ARMY RDT&E BUDGET ITEM JUSTIFICATION (R2 Exhibit)

February 2005

BUDGET ACTIVITY
5 - System Development and Demonstration

PE NUMBER AND TITLE
0604□60A - Distributive Interactive Simulations (DIS) - Engin

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
Total Program Element (PE) Cost		24192	25477	22057	20945	21804	20712	15133	14913	Continuing	184011
C73	SYNTHETIC THEATER OF WAR	1293	1474	2190	2311	2384	2504	0	0	0	13950
C74	DEVEL SIMULATION TECH	3133	2352	1869	2235	4000	3951	849	448	0	18987
C77	INTERACTIVE SIMULATION	0	1246	1167	1190	1191	1194	1049	1074	0	8111
C78	ONE SEMI-AUTOMATED FORCES (ONESAF)	19766	20405	16831	15209	14229	13063	13235	13391	Continuing	142963

A. Mission Description and Budget Item Justification: This program element supports the Army's Advanced Simulation Program which enables operational readiness and supports the development of concepts and systems for Stryker and Future Force through the application of new simulation technology and techniques. This development and application of simulation technology will provide the tools to electronically link all subcomponents together in a manner that is transparent to the user. The synthetic environment is used to verify the scenarios, tactics/techniques and procedures, train testers on new hardware/software and conduct trial test runs before costly live field tests. The tools developed are available for reuse by developers and users of simulations throughout the Army. Project C73, Synthetic Theater of War-Army (STOW-A), provides innovative applications of current systems (live, virtual and constructive, Command, Control, Communications, Computers and Integration (C4I) Surveillance and Reconnaissance) to meet the urgent training requirements until availability of the next generation systems. STOW-A provides direct support to the Training, Exercises and Military Operations (TEMO) domain and the Advanced Concepts Requirements (ACR) domain. TEMO support derives from the demonstrated, low cost training capabilities that are provided by the toolkit. ACR support derives from the demonstrated capability of the kit to support battle lab and Army Warfighting Experiments (AWE) exercises and the development of Tactics, Techniques and Procedures (TTP) to support digital operations. Project C74 provides the resources necessary to perform the formally chartered mission of the Army's Simulation to C4ISR Interoperability Overarching Integrated Product Team (SIMCI OIPT). Project C77, Interactive Simulation, focuses on development of advanced simulation technology and tools to provide a reusable synthetic environment. This program will benefit the Army and DOD by providing standards for interoperability and software. The project also develops and enhances reconfigurable simulators which are used as Advanced Concepts Research Tools (ACRT) that will allow the battlelabs to accomplish their mission in support of the ACR, Research, Development and Acquisition (RDA), and TEMO domains. Project C78 develops the One Semi-Automated Forces (OneSAF) program that will combine and improve the functionality and improve behaviors of several current semi-automated forces to provide a single SAF for Army use in simulations.

The FY06 and FY07 STOW-A, C73 project line will continue the development of the software to link entity-based simulations and simulators to live tactical command and control systems and incorporate live simulations through the instrumented operating systems at the Combat Training Centers (CTCs). The FY06 and FY07 C74 Project line provides for Simulation-to-C4I interoperability (SIMCI) effort between the models and simulations and tactical C4I Systems. The FY06 and FY07 C78 Project funding will continue development of the software to provide OneSAF initial operational capability

functionality for Army evaluation and test.

B. Program Change Summary	FY 2005	FY 2006	FY 2007
Previous President's Budget (FY 2005)	26985	25860	24302
Current Budget (FY 2006/2007 PB)	25477	22057	20945
Total Adjustments	-1508	-3803	-3357
Net of Program/Database Changes			
Congressional Program Reductions	-3730		
Congressional Rescissions			
Congressional Increases	3000		
Reprogrammings			
SBIR/STTR Transfer	-778		
Adjustments to Budget Years		-3803	-3357

FY05 Congressional plus-up of $1.7M for Commander's Rock Drill was transferred to Project C78 for execution in FY05. The FY05 Congressional plus-up of $1.3M for Dynamic Re-Addressing and Management for Army was transferred to Project C77 for execution in FY05. Funds in FY06 ($3.803M) and FY07 ($3.357M) were realigned to higher priority programs.

ARMY RDT&E BUDGET ITEM JUSTIFICATION (R2a Exhibit)

February 2005

BUDGET ACTIVITY	PE NUMBER AND TITLE	PROJECT
5 - System Development and Demonstration	**0604□60A - Distributive Interactive Simulations (DIS) - Engin**	**C□3**

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
C73 SYNTHETIC THEATER OF WAR	1293	1474	2190	2311	2384	2504	0	0	0	13950

A. Mission Description and Budget Item Justification: This program supports development and integration activities for the Synthetic Theater Of War-Army (STOW-A) Digital Sustainment Training (DST) software baseline that includes integration of fielded simulations and simulators with C4ISR systems. The development and integration to be accomplished will result in the capability to provide a seamless synthetic environment which will support digital training, test and mission rehearsal requirements. Specific efforts will include integration of a ground maneuver simulation into the Fire Support Simulation Tools (FSST) architecture and enhancement of the extant intelligence capability of FSST. Additionally, better representation and fidelity of other battlefield operating systems functionality will be gained. Development focuses on leveraging existing and emerging technology in a manner that produces substantial and continual improvements in combat readiness through the use of full spectrum, high fidelity, distributed simulation capability to support a large scale user-based exercise/experiment for JOINT VENTURE training and analytical needs. The Digital Battlefield Sustainment Trainer (DBST) program is a strategic agility program designed to meet the Operational Needs and other critical initiatives from the field. It will do this through the application of available current and emerging technologies. This project develops innovative applications of current systems (live, virtual, constructive, C4ISR) to meet urgent needs across the domains (e.g., training shortfalls) until the next-generation systems are available. The FY06 and FY07 funding will continue development of software and hardware interfaces to provide the required digital training capability to the field, helping to overcome unique digital training challenges that currently exist in the U.S. Army at the brigade level. DBST is part of the Army Constructive Training Federation (ACTF).

Accomplishments/Planned Program	FY 2004	FY 2005	FY 2006	FY 2007
FY04-FY07: Continue development of integration software to link simulation with tactical command and control systems in support of Constructive Simulation. (Software Blocking)	585	336	249	260
FY05-FY07: Initiate development of software to support Joint Venture and Joint Contingency Force Simulation - Simulation Integration	0	280	386	410
FY04-FY07: Continue verification and validation of software integration to include DOD Information Technology Security Certification and Accreditation Process (DITSCAP).	345	140	170	202
FY04-FY07: Continue integration of Tactical Simulation Interface Unit in support of Army Constructive Training Federation	363	718	1385	1439
Totals	1293	1474	2190	2311

B. Other Program Funding Summary	FY 2004	FY 2005	FY 2006	FY 2007	FY 2008	FY 2009	FY 2010	FY 2011	To Compl	Total Cost
OMA, 121014	2889	2975	2761	2901	3048	3223	0	0	0	17797

C. Acquisition Strategy: Development is accomplished through delivery orders to competitively selected contractors based on performance specifications via PEO STRI Ominbus Contract (STOC) and General Services Administration (GSA) contracts.

ARMY RDT&E COST ANALYSIS(R3)

February 2005

BUDGET ACTIVITY
5 - System Development and Demonstration

PE NUMBER AND TITLE
0604□60A - Distributive Interactive Simulations (DIS) - Engin

PROJECT
C□3

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 . Enhanced Tactical Simulation Interface Unit(ETSIU)/Enhanced Protocol Interface Unit(EPIU) Interface	C/CPFF	AEGIS, Orlando, FL	3173	256	1-2Q	1385	1-2Q	1439	1-2Q	Continue	Continue	Continue
b . STOW-A/DBST Software Development	Various	Multiple	6925	196	1-2Q	0		0		0	7121	7121
c . Architecture Development	C/CPIF	Multiple	939	177	1-2Q	0		0		0	1116	1116
Subtotal:			11037	629		1385		1439		Continue	Continue	Continue

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 . Engr & Technical Support	Various	Multiple	2165	207	1Q	593	1-4Q	616	1-4Q	Continue	Continue	Continue
Subtotal:			2165	207		593		616		Continue	Continue	Continue

ARMY RDT&E COST ANALYSIS(R3)

February 2005

BUDGET ACTIVITY
5 - System Development and Demonstration

PE NUMBER AND TITLE
0604□60A - Distributive Interactive Simulations (DIS) - Engin

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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 . DBST Integration, Evaluation and Test	C/CPFF	Multiple	1769	500	1-3Q	0		0		0	2269	2269
Subtotal:			1769	500		0		0		0	2269	2269

Remarks: Required for evaluation of annual version release. There are system tasks that are peformed as part of the annual version release.

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
a . Program Management	Various	Multiple	3459	138	1-4Q	212	1-4Q	256	1-4Q	Continue	Continue	Continue
Subtotal:			3459	138		212		256		Continue	Continue	Continue
Project Total Cost:			18430	1474		2190		2311		Continue	Continue	Continue

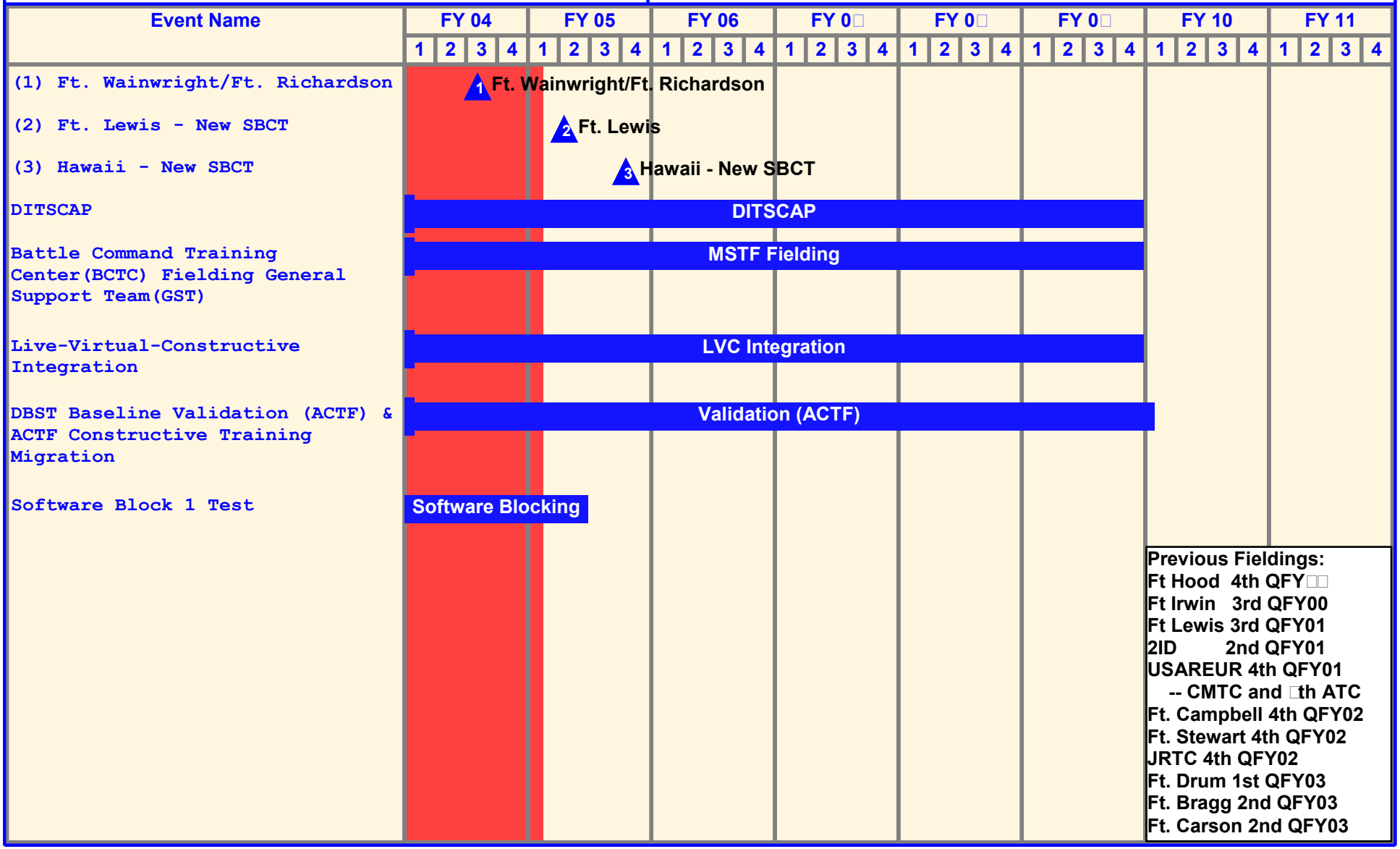
Schedule Profile (R4 Exhibit)

February 2005

BUDGET ACTIVITY
5 - System Development and Demonstration

PE NUMBER AND TITLE
0604□60A - Distributive Interactive Simulations (DIS) - Engin

PROJECT
C□3



Schedule Detail (R4a Exhibit)

February 2005

BUDGET ACTIVITY	PE NUMBER AND TITLE	PROJECT
5 - System Development and Demonstration	**0604□60A - Distributive Interactive Simulations (DIS) - Engin**	**C□3**

Schedule Detail	FY 2004	FY 2005	FY 2006	FY 2007	FY 2008	FY 2009	FY 2010	FY 2011
Award Engineering & Technical Support	1-2Q	1-2Q	1-2Q	1-2Q	1-2Q	1-2Q		
Annual SW Version Release	3Q	3Q	3Q	3Q	3Q	3Q		

ARMY RDT&E BUDGET ITEM JUSTIFICATION (R2a Exhibit)

February 2005

BUDGET ACTIVITY	PE NUMBER AND TITLE	PROJECT
5 - System Development and Demonstration	**0604□60A - Distributive Interactive Simulations (DIS) - Engin**	**C□4**

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
C74 DEVEL SIMULATION TECH	3133	2352	1869	2235	4000	3951	849	448	0	18987

A. Mission Description and Budget Item Justification: The funding in this project line supports the chartered mission of the Simulation to C4I Interoperability (SIMCI) Overarching IPT. This effort provides recommendations to Senior Army Leadership on strategies, methods, and changes in Army Policy resulting in improved interoperability between the Modeling and Simulation (M&S) community, the Battle Command community, and the Weapons System / Platform community as well. SIMCI Investments include a System of Systems focus on Architectures, Data, Standards, and strategies to influence the acceptance of Interoperability Common components. SIMCI also invests in limited processes to foster Army level collaboration and problem solving strategies on Interoperability issues at the System of Systems level. A stated requirement of the SIMCI OIPT is to establish and facilitate communication with the Future Combat System (FCS) Lead Systems Integrator (LSI) to provide them with Interoperability issues encountered by the Current Force implementation, for the expressed purpose of influencing the FCS program to more interoperable solutions. Nearly all SIMCI investments are made as cost sharing opportunities with others who require access to SIMCI sponsored / endorsed technologies and capabilities.

Interoperability is the ability of systems, units, or forces to provide data, information, materiel, and services to and accept the same from other systems, units, or forces, and to use the data, information, materiel, and services that are exchanged to enable them to operate effectively together. To achieve interoperability in the Army's System of Systems approach toward Army Transformation, components based architectures are critical to successful integration of current and future M&S and tactical systems.

SIMCI's requirement is to tie interoperability and top level warfighter tasks to the Future Force to enable the soldier to train while at the institution, at homestation, at the Combat Training Centers, or at a deployed location with a fully integrated and interoperable training environment. This requires the development and distribution of SIMCI solutions for design and utilization of common components for the Army future Battle Command and the various applicable systems and platforms that are essential for Army Transformation.

Digital Integration Lab (DIL) provides a centrally controlled digital integration laboratory to conduct program development, integration and the mandated Intra-Army Interoperability activities in support of PEO STRI integration of interoperability with the Army's System and Non-System Training Aides, Devices and Simulation and Simulators (TADSS) with existing and emerging Army Battle Command Systems.

Accomplishments/Planned Program	FY 2004	FY 2005	FY 2006	FY 2007
FY04-FY07: Provided Army level synchronization of SIMCI-related and software blocking related initiatives (development, configuration, management, certification, and distribution).Developed an M&S data model to align the Army's integrated core data model. Provided recommendations on DA level policy to improve interoperability between M&S and tactical C4I systems. Managed the SIMCI efforts between the M&S and tactical C4I systems. Provided ABCS Software License management to all SIMCI related programs. Provided architectural support and effective liaison to PM Future Combat Systems (FCS), Defense Modeling and Simulation Office (DMSO), Defense Information Systems Agency (DISA) and other Services. Collaborated on the stand up of a fully enabled and feature rich SIMCI Requirements Synchronization & Assessment Enterprise Tool Set (RS&A ETS). Develop and manage the Simulation-to-C4I interoperability (SIMCI) initiatives between the models and simulations (M&S) and tactical C4I Systems in a components based architectures approach. Develop C4I support plans to align the Army's operational, systems, and technical architectures to define and enable interoperable solutions between the M&S and the C4I community.Funding line zeroed out beginning in FY 05 due to funds being realigned under VMSO.	267	0	0	0
FY04-FY07: Continue management of the SIMCI efforts(7 Government WYs FY 05). Provide support of the SIMCI Overarching Integrated Product Team's (OIPT) approach to interoperability which includes architecture alignment, data model alignment, promotion of common standards & the development, baseline control & distribution of common interoperability. Objectives are: Develop components for existing Battle Command/C4ISR and simulation systems; conduct experimentation and standardization with Battle Management Language (BML) Prototype; develop specification for a standard interface to facilitate interoperability between communications effects simulations and C4I systems; develop a SIMCI Component Architecture to provide seamless interoperability between Army Battle Command and Army M&S components; further develop and increase user awareness of the Requirements Synchronization and Assessment Enterprise Tool Set (RS&A ETS); and align all initiatives with the Army's Software Blocking Policy. Continue transition of SIMCI knowledge and Proof of Principle(POP)Products to Army and Joint Programs of Record. Manage and sustain the PEO STRI Digital Integration Lab as the single point access to Army Battle Command Systems.	2866	2352	1869	2235
Totals	3133	2352	1869	2235

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

C. Acquisition Strategy: SIMCI OIPT resources are allocated to multiple organizations and contracts to procure and execute approved functions and projects to support the SIMCI and components based architecture alignment efforts. Majority of funding is reflected in the Management Services line.

ARMY RDT&E COST ANALYSIS(R3)

February 2005

BUDGET ACTIVITY
5 - System Development and Demonstration

PE NUMBER AND TITLE
0604□60A - Distributive Interactive Simulations (DIS) - Engin

PROJECT
C□4

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 . C4I Interoperability - Tng in the System of Systems Architecture (TSOSA)	C/CPAF	MITRE, CECOM, Ft Monmouth, NJ	230	0		0		0		0	230	230
b . C4I Interoperability - SIMCI OIPT/Digital Integration Lab (DIL)	T&M	COLSA Corporation, Huntsville, AL	531	1961	1-3Q	0		0		0	2492	2492
c . C4I Interoperability - SIMCI Battle Management Language (BML)	C/CPAF	Northrop Grumman Information Technology, McLean, VA	0	250	1-4Q	0		0		0	250	250
Subtotal:			761	2211		0		0		0	2972	2972

ARMY RDT&E COST ANALYSIS(R3)

February 2005

BUDGET ACTIVITY
5 - System Development and Demonstration

PE NUMBER AND TITLE
0604□60A - Distributive Interactive Simulations (DIS) - Engin

PROJECT
C□4

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 . Facility Support for Digital Integration Lab (DIL)	In-House	PEO STRI (formerly STRICOM), Orlando, FL	60	350	1-3Q	350	1-3Q	350	1-3Q	Continue	Continue	Continue
Subtotal:			60	350		350		350		Continue	Continue	Continue

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
Subtotal:			0	0		0		0		0	0	0

ARMY RDT&E COST ANALYSIS(R3)

February 2005

BUDGET ACTIVITY
5 - System Development and Demonstration

PE NUMBER AND TITLE
0604□60A - Distributive Interactive Simulations (DIS) - Engin

PROJECT
C□4

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
a . Program Management	Multiple	Various	5060	2821	1-4Q	1519	1-4Q	1885	1-4Q	Continue	Continue	Continue
Subtotal:			5060	2821		1519		1885		Continue	Continue	Continue
Project Total Cost:			5881	5382		1869		2235		Continue	Continue	Continue

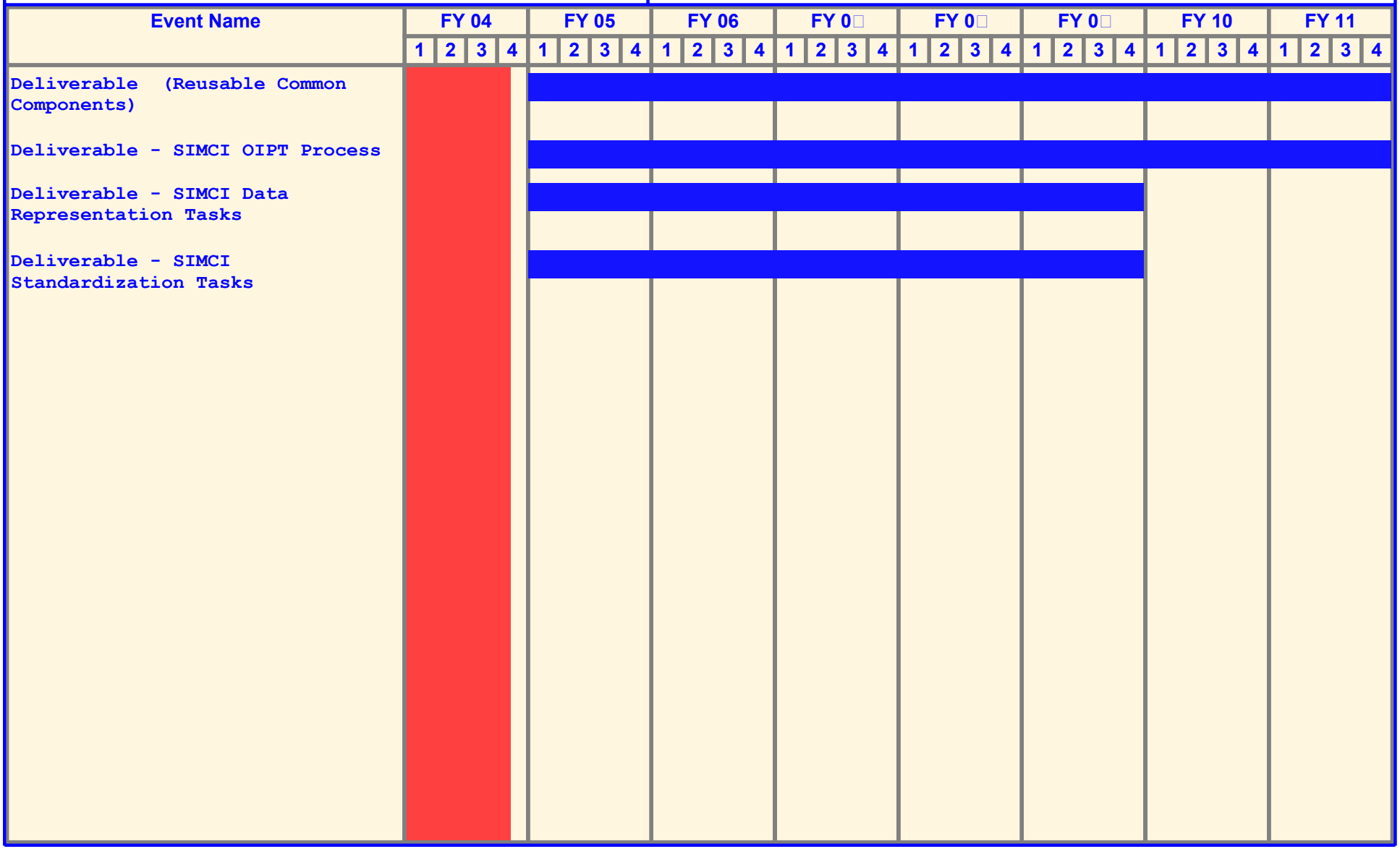
Schedule Profile (R4 Exhibit)

February 2005

BUDGET ACTIVITY
5 - System Development and Demonstration

PE NUMBER AND TITLE
0604□60A - Distributive Interactive Simulations (DIS) - Engin

PROJECT
C□4



Schedule Detail (R4a Exhibit)

February 2005

BUDGET ACTIVITY	PE NUMBER AND TITLE	PROJECT
5 - System Development and Demonstration	**0604□60A - Distributive Interactive Simulations (DIS) - Engin**	**C□4**

Schedule Detail	FY 2004	FY 2005	FY 2006	FY 2007	FY 2008	FY 2009	FY 2010	FY 2011
M&S Services for GIG					1Q			4Q
Integration of Training into Army Enterprise and Joint C4I Architectures		1Q				4Q		
C4I-M&S Reference Object Model (CROM)	1Q					4Q		
Army C4I and Simulation Initialization System (ACSIS)	1Q			4Q				
Standardize Battle Management Language	1Q					4Q		
Representation of Communication Effects (CE) for Experimentation, Training and Operations		1Q						4Q
Transition of Common Components/Services to Applications		1Q						4Q

ARMY RDT&E BUDGET ITEM JUSTIFICATION (R2a Exhibit)

February 2005

BUDGET ACTIVITY	PE NUMBER AND TITLE	PROJECT
5 - System Development and Demonstration	**0604□60A - Distributive Interactive Simulations (DIS) - Engin**	**C□□**

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
C77 INTERACTIVE SIMULATION	0	1246	1167	1190	1191	1194	1049	1074	0	8111

A. Mission Description and Budget Item Justification: This project supports the development and maintenance of the Army Geospatial Data Integrated Master Plan (AGDIMP). The ADGIMP is a Chief of Staff, Army approved document that provides the framework for future decisions and direction to generate, manage, analyze, and distribute geospatial data for battle management operations, training, and mission rehearsal. The AGDIMP also provides the processes and procedures to identify and refine Army geopspatial resource requirements. Geospatial Information and Services provide the basis for situational awareness on the battlefield. Geospatial data provides Soldiers with the framework and background for displaying the location of friendly and enemy forces, and the location of critical features on the battlefield. Geospatial data, used in Army simulators and simulations as well as its command and control systems, also provides insights on how the physical environment will impact combat operations. The Army's Future Force will include unmanned aerial and ground vehicles that require a greater degree of resolution in both terrain and enhanced feature data to navigate and move on the battlefield to minimize exposure of Soldiers to hostile environments and enemy force that will depend on a common set of geospatial data that is continually upgraded and made available on a network of information that is accessible to all involved. The purpose of the AGDIMP is twofold. First, this plan describes a concept of operations for a complete, integrated, end-to-end, network-centric process for collecting, managing, distributing, and updating geospatial data in the Army's Future Force. Although this plan encompasses most of the issues of an end-to-end solution for geospatial needs and concerns, it does not contain the total level of detail or complexity to be considered a complete end-to-end solution. It does, however, contain a foundation of issues necessary to develop a concept of operations for a complete, integrated, end-to-end, network-centric process for collecting, managing, distributing, and updating geospatial data. Second, this plan identifies activities and funding needed to execute the basic concept of operations described in the AGDIMP. The scope of the AGDIMP includes all activities starting with data acquisition from multiple sources, to include raw sensor feeds from national sensors to soldier/platform level, and culminating with accurate, robust, and timely geospatial (terrain-related) data and data conversion tools that support multiple battle command, training, and mission-rehearsal applications. The AGDIMP does not include the algorithms and functions used by the applications themselves to produce finished battle command or intelligence products. The AGDIMP is intended to become part of a much larger effort that will integrate geospatial activities across all Services, while documenting the complex framework for a "net ready" geospatial information and services architecture, an environment in which the Army's current and future forces must operate to achieve information dominance within the total battle space. This larger effort is the Joint Geospatial Enterprise Service (JGES). An Initial Concepts Document (ICD) for the JGES has been developed in conjunction with the Joint Forces Command and the other Services (including Special Operations Command, and currently, this document is being staffed within Department of the Army Headquarters. The Army Requirements Oversight Council (AROC) will approve the JGES ICD. Subsequent to that approval, the Joint Requirements Oversight Council (JROC) will also staff, review and approve the ICD.

Accomplishments/Planned Program	FY 2004	FY 2005	FY 2006	FY 2007
Supports the development of the Dynamic Readdressing and Management for Army (DRAMA) 2010.	0	1246	0	0
Develop an integrated, end-to-end, geospatial process that can be used for network-centric operations. The network-centric, integrated geospatial process must include a process to identify requirements for new geospatial data, assemble the components of needed data, archive the data in a distributed network of storage facilities (or warehouses), and ensure the data are available to all authorized users.	0	0	507	0
Develop policy, procedures, and standards for geospatial data management, including fusion/integration (e.g., fusion and conflation), transformation, filtering, and dissemination of data across all echelons of command. This includes the timely distribution of appropriate data from the Top Secret network – the Joint Worldwide Intelligence Communications System	0	0	660	0
Develop common, analytical, geospatial services among the Battle Command, topographic engineering, and training elements. Establish a Joint geospatial data dictionary. Establish a Joint geospatial data model. Develop common analytical, geospatial services between BC and M&S. Define the requirements for metadata standards to determine the fitness of use (FoU) of existing and planned services and applications as a function of varying quality geospatial data. Provide the FoU data to the user as part of the analysis product metadata. Establish a distributed, Joint Geospatial Enterprise Service Test Bed (JGES(T)) to support the experimentation; evaluation; and verification, validation, and accreditation (VV&A) of geospatial services and applications. Establish a Joint geospatial system and organization at the Joint level that supports the combatant commander.	0	0	0	1190
Totals	0	1246	1167	1190

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

C. Acquisition Strategy: The Army G-3/5/7 is the lead for the AGDIMP. The Army G-3/5/7 and G-2 will establish authority, research development, test, and evaluation (RDTE) and operation and maintenance (O&M) policies and requirements for Army geospatial data enhancement and/or augmentation and associated geospatial data warehouse(s), facilities, nodes, and staffing. Resources will be allocated to multiple organizations and contracts to obtain and execute approved functions and projects to support the AGDIMP.

ARMY RDT&E COST ANALYSIS(R3)

February 2005

BUDGET ACTIVITY
5 - System Development and Demonstration

PE NUMBER AND TITLE
0604□60A - Distributive Interactive Simulations (DIS) - Engin

PROJECT
C□□

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 . Dynamic Readdressing and Management for Army (DRAMA) 2010	C/CPAF	Various	0	1246	2Q	0		0		0	1246	0
b . Army Geospatial Data Integrated Master Plan (AGDIMP)	C/CPAF	Various	0	0		860	2Q	870	2Q	Continue	1730	0
Subtotal:			0	1246		860		870		Continue	2976	0

Remarks: Dynamic Readdressing and Management Army (DRAMA) 2010 is a Congressional Add project in FY 2005.

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
Subtotal:			0	0		0		0		0	0	0

ARMY RDT&E COST ANALYSIS(R3)

February 2005

BUDGET ACTIVITY
5 - System Development and Demonstration

PE NUMBER AND TITLE
0604□60A - Distributive Interactive Simulations (DIS) - Engin

PROJECT
C□□

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
Subtotal:			0	0		0		0		0	0	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
a . Army Geospatial Data Integrated Master Plan (AGDIMP)	C/CPAF	Various	0	0		307	2Q	320	2Q	Continue	627	0
Subtotal:			0	0		307		320		Continue	627	0
Project Total Cost:			0	1246		1167		1190		Continue	3603	0

Schedule Detail (R4a Exhibit)

February 2005

BUDGET ACTIVITY	PE NUMBER AND TITLE	PROJECT
5 - System Development and Demonstration	**0604□60A - Distributive Interactive Simulations (DIS) - Engin**	**C□□**

Schedule Detail	FY 2004	FY 2005	FY 2006	FY 2007	FY 2008	FY 2009	FY 2010	FY 2011
Plan for a Joint, Integrated, Network Centric End-toEnd Geospatial System			2-4Q	1-4Q	1-4Q	1-4Q	1-4Q	1-4Q
Collect and Update Geospatial Data			2-4Q	1-4Q	1-4Q	1-4Q	1-4Q	1-4Q
Catalog, Assess, Develop, and Disseminate Current Geospatial Data Integration Tools			3-4Q	1-4Q	1-4Q	1-4Q	1-4Q	1-4Q
Verify, Manage, and Distribute Geospatial Data			3-4Q	1-4Q	1-4Q	1-4Q	1-4Q	1-4Q
Develop and exploit fitness of use metadata				1-4Q	1-4Q	1-4Q	1-4Q	1-4Q

The roadmap to implement the Army Geospatial Data Integrated Master Plan (AGDIMP) is divided into five sections, each one corresponding to one of the five trade study groups that developed plans for developing future Army geospatial operations to support the Army's Future Force. Of particular importance is the time period for which action is required. The roadmap identifies the activities that need to be funded to execute the AGDIMP.

The roadmap is based on the implementation of two concepts:

1. A Joint Geospatial Enterprise Service (JGES): an overarching set of capabilities to collect, develop, analyze, and distribute geospatial data from national to platform level.
2. A Joint Geospatial Enterprise Service Testbed (JGES(T)): a distributed prototyping environment within which new geospatial enterprise concepts will be designed, prototyped, tested, and evaluated. Results from the JGES(T) will become the basis for the operational JGES capability.

ARMY RDT&E BUDGET ITEM JUSTIFICATION (R2a Exhibit)

February 2005

BUDGET ACTIVITY	PE NUMBER AND TITLE	PROJECT
5 - System Development and Demonstration	**0604□60A - Distributive Interactive Simulations (DIS) - Engin**	**C□□**

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
C78	ONE SEMI-AUTOMATED FORCES (ONESAF)	19766	20405	16831	15209	14229	13063	13235	13391	Continuing	142963

A. Mission Description and Budget Item Justification: This project develops and delivers software systems to realistically represent activities of units and forces in simulation. This representation is used to support the concept evaluation, experimentation, materiel acquisition and training communities. Initiatives include the systems engineering and design for development and evolution of the architecture and software tools for a universal Army computer generated forces system, One Semi-Automated Forces (OneSAF). OneSAF is a next generation higher fidelity Brigade and below SAF that will represent a full range of operations, systems and control processes in support of stand alone and embedded training and research, development and acquisition simulation applications. OneSAF will be fully interoperable with the Army's emerging virtual, live and division and above constructive simulations and will provide next generation simulation products. OneSAF will replace a variety of simulations currently used within the Army to support analytic and training simulation activities. This project is a component of the Army Constructive Training Federation (ACTF).

The FY06 and FY07 programs will continue the development of the software required to provide OneSAF final operational capability for Army evaluation and test.

Accomplishments/Planned Program	FY 2004	FY 2005	FY 2006	FY 2007
FY04-FY07: Continues development of functionality to provide architectural services, components, synthetic environment and infrastructure capable of supporting initial model development.	7135	5154	5527	3923
FY04-FY06: Continue to develop life cycle applications and infrastructure enhancements for OneSAF Full Operational Capability Version 1.0.	818	962	500	0
FY04-FY07: Continue to develop functionality to represent behaviors, physical models, and communication models for OneSAF	10444	11403	6804	6786
FY04-FY07: Continue verification & Validation of newly developed and integrated software.	1369	1256	2000	2000
FY04-FY05 Commander's Rock Drill	0	1630	0	0
FY06-FY07: Initiate NETT	0	0	2000	2500
Totals	19766	20405	16831	15209

B. Other Program Funding Summary	FY 2004	FY 2005	FY 2006	FY 2007	FY 2008	FY 2009	FY 2010	FY 2011	To Compl	Total Cost
OMA, 121014	1900	2007	5616	5450	6146	5892	5718	5860	Continuing	Continuing

OMA funding provides for OneSAF life cycle software maintenance of existing software.

C. Acquisition Strategy: Development based on performance specifications via multiple Task Orders on competitively selected contracts.

ARMY RDT&E COST ANALYSIS(R3)

February 2005

BUDGET ACTIVITY
5 - System Development and Demonstration

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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 . Architecture Dev & System Integration	CPFF	Science Applications International Corp, Orlando, FL	29086	8409	1-2Q	4238	1-2Q	3923	1-2Q	Continue	Continue	Continue
b . Integrated Environment Dev	CPFF	Advanced Systems Technology, Inc., Orlando FL	4911	1030	1-2Q	1500	1-2Q	1500	1-2Q	Continue	Continue	Continue
c . Synthetic Environment Dev	CPFF	Science Applications International Corp, Orlando, FL	4017	1375	1-2Q	500	1-2Q	500	1-2Q	Continue	Continue	Continue
d . Knowledge Acquisition/Knowledge Engineering	CPFF	Aegis Technologies Group, Huntsville, AL	3819	1015	1-2Q	500	1-2Q	500	1-2Q	Continue	Continue	Continue
e . OneSAF System Development	CPFF	Various	5385	1734	1-2Q	1463	1-2Q	416	1-2Q	Continue	Continue	Continue
f . Model Development	CPFF	Acusoft/Various	11365	1807	1-2Q	840	1-2Q	1000	1-2Q	Continue	15012	Continue
g . NETT	CPFF	To be determined	0	0		2000	2-3Q	2500	1-2Q	Continue	Continue	4500
h . Commander's Rock Drill			0	1630		0		0		0	1630	1600
Subtotal:			58583	17000		11041		10339		Continue	Continue	Continue

Remarks: Each contract award is a Delivery Order on a competitively selected contract.

Each Delivery Order will be recompeted in FY06 to award for post-FOC activities.

Product Development:
Item h. FY04 Commander's Rock Drill funding was moved to another funding line for execution.

ARMY RDT&E COST ANALYSIS(R3)

February 2005

BUDGET ACTIVITY
5 - System Development and Demonstration

PE NUMBER AND TITLE
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PROJECT
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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 . System Analysis	Various	Multiple	2777	500	1-2Q	600	1-2Q	600	1-2Q	Continue	Continue	Continue
b . Domain Analysis	Various	Multiple	2587	500	1-2Q	600	1-2Q	600	1-2Q	Continue	Continue	Continue
c . Architecture Engr & Tech Spt	C/CPFF	MITRE FFRDC	1676	200	1-2Q	260	1-2Q	270	1-2Q	Continue	Continue	Continue
Subtotal:			7040	1200		1460		1470		Continue	Continue	Continue

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 . OneSAF integration, evaluation and test	C/CPAF	TBD	1050	402	1-3Q	2000	1-3Q	1000	1-3Q	Continue	Continue	Continue
b . OneSAF Verification, Validation & Accreditation	Various	Multiple	1418	613	1-3Q	1000	1-3Q	1000	1-3Q	Continue	Continue	Continue
Subtotal:			2468	1015		3000		2000		Continue	Continue	Continue

ARMY RDT&E COST ANALYSIS(R3)

February 2005

BUDGET ACTIVITY
5 - System Development and Demonstration

PE NUMBER AND TITLE
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PROJECT
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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
a . Program management	Various	Multiple	4875	1190	1-4Q	1330	1-4Q	1400	1-4Q	Continue	Continue	Continue
Subtotal:			4875	1190		1330		1400		Continue	Continue	Continue
Project Total Cost:			72966	20405		16831		15209		Continue	Continue	Continue

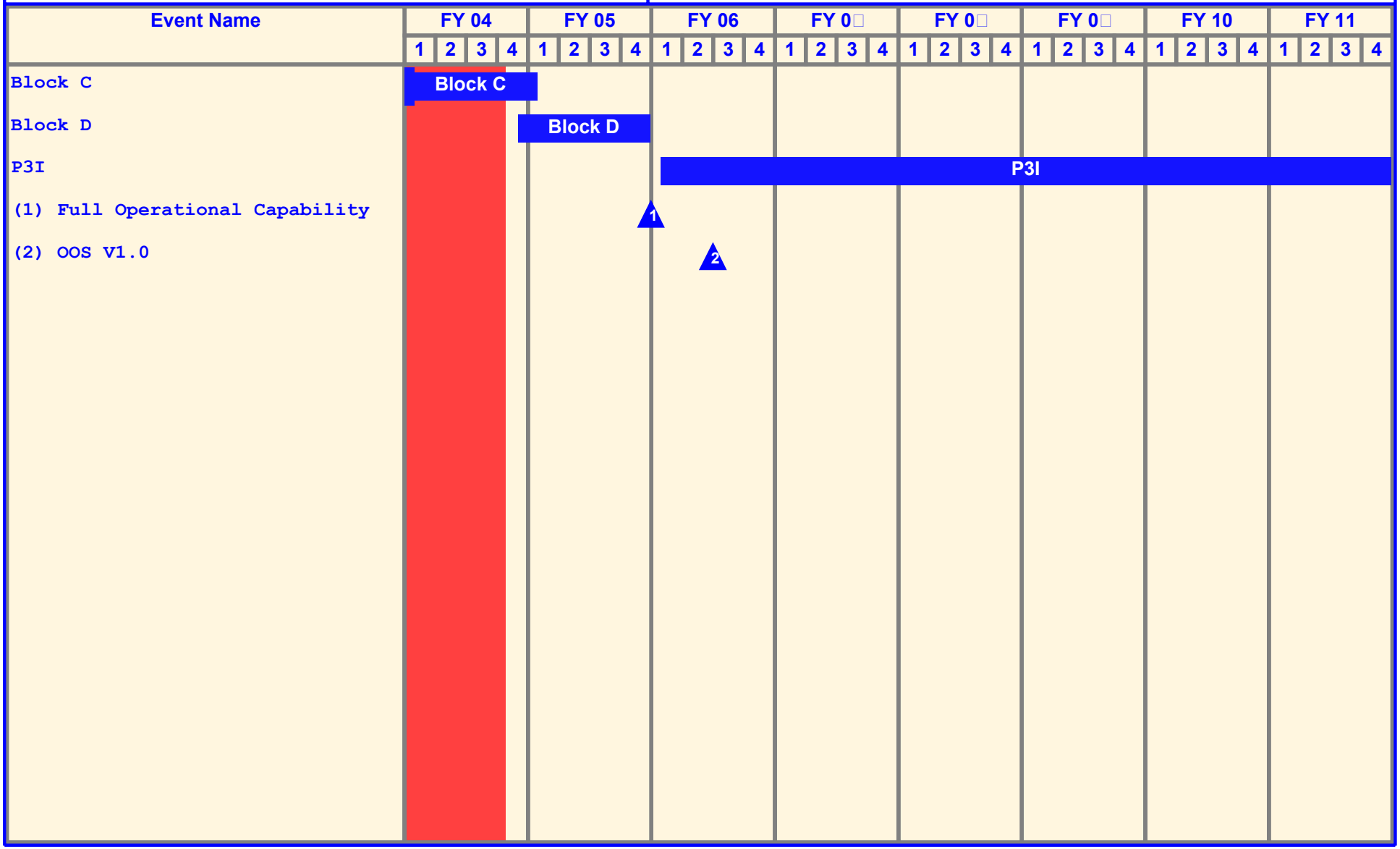
Schedule Profile (R4 Exhibit)

February 2005

BUDGET ACTIVITY
5 - System Development and Demonstration

PE NUMBER AND TITLE
0604□60A - Distributive Interactive Simulations (DIS) - Engin

PROJECT
C□□



Schedule Detail (R4a Exhibit)

February 2005

BUDGET ACTIVITY	PE NUMBER AND TITLE	PROJECT
5 - System Development and Demonstration	**0604□60A - Distributive Interactive Simulations (DIS) - Engin**	**C□□**

Schedule Detail	FY 2004	FY 2005	FY 2006	FY 2007	FY 2008	FY 2009	FY 2010	FY 2011
Award OneSAF Development Task Orders for individual components to meet block requirement	1Q	1Q	1Q	1Q	1Q	1Q	1Q	1Q
Block C		1Q						
Block D		4Q						
OneSAF FOC (Version 1.0)			1Q					
Deliver Block D		4Q						
OneSAF FOC (Version 1.0)			1Q					