

ARMY RDT&E BUDGET ITEM JUSTIFICATION (R2 Exhibit)							February 2004					
BUDGET ACTIVITY 7 - Operational system development				PE NUMBER AND TITLE 0203758A - Digitization			PROJECT 374					
COST (In Thousands)				FY 2003 Actual	FY 2004 Estimate	FY 2005 Estimate	FY 2006 Estimate	FY 2007 Estimate	FY 2008 Estimate	FY 2009 Estimate	Cost to Complete	Total Cost
374 HOR BATTLEFLD DIGITIZN				27727	18049	24506	23390	15835	10103	11432	Continuing	Continuing
<p>A. Mission Description and Budget Item Justification: Horizontal Battlefield Digitization is a strategy that allows warfighters, from the individual soldier and platform to echelons above corps, to share critical situational awareness (SA) and command and control information. It applies digital information technologies to acquire, exchange, and employ data throughout the battlespace, providing a clear and accurate common relevant picture for leaders at all levels. This timely sharing of information significantly improves the ability of commanders and leaders to quickly make decisions, synchronize forces and fires, and increase the operational tempo. Digitization is a means of realizing a fully integrated command and control capability to the platoon level, including interoperability links with joint and multi-national forces. The major efforts included in the program element are: 1) Integration and synchronization of the Army's interoperability efforts; coordination of interoperability efforts between joint and multi-national forces; and the synchronization of combat material and training efforts to develop and deploy Army information technologies. 2) Systems engineering; Integration of physical interfaces and logical mechanisms between and across multiple battlefield operating systems and across multiple Program Executive Offices, providing improved capability to operate in the common battlefield picture/SA and common operating environment (COE). Enhance synchronization of maneuvers, direct/indirect fires, intelligence and targeting, and reduce fratricide. 3) Unit Set Fielding (USF) operationally releases, fields, and incorporates materiel systems as part of the whole C4ISR system of systems architecture associated with the critical mission threads the Army requires to support Strategic National Tasks. USF serves as the synchronizing process, ensuring that fieldings are implemented in an integrated and complimentary fashion and support a unit's modernization with minimum disruption to unit readiness. 4) Software Blocking to synchronize system developments in order to support SOS interoperability for legacy, interim and objective forces. Horizontal Battlefield Digitization supports the Future/Current to Future transition path of the Army Transformation Plan</p>												
<u>Accomplishments/Planned Program</u>									FY 2003	FY 2004	FY 2005	
Conduct technical interoperability studies, perform interoperability/integration analyses, analyze networked weapon system and Command, Control, Communications, Computers, Intelligence, Surveillance, and Reconnaissance (C4ISR) system compatibility, and assess technical and operational test plans, activities, and results.									4688	2052	1253	
Provide technical, analytical, and management support for implementation of information operations on the digitized battlefield.									1689	1100	1130	
Coordinate, integrate, and synchronize all aspects of material system fieldings to include tracking, recording, and resolving issues for system of systems synchronization and database management, the TCP priorities.									6452	5566	5189	

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Accomplishments/Planned Program B(continued)		FY 2003	FY 2004	FY 2005
Provide through validation of evolving digital requirements/architecture to ensure realistic/adequate data flows, mission thread analysis, interoperability, human resource engineering, security and physical layout of the Transformation Campaign Plan.		1505	900	500
Develop C4I systems software baselines and manage Horizontal Technology Integration efforts. Provide assessments for risk, interoperability, performance, and scheduling. Perform System Integration functions for baselining and process improvements.		175	0	0
Synchronize system/platform integration, through the use of common components, across ground and aviation programs.		1000	500	500
Migrate full Joint interoperability and integration standards, including the robust near real time network integration of Aviation systems with Ground systems, and robust networked and databased integration of Weapon systems with Command & Control (C2) systems. Provide synergistic operational capabilities to the force.		2500	2500	1500
Improve network management across all fielded digitized systems to support increased activity.		2639	0	0
Integrate and synchronize interoperability across C4ISR programs in support of testing, training, and fielding system of systems developments to the force. Provide efforts in architecture to strengthen and leverage S&T advanced capabilities, like flexibility and extensibility.		4210	3000	3000
Single Integrated Ground Picture (SIGP) is an Army-led, multi-service initiative that maximizes the effectiveness of mission execution and significantly enhances the warfighting capabilities for U.S., Allied and Coalition Ground Forces by providing integrated information of the ground-based battlespace to the warfighter. The Single SIGP focus is the development of Joint processes, methods, architectures, standards, Operational Concept and Concept of Operations that provides the Warfighter with enhanced Situational Awareness of the battlespace, enabling the Warfighters to more precisely and decisively command and control that battlespace.		0	0	10434
Apply university academic and research resources to the integration of Army modeling, simulation, and training in support of modernized forces.		2000	1000	0
Support Joint and Coalition interoperability programs to improve operational integration in accordance with JV 2010, including C4I Coalition Warfare, interoperability database developments, operational system architectures and the Multilateral Interoperability Program (MIP).		869	986	1000
Small Business Innovative Research/Small Business Technology Transfer programs.		0	445	0
Totals		27727	18049	24506

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374**B. Program Change Summary**

	FY 2003	FY 2004	FY 2005
Previous President's Budget (FY 2004)	32158	18251	18716
Current Budget (FY 2005 PB)	27727	18049	24506
Total Adjustments	-4431	-202	5790
Congressional program reductions		-172	
Congressional rescissions			
Congressional increases			
Reprogrammings	-4431	-30	
SBIR/STTR Transfer			
Adjustments to Budget Years			5790

FY05 program increased for Single Integrated Ground Picture (SIGP) which is a new joint effort to provide integrated information of the ground-based battlespace to the warfighter.

C. Other Program Funding Summary: Not Applicable

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<p><u>D. Acquisition Strategy:</u> To validate/demonstrate concepts and requirements, near term efforts are focused on developing a seamless battlefield software architecture and digitized appliqué hardware systems to include: evaluation of the horizontal battlefield digitization resources for systems, acquisition, integration, and testing of digital capability across multiple command and control, communications, sensors, and weapons platforms. The result will be an integrated capability designed to meet the near-term requirements of the Stryker Brigade Combat Teams and the Army Future Force. Also supports the Army's role in joint and multi-national digitization programs and Joint Battlefield Situational Awareness.</p>		

ARMY RDT&E COST ANALYSIS(R3)									February 2004			
BUDGET ACTIVITY 7 - Operational system development					PE NUMBER AND TITLE 0203758A - Digitization					PROJECT 374		
I. Product Development	Contract Method & Type	Performing Activity & Location	Total PYs Cost	FY 2003 Cost	FY 2003 Award Date	FY 2004 Cost	FY 2004 Award Date	FY 2005 Cost	FY 2005 Award Date	Cost To Complete	Total Cost	Target Value of Contract
a . System Integration/Software Blocking	MIPR/PWD	Various	59186	16474	1Q	12848	2-3Q	11422	1Q	Continue	99930	0
b . International Digitization	MIPR/PWD	Various	11001	0	1Q	0	1Q	0	1Q	0	11001	0
c . Technical Analysis	MIPR	MITRE, McLean, VA	4028	1090	1Q	1329	1Q	1200	1Q	Continue	7647	0
d . Other Government Agencies	MIPR	Various	6022	500	1Q	0	1Q	0		0	6522	0
e . Single Integrated Ground Picture	MIPR		0	0		0		10434	2-3Q	8000	18434	0
Subtotal:			80237	18064		14177		23056		Continue	143534	0

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II. Support Cost	Contract Method & Type	Performing Activity & Location	Total PYs Cost	FY 2003 Cost	FY 2003 Award Date	FY 2004 Cost	FY 2004 Award Date	FY 2005 Cost	FY 2005 Award Date	Cost To Complete	Total Cost	Target Value of Contract
a . Directorate of Integration Office Operations	In House	Pentagon, Arlington, VA	6192	1400	1-4Q	1615		1450	1-4Q	0	10657	0
b . Digitization Planning, Internet and graphics support	MIPR	Veridian Corp. Pentagon, Arlington, VA	5299	1700	1Q	0		0		0	6999	0
c . Info Ops, System Eng. Integration & Ops Spt.	PWD	Quantum Res International, Pentagon, Arlington, VA, Ft. Monroe, VA, & Ft. Hood, TX and others	11026	4100	1Q	1257		0		0	16383	0
d . Other Integration Support	MIPR	L3Com, Pentagon	1923	196	1Q	0		0		0	2119	0
Subtotal:			24440	7396		2872		1450		0	36158	0

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III. Test and Evaluation	Contract Method & Type	Performing Activity & Location	Total PYs Cost	FY 2003 Cost	FY 2003 Award Date	FY 2004 Cost	FY 2004 Award Date	FY 2005 Cost	FY 2005 Award Date	Cost To Complete	Total Cost	Target Value of Contract
a . Other Govt. Agencies	MIPR	Various	4935	127	1Q	0		0		0	5062	0
b . University XXI Initiatives	PWD	Univ. of Texas and Texas A&M	8692	2000	1Q	1000		0		0	11692	0
c . Studies/Analyses	MIPR	Pentagon, Arlington, VA	1976	140	1Q	0		0		0	2116	0
d . DISM Battalion Test	MIPR/PWD		1000	0		0		0		0	1000	0
Subtotal:			16603	2267		1000		0		0	19870	0
IV. Management Services	Contract Method & Type	Performing Activity & Location	Total PYs Cost	FY 2003 Cost	FY 2003 Award Date	FY 2004 Cost	FY 2004 Award Date	FY 2005 Cost	FY 2005 Award Date	Cost To Complete	Total Cost	Target Value of Contract
Subtotal:			0	0		0		0		0	0	0
Remarks: Not Applicable												
Project Total Cost:			121280	27727		18049		24506		Continue	199562	0