

ARMY RDT&E BUDGET ITEM JUSTIFICATION (R2 Exhibit)

May 2009

BUDGET ACTIVITY 7 - Operational system development		PE NUMBER AND TITLE 0203758A - Digitization			
COST (In Thousands)	FY 2008 Actual	FY 2009 Estimate	FY 2010 Estimate	Cost to Complete	Total Cost
374 HOR BATTLEFLD DIGITIZN	10426	9502	10692	Continuing	Continuing

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 situation awareness (SA) and command and control (C2) information. It conducts analysis and evaluation of new information technologies, concepts, and applications of integrated management activities to meet the dynamic Army acquisition technology requirements. The strategy applies digital information technologies to acquire exchange and employ data throughout the operational environment, providing a clear and accurate common operational 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 C2 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 Army information technologies; 2) Systems engineering and integration of hardware and software interfaces between and across the warfighting functions and across multiple Program Executive Offices, providing System of System (SOS) capabilities that satisfy warfighter requirements and enable the execution of mission operations by providing one Common Operational Picture (COP)/Common Tactical Picture. 3) Oversee and support synchronization of LandWarNet Battle Command capabilities and ensure interoperability across the current and future force. 4) Support fielding of integrated systems to Active and Reserve Components (USARNG and USAR) in accordance with Army Force Generation (ARFORGEN). 5) Supports integration and enhancements to Army Equipping Enterprise System (AE2S) software for the single program language, single platform system that incorporates Force Development Investment Information System (FDIIS), Continuous Early Validation (CEaVa), COP and Army Flow Model (AFM).

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<u>B. Program Change Summary</u>	FY 2008	FY 2009	FY 2010
Previous President's Budget (FY 2009)	9675	9534	8871
Current BES/President's Budget (FY 2010)	10426	9502	10692
Total Adjustments	751	-32	1821
Congressional Program Reductions		-32	
Congressional Rescissions			
Congressional Increases			
Reprogrammings	968		
SBIR/STTR Transfer	-217		
Adjustments to Budget Years			1821

Change Summary Explanation: Funding - FY 10: Funding increased to support AE2S in Horizontal Battlefield Digitization.

ARMY RDT&E BUDGET ITEM JUSTIFICATION (R2a Exhibit)

May 2009

BUDGET ACTIVITY 7 - Operational system development	PE NUMBER AND TITLE 0203758A - Digitization			PROJECT 374	
COST (In Thousands)	FY 2008 Actual	FY 2009 Estimate	FY 2010 Estimate	Cost to Complete	Total Cost
374 HOR BATTLEFLD DIGITIZN	10426	9502	10692	Continuing	Continuing

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<u>Accomplishments/Planned Program:</u>	<u>FY 2008</u>	<u>FY 2009</u>	<u>FY 2010</u>
Conduct technical interoperability assessments, perform interoperability/integration analyses, analyze networked weapon system and Situational Awareness (SA), Command and Control (C2), Command, Control, Communications, Computers, Intelligence, Surveillance, and Reconnaissance (C4ISR) systems compatibility, and assess technical and operational test plans, activities, and results.	1648	1527	2842
Integrate and synchronize interoperability across SA/C2/C4ISR programs in support of acquisition synchronization, testing, training, and fielding System of Systems capabilities to the Army Force. Continue application across current and future force.	1567	1522	2594
Support digitization technical integration with Active and Reserve Components both CONUS and OCONUS.	3006	2759	3256
Procures AE2S software integration and enhancements for the single program language, single platform system that incorporates FDIIS, CEaVa, COP and AFM			2000
Support Joint and Coalition interoperability programs to improve integration and interoperability in accordance with Army Software Blocking Policy, Joint Planning Guidance, Coalition Specifications, Joint Capabilities Integration and Development System (JCIDS) requirements.	600	600	
Manage cross-platform software and hardware development, testing, training, and fielding to ensure the coordinated interoperability for each Army Force unit rotation.	2405	1428	

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BUDGET ACTIVITY	PE NUMBER AND TITLE	PROJECT	
7 - Operational system development	0203758A - Digitization	374	
Apply university academic and research resources to the integration of Army complex modeling, simulation, and training in support of modernized forces.	1200	1399	
Small Business Innovative Research/Small Business Technology Transfer Programs		267	
Total	10426	9502	10692

B. Other Program Funding Summary Not applicable for this item.

C. Acquisition Strategy 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.

ARMY RDT&E COST ANALYSIS (R3)

May 2009

BUDGET ACTIVITY			PE NUMBER AND TITLE							PROJECT		
7 - Operational system development			0203758A - Digitization							374		
I. Product Development	Contract Method & Type	Performing Activity & Location	Total PYs Cost	FY 2008 Cost	FY 2008 Award Date	FY 2009 Cost	FY 2009 Award Date	FY 2010 Cost	FY 2010 Award Date	Cost To Complete	Total Cost	Target Value of Contract
System/Software Integration	MIPR/PWD	Various	112271	6544	2-3Q	3285	2-3Q	2984	2-3Q	Cont.	Cont.	
International Digitization	MIPR/PWD	Various	11001								11001	
Technical Analysis	MIPR	MITRE, McLean, VA	12956	2445	1Q	2518	1Q	2593	1Q	Cont.	Cont.	
Other Government Agencies	MIPR	Various	6522									
Single Integrated Ground Picture	MIPR		7281									
Subtotal:			150031	8989		5803		5577		Cont.	Cont.	
II. Support Costs	Contract Method & Type	Performing Activity & Location	Total PYs Cost	FY 2008 Cost	FY 2008 Award Date	FY 2009 Cost	FY 2009 Award Date	FY 2010 Cost	FY 2010 Award Date	Cost To Complete	Total Cost	Target Value of Contract
Directorate of Integration Office Operations	In House	Pentagon, Arlington, VA	14422		1-4Q		1-4Q		1-4Q		14422	
System Eng. & Field Integration, Internet and graphics support.	PWD	Quantum Res International, Pentagon & Arlington, VA, Ft. Monroe, VA, & Ft. Hood, TX	10058	237	4Q	2300	4Q	3115	3-4Q		15710	
Software Integration and enhancements	PWD	SAIC, Pentagon & Ft. Belvoir						2000	2Q		2000	
Subtotal:			24480	237		2300		5115			32132	
Remarks: Directorate of Integration Office Operations was moved from the APC at ASC to G8 at OA22.												
III. Test And Evaluation	Contract Method & Type	Performing Activity & Location	Total PYs Cost	FY 2008 Cost	FY 2008 Award Date	FY 2009 Cost	FY 2009 Award Date	FY 2010 Cost	FY 2010 Award Date	Cost To Complete	Total Cost	Target Value of Contract
Other Govt. Agencies	MIPR	Various	5062								5062	
University XXI Initiatives	PWD	Univ. of Texas and	19472	1200	3Q	1399	3Q				22071	

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May 2009

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		Texas A&M									
Studies/Analyses	MIPR	Pentagon, Arlington, VA	2116							2116	
DISM Battalion Test	MIPR/PWD		1000							1000	
Subtotal:			27650	1200		1399				30249	

Remarks: University XXI was granted a congressional mark of one million dollars in FY08 which was a misalignment. OSD realigned the funding and the effort was cash flowed funds from 273758 with an increase that was executed at \$1.2M.

IV. Management Services	Contract Method & Type	Performing Activity & Location	Total PYs Cost	FY 2008 Cost	FY 2008 Award Date	FY 2009 Cost	FY 2009 Award Date	FY 2010 Cost	FY 2010 Award Date	Cost To Complete	Total Cost	Target Value of Contract
Subtotal:												

Remarks: Not Applicable

Project Total Cost:	202161	10426		9502		10692		Cont.	Cont.
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