

<b>ARMY RDT&amp;E BUDGET ITEM JUSTIFICATION (R2 Exhibit)</b>							<b>February 2005</b>				
BUDGET ACTIVITY <b>7 - Operational system development</b>				PE NUMBER AND TITLE <b>0203758A - Digitization</b>				PROJECT <b>374</b>			
COST (In Thousands)		FY 2004 Actual	FY 2005 Estimate	FY 2006 Estimate	FY 2007 Estimate	FY 2008 Estimate	FY 2009 Estimate	FY 2010 Estimate	FY 2011 Estimate	Cost to Complete	Total Cost
374	HOR BATTLEFLD DIGITIZN	17865	29045	12343	13061	10174	11423	10809	8489	0	140936
<p><b><u>A. Mission Description and Budget Item Justification:</u></b> 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.</p>											
<b><u>Accomplishments/Planned Program</u></b>							FY 2004	FY 2005	FY 2006	FY 2007	
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.							2052	1253	1200	1300	
Provide technical, analytical, and management support for implementation of information operations on the digitized battlefield.							1100	1130	1100	1307	
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.							5566	5189	5165	5554	
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.							1900	2379	1378	1400	

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Accomplishments/Planned Program B(continued)			FY 2004	FY 2005	FY 2006	FY 2007
Synchronize system/platform integration, through the use of common components, across ground and aviation programs.			500	500	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. Influence requirement and materiel development to produce integrated/synchronized systems for the Future Force.			2316	3000	3000	3000
Integrate and synchronize interoperability across C4ISR programs in support of testing, training, and fielding system of systems developments to the force. Continue efforts to strengthen and leverage S&T advanced capabilities. Continue application across current and future force.			2000	1867	0	0
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 ground picture of the battlespace, enabling the Warfighters to more precisely and decisively command and control that battlespace.			0	9973	0	0
Apply university academic and research resources to the integration of Army modeling, simulation, and training in support of modernized forces.			1000	2000	0	0
Support Joint and Coalition interoperability programs to improve operational integration in accordance with Joint Planning Guidance, including C4I Coalition Warfare, interoperability database developments, operational system architectures and coalition data strategies.			986	1000	0	0
Small Business Innovative Research/Small Business Technology Transfer programs.			445	754	0	0
Totals			17865	29045	12343	13061

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**374****B. Program Change Summary**

	FY 2005	FY 2006	FY 2007
Previous President's Budget (FY 2005)	24506	23390	15835
Current Budget (FY 2006/2007 PB)	29045	12343	13061
Total Adjustments	4539	-11047	-2774
Net of Program/Database Changes			
Congressional Program Reductions	-1707		
Congressional Rescissions			
Congressional Increases	7000		
Reprogrammings			
SBIR/STTR Transfer	-754		
Adjustments to Budget Years		-11047	-2774

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

FY05 Congressional increase of \$2.0M for digitization support to Fort Hood, TX. FY05 Congressional add of \$5.0M to support satellite communications for learning and broad band language training (funds being held in HQ pending creation of new project element.

FY06/07 Funds realigned to reflect higher Army Priorities including termination of SIGP.

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<p><u>C. Other Program Funding Summary:</u> Not Applicable</p> <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 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, synchronize 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, battle command efforts and Joint Battlefield Situational Awareness.</p>		

ARMY RDT&E COST ANALYSIS(R3)									February 2005			
BUDGET ACTIVITY <b>7 - Operational system development</b>					PE NUMBER AND TITLE <b>0203758A - Digitization</b>					PROJECT <b>374</b>		
I. Product Development	Contract Method & Type	Performing Activity & Location	Total PYs Cost	FY 2005 Cost	FY 2005 Award Date	FY 2006 Cost	FY 2006 Award Date	FY 2007 Cost	FY 2007 Award Date	Cost To Complete	Total Cost	Target Value of Contract
a . System Integration/Software Blocking	MIPR/PWD	Various	87324	11338	1Q	6543	2-3Q	7561	2-3Q	Continue	112766	0
b . International Digitization	MIPR/PWD	Various	11001	0	1Q	0		0		0	11001	0
c . Technical Analysis	MIPR	MITRE, McLean, VA	6447	1600	1Q	1600		1300	1Q	Continue	10947	0
d . Other Government Agencies	MIPR	Various	6522	0		0		0		0	6522	0
e . Single Integrated Ground Picture	MIPR		0	9973	2-3Q	0		0		0	9973	0
Subtotal:			111294	22911		8143		8861		Continue	151209	0

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II. Support Cost	Contract Method & Type	Performing Activity & Location	Total PYs Cost	FY 2005 Cost	FY 2005 Award Date	FY 2006 Cost	FY 2006 Award Date	FY 2007 Cost	FY 2007 Award Date	Cost To Complete	Total Cost	Target Value of Contract
a . Directorate of Integration Office Operations	In House	Pentagon, Arlington, VA	9207	1450	1-4Q	1500		1500	1-4Q	0	13657	0
b . Digitization Planning, Internet and graphics support	MIPR	General Dynamics Corp. Pentagon, Arlington, VA	6999	0		0		0		0	6999	0
c . Info Ops, System Eng. Integration & Ops Spt. Planning, Internet and graphics support.	PWD	Quantum Res International, Pentagon, Arlington, VA, Ft. Monroe, VA, & Ft. Hood, TX and others	16383	2684	3Q	2700		2700		0	24467	0
d . Other Integration Support	MIPR	L3Com, Pentagon	2119	0		0		0		0	2119	0
Subtotal:			34708	4134		4200		4200		0	47242	0

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III. Test and Evaluation	Contract Method & Type	Performing Activity & Location	Total PYs Cost	FY 2005 Cost	FY 2005 Award Date	FY 2006 Cost	FY 2006 Award Date	FY 2007 Cost	FY 2007 Award Date	Cost To Complete	Total Cost	Target Value of Contract
a . Other Govt. Agencies	MIPR	Various	5062	0		0		0		0	5062	0
b . University XXI Initiatives	PWD	Univ. of Texas and Texas A&M	12692	2000		0		0		0	14692	0
c . Studies/Analyses	MIPR	Pentagon, Arlington, VA	2116	0		0		0		0	2116	0
d . DISM Battalion Test	MIPR/PWD		1000	0		0		0		0	1000	0
Subtotal:			20870	2000		0		0		0	22870	0
IV. Management Services	Contract Method & Type	Performing Activity & Location	Total PYs Cost	FY 2005 Cost	FY 2005 Award Date	FY 2006 Cost	FY 2006 Award Date	FY 2007 Cost	FY 2007 Award Date	Cost To Complete	Total Cost	Target Value of Contract
			0	0		0		0		0	0	0
Subtotal:												
Remarks: Not Applicable												
Project Total Cost:			166872	29045		12343		13061		Continue	221321	0