase and integrate AETF Experimentation Equipment Sets which include Telecommunications, routers, network management software, COE software, Network Application and Services software, smart phones and PDAs, computers (Handheld and Mobile), Antennas, display screens, radios, vehicles and associated mounting hardware and cables.			-	-	40.000
Title: Government BCT Technical Integration Support and Facility (WSMR) Description: Funding is provided for the following effort FY 2012 Plans:			-	-	7.500

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B. Accomplishments/Planned Programs (\$ in Millions, Article Quantities in Each)		FY 2010	FY 2011
Approximately 30 government personal to support BCT Integration and Experimentation management.			
Title: Government Management of BCT Network Integration, Modeling and Simulation, and Test and Evaluation Description: Funding is provided for the following effort FY 2012 Plans: Approximately 40 government personnel for test planning, management, and execution staff. Approximately 30 government engineering and assessment personnel to complete analysis and assessment of all experiments and test to future improve BCT capability. Approximately 30 government personnel for AETF integration and coordination (PM) staff.		-	25.000
Title: BCT Network Integration, Modeling and Simulation, and Test and Evaluation Description: Funding is provided for the following effort FY 2012 Plans: Finalize the preparation, planning and coordination of all experiments and test events with ATEC, OTC, FFID and PM. Conduct all experiments and tests to include procurement of range time and support. Develop all reports for test engineering support. Prepare and procure test infrastructure to support all experiments and tests. Procure test instrumentation and code or procure M&S models to support brigade testing and simulation. Contract for functional system representatives to assist in integration, troubleshooting and testing.		-	80.000
Title: SoS Engineering and Analysis - Government Management Description: Funding is provided for the following effort FY 2012 Plans: Finalize the Arm's SoS engineering policies, guidelines and COEs for Brigade and Network Brigade CP/CS Integration. Complete and manage a SoS Engineering Baseline within an Integrated Data Environment to evaluate emerging capabilities. Finalize Brigade-level architectures to demonstrate required functionality between weapons/support systems within the BCT. Document the standards required to improve commonality of integration approaches (i.e. VICTORY). Document current ground/air/lethality/C4ISR systems performance characteristics (i.e. SWaP-C) to aid and standardize development and integration approaches. Establish and standardize the M&S/Analysis tool kit required for evaluation and risk reduction of emerging capability needs (i.e. ONS/JUONS). Approximately 70 government personal to conduct this effort in support of ASA(ALT) decision process.		-	17.500
Title: SoS Engineering and Analysis - BCT Architecture Modeling & Network Analysis Description: Funding is provided for the following effort		-	15.000

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B. Accomplishments/Planned Programs (\$ in Millions, Article Quantities in Each)			FY 2010	FY 2011	FY 2012
<i>FY 2012 Plans:</i> Refine and finalize Network Analysis Tools. NAIL shall mature the Army's Brigade Combat Team (BCT) Network and beyond by performing network analysis, integration and experimentation, and assessing the end to end performance capability of the Network Five-Layer Architecture in specification and design, identify performance caps, emerging technical solutions, and complete the requirements in support of the Army Modernization Program Plan. Perform and deliver LVC E2E network performance analysis and assessment of Army Modernization Program various Network System of System; SoS designs and requirements in support of Army Modernization Network for CP13/14 and beyond integration, experimentation and analysis and development.					
<i>Title:</i> Integrated Base Defense <i>Description:</i> Funding is provided for the following effort <i>FY 2012 Plans:</i> Complete the development of framework, to analyze threat and requirements, create standards and protocols, develop architecture and use cases, define performance parameters, create and support defined program. Approximately 20 government personnel to support.			-	-	5.000
<i>Title:</i> CP 13/14 and Beyond Mission Analysis <i>Description:</i> Funding is provided for the following effort <i>FY 2012 Plans:</i> CP assessment and material identification, systems, engineering and integration, acquisition, testing & evaluation, training, logistics and fielding, and resource management. Develop and execute a working-level IMP/IMS that details the integration, testing, SoS & FoS test plans and fielding plans/schedules for capability packages with specific units that cycle through ARFORGEN. Lead the execution of the SoS-level, FoS-level trades and analyses to determine Future CP Materiel composition, resulting in a recommendation to ASA(ALT). Establish and maintain a federation of integration, test, and modeling and simulation facilities/capabilities to support Capability Package/Capability Set Management and Execution. Plan, Coordinate and Conduct future Brigade Combat Team Integration Exercises (BCTIE) beyond FY12. Apply the Integrated Network Test EXORD execution strategy to CPs 13-14 and beyond as appropriate. Ensure sufficient requirements are in place and that adequate resources are programmed to support delivery of capability. Conduct ?integration and feasibility? analysis to include cost, schedule, performance and integration risks. Determine the ?delta? between the required capabilities, architectures and the equipment on-hand. Conduct Integration Readiness Reviews at the BCT level to support system-level DAB, CSB and WSR execution. Develop brigade portfolios across all materiel domains. Develop and Execute an overarching System Integration Plan (SILS, SITs, NAIL, SoSIL, CCNs, CTSF, AETF, Use Case, Threads, etc). Recommend interface standards and policy to ASA(ALT)			-	-	10.000

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B. Accomplishments/Planned Programs (\$ in Millions, Article Quantities in Each)		FY 2010	FY 2011
SoS SE following holistic systems engineering analysis and determining integration costs across community. Recommend SoS developmental, verification and integration test standards and policy to ASA(ALT) and ATEC following coordination across PEOs and test and evaluation community and determining associated costs. Establish and Chair an Integration Configuration Control Board (ICCB) to ensure standards and policy are complied with, and enforce commonality of interfaces, capabilities, and standardization, wherever possible. Establish Collective Training Requirements for Brigade. Expected products/results from Integration include: Improved BCT performance through decreased SWaP-C and required network bandwidth of emerging capabilities, Standardized ?look and feel? to the Soldier across BCTs, Enhanced Situational Awareness at the Soldier level. Improved Soldier performance via a synchronized fielding/training execution. Approximately 40 government personal to support.			
Title: Common Operating Environment (COE) - Government Management Description: Funding is provided for the following effort FY 2012 Plans: Serve as the lead software engineering agent for the Army COE. Establish and maintain a software support repository for configuration control and re-distribution of the Tactical COE and COE-based Applications. Establish a federation of software SILs across the AMC SW Support Centers to leverage the capabilities of all the centers in support of COE prototyping, assessment and deployment. Chair the design forum across the affected PEOs and Software Centers needed to establish the architectural design rules which enable proper convergence on a COE across the Army Enterprise. Evaluate existing software components from SOSCOE, JCR, JBC-P, BCS and other for use in a Tactical COE for all computing environments. Provide help desk and integration support to COE application developers across PEOs, reducing overall integration time and cost to implement. Conduct rapid prototyping and integration of capabilities across legacy and emerging systems to demonstrate military utility in the BCT Integration Events and other appropriate venues. Establish design leadership within the AMC Software Centers for the COE and Army Networking by shifting this work from the contractor base into the Army, organic staff and organizations. Define and govern COE standards and policies to ensure information sharing between tactical systems across the Army Network. Approximately 30 government personal		-	7.500
Title: Common Operating Environment - Software Code Development Description: Funding is provided for the following effort FY 2012 Plans: Contracting for OEM support to develop a common operating environment for the Army. This includes procurement of software coding, integration and testing to ensure current Battle Command and vehicle software are compatible with the operating system.		-	15.000
Title: Common Operating Environment - Facilities & Infra-Structure		-	10.000

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B. Accomplishments/Planned Programs (\$ in Millions, Article Quantities in Each)			FY 2010	FY 2011	FY 2012
Description: Funding is provided for the following effort FY 2012 Plans: Procure all software licenses required to support developing a common operating environment. Create a software repository for all Army operating software (such as, SOSCOE, JCR, Battle Command, FBCB2, etc). Establish DREN connection and network capability to FFID and APG to support integration and testing. Create infrastructure to manage and support common operating environment facility.					
Title: Common Operating Environment - FSR Integration Support Description: Funding is provided for the following effort FY 2012 Plans: Contractor support to integrate network hardware and software into the common operating environment. This includes SIL support, government test support, and soldier user test support. This support includes both labor for white coats assisting with integration, contractor technical support for trouble shooting and any spare hardware updates or requirements to support the integration process.			-	-	10.000
Title: Brigade Set Fielding Planning and Coordination Description: Funding is provided for the following effort FY 2012 Plans: Planning coordination, and execution of Brigade Set Fielding to include facilities, units, equipment, software, training, NET teams, NMIBs, spares, CLS. Approximately 30 government personnel.			-	-	7.500
Title: VICTORY Architecture and Standards Description: Funding is provided for the following effort FY 2012 Plans: VICTORY = Vehicular Integration for C4ISR/EW Interoperability. Interoperable Open Systems Electronics Architecture that: increases available Platform Crew Space, increases Platform Capabilities, enables Mission Equipment Portability, reduces Platform Integration Costs, and reduces Platform Life Cycle Costs. Development of VICTORY Architecture and Integration of Victory into CP/CSs. Evaluate the Army vehicle inventory for VICTORY architecture compliance. Evaluate the Army C4ISR inventories for VICTORY compliance. Evaluate baseline SWAP-C of Army systems and potential gains from VICTORY implementation. Understand Army Vehicle and C4ISR Architectures and the Deltas from the VICTORY concept. Participate			-	-	5.000

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B. Accomplishments/Planned Programs (\$ in Millions, Article Quantities in Each)							FY 2010	FY 2011	FY 2012		
in VICTORY Working Groups. Ensure VICTORY is included in all architectures and standards. Participate in VICTORY PDRs and CDRs. Develop VICTORY Architecture Demonstration/Prototype Using Future CP/CS Systems. Create a test plan to validate prototype performance with VICTORY implementation. Advocate for Requirements and Funding that supports VICTORY implementation in system upgrades and new procurements . Capture VICTORY key dates, implementation plans, etc in PEO I schedule. Approximately 20 government personal.											
Title: Government Staffing to Execute Termination Contract Negotiations Description: Funding is provided for the following effort FY 2012 Plans: Approximately 35 government personnel to complete Contract Close-Out and Termination of Boeing and other SETA contracts.							-	-	8.872		
Title: Contract Special Termination Costs Description: Funding is provided for the following effort FY 2012 Plans: Special Termination Costs for Boeing and SETA contracts. These costs are paid to the contractor and subcontractors as per FAR 31.205 for; Severance Pay, Reasonable costs continuing after termination, Settlement of expenses, and the costs to return field service personnel from remote or liaison sites. In addition to the FAR termination costs this element includes Disposition of Terminated Material to other Army agencies. These funds also include all cost for packaging, transporting, and short and long term storage of selected materials IAW FAR 45/49. All Secure equipment was dispositioned IAW NSA requirements.							-	-	90.000		
Accomplishments/Planned Programs Subtotals							847.011	568.711	383.872		
C. Other Program Funding Summary (\$ in Millions)											
Line Item	FY 2010	FY 2011	FY 2012 Base	FY 2012 OCO	FY 2012 Total	FY 2013	FY 2014	FY 2015	FY 2016	Cost To Complete	Total Cost
• 0604646A: Non Line of Sight - Launch System	88.205	81.247								0.000	169.452
• 0604660A: FCS MGV Manned Ground Vehicles & Common Grd Vehicle Components	231.103									0.000	231.103
• 0604662A: FCS Reconnaissance (UAV) Platforms	92.444	50.304								0.000	142.748
	122.418	249.948	143.840		143.840		106.480	131.880	32.009	0.000	911.047

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C. Other Program Funding Summary (\$ in Millions)											
Line Item	FY 2010	FY 2011	FY 2012 Base	FY 2012 OCO	FY 2012 Total	FY 2013	FY 2014	FY 2015	FY 2016	Cost To Complete	Total Cost
• 0604663A: FCS Unmanned Ground Vehicles											
• 0604664A: FCS Unattended Ground Sensors	39.664	7.515	0.499		0.499					0.000	47.678
• 0604665A: FCS Sustainment & Training R&D	685.524	610.389					251.761	254.232	181.558	0.000	2,187.185
• G86200: WTCV FCS Spin Out Program	210.909									0.000	210.909
• A00015: ACFT BCT Unmanned Aerial Veh (UAVs) Incr 1		44.206								0.000	44.206
• B00001: OPA BCT Unattended Ground Sensor		29.718								0.000	29.718
• B00002: OPA BCT Network		176.543								0.000	187.068
• B00003: OPA BCT Network Incr 2							229.528	187.955	179.653	0.000	768.167
• F00001: OPA BCT Unmanned Ground Vehicle		20.046	24.805		24.805					0.000	48.096
• F00002: OPA BCT Unmanned Ground Vehicle Incr 2			11.924		11.924		422.192	834.171	696.603	0.000	2,414.904
• G80001: OPA BCT Training/Logistics/Management		61.581	149.308		149.308		49.792	28.259		0.000	435.142
• G00002: OPA BCT Training/Logistics/Management Incr 2			57.103		57.103		441.250	347.466	273.354	0.000	1,308.265
D. Acquisition Strategy											
A 23 June 2009 Acquisition Decision Memorandum (ADM) directed the cancellation of the FCS (BCT) acquisition program. It also instructed the Army to transition to an Army modernization plan consisting of a number of integrated acquisition programs. At that time, the SO E-IBCT was designated a pre-MDAP, with a Milestone C decision scheduled for the first quarter FY10. A follow-on ADM was issued 9 July 2009. In it, the Army was directed to continue efforts to improve the brigades beyond the Early Infantry Brigade Combat Team acquisition until a standalone program(s) is defined later in 2010. An Army BCT Modernization Defense Acquisition Board (DAB) was then held on October 16, 2009 to review the Army's plans for the post-Future Combat Systems efforts and confirm the Army brigade modernization acquisition plans were consistent with the Secretary of Defense's guidance. An ADM issued after this DAB stated: "The approach, for Increment 1 (Early-Infantry Brigade Combat Team (E-IBCT)) and the Ground Combat Vehicle (GCV) effort, is consistent with the Secretary's guidance and each is being positioned for more in-depth review and acquisition decisions later in 2009." The Increment 1 E-IBCT Milestone C took place 22 December 2009 and was approved in an ADM dated 24											

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Exhibit R-2A, RDT&E Project Justification: PB 2012 Army		DATE: February 2011
APPROPRIATION/BUDGET ACTIVITY 2040: <i>Research, Development, Test & Evaluation, Army</i> BA 5: <i>Development & Demonstration (SDD)</i>	R-1 ITEM NOMENCLATURE PE 0604661A: <i>FCS Systems of Systems Engr & Program Mgmt</i>	PROJECT FC2: <i>BCT SYSTEM OF SYSTEMS ENGR & PROGRAM MGMT</i>
December 2009. The Program Executive Office-Integration (PEO-I) has modified the existing contract to be compliant with the aforementioned ADMs. On 12-Jan 2011 a follow on DAB approved procurement of brigades 2 & 3. This budget justification reflects the latest OSD DAB for Increment 1 (E-IBCT) program and the follow-on IBCT modernization program as approved in RMD XXXX.		
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 2012 Army										DATE: February 2011			
APPROPRIATION/BUDGET ACTIVITY				R-1 ITEM NOMENCLATURE				PROJECT					
2040: Research, Development, Test & Evaluation, Army BA 5: Development & Demonstration (SDD)				PE 0604661A: FCS Systems of Systems Engr & Program Mgmt				FC2: BCT SYSTEM OF SYSTEMS ENGR & PROGRAM MGMT					
Management Services (\$ in Millions)				FY 2011		FY 2012 Base		FY 2012 OCO		FY 2012 Total			
Cost Category Item	Contract Method & Type	Performing Activity & Location	Total Prior Years Cost	Cost	Award Date	Cost	Award Date	Cost	Award Date	Cost	Cost To Complete	Total Cost	Target Value of Contract
Termination	Various	The Boeing Company:Various	-	-		-		-		-	Continuing	Continuing	0.000
Contract Special Termination Costs	Various	The Boeing Company:Various	-	-		90.000		-		90.000	Continuing	Continuing	0.000
GOVERNMENT BCT TECHNICAL INTEGRATION SUPPORT AND FACILITY (WSMR)	Allot	VARIOUS:VARIOUS	-	-		7.500		-		7.500	Continuing	Continuing	0.000
GOVERNMENT MGT OF BCT NETWORK INTEGRATION, MODELING AND SIMULATION AND TEST AND EVALUATION	Allot	VARIOUS:VARIOUS	-	-		25.000		-		25.000	Continuing	Continuing	0.000
SOS ENGINEERING AND ANALYSIS - GOVERNMENT MANAGEMENT	Allot	VARIOUS:VARIOUS	-	-		17.500		-		17.500	Continuing	Continuing	0.000
INTEGRATED BASE DEFENSE	Allot	VARIOUS:VARIOUS	-	-		5.000		-		5.000	Continuing	Continuing	0.000
CP 13/14 AND BEYOND MISSION ANALYSIS	Allot	VARIOUS:VARIOUS	-	-		10.000		-		10.000	Continuing	Continuing	0.000
COMMON OPERATING ENVIRONMENT - GOVERNMENT MANAGEMENT	Allot	VARIOUS:VARIOUS	-	-		7.500		-		7.500	Continuing	Continuing	0.000
BRIGADE SET FIELDING PLANNING AND COORDINATION	Allot	VARIOUS:VARIOUS	-	-		7.500		-		7.500	Continuing	Continuing	0.000
VICTORY ARCHITECTURE AND STANDARDS	Allot	VARIOUS:VARIOUS	-	-		5.000		-		5.000	Continuing	Continuing	0.000
GOVERNMENT STAFFING TO EXECUTE TERMINATION CONTRACT NEGOTIATIONS	Allot	PEO I:WARREN, MI	-	-		8.872		-		8.872	Continuing	Continuing	0.000
Subtotal			-	-		183.872		-		183.872			0.000

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Exhibit R-3, RDT&E Project Cost Analysis: PB 2012 Army										DATE: February 2011			
APPROPRIATION/BUDGET ACTIVITY					R-1 ITEM NOMENCLATURE				PROJECT				
2040: Research, Development, Test & Evaluation, Army BA 5: Development & Demonstration (SDD)					PE 0604661A: FCS Systems of Systems Engr & Program Mgmt				FC2: BCT SYSTEM OF SYSTEMS ENGR & PROGRAM MGMT				
Product Development (\$ in Millions)				FY 2011		FY 2012 Base		FY 2012 OCO		FY 2012 Total			
Cost Category Item	Contract Method & Type	Performing Activity & Location	Total Prior Years Cost	Cost	Award Date	Cost	Award Date	Cost	Award Date	Cost	Cost To Complete	Total Cost	Target Value of Contract
Contractor SEPM	Various	The Boeing Company:Various	-	104.248		-		-		-	Continuing	Continuing	0.000
Contractor System Requirements and Integration	Various	The Boeing Company:Various	-	37.219		-		-		-	Continuing	Continuing	0.000
Contractor Training Products	Various	The Boeing Company:Various	-	25.856		-		-		-	Continuing	Continuing	0.000
Contract Fee	Various	The Boeing Company:Various	-	22.646		-		-		-	Continuing	Continuing	0.000
Contractor Supportability/Log	Various	The Boeing Company:Various	-	22.192		-		-		-	Continuing	Continuing	0.000
BCT TECHNICAL INTEGRATION SUPPORT AND FACILITY (WSMR)	TBD	VARIOUS:Various	-	-		40.000		-		40.000	Continuing	Continuing	0.000
BCT TECHNICAL INTEGRATON SUPPORT AND FACILITY	TBD	VARIOUS:Various	-	-		30.000		-		30.000	Continuing	Continuing	0.000
SOS ENGINEERING AND ANALYSIS - BCT ARCHITECTURE MODELING AND NETWORK ANALYSIS	TBD	APG:Aberdeen, MD	-	-		15.000		-		15.000	Continuing	Continuing	0.000
COMMON OPERATING ENVIRONMENT - SOFTWARE CODE DEVELOPMENT	TBD	VARIOUS:VARIOUS	-	-		15.000		-		15.000	Continuing	Continuing	0.000
COMMON OPERATING ENVIRONMENT - FACILITIES AND INFRASTRUCTURE	TBD	VARIOUS:VARIOUS	-	-		10.000		-		10.000	Continuing	Continuing	0.000
COMMON OPERATING ENVIRONMENT - FSR INTEGRATION SUPPORT	TBD	VARIOUS:VARIOUS	-	-		10.000		-		10.000	Continuing	Continuing	0.000
Subtotal			-	212.161		120.000		-		120.000			0.000

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Exhibit R-3, RDT&E Project Cost Analysis: PB 2012 Army											DATE: February 2011		
APPROPRIATION/BUDGET ACTIVITY 2040: Research, Development, Test & Evaluation, Army BA 5: Development & Demonstration (SDD)				R-1 ITEM NOMENCLATURE PE 0604661A: FCS Systems of Systems Engr & Program Mgmt				PROJECT FC2: BCT SYSTEM OF SYSTEMS ENGR & PROGRAM MGMT					
Support (\$ in Millions)				FY 2011		FY 2012 Base		FY 2012 OCO		FY 2012 Total			
Cost Category Item	Contract Method & Type	Performing Activity & Location	Total Prior Years Cost	Cost	Award Date	Cost	Award Date	Cost	Award Date	Cost	Cost To Complete	Total Cost	Target Value of Contract
Government SEPM	Allot	PEO-I:Various	-	96.113		-		-		-	Continuing	Continuing	0.000
Government GFX	Allot	PEO-I:Various	-	17.342		-		-		-	Continuing	Continuing	0.000
Government A-Kit Development	Allot	PEO-I:Various	-	5.000		-		-		-	Continuing	Continuing	0.000
Government Other	Allot	PEO-I:Various	-	68.644		-		-		-	Continuing	Continuing	0.000
Subtotal			-	187.099		-		-		-			0.000
Remarks FY12: All Platform specific Government Engineering and PM costs are included in the appropriate Platform Program Element.													
Test and Evaluation (\$ in Millions)				FY 2011		FY 2012 Base		FY 2012 OCO		FY 2012 Total			
Cost Category Item	Contract Method & Type	Performing Activity & Location	Total Prior Years Cost	Cost	Award Date	Cost	Award Date	Cost	Award Date	Cost	Cost To Complete	Total Cost	Target Value of Contract
Contractor - SoS Test	Various	The Boeing Company:Various	-	36.938		-		-		-	Continuing	Continuing	0.000
Government STE and M&S	Allot	PEO-I:Various	-	123.513		-		-		-	Continuing	Continuing	0.000
BCT Integration Exercises	Allot	PEO-I:Various	-	9.000		-		-		-	Continuing	Continuing	0.000
BCT NETWORK INTEGRATION, MODELING AND SIMULATION AND TEST AND EVALUATION	TBD	VARIOUS:FT BLISS, TX	-	-		80.000		-		80.000	Continuing	Continuing	0.000
Subtotal			-	169.451		80.000		-		80.000			0.000
Remarks FY12: All Platform specific Test and Evaluation costs are included in the appropriate Platform Program Element.													
			Total Prior Years Cost	FY 2011		FY 2012 Base		FY 2012 OCO		FY 2012 Total	Cost To Complete	Total Cost	Target Value of Contract
Project Cost Totals			-	568.711		383.872		-		383.872			0.000

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Exhibit R-3, RDT&E Project Cost Analysis: PB 2012 Army							DATE: February 2011		
APPROPRIATION/BUDGET ACTIVITY 2040: Research, Development, Test & Evaluation, Army BA 5: Development & Demonstration (SDD)			R-1 ITEM NOMENCLATURE PE 0604661A: FCS Systems of Systems Engr & Program Mgmt			PROJECT FC2: BCT SYSTEM OF SYSTEMS ENGR & PROGRAM MGMT			
	Total Prior Years Cost	FY 2011	FY 2012 Base	FY 2012 OCO	FY 2012 Total	Cost To Complete	Total Cost	Target Value of Contract	
Remarks									

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Exhibit R-4, RDT&E Schedule Profile: PB 2012 Army			DATE: February 2011		
APPROPRIATION/BUDGET ACTIVITY 2040: <i>Research, Development, Test & Evaluation, Army</i> BA 5: <i>Development & Demonstration (SDD)</i>		R-1 ITEM NOMENCLATURE PE 0604661A: <i>FCS Systems of Systems Engr & Program Mgmt</i>		PROJECT FC2: <i>BCT SYSTEM OF SYSTEMS ENGR & PROGRAM MGMT</i>	

	FY 2010				FY 2011				FY 2012				FY 2013				FY 2014				FY 2015				FY 2016			
	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
Increment 1 Total Program Tasks																												
Incr 1 Production Contract Definitization																												
Incr 1 TT / FDT&E / LUT 10																												
Incr 1 Production Delivery (1st IBCT)																												
Incr 1 Initial Integrated Verification Testing																												
Incr 1 Technical Field Test																												
Incr 1 Customer Test																												
CP 13/14 Total Program Tasks																												
CP 13/14 CDR																												
CP 13/14 Production																												
CP 13/14 FDT&E / STX / LUT 13																												
CP 13/14 Milestone C																												
CP 13/14 Initial Operational Capability																												

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Exhibit R-4A, RDT&E Schedule Details: PB 2012 Army			DATE: February 2011
APPROPRIATION/BUDGET ACTIVITY 2040: <i>Research, Development, Test & Evaluation, Army</i> BA 5: <i>Development & Demonstration (SDD)</i>	R-1 ITEM NOMENCLATURE PE 0604661A: <i>FCS Systems of Systems Engr & Program Mgmt</i>	PROJECT FC2: <i>BCT SYSTEM OF SYSTEMS ENGR & PROGRAM MGMT</i>	

Schedule Details

Events	Start		End	
	Quarter	Year	Quarter	Year
Increment 1 Total Program Tasks	1	2010	1	2012
Incr 1 Production Contract Definitization	4	2010	4	2010
Incr 1 TT / FDT&E / LUT 10	2	2010	3	2010
Incr 1 Production Delivery (1st IBCT)	4	2010	3	2011
Incr 1 Initial Integrated Verification Testing	4	2010	1	2011
Incr 1 Technical Field Test	1	2011	2	2011
Incr 1 Customer Test	2	2011	3	2011
CP 13/14 Total Program Tasks	2	2011	2	2015
CP 13/14 CDR	2	2011	2	2011
CP 13/14 Production	3	2013	2	2016
CP 13/14 FDT&E / STX / LUT 13	3	2012	4	2012
CP 13/14 Milestone C	2	2013	2	2013
CP 13/14 Initial Operational Capability	2	2015	2	2015

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