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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 0604805A: <i>Command, Control, Communications Systems - Eng Dev</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	57.040	90.736	137.811	-	137.811	33.492	18.583	18.178	17.216	Continuing	Continuing
485: <i>Info Standards Interop Eng/ Joint Interop Cert</i>	9.781	10.008	19.769	-	19.769	13.900	13.128	14.013	14.076	Continuing	Continuing
589: <i>ARMY SYS ENGINEERING & WARFIGHTING TECH SUP</i>	47.259	10.100	-	-	-	-	-	-	-	Continuing	Continuing
593: <i>JOINT BATTLE COMMAND - PLATFORM (JBC-P)</i>	-	70.628	118.042	-	118.042	19.592	5.455	4.165	3.140	0.000	221.022

A. Mission Description and Budget Item Justification

This Program Element (PE) supports efforts to develop interoperability of Army programs and products, horizontally and vertically for the digitized battlefield. Project D485 supports Information Standards Interoperability Engineering and Joint Interoperability Certification. It provides the critical elements of the Army/Joint Technical Architecture, the mandated standards and communication protocols for Army/Joint ground and air operations, and crucial certification test tools to evaluate systems' interoperability for the Warfighter in support of the Vice Chief of Staff of the Army (VCSA) and Army Acquisition Executive (AAE). It also provides Joint certification testing and certification recommendations to the Joint Chiefs of Staff (JCS) for Army systems. This Army-wide effort directly supports the management, oversight, development, maintenance, and interoperability at the Army enterprise level C4I/IT (Command, Control, Communications, Computers, and Intelligence/Information Technology) architecture efforts required to implement Unit Set Fielding (USF), Software Blocking (SWB) Policy and Army Knowledge Management.

Project D589 Army Systems Engineering (ASE) & Warfighter Technical Support provides essential technology expertise on all Systems Engineering and Technical Architecture (SE/TA) matters critical to gain Information Dominance and foster interoperability among all Army systems.

Project D593, Joint Battle Command - Platform (JBC-P) funds the Systems Engineering, Software Development and Testing of JBC-P. Joint Battle Command - Platforms (JBC-P), which includes Blue Force Tracking (BFT) and Army Aviation, provides true Joint force Command and Control (C2) Situational Awareness (SA) and communications (e.g., terrestrial, celestial) capability at the platform level through command center locations (e.g., Network Operations Centers (NOC), Tactical Operation Centers (TOCs), Brigade Command Posts) and enables mission accomplishment across the entire spectrum of military operations.

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B. Program Change Summary (\$ in Millions)	<u>FY 2010</u>	<u>FY 2011</u>	<u>FY 2012 Base</u>	<u>FY 2012 OCO</u>	<u>FY 2012 Total</u>
Previous President's Budget	58.739	90.789	49.071	-	49.071
Current President's Budget	57.040	90.736	137.811	-	137.811
Total Adjustments	-1.699	-0.053	88.740	-	88.740
• Congressional General Reductions		-			
• Congressional Directed Reductions		-			
• Congressional Rescissions	-	-			
• Congressional Adds		-			
• Congressional Directed Transfers		-			
• Reprogrammings	-	-			
• SBIR/STTR Transfer	-	-0.273			
• Adjustments to Budget Years	-0.051	-	56.148	-	56.148
• Other Adjustments 1	-1.648	0.220	-	-	-
• Other Adjustments 2	-	-	19.753	-	19.753
• Other Adjustments 3	-	-	12.839	-	12.839

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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
485: Info Standards Interop Eng/Joint Interop Cert	9.781	10.008	19.769	-	19.769	13.900	13.128	14.013	14.076	Continuing	Continuing
Quantity of RDT&E Articles											

A. Mission Description and Budget Item Justification

Focus for this project is to support the engineering or evaluation of commercially-available information technology (IT) tools to develop architecture products Information Technology based Command, Control, Computers, and Communications (C4/IT) systems such as Applications Program Interfaces for Weapons Systems. A significant effort will be on building Army (consistent with DoD) C4/IT technical standards-compliant Army data repositories that are web-accessible but secure. These repositories will be consistent with DoD standards and policies and virtually appear to be a single repository for Army C4/IT architecture products.

To support the Army Vice Chief of Staff (VCSA) and the Army Chief Information Officer/G6, as cited in the AEA Master Plan, this initiative fulfills the Clinger-Cohen Act mandate of developing sound integrated Information Technology (IT) architectures and the Army's Software Blocking Policy. The increased combat power of the Future Force will be dependent on the information superiority of network & knowledge centric warfare and the ability of systems to be fully -interoperable as a member of the joint, multinational, interagency team as well as emerging Future Force (FF) C4ISR (Command, Control, Communications, Computers, Intelligence, Surveillance and Reconnaissance) Systems. It identifies and reduces interoperability issues earlier in the life cycle by intra-Army/FF/Joint/combined experiments and assessments, and through the establishment & sustainment of common standards. This Army wide effort directly supports the management, oversight, development, maintenance, and interoperability of the Army enterprise level C4/IT architecture efforts required to implement Software Blocking and Army Enterprise Architecture (AEA). Specifically, this project resources the Army's messaging standards conformance authority in assessing compliance with the Defense Information Systems Repository (DISR), in meeting the warfighter information exchange requirements and in facilitating their interoperability. It also resources, in accordance with the DISR, the development and maintenance of the following information standards: Variable Message Format (VMF) & Combat Net Radio (CNR) protocol, which support Army/Joint ground operations; Tactical Digital Information Links (TADILs), which support Air Defense operations; and US Message Text Format (USMTF), which support Intel and Commanders operations. It provides the Army's lead for configuration management functions of these standards and test tools at both Army and Joint levels. This project resources the Army participation in joint/allied messaging certification testing & configuration management processes. This project also resources the development and fielding of a suite of four (4) crucial tools which are used throughout the entire Army. These tools which are currently under development will provide the ideal means to: a) validate Technical Architecture/Technical Reference Model (TA/TRM) critical messaging and protocol standards; b) improve systems interoperability; c) verify/certify correct system implementations and interpretation to TA/TRM; d) sustain/support digitization and transition of fielded systems; e) support Software Blocking and interoperability testing; f) provide Legacy AEA interoperability with Future Combat System (FCS) command and control systems. These crucial tools are critical to the TA/TRM Compliance, Certification Testing mission & Interoperability programs. The task also supports the Army's transformation campaign while mitigating interoperability issues resulting in reducing cost & program slippages. This project also provides the Configuration Management & Control for the Software Blocking (SWB)/USF (Unit Set Fielding).

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APPROPRIATION/BUDGET ACTIVITY 2040: Research, Development, Test & Evaluation, Army BA 5: Development & Demonstration (SDD)		R-1 ITEM NOMENCLATURE PE 0604805A: Command, Control, Communications Systems - Eng Dev		PROJECT 485: Info Standards Interop Eng/Joint Interop Cert		
B. Accomplishments/Planned Programs (\$ in Millions, Article Quantities in Each)						
		FY 2010	FY 2011	FY 2012 Base	FY 2012 OCO	FY 2012 Total
Title: C4ISR		2.938	3.045	4.882	-	4.882
Articles:		0	0			
Description: Funds to support the following effort						
FY 2010 Accomplishments: Develop and update architecture standards and protocols necessary to ensure C4ISR systems interoperability						
FY 2011 Plans: Develop and update architecture standards and protocols necessary to ensure C4ISR systems interoperability						
FY 2012 Base Plans: Develop and update architecture standards and protocols necessary to ensure C4ISR systems interoperability						
Title: Army Warfighter Information Standards		2.006	2.011	4.882	-	4.882
Articles:		0	0			
Description: Funds to support the following effort						
FY 2010 Accomplishments: Engineer, develop & publish Army Warfighter Information Standards (i.e. XML-USMTF/VMF,Wireless XML, database exchange, etc...) incorporating DoD standards requirements.						
FY 2011 Plans: Engineer, develop & publish Army Warfighter Information Standards (i.e. XML-USMTF/VMF,Wireless XML, database exchange, etc...) incorporating DoD standards requirements.						
FY 2012 Base Plans: Engineer, develop & publish Army Warfighter Information Standards (i.e. XML-USMTF/VMF,Wireless XML, database exchange, etc...) incorporating DoD standards requirements.						
Title: technical architecture standards requirements		2.206	2.270	4.882	-	4.882
Articles:		0	0			
Description: Funds to support the following efforts						
FY 2010 Accomplishments:						

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B. Accomplishments/Planned Programs (\$ in Millions, Article Quantities in Each)						
		FY 2010	FY 2011	FY 2012 Base	FY 2012 OCO	FY 2012 Total
Identify, analyze, and provide solutions to gaps in technical architecture standards requirements						
FY 2011 Plans: Identify, analyze, and provide solutions to gaps in technical architecture standards requirements						
FY 2012 Base Plans: Identify, analyze, and provide solutions to gaps in technical architecture standards requirements						
Title: Army Net-Centric Enterprise Service Articles:		2.307 0	2.373 0	4.813	-	4.813
Description: Funds to support the following effort FY 2010 Accomplishments: Develop and engineer Army Net-Centric Enterprise Service standards and protocols supporting OSD Global Information Grid messaging requirements and serve as Army focal point for messaging working group. FY 2011 Plans: Develop and engineer Army Net-Centric Enterprise Service standards and protocols supporting OSD Global Information Grid messaging requirements and serve as Army focal point for messaging working group. FY 2012 Base Plans: Develop and engineer Army Net-Centric Enterprise Service standards and protocols supporting OSD Global Information Grid messaging requirements and serve as Army focal point for messaging working group.						
Title: Knowledge Center Development Articles:		0.324 0	0.309 0	0.310	-	0.310
Description: Funds to support the following effort FY 2010 Accomplishments: Knowledge Center Development - Build & update as necessary access to website repositories for key policies, directives, and architecture products. FY 2011 Plans:						

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B. Accomplishments/Planned Programs (\$ in Millions, Article Quantities in Each)				FY 2010	FY 2011
Knowledge Center Development - Build & update as necessary access to website repositories for key policies, directives, and architecture products. <i>FY 2012 Base Plans:</i> Knowledge Center Development - Build & update as necessary access to website repositories for key policies, directives, and architecture products					
				FY 2012 Base	FY 2012 OCO
Accomplishments/Planned Programs Subtotals				9.781	10.008
				19.769	-
				19.769	
C. Other Program Funding Summary (\$ in Millions) N/A					
D. Acquisition Strategy The efforts funded in this project are non-system specific, interoperability experimentation, evaluation and certification across multiple systems. The contractual efforts/ services are obtained from existing competitive omnibus support service contracts.					
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				PE 0604805A: Command, Control, Communications Systems - Eng Dev				485: Info Standards Interop Eng/Joint Interop Cert					
BA 5: Development & Demonstration (SDD)													
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
Labor	Various	USACECOM ,:Ft. Monmouth, NJ	37.103	10.008		19.769		-		19.769	Continuing	Continuing	Continuing
Travel	Various	USACECOM,:Ft. Monmouth, NJ	0.457	-		-		-		-	Continuing	Continuing	Continuing
Subtotal			37.560	10.008		19.769		-		19.769			
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
Development Support	Various	Arinc,:various	5.699	-		-		-		-	Continuing	Continuing	Continuing
Development Support	Various	Telos,:various	4.581	-		-		-		-	Continuing	Continuing	Continuing
Development Support	Various	CSC,:various	1.963	-		-		-		-	Continuing	Continuing	Continuing
Development Support	Various	C3I,:various	1.374	-		-		-		-	Continuing	Continuing	Continuing
Development Support	Various	Mitre,:various	0.280	-		-		-		-	Continuing	Continuing	Continuing
Development Support/ Army Enterprise Applications Architecture	Various	Binary,:various	0.046	-		-		-		-	Continuing	Continuing	Continuing
Development Support-Knowledge Center	Various	ITEL,:various	1.198	-		-		-		-	Continuing	Continuing	Continuing
Development Support	Various	ITEL,:various	2.640	-		-		-		-	Continuing	Continuing	Continuing
Development Support	Various	Northrop Grumman (SEC SSES),:various	2.579	-		-		-		-	Continuing	Continuing	Continuing
Technical Support	Various	TFE,:various	0.095	-		-		-		-	Continuing	Continuing	Continuing
Technical Support	Various	Marconi,:various	0.183	-		-		-		-	Continuing	Continuing	Continuing
Equipment	Various	USACECOM,:various	0.485	-		-		-		-	Continuing	Continuing	Continuing
Equipment (Development Support)	Various	GTE,:various	0.106	-		-		-		-	Continuing	Continuing	Continuing
Telecommunications	Various	USASC,:various	1.145	-		-		-		-	Continuing	Continuing	Continuing
Subtotal			22.374	-		-		-		-			

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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	
Remarks *Contracts/awards cited are 5 year (1 base + 4 option years). Future award dates imply future competitive award, contractor TBD.														
			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			59.934	10.008		19.769		-		19.769				
Remarks														

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APPROPRIATION/BUDGET ACTIVITY 2040: Research, Development, Test & Evaluation, Army BA 5: Development & Demonstration (SDD)				R-1 ITEM NOMENCLATURE PE 0604805A: Command, Control, Communications Systems - Eng Dev				PROJECT 589: ARMY SYS ENGINEERING & WARFIGHTING TECH SUP			
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
589: ARMY SYS ENGINEERING & WARFIGHTING TECH SUP	47.259	10.100	-	-	-	-	-	-	-	Continuing	Continuing
Quantity of RDT&E Articles											

A. Mission Description and Budget Item Justification

This project has been re-aligned to better support the mission of Army Chief of Staff (CSA) sanctioned Army Architecture Integration Center (AAIC) for developing, implementing and maintaining the Army Enterprise Architecture for Information Technology based Command, Control, Computers & Communications (C4/IT) systems. AAIC mission is to develop standards-based architecture products that are inter-operable within the Army as well as the with Joint, Interagency, and Multinational systems.

This project funded the Army Systems Engineering Office (ASEO) by providing technical research and development and modeling and simulation with the primary mission of developing technical architecture standards without compromising DoD-mandated standards but ensuring Army C4/IT systems under development are interoperable with legacy systems still utilized by the Army warfighter, which extend from tactical levels up through operational and strategic components of the Army Battle Command Architecture (ABCA), as well as, the institutional portions of the Enterprise to include the Army's Business Enterprise Architecture (BEA). The ASEO supports the Army CIO/G6 Architecture Integration Center (AAIC) in establishing an integrated AEA framework that complements, and is a natural extension of, the GIG-Enterprise Services (GIG-ES). In addition, the ASEO is an essential contributor in the development of the JBMC2 integrated architecture, the Battle Command Architecture, and emerging Cross-Service Integrated Architecture efforts. Each of these architecture definition and integration efforts is elemental to achieving the Army's goal of a NetCentric Future Force.

Previously, the Joint Technical Architecture (JTA) and JTA-Army (JTA-A) (now the Army Technical Architecture/Technical Reference Model (TA/TRM) have provided the foundation for designing, building, fielding and supporting Joint interoperable Army systems in an expedient and cost-effective manner. With the revision to the standardization process as implemented by the Defense Information Systems Agency (DISA), technical architecture standards are encompassed in the new Defense Information Systems Repository (DISR) program. The Army must participate in DISR to ensure Army requirements are adequately captured and reflected in any new baseline developed by DISA. The ASEO identifies emerging standards in support of the integration of new technologies into existing Army systems and Advanced Technology Demonstrations/Advanced Concept Technology Demonstrations (ATD/ACTDs), enabling the Army transformation to the Future Force. The ASEO's work efforts in the development and maintenance of Army IT standards within the context of DISR guidelines are critical path elements to achieve transformation, increase joint interoperability and to provide the future Army with the ability to fight and win on tomorrow's battlefields. However, the Technical Architecture (TA) alone only provides the foundation for interoperability. Integrated Army Enterprise Architectures (e.g., ABCA, BEA, etc.) fuse Operational, Systems and Technical views of the Army Enterprise into cohesive and manageable information sets that allow the Army to make consequent decisions regarding the Army's inventory of present and future systems and their associated funding. In this area the ASEO specializes in defining and exploiting (through analysis) the relationships between architectural views to provide quantitative answers to complex questions regarding the Army's future capabilities and the roadmap the Army will pursue in realizing them.

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<p>The allocated resources fund two support efforts for CIO/G6. First, subsequent to the development of the AKEA (Army Knowledge Enterprise Architecture) Guidance Document, the effort has shifted to development of the Army Technical Reference Model (TRM) for information broker/mediation services, and mapping the Army's architecture requirements to DOD Information Enterprise Architecture, including NCES (Net-Centric Enterprise Services). Second, support of the design and development of the AAIC (Army Architecture Integration Center) Web-based Knowledge Center continues with increased development requirements and functionality, including the consolidation of architectural repositories, design of the CADIE Repository and acting as the Army's agent for Defense Architecture Repository-Army (DARS) database.</p> <p>Joint Battle Command - Platforms (JBC-P), which includes Blue Force Tracking (BFT) and Army Aviation, provides true Joint force Command and Control (C2) Situational Awareness (SA) and communications (e.g., terrestrial, celestial) capability at the platform level through command center locations (e.g., Network Operations Centers (NOC), TOCs, Brigade Command Posts) and enables mission accomplishment across the entire spectrum of military operations. JBC-P serves as the cornerstone for Joint Blue Force Situational Awareness (JBFSa). It provides continuous near-real-time identification of friendly locations to populate the Joint Common Operating Picture (JCOP). JBC-P enhances Joint Combat Identification to increase combat effectiveness and reduce fratricide in a secure environment. It enables Joint, Net-Centric Command and Control (C2)/Battle Command by seamlessly passing/sharing relevant information vertically and horizontally, within all levels of command, regardless of Service unit hierarchy. In addition to utilizing the BFT system, JBC-P system hardware consists of a family of computers (e.g., handhelds, tablets, ruggedized computers, beacons, and in-dash computers), communications equipment (e.g., satellite transceivers/antennas), encryption devices, and ancillary equipment (e.g., Mission Data Loader, Disc Duplicator, cables, installation kits, etc.).</p> <p>JBC-P RDT&E Funding began in FY10. FY10 RDTE funding is shown in this Program Element (654805) and Project No. (589).</p> <p>Beginning in FY11, JBC-P RDT&E funding will be shown in Program Element 654805, Project No. 593.</p>							
B. Accomplishments/Planned Programs (\$ in Millions, Article Quantities in Each)			FY 2010	FY 2011	FY 2012 Base	FY 2012 OCO	FY 2012 Total
Title: C4ISR			3.104	3.180	-	-	-
Articles:			0	0			
Description: Funding is provided for the following effort							
FY 2010 Accomplishments: Analyze and provide Systems Engineering solutions to fill in gaps identified in C4ISR systems under development as well as fielded systems.							
FY 2011 Plans: Analyze and provide Systems Engineering solutions to fill in gaps identified in C4ISR systems under development as well as fielded systems.							
Title: Joint Technical Architecture (JTA)			0.417	0.416	-	-	-

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B. Accomplishments/Planned Programs (\$ in Millions, Article Quantities in Each)					
	FY 2010	FY 2011	FY 2012 Base	FY 2012 OCO	FY 2012 Total
Articles: 0	0	0			
Description: Funding is provided for the following effort					
FY 2010 Accomplishments: Identify unique Army requirements to influence Army/DoD Architecture Technical standards under new Defense information Systems Repository developed under Defense Information Systems Agency (DISA) oversight. Prior years: Technically influence the development/implementation of Joint Technical Architecture (JTA). FY03 accomplishments: JTA Versions 5.x, 6.0 restructured and aligned with Net-Centric Philosophy and redefined scope and standards applicability. Planned activities: JTA-A version 7.0, 7.5 to include major revision of Information Security Section, to include results of Tactical Imagery Transport Study					
FY 2011 Plans: Identify unique Army requirements to influence Army/DoD Architecture Technical standards under new Defense information Systems Repository developed under Defense Information Systems Agency (DISA) oversight. Prior years: Technically influence the development/implementation of Joint Technical Architecture (JTA). FY03 accomplishments: JTA Versions 5.x, 6.0 restructured and aligned with Net-Centric Philosophy and redefined scope and standards applicability. Planned activities: JTA-A version 7.0, 7.5 to include major revision of Information Security Section, to include results of Tactical Imagery Transport Study					
Title: Global Information Grid (GIG) Technologies	0.312	0.312	-	-	-
Articles: 0	0	0			
Description: Funding is provided for the following effort					
FY 2010 Accomplishments: Investigate information technical standards for inclusion in DSR, Defense Standards Repository. Global Information Grid (GIG) Technologies (XML, JPEG 2000, MPEG 4, IPV6)					
FY 2011 Plans: Investigate information technical standards for inclusion in DSR, Defense Standards Repository. Global Information Grid (GIG) Technologies (XML, JPEG 2000, MPEG 4, IPV6)					
Title: DISR	1.458	1.458	-	-	-
Articles: 0	0	0			
Description: Funding is provided for the following effort					

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B. Accomplishments/Planned Programs (\$ in Millions, Article Quantities in Each)					
	FY 2010	FY 2011	FY 2012 Base	FY 2012 OCO	FY 2012 Total
FY 2010 Accomplishments: Research and incorporate applicable emerging open standards-based commercial technologies to influence future force systems. Ensure that open commercial standards adopted by Future Force enabling systems are reflected in the DISR baseline. Maintain subject matter expertise on DISR, Defense Standards Repository Information Technology (IT) standards' mandates to ensure current and future force systems remain interoperable. Ensure a logical and cost-effective evolution of TA baselines while maximizing Joint interoperability.					
FY 2011 Plans: Research and incorporate applicable emerging open standards-based commercial technologies to influence future force systems. Ensure that open commercial standards adopted by Future Force enabling systems are reflected in the DISR baseline. Maintain subject matter expertise on DISR, Defense Standards Repository Information Technology (IT) standards' mandates to ensure current and future force systems remain interoperable. Ensure a logical and cost-effective evolution of TA baselines while maximizing Joint interoperability.					
Title: DISR Compliance Requirements		0.729 0	0.729 0	-	-
Articles:					
Description: Funding is provided for the following effort					
FY 2010 Accomplishments: DISR Compliance Requirements -Ensure Program Managers have an executable and effective strategy for implementing the Army/DoD Technical Architecture standards.					
FY 2011 Plans: DISR Compliance Requirements -Ensure Program Managers have an executable and effective strategy for implementing the Army/DoD Technical Architecture standards.					
Title: Army Enterprise Technical Views		1.666 0	1.506 0	-	-
Articles:					
Description: Funding is provided for the following effort					
FY 2010 Accomplishments:					

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APPROPRIATION/BUDGET ACTIVITY 2040: Research, Development, Test & Evaluation, Army BA 5: Development & Demonstration (SDD)		R-1 ITEM NOMENCLATURE PE 0604805A: Command, Control, Communications Systems - Eng Dev		PROJECT 589: ARMY SYS ENGINEERING & WARFIGHTING TECH SUP		
B. Accomplishments/Planned Programs (\$ in Millions, Article Quantities in Each)		FY 2010	FY 2011	FY 2012 Base	FY 2012 OCO	FY 2012 Total
Validate/Integrate Army Enterprise Technical Views to enable the Army Technical and Systems Architect (CIO/G6) to monitor, assess and control the inherent risks associated with leveraging continuously changing technologies across all Army Enterprise Functionals/PEO/Communities. FY 2011 Plans: Validate/Integrate Army Enterprise Technical Views to enable the Army Technical and Systems Architect (CIO/G6) to monitor, assess and control the inherent risks associated with leveraging continuously changing technologies across all Army Enterprise Functionals/PEO/Communities.						
Title: IPv6 protocol Articles: Description: Funding is provided for the following effort FY 2010 Accomplishments: Provide systems analysis for implementing IPv6 protocol across Army to ensure communications/data-sharing/ data-exchange between systems. Prior Years: As a result of the decision agreed to at the 19 Dec 02 AKEA, GOSC, direction of MU17 funding was realigned to support the Protocols Investigation for the Next Generation (PING) program. The PING supported current technology agreements with various technology developers such as HP, Cisco, Microsoft and Telecordia. In addition, PING represented the ARMY CIO/G6 office at various ASD (NII)/DoD CIO meetings discussing DoD IPv6 policy and Transisition Planning, participated with JITC at DISA's Def Interop Comm Exercise 2003 (DICE 2003) demonstrating IPv6 interoperability, active member of DoD IPv6 Test Bed evaluating and testing IPv6 benefits and trade-offs, first Army lab participating with North American IPv6 Task Forces MoonV6 initiative, drafted ARmy's Phase I IPv6 Transition plan and initial transition strategy to migrate Army systems and networks to native IPv6 by FY08 in compliance with DoD policy,prepared evaluation criteria for selecting early IPv6 adopter candidates in support of the Army GIO/G6 office, hosted first Army IPv6 data call to collect systems impact information and baseline on Army IPv6 transition plan, provided IPv6 technical guidance and knowledge to the Army acquisition community. FY 2011 Plans: Provide systems analysis for implementing IPv6 protocol across Army to ensure communications/data-sharing/ data-exchange between systems. Prior Years: As a result of the decision agreed to at the 19 Dec 02 AKEA, GOSC, direction of MU17 funding was realigned to support the Protocols Investigation for the Next Generation (PING) program. The PING supported		0.729 0	0.729 0	-	-	-

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APPROPRIATION/BUDGET ACTIVITY 2040: Research, Development, Test & Evaluation, Army BA 5: Development & Demonstration (SDD)		R-1 ITEM NOMENCLATURE PE 0604805A: Command, Control, Communications Systems - Eng Dev		PROJECT 589: ARMY SYS ENGINEERING & WARFIGHTING TECH SUP		
B. Accomplishments/Planned Programs (\$ in Millions, Article Quantities in Each)		FY 2010	FY 2011	FY 2012 Base	FY 2012 OCO	FY 2012 Total
current technology agreements with various technology developers such as HP, Cisco, Microsoft and Telecordia. In addition, PING represented the ARMY CIO/G6 office at various ASD (NII)/DoD CIO meetings discussing DoD IPv6 policy and Transisition Planning, participated with JITC at DISA's Def Interop Comm Exercise 2003 (DICE 2003) demonstrating IPv6 interoperability, active member of DoD IPv6 Test Bed evaluating and testing IPv6 benefits and trade-offs, first Army lab participating with North American IPv6 Task Forces MoonV6 initiative, drafted ARmy's Phase I IPv6 Transition plan and initial transition strategy to migrate Army systems and networks to native IPv6 by FY08 in compliance with DoD policy,prepared evaluation criteria for selecting early IPv6 adopter candidates in support of the Army GIO/G6 office, hosted first Army IPv6 data call to collect systems impact information and baseline on Army IPv6 transition plan, provided IPv6 technical guidance and knowledge to the Army acquisition community.						
Title: Define and exploit Articles: Description: Funding is provided for the following effort FY 2010 Accomplishments: Define and exploit (through analysis) the relationships between architectural views to provide quantitative answers to complex questions regarding the Army's future capabilities and the roadmap the Army will pursue in realizing them. FY 2011 Plans: Define and exploit (through analysis) the relationships between architectural views to provide quantitative answers to complex questions regarding the Army's future capabilities and the roadmap the Army will pursue in realizing them.		0.729 0	0.729 0	-	-	-
Title: Joint Blue Force Situational Awareness (JBFSA)initiative Articles: Description: Funding is provided for the following effort FY 2010 Accomplishments: Provide systems engineering solutions including techincal architectures for Army systems supporting Joint Blue Force Situational Awareness (JBFSA)initiative FY 2011 Plans:		0.958 0	1.041 0	-	-	-

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APPROPRIATION/BUDGET ACTIVITY 2040: Research, Development, Test & Evaluation, Army BA 5: Development & Demonstration (SDD)	R-1 ITEM NOMENCLATURE PE 0604805A: Command, Control, Communications Systems - Eng Dev	PROJECT 589: ARMY SYS ENGINEERING & WARFIGHTING TECH SUP				
B. Accomplishments/Planned Programs (\$ in Millions, Article Quantities in Each)		FY 2010	FY 2011	FY 2012 Base	FY 2012 OCO	FY 2012 Total
Provide systems engineering solutions including technical architectures for Army systems supporting Joint Blue Force Situational Awareness (JBFSAs) initiative						
Title: JBC-P Software Development Articles: Description: Develop Capabilities, Product Applications, Platform Interoperability, and System Services across the JBC-P family of systems, to include the development of capabilities to meet Key Performance Parameters (KPPs) and in support of Multi-Level Security Domains for Network, Users, and Information. FY 2010 Accomplishments: Develop Capabilities, Product Applications, Platform Interoperability, and System Services across the JBC-P family of systems, to include the development of capabilities to meet Key Performance Parameters (KPPs) and in support of Multi-Level Security Domains for Network, Users, and Information.		18.329 0	-	-	-	-
Title: JBC-P Software Engineering Articles: Description: Perform Software/Systems Engineering in support of the Development of JBC-P Capabilities, Applications, and Services, to include, but not limited to, Conducting Engineering Studies, Architecture Development (both Software and Network), Systems Analyses, Technical Readiness Assessments, Technical Interchange Meetings/Events, and Development of Related Reports and other Deliverables. FY 2010 Accomplishments: Perform Software/Systems Engineering in support of Development of JBC-P Capabilities, Applications, and Services, to include, but not limited to, Conducting Engineering Studies, Architectural Development (both Software and Network), Systems Analyses, Technical Readiness Assessments, Technical Interchange Meeting Events, and Development of Related Reports and other Deliverables.		12.500 0	-	-	-	-
Title: JBC-P Prototype Development Articles: Description: Design, Develop, and Procure Prototypes for Platform Dismountable Product, Standalone Dismounted Handheld Product, Beacon Product, Embedded Encryption, and Satellite Transceiver. FY 2010 Accomplishments:		1.100 0	-	-	-	-

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B. Accomplishments/Planned Programs (\$ in Millions, Article Quantities in Each)		FY 2010	FY 2011	FY 2012 Base	FY 2012 OCO	FY 2012 Total
Design, Develop and Procure Prototypes for Platform Dismountable Product, Standalone Dismounted Handheld Product, Beacon Product, Embedded Encryption, and Satellite Transceiver.						
Title: JBC-P Test and Integration Articles: Description: Develop and Conduct JBC-P Integration Test Events FY 2010 Accomplishments: Develop and Conduct JBC-P Integration Test Events		1.100 0	-	-	-	-
Title: JBC-P System Engineering/Program Management Articles: Description: JBC-P System Engineering/Program Management for PM FBCB2 Program Office Personnel, including Core, Matrix, and Contractor Support Personnel. FY 2010 Accomplishments: JBC-P System Engineering/Program Management for PM FBCB2 Program Office Personnel, including, Core, Matrix, and Contractor Support Personnel.		3.042 0	-	-	-	-
Title: Small Business Innovative Research/Small Business Technology Transfer Programs Articles: Description: Funding to Support Small Business Innovative Research/Small Business Technology Transfer Programs FY 2010 Accomplishments: Funding to Support Small Business Innovative Research and Small Business Technology Transfer Programs.		1.086 0	-	-	-	-
Accomplishments/Planned Programs Subtotals		47.259	10.100	-	-	-

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<u>C. Other Program Funding Summary (\$ in Millions)</u> N/A		
<u>D. Acquisition Strategy</u> <p>The JBC-P program was Joint Requirements Oversight Council (JROC) approved in May 2008. The Acquisition Strategy Report (ASR) was approved in September 2009. An Acquisition Decision Memorandum, approving a Modified Milestone B and entry into the Engineering and Manufacturing Development phase, was issued in September 2009.</p> <p>RDTE funding for JBC-P began in FY10.</p> <p>The FY10 JBC-P RDTE program funding is in this Program Element (654805) and Project Number (589).</p> <p>Beginning in FY11, JBC-P RDTE program funding will be shown in Program Element 654805, Project Number 593.</p>		
<u>E. Performance Metrics</u> <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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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 0604805A: Command, Control, Communications Systems - Eng Dev				PROJECT 589: ARMY SYS ENGINEERING & WARFIGHTING TECH SUP					
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
Government Systems Engineering Support	Various	ASEO, DCTS, PING/03 only,:various	23.516	5.944		-		-		-	Continuing	Continuing	Continuing
Contract Support 1	Various	C3ISGI,:various	3.080	-		-		-		-	Continuing	Continuing	Continuing
Contract Support 2	Various	TRW,:various	1.281	-		-		-		-	Continuing	Continuing	Continuing
Overhead	Various	ASEO/WTS CECOM,:various	1.422	-		-		-		-	Continuing	Continuing	Continuing
Contract Systems Engineering Support	Various	Battelle,:various	0.354	-		-		-		-	Continuing	Continuing	Continuing
System Development and Integration	Various	PEO C3S, PM TOCS,:Ft. monmouth, NJ	0.025	-		-		-		-	Continuing	Continuing	Continuing
Travel	Various	SEC, USACECOM,:various	0.145	0.025		-		-		-	Continuing	Continuing	Continuing
Development Support	Various	Northrop Grummon (SEC SSES),:various	0.300	0.050		-		-		-	Continuing	Continuing	Continuing
Contract Systems Engineering Support	Various	SRI,:various	0.199	-		-		-		-	Continuing	Continuing	Continuing
Labor (Internal Government)	Various	SEC, USACECOM,:various	5.174	0.856		-		-		-	Continuing	Continuing	Continuing
Equipment	Various	USACECOM,:various	0.030	0.005		-		-		-	Continuing	Continuing	Continuing
Development Support	Various	ITEL,:various	0.300	0.050		-		-		-	Continuing	Continuing	Continuing
Contract Support 3	Various	Lockheed Martin,:various	0.545	-		-		-		-	Continuing	Continuing	Continuing
Contract Support 4	Various	SAIC,:various	1.811	-		-		-		-	Continuing	Continuing	Continuing
Contract Systems Engineering Support	Various	SRC,:various	0.612	-		-		-		-	Continuing	Continuing	Continuing
Contract Systems Engineering Support	Various	MITRE,:various	9.177	0.350		-		-		-	Continuing	Continuing	Continuing
Systems Engineering and Integration	Various	WTS - ISIO CECOM,:various	2.341	-		-		-		-	Continuing	Continuing	Continuing
Contract Support	Various	Datron,:various	0.305	-		-		-		-	Continuing	Continuing	Continuing

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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 0604805A: Command, Control, Communications Systems - Eng Dev				589: ARMY SYS ENGINEERING & WARFIGHTING TECH SUP					
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
Contract Systems Engineering Support	Various	Gemini,:various	0.137	-		-		-		-	Continuing	Continuing	Continuing
Development Support-Knowledge Center	Various	ITEL,:various	0.849	-		-		-		-	Continuing	Continuing	Continuing
Contract Support	Various	Rutgers University,:various	0.528	-		-		-		-	Continuing	Continuing	Continuing
Contract Systems Engineering Support	Various	Suntek Systems,:various	0.460	-		-		-		-	Continuing	Continuing	Continuing
Contract Systems Engineering Support	Various	HTPi,:various	0.145	-		-		-		-	Continuing	Continuing	Continuing
Contract Support	Various	Telos,:various	0.024	-		-		-		-	Continuing	Continuing	Continuing
Engineering Support	Various	ISEC,:various	1.357	-		-		-		-	Continuing	Continuing	Continuing
Contract Support	Various	PTG/CACI,:various	0.026	-		-		-		-	Continuing	Continuing	Continuing
Contract Systems Engineering Support	TBD	Litton,:TBD	0.970	0.240		-		-		-	Continuing	Continuing	Continuing
Contract Support	TBD	CSC,:TBD	1.746	-		-		-		-	Continuing	Continuing	Continuing
Contract Support	TBD	BAE,:TBD	0.139	-		-		-		-	Continuing	Continuing	Continuing
Contract Support	TBD	Janus Research Group,:TBD	0.072	-		-		-		-	Continuing	Continuing	Continuing
Contract Systems Engineering Support	TBD	CSC,:TBD	20.506	2.500		-		-		-	Continuing	Continuing	Continuing
Contract Systems Engineering Support	TBD	GTE/BBN,:TBD	0.960	-		-		-		-	Continuing	Continuing	Continuing
Travel	TBD	ASEO/WTSC CECOM,:TBD	1.856	0.080		-		-		-	Continuing	Continuing	Continuing
Development of software based VOIP	TBD	TBD:TBD	2.400	-		-		-		-	Continuing	Continuing	Continuing
JBC-P Software Development	MIPR	Software Engineering Directorate (SED):Huntsville, AL	-	-		-		-		-	Continuing	Continuing	Continuing
JBC-P Software/Systems Engineering	MIPR		-	-		-		-		-	Continuing	Continuing	Continuing

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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 0604805A: Command, Control, Communications Systems - Eng Dev				PROJECT 589: ARMY SYS ENGINEERING & WARFIGHTING TECH SUP				
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
		Software Engineering Center (SEC):Huntsville, AL											
JBC-P Hardware Development	MIPR	SED:Huntsville, AL	-	-		-		-		-	Continuing	Continuing	Continuing
Subtotal			82.792	10.100		-		-		-			
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
JBC-P PM Office Support	Various	PM FBCB2 PMO:various	-	-		-		-		-	Continuing	Continuing	Continuing
JBC-P Matrix Support	Various	PM FBCB2 PMO:various	-	-		-		-		-	Continuing	Continuing	Continuing
JBC-P Miscellaneous Contractor Support	Various	CACI:various	-	-		-		-		-	Continuing	Continuing	Continuing
Subtotal			-	-		-		-		-			
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
JBC-P Contractor Test Support	MIPR	SED, Redstone Arsenal:Huntsville, AL	-	-		-		-		-	Continuing	Continuing	Continuing
Subtotal			-	-		-		-		-			
			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			82.792	10.100		-		-		-			

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	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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APPROPRIATION/BUDGET ACTIVITY 2040: <i>Research, Development, Test & Evaluation, Army</i> BA 5: <i>Development & Demonstration (SDD)</i>				R-1 ITEM NOMENCLATURE PE 0604805A: <i>Command, Control, Communications Systems - Eng Dev</i>				PROJECT 593: <i>JOINT BATTLE COMMAND - PLATFORM (JBC-P)</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
593: <i>JOINT BATTLE COMMAND - PLATFORM (JBC-P)</i>	-	70.628	118.042	-	118.042	19.592	5.455	4.165	3.140	0.000	221.022
Quantity of RDT&E Articles											
A. Mission Description and Budget Item Justification <p>Joint Battle Command - Platforms (JBC-P), which includes Blue Force Tracking (BFT) and Army Aviation, provides true Joint force Command and Control (C2) Situational Awareness (SA) and communications (e.g., terrestrial, celestial) capability at the platform level through command center locations (e.g., Network Operations Centers (NOC), Tactical Operation Centers (TOCs), Brigade Command Posts) and enables mission accomplishment across the entire spectrum of military operations. JBC-P serves as the cornerstone for Joint Blue Force Situational Awareness (JBFSa). It provides continuous near-real-time identification of friendly locations to populate the Joint Common Operating Picture (JCOP). JBC-P enhances Joint Combat Identification to increase combat effectiveness and reduce fratricide in a secure environment. It enables Joint, Net-Centric Command and Control (C2)/Battle Command by seamlessly passing/sharing relevant information vertically and horizontally, within all levels of command, regardless of Service unit hierarchy. In addition to utilizing the FBCB2/BFT system, JBC-P system hardware consists of a family of computers (e.g., handhelds, tablets, ruggedized computers, beacons, and in-dash computers), communications equipment (e.g., satellite transceivers/antennas), encryption devices (e.g., KGV-72), and ancillary equipment (e.g., Mission Data Loader, Disc Duplicator, cables, installation kits, etc.).</p> <p>JBC-P RDTE Funding began in FY10. FY10 RDTE funding is shown in Program Element (654805) and Project No. (589).</p> <p>Beginning in FY11, JBC-P RDTE funding will be shown in this Program Element (654805) and Project No. (593).</p>											
B. Accomplishments/Planned Programs (\$ in Millions, Article Quantities in Each)							FY 2010	FY 2011	FY 2012 Base	FY 2012 OCO	FY 2012 Total
Title: Software Development <p align="right">Articles:</p> <p>Description: Develop Capabilities, Product Applications, Platform Interoperability, and System Services across the JBC-P family of systems, to include the development of capabilities to meet Key Performance Parameters (KPPs) and in support of Multi-Level Security Domains for Network, Users, and Information.</p> <p>FY 2011 Plans: Develop Capabilities, Product Applications, Platform Interoperability, and System Services across the JBC-P family of systems, to include the development of capabilities to meet Key Performance Parameters (KPPs), and in support of Multi-Level Security Domains for Network, Users, and Information.</p> <p>FY 2012 Base Plans:</p>							-	28.000 0	33.600	-	33.600

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B. Accomplishments/Planned Programs (\$ in Millions, Article Quantities in Each)		FY 2010	FY 2011	FY 2012 Base	FY 2012 OCO	FY 2012 Total
Complete Software System Acceptance Test (SSAT) for product build 2 for Capability Set 13-14 software and deliver to PM. Complete engineering, design, development, coding and SSAT for Build 3 of product software (vehicle, network operations center, command post, NETT Warrior products and incorporation of Movement Tracking System functionality into JBC-P) for Capability Set 13-14 and deliver to PM. In order to meet timelines for the Army's Capability Set 15-16 fielding cycle, begin Software Development in Fiscal Year 2012. Initiate engineering, design and coding for Capability Set 15-16 Core/Product Development Kit (PDK) software. Complete engineering, design and coding for product builds 4 through 6 to complete all threshold Key System Attributes and to fully meet the Key Performance Parameters outlined in the Capability Development Document for all of the products. Continue development of functionality for aviation platforms, including work needed for convergence of Ground and Air Command and Control (C2) and Situational Awareness (SA) and to successfully complete DO178B airworthiness qualification testing. Conduct User Juries to gain user feedback on the software. Include Marine Corps participation in working groups and integrated product/process teams and provide software builds to the Marine Corps as required for testing to ensure Marine Corps requirements are included and adequately addressed throughout the software development effort.						
Title: Software Engineering Articles: Description: Perform Software/Systems Engineering in support of the development of JBC-P Capabilities, Applications, and Services, to include, but not limited to, Conducting Engineering Studies, Architecture Development (both Software and Network), System Analyses, Technical Readiness Assessments, Technical Interchange Meetings/Events, and development of Related Reports and other deliverables. FY 2011 Plans: Perform Software/Systems Engineering in support of the development of JBC-P capabilities, Applications, and Services, to include, but not limited to, Conducting Engineering Studies, Architecture Development (both Software and Network), System Analyses, Technical Readiness Assessments, Technical Interchange Meetings/Events, and development of Related Reports and other deliverables. FY 2012 Base Plans: In order to meet timelines for the Army's Capability Set 15-16 fielding cycle, begin Software and System Engineering in Fiscal Year 2012. Begin planning, requirements analysis, system architecture and Family of Systems (FoS) engineering for Capability Set 15-16 software. Begin security engineering including security		-	20.000 0	12.800	-	12.800

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B. Accomplishments/Planned Programs (\$ in Millions, Article Quantities in Each)		FY 2010	FY 2011	FY 2012 Base	FY 2012 OCO	FY 2012 Total
certification and accreditation plan, safety engineering and FoS definition study and prototyping. Begin development of System/Subsystem specification for Capability Set 15-16 software.						
Title: Prototype Manufacturing Articles: Description: Design, Develop and Procure Prototypes for Platform Dismountable Product, Standalone Dismounted Handheld Product, and Beacon Product, Embedded Encryption and Satellite Transceiver FY 2011 Plans: Design, Develop and Procure Prototypes for Platform Dismountable Product, Standalone Dismounted Handheld Product, and Beacon Product, Embedded Encryption and Satellite Transceiver. FY 2012 Base Plans: Stand-alone Dismount (Handheld) hardware: Complete Commercial Off-the-Shelf (COTS) and other prototype assessments and develop performance specification for Low Rate Initial Production effort for. Release Draft Low Rate Initial Production Request for Proposal. Based on successful Low Rate Initial Production decision review, release final Low Rate Initial Production Request for Proposal and begin evaluation of proposals. Platform Dismountable hardware: Conduct Low Rate Initial Production decision review based on test results. Upon successful completion of Initial Operational Test and Evaluation (IOT&E), conduct Full Rate Production decision review.		-	5.000 0	12.240	-	12.240
Title: Battle Command Common Operating Environment Description: Develop a Common Operating Environment based on the Battle Command Product Line for Mounted and Mobile Computing Environments FY 2012 Base Plans: Conduct technology assessments and establish an infrastructure to support development of third party Mounted and Mobile Computing Environments based on the Battle Command Product Line across the spectrum of Mission Command applications at the platform level. Converge on a Common Operating Environment for Battle Command at the platform and dismount level.		-	-	19.753	-	19.753
Title: Common Computing Hardware System		-	-	12.839	-	12.839

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B. Accomplishments/Planned Programs (\$ in Millions, Article Quantities in Each)				FY 2010	FY 2011	FY 2012 Base	FY 2012 OCO	FY 2012 Total
Description: Develop a common family of computing hardware to support Mission Command applications at the platform level FY 2012 Base Plans: Identify consolidated platform functional capabilities for Battle Command, Logistics and other Warfighter Functional Areas. Identify and prioritize sensor data integration requirements required for the dismounted soldier, mounted platforms and at Company Command Posts. Develop computing requirements for each role or class of platform and use to define functional and performance requirements for competitive hardware procurements.								
Title: Program Management Articles: Description: FBCB2 Program Management FY 2011 Plans: Program Management, to include Core, Matrix and Contractor Support. FY 2012 Base Plans: Provide requirement, technical, logistics and business oversight for all software and hardware development activities. Monitor progress of performing organizations and prepare reports to higher headquarters. Develop and implement plans for process and product improvements.				-	5.628 0	7.060	-	7.060
Title: Test, Evaluation and Integration Articles: Description: Develop and Conduct Integration Events (i.e., Tests and Assessments) FY 2011 Plans: Develop and Conduct Software and Hardware Integration Events (i.e., Tests and Assessments). FY 2012 Base Plans: Complete planning for Capability Set 13-14 Operational Test. Equip test unit with Engineering and Manufacturing Development hardware. Conduct Initial Test and Evaluation (IOT&E) on Capability Set 13-14 software and Remoteable Vehicle (Tablet) hardware. Conduct operational assessment of Stand-Alone				-	12.000 0	19.750	-	19.750

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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 0604805A: <i>Command, Control, Communications Systems - Eng Dev</i>			PROJECT 593: <i>JOINT BATTLE COMMAND - PLATFORM (JBC-P)</i>					
B. Accomplishments/Planned Programs (\$ in Millions, Article Quantities in Each)						FY 2010	FY 2011	FY 2012 Base	FY 2012 OCO	FY 2012 Total	
Dismounted (Handheld) hardware concurrent with Initial Operational Test and Evaluation. Evaluate test data and provide reports to the Project Manager and Milestone Decision Authority for use in decision reviews.											
Accomplishments/Planned Programs Subtotals						-	70.628	118.042	-	118.042	
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
• Joint Battle Command - Platform: OPA W61990	17.188	0.147	69.514	148.335	217.849		139.100	133.095	134.696	134.696	854.150
• ARMY SYS ENGR & WARFIGHTING TECH SP: RDTE PE 654805, Proj. No. 589	37.620									0.000	37.620
• Joint Battle Cmd - Platform (JBC-P): RDTE PE 273759, Proj. No. 122		3.935								0.000	3.935
D. Acquisition Strategy											
The JBC-P program was Joint Requirements Oversight Council (JROC) approved in May 2008. RDTE funding for JBC-P begins in Fiscal Year 2010. The Acquisition Strategy Report (ASR) was approved in September 2009. An Acquisition Decision Memorandum, approving a Modified Milestone B, and entry into the Engineering and Manufacturing Development phase, was issued in September 2009.											
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 0604805A: Command, Control, Communications Systems - Eng Dev				593: JOINT BATTLE COMMAND - PLATFORM (JBC-P)				
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
Joint Battle Command - Platforms (JBC-P) development	MIPR	SED, Redstone Arsenal:Huntsville, AL	-	28.000		33.600		-		33.600	Continuing	Continuing	Continuing
JBC-P Software/System Engineering	MIPR	SED, Redstone Arsenal:Huntsville, AL	-	20.000		12.800		-		12.800	Continuing	Continuing	Continuing
Design, Develop, and Procure Hardware Prototypes	Various	Multiple:Multiple	-	5.000		12.240		-		12.240	Continuing	Continuing	Continuing
Battle Command Common Operating Environment Platform/Dismount Convergence	Various	Multiple:Multiple	-	-		19.753		-		19.753	Continuing	Continuing	0.000
Common Computing Hardware System for Platform based Applications	Various	Multiple:Multiple	-	-		12.839		-		12.839	Continuing	Continuing	0.000
Subtotal			-	53.000		91.232		-		91.232			
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 In-House System/Project Management	Sub Allot	PM FBCB2:Aberdeen Proving Ground (APG), MD	-	2.000		2.500		-		2.500	Continuing	Continuing	Continuing
Government Matrix System/ Project Management	MIPR	PM FBCB2:Aberdeen Proving Ground (APG), MD	-	1.000		1.500		-		1.500	Continuing	Continuing	Continuing
Contractor System/Project Management Support	C/FP	TBD:TBD	-	2.628		3.060		-		3.060	Continuing	Continuing	Continuing
Subtotal			-	5.628		7.060		-		7.060			

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Exhibit R-3, RDT&E Project Cost Analysis: 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 0604805A: <i>Command, Control, Communications Systems - Eng Dev</i>				PROJECT 593: <i>JOINT BATTLE COMMAND - PLATFORM (JBC-P)</i>					

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
Develop and Conduct Tests and Assessments	MIPR	SED, Redstone Arsenal:Huntsville, AL	-	12.000		19.750		-		19.750	Continuing	Continuing	Continuing
Subtotal			-	12.000		19.750		-		19.750			

	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	-	70.628		118.042		-		118.042			

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 0604805A: <i>Command, Control, Communications Systems - Eng Dev</i>	PROJECT 593: <i>JOINT BATTLE COMMAND - PLATFORM (JBC-P)</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
Hardware Development																												
System Requirements Review																												
Critical Design Review																												
MS C (Approval for software to go to operational testing)																												
Operational Test																												
Full Rate Production (FRP) Decision Review/ SW Fielding Decision																												

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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 0604805A: <i>Command, Control, Communications Systems - Eng Dev</i>	PROJECT 593: <i>JOINT BATTLE COMMAND - PLATFORM (JBC-P)</i>	

Schedule Details

Events	Start		End	
	Quarter	Year	Quarter	Year
Hardware Development	1	2010	1	2014
System Requirements Review	2	2010	2	2010
Critical Design Review	3	2011	3	2011
MS C (Approval for software to go to operational testing)	4	2011	4	2011
Operational Test	1	2012	2	2012
Full Rate Production (FRP) Decision Review/SW Fielding Decision	3	2012	3	2012