

ARMY RDT&E BUDGET ITEM JUSTIFICATION (R-2 Exhibit)							February 2003				
BUDGET ACTIVITY 7 - Operational system development				PE NUMBER AND TITLE 0203758A - Digitization				PROJECT 374			
COST (In Thousands)		FY 2002 Actual	FY 2003 Estimate	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	31420	32158	18251	18716	15349	15733	9952	11296	Continuing	183695
<p><u>A. Mission Description and Budget Item Justification:</u> 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 Legacy to Objective transition path of the Army Transformation Plan</p>											
<u>Accomplishments/Planned Program</u>							<u>FY 2002</u>	<u>FY 2003</u>	<u>FY 2004</u>	<u>FY 2005</u>	
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.							4832	4688	3993	4050	
Provide technical, analytical, and management support for implementation of information operations on the digitized battlefield.							1608	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.							1518	1597	1000	1020	
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.							1325	1505	900	910	

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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.		1019	0	0	0	
Synchronize system/platform integration, through the use of common components, across ground and aviation programs.		4386	0	0	0	
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.		0	5174	2558	2666	
Manage integration of Analysis, Modeling and Design (AMD, including software development systems, through database integration, with other systems. Support the increased ingegration of training and test systems with the tactical (C4ISR) systems.		0	2885	0	0	
Apply emerging horizontal integrated information technologies, capitalizing on the synergism achieved through system of system fieldings across functional areas.		3942	0	0	0	
Improve network management across all fielded digitized systems to support increased activity.		0	2659	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.		0	4210	8100	8340	
Integrate and synchronize modeling and simulation interoperability with programs in support of testing and training of system of systems developments as part of Simulation and C2 Information Systems Connectivity Experiments (SINCE).		3475	0	0	0	
Provide strategic planning to the Army Experimentation Campaign Program (AECPP). Design and manage Unit Set configuration and execution. Perform management and oversight of the 3 views of architecture (system, operational, and technical).		1430	0	0	0	
Identify Embedded Training Design Support tasks, methodologies, research, and development in the use of simulation.		1630	0	0	0	
Apply university academic and research resources to the integration of Army modeling, simulation, and training in support of modernized forces.		2755	2000	0	0	
Support Joint and Coalition interoperability programs to improve operational integration in accordance with JV 2010, including C4I Coalition Warfare, Command and Control System Interoperability Program (C2SIP) efforts, interoperability database developments, operational system architectures, the Simulation of C2 Information Systems Connectivity Experiments (SINCE) and the Multilateral Interoperability Program (MIP).		2500	2951	600	600	

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BUDGET ACTIVITY

7 - Operational system development

PE NUMBER AND TITLE

0203758A - Digitization

PROJECT

374**Accomplishments/Planned Program (continued)**

Support Digital Intelligence Situation Mapboard (DISM) Battalion Testand integration research with SINCGARS

FY 2002**FY 2003****FY 2004****FY 2005**

1000

2800

0

0

Totals

31420

32158

18251

18716

B. Program Change Summary

FY 2002

FY 2003

FY 2004

FY 2005

Previous President's Budget (FY 2003)

32027

28968

32465

33405

Current Budget (FY 2004/2005 PB)

31420

32158

18251

18716

Total Adjustments

-607

3190

-14214

-14689

Congressional program reductions

Congressional rescissions

-530

Congressional increases

4800

Reprogrammings

251

-186

SBIR/STTR Transfer

-858

-894

Adjustments to Budget Years

-14214

-14689

Starting FY2004: Transfer of civilian salaries and contractor support to OMA.

ARMY RDT&E COST ANALYSIS(R-3)									February 2003			
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	15154	1Q	16451	1Q	16916	1Q	Continue	Continue	0
b . International Digitization	MIPR/PWD	Various	11001	2951	1Q	600	1Q	600	1Q	Continue	Continue	0
c . Technical Analysis	MIPR	MITRE, McLean, VA	4028	1090	1Q	1200	1Q	1200	1Q	Continue	Continue	0
d . Other Government Agencies	MIPR	Various	6022	500	1Q	0	1Q	0		0	6522	0
Subtotal:			80237	19695		18251		18716		Continue	Continue	0
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	0		0		0	7592	0
b . Digitization Planning, Internet and graphics support	MIPR	Veridian Corp. Pentagon, Arlington, VA	5299	1700	1Q	0		0		0	6999	0

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II. Support Cost (continued)	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
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	0		0		0	15126	0
d . Other Integration Support	MIPR	L3Com, Pentagon	1923	196	1Q	0		0		0	2119	0
Subtotal:			24440	7396		0		0		0	31836	0
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	0		0		0	10692	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
e . DISM Integration Research with SINCGARS	MIPR	PM Soldier Huntsville, AL	0	2800		0		0		0	2800	0

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III. Test and Evaluation (continued)	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:			16603	5067		0		0		0	21670	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	32158		18251		18716		Continue	Continue	0