

# ARMY RDT&E BUDGET ITEM JUSTIFICATION (R2 Exhibit)

**February 2007**

<b>BUDGET ACTIVITY</b>		<b>PE NUMBER AND TITLE</b>							<b>PROJECT</b>	
<b>5 - System Development and Demonstration</b>		<b>0604665A - FCS Sustainment &amp; Training R&amp;D</b>							<b>FC6</b>	
COST (In Thousands)	FY 2006 Actual	FY 2007 Estimate	FY 2008 Estimate	FY 2009 Estimate	FY 2010 Estimate	FY 2011 Estimate	FY 2012 Estimate	FY 2013 Estimate	Cost to Complete	Total Cost
FC6 FCS Network Hardware & Software			678781	536387	336471	367894	292770	170602	Continuing	Continuing

**A. Mission Description and Budget Item Justification:** The Army's Future Combat System (Brigade Combat Team) (FCS (BCT)) is a joint system of systems consisting of a network and a combination of manned and unmanned systems that use an advanced network architecture to enable levels of joint connectivity, situational awareness and understanding, and synchronized operations previously unachievable. It is designed to interact with and enhance the Army's most valuable weapon - the Soldier. When fully operational, FCS will provide the Army and the joint force unprecedented capability to see the enemy, engage him on our terms, and defeat him on the 21st Century battlefield. The Army's first modernization effort in nearly four decades; FCS is the embodiment of the modular force, a modular system designed for "full spectrum" operations. It will network existing systems, systems already under development and future systems to be developed to meet the requirements of the Army's Future Force. It is adaptable to traditional warfare as well as complex, irregular warfare in various rural and urban terrains. It can also be adapted to civil support, such as disaster relief. FCS is the #1 priority acquisition program for the Army.

Network Software - Provides the SoS engineering effort to transform the FCS Operational Requirement Document (ORD) into a networked SoS architecture. Develop and Build/Test software codes for the FCS. It includes the conduct of system reviews, trade studies, and architectural design of the SoS network including requirements flow down, configuration management, SoS software requirements, functional & operational architecture, and design reviews to ensure network integration across all of the BCT Battlefield Functional Areas to meet FCS requirements and SoS integration. Network software management traces, cost, schedule, and performance throughout the program.

Network Software Analysis and Integration links definition, design, procurement, construction, integration, experimentation, and testing of the elements of the distributed network system across the FoS in accordance with the Software Development Plan (SDP), SoS specification, C4ISR, Spin Out, and applicable segment and subsystem specification.

The distributed network consists of the following elements: a distributed information management backbone, communications applications and interfaces, Intelligence, Surveillance and Reconnaissance (ISR) applications and interfaces, command and control applications and interfaces, and training and supportability applications.

Common Network Hardware - Includes design, development and prototype procurement of common hardware required for implementation of the data network. This includes sensors, communications hardware and computer processing capabilities.

Network Software Performance Management - This effort represents the contractors' management of this project's efforts and cost accounts.

Command and Control - Definition, development, integration, and testing of the distributed command and control application software, including soldier interfaces, mission planning, situational awareness and understanding, and battle command for the FCS (BCT).

Information Management - Definition and development of the information management backbone and application interface structure for implementation of the distributed network.

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System of Systems Common Operating Environment (SoSCOE) - The SOSCOE is the common set of software tools and services that application and platform developers use as a foundation for their software development. It is the common middleware that exists between the domain applications and the operating system and underlying network.

This is different for other Operation Environments, in the past, in that it is not so much a common environment for software to execute within as much as a toolkit of software for use by software developers to ensure that the end solution is tightly integrated across the FCS Family of Systems. It takes common function and makes them available for use across the various components including, Battle Command, Supportability, Sensors, and the platforms themselves.

The operating system itself is not part of SOSCOE but instead is included in the Integrated Computer system. SOSCOE will exist in various editions to meet the needs of the diverse platforms and will include real and non-realtime functions, safety critical functionality, and must meet the needs of small and unmanned systems as well as the primary manned ground systems.

Fusion - Definition, development, integration, and testing of the distributed ISR application software, including soldier interfaces, common sensor interface, Level 1 fusion with organic and non-organic sensor feeds, and sensor data management for the FCS.

Communication system software - Definition, integration, development, coding, and qualification of the communications network. Includes: requirements development, traceability and management, functional flow analysis and update to the requirements database, technical trade studies and analyses.

Weapons management control software - Distributed control of network fires.

ACE applications - The ACE applications that reside with the soldier and on the platforms for reachback.

Embedded training integration software - Definition, development, integration, and testing of the common and unique training software applications that are distributed across the FCS FoS.

Pursuant to National Defense Authorization Act for Fiscal Year 2006 - Section 214: Separate Program Elements for Significant Systems Development and Demonstration Projects for Armored Systems Modernization Program, the PM FCS (BCT) established this Program Element (0604665A Project FC6) for FCS Network Hardware & Software SDD efforts, commencing with the FY2008 President's Budget submission to Congress.

<b><u>Accomplishments/Planned Program:</u></b>	<u>FY 2006</u>	<u>FY 2007</u>	<u>FY 2008</u>	<u>FY 2009</u>
SOSCOE Information Management Software (IMS)Development - FY08 Objectives: Complete Development & Test of Build 2.0. Complete Formal Qualification Test of Build 2.0. Deliver Formal Release of 2.0 Complete Build 2.5 Requirements and Architecture Review (RAR) and Architecture and Design review (ADR) Reviews. Complete Build 2.5 ISM Review Complete Requirements, Design, Code & Test of Build 2.5. Deliver Build 2.5 Engineering Release. Purchase And Maintain COTS License AgreementsSupport JEFX 08. FY09 Objectives: Complete Development & Test of Build 2.5. Complete Formal Qualification Test of Build 2.5. Deliver Formal Release of 2.5. Complete Build 3.0 RAR and ADR Reviews. Complete Build 3.0 IMS Review. Complete Requirements, Design, Code & Test of Build 3.0. Deliver Build 3.0 Engineering Release. Purchase And Maintain COTS License Agreements.			87528	79020

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<b>5 - System Development and Demonstration</b>	<b>0604665A - FCS Sustainment &amp; Training R&amp;D</b>	<b>FC6</b>		
Communication Systems Software and Network Management Software - FY08 Objectives: Complete Development and Testing of Build 2.0. FY09 Objectives: Network Management Software (NMS) Build 2 Engineering Release. NMS Build 2 Final			22627	16342
Battle Command Software FY08 Objectives: Complete Design, Build, and Test of Build 2.0 Early / Spin Out 2 Early. Complete Design, Build, and Test of Build 2.0 Engineering Iteration 2 Early 2Q 2008. Battle Command Software Build 2 Early. Engineering Release 3Q FY08. Build 2 Final Release. Battle Command Software Spec Build Planning Checkpoint 3Q FY08. Build 2 Final release. Battle Command Software Build Readiness Checkpoint 4Q FY08. FY09 Objectives: Battle Command Software Build 2 Test Readiness Review. Deliveries of Battle Command Software Final / Spin Out 2 Final / Engineering Iteration 2 Final. Begin Battle Command Software Build 3 Early Life Cycle Objective. Battle Command Software Build 2 Engineering Release. Battle Command Software Specification Build 3 Engineering Release rev A. Battle Command Software Life Cycle Architecture Build 3 Engineering Release. Battle Command Software Build Readiness Checkpoint Build 3 Engineering Release.			70466	67345
Fusion Software - FY08 Objectives: Deliveries to Battle Command of Build 2 Early / Spin Out 2 Early / Engineering Iteration 2 Early, in 3Q FY08. ISR Fusion software Build 2 Final Life Cycle Objective, 3Q FY08. ISR Fusion software Build 2 Early Engineering Release 4Q FY08. ISR Fusion software Build 2 Final Spec Build Planning Checkpoint, 4Q FY08. ISR Fusion software Build 2 Final Build Readiness Checkpoint, 4Q FY08. FY09 Objectives: Build 2 Test Readiness Review - Deliveries of ISR Fusion software Build 2 Final / Engineering Iteration 2 Final. Build 3 Early Life Cycle Objective. ISR Fusion software Build 2 final Release. ISR Fusion software Build 3 Engineering release Spec Build Planning Checkpoint. ISR Fusion software Build 3 Engineering release Life Cycle Architecture. ISR Fusion software Build 3 Engineering release Build Readiness Checkpoint.			15875	19511
ACE Application Software - FY08 Objectives: Provide a soldier in the field with the ability to request a serialized Part, and receive data on its design, its alternate or substitution parts, and where the nearest depot to request replacement. Enable and Manage: Logistics Vision (Repair and Replace). As Planned Structures. As Designed Structures. As Mfg Structures. Enable addition DPD data domains. FY09 Objectives: Support Milestone C capabilities. Knowledge Management capabilities within DPD. Initial Reachback capabilities through SOSCOE Interoperability Services to ACE/DPD facilitating OEM information exchange.			1065	2738
Embedded Training Software FY08 - Planned Accomplishments. 32 One Team Partners continue to develop Embedded Training capability and products for the FCS program, Experiment 2 & Spin Out 1: Training Aids and Devices, Simulations and Simulators (TADSSs), Embedded Training software. Deliver 3rd increment of Training Common Components software for FCS (ultimate reuse of 14.6 Million Govt. developed lines of code). Continue integration of Embedded Training software and products in the Training Systems Integration Lab (SIL). Continue integration of training software with Warfighter Machine Interface (WMI) leading to FCS Engineering Iteration 2 in FY09. Complete Training Common Component (Starter Kit (Early). 1. Live/Constructive interoperability. 2. TCC initialization & conduct iteration. 3. Vertical integration with SOSCOE Live/Constructive Interoperability Early). Environment support all Training Common Components (Early). L/C support (Early). Control of TCCs (Early). Support for initialization (Early). Training Support Package support, parsing, editing (Early). L/C data collection capability (Early). L/C After Action Review (Early) LT TES capability (Early).			18550	16557
Embedded Training Software FY09 - Planned Accomplishments. 32 One Team Partners continue to develop Embedded Training capability and products for the FCS program: Training Aids and Devices, Simulations and Simulators (TADSSs), Embedded Training software. Deliver 4th increment of Training Common Components for FCS (ultimate reuse of 14.6 Million Govt. developed lines of code). Continue integration of Embedded Training software and products in the Training Systems Integration Lab (SIL). Continue integration of Training software with Warfighter Machine Interface (WMI) for FCS Engineering Iteration 2 as initial Embedded Training functionalities. Complete TCC Starter Kit (Final). 1. Live/Constructive interoperability 2. TCC initialization & conduct 3. Vertical integration with				

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SOSCOELive/Constructive interoperability (Final). Environment support all TCCs (Final). L/C support (Final). Control of TCCs (Final). Support for initialization (Final). TSP support, parsing, editing (Final). L/C data collection capability (Final). L/C After Action Review (Final). LT TES capability (Final). Training Infrastructure (Basic). Support all Platform Training Modes (Live-Fire, Simulated-Fire, Ordnance-Free, and Virtual/Constructive). Support limited mix-mode training (Concurrent Operational and Training Modes). Prepare MGCV Crew station for Computer Based Training. Prepare MGCV Platform for a Simulation Based Training Exercise . Multiple Training Sessions. Single Platform (Live and Virtual Platforms). Control Exercise (Start/End, Pause/Resume, Events, Time Compression). Create Checkpoints. Restart Exercise from Checkpoints. Log Training Exercise Data. Complex Fault Management. Training Content. Conduct Computer Based Training. Conduct Basic Single Vehicle Live/Virtual Simulation Based Training. Basic Driver Training. Basic Gunnery Training. Initial simulation-based TSPs. Initial IMI-based TSPs. Initial IETM based TSPs. Initial Sound Generation.				
CONTRACTOR LOGISTICS PRODUCTS APPLICATION INTEGRATION - FY08/09 Accomplishments - Ensure the definition, development, procurement, fabrication, integration, and testing of a Logistics Decision Support System (LDSS), and a Platform Soldier-Mission Readiness System (PS-MRS) and a Logistics Data Management Service (LDMS) to support each Manned - Unmanned UPV system type. Define and recommend the interfaces necessary to incorporate appropriate in-lieu-of systems supportability requirements and information technology applications IAW the Supportability Strategy.			53440	34157
Ground Sensors Integrator Hardware - FY08-09 Planned Accomplishments: Conduct Prototype Readiness Reviews (PRR) for the following sensors: Common EO Sensor (CEOS). Multi-Function RF Sensor (MFRFS). Combat Identification Sensor (CIDS). Conduct CDR for CID Sensor. Conduct CDR for SUGV EO/IR Sensor. Conduct PDR for SREO Sensor. Conduct CDR for SREO Sensor. FY09 Planned Accomplishments. Conduct Prototype Readiness Reviews (PRR) for the following sensors:SUGV EO/IR Sensor Short Range EO Sensor (SREOS). Chemical Detection (CD) Sensor. SREO Sensor. Deliver the following Sensor prototype hardware to C4ISR SIL, UGV SILs and MGCV SILs.			210810	147339
Air Sensor Hardware - FY08 Objectives: Continued PIDS to Air Sensor Segment Specification requirements flowdown, resolution and Gap analysis. Updated TPMs based on sensor PDRs, CDRs and verification testing (CL I & IV). CL I UAV: 12 Prototype Deliveries, prototype sensors integrated to SIL starting in 2QFY08, C4ISR SIL Integration effort start in 3QFY08. CL IV UAV:four prototype ASTAIMIDS (EOIR/LD/CM)delivered, Conduct Test Readiness Review - 1Q08, Continue Prototype Qual Tests, Deliver 1 ASTAIMIDS emulator to SIL, Conduct Contractor Field Test. SAR/GMTI: Continue Prototype development, Deliver 1 Emulator to support initial SIL integration. AiTR: Continue Hardware and Software development, Continue Software qualification tests, Delivery 3 Emulators with AiTR, Algorithms Embedded, C4ISR SIL Integration effort start in 1QFY08. FY09 Objectives:Deliver 3 EO/IR Class 1 Sensors. EOIR sensor Integration and Test onto the CL 1 UAV: Deliver 9 ASTAMIDS CL IV prototype sensors.C4ISR SIL integration effort start in 1Q09, SAR/GMTI Prototype Deliveries, C4ISR SIL integration effort start in 1Q09. AiTR: Delivery 1 AiTR prototype to C4ISR SIL.			17166	13225
Communication Hardware (Air and Ground) - FY08 Objectives: Deliver 2 Air Platform Communication Systems Payloads to C4 SIL. Deliver 8 Air Platform Communication Systems Payloads to UAV IV. Deliver 1 Ground Platform Communication Systems Payloads to BAE SIL. Air Platform Communication Systems Class IV CDR. Network Systems PDR 4Q08. Ground Platform Communication Systems Payloads MGCV, CDR in FY08. Deliver 4 Ground Control Stations (GCS) to UAV. Deliver GMR and HMS EDMs Radios to SILs. Deliver 2 Ground Platform Communication Systems Payloads to C4IT. Deliver 4 Ground Platform Communication Systems Payloads to MGCV. FY09 Objectives: Deliver type 8 HMS to UGV (SUGV1). Deliver Integrated Communication Suites to C4ISR, MGCV, and UGV System Integration Laboratories (SILs).			70162	44788
ICS - Computer Processing, Hardware and Software - FY08 Objectives: Deliver 7 ICS Emulators (Types I, II, V, VIII). Deliver 12 ICS Type VI Prototypes and 15 Brass boards. Complete ICS CDRfor non Spin Out configurations. FY09 Objectives:Integrated			84897	66453

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Communication Suites deliveries to C4ISR, MGV, and UGV System. ICS Emulator deliveries to Platform SILs. ICS Brassboard deliveries to C4ISR SIL. ICS Prototype deliveries to MGV, UGV, and UAV Platforms.		
CONTRACTOR C4ISR SYSTEM IAT&C - FY08/09 Accomplishments - Includes FoS level Integration, Test Planning, Test Execution, and Test results analysis for equipment that is integrated and tested at the FoS level for later incorporation as a unit to another product. An example is C4ISR suite for a vehicle platform. Integrating and testing the suite is essential before delivering it for integration into the vehicle. Includes management and integration of sensor, communication and computer hardware and software in the SIL and integration of network management, Battle Command and ISR Fusion software packages from partners into SOSCOE conducted in the SIL.		10787 11125
GFX - GFX supports the LSI contractor efforts. GFX funds came off the LSI contract as part of the definitization of the transition contract award. This Networks GFX includes, government support to C4ISR JEFX Experimentation, C4ISR Hardware to support Experimentats 2 - 4 and C4ISR End to End Network support.		15408 17787
<b>Total</b>		<b>678781 536387</b>

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<u><b>B. Program Change Summary</b></u>	FY 2006	FY 2007	FY 2008	FY 2009
Previous President's Budget (FY 2007)				
Current BES/President's Budget (FY 2008/2009)			678781	536387
Total Adjustments			678781	536387
Congressional Program Reductions				
Congressional Recissions				
Congressional Increases				
Reprogrammings				
SBIR/STTR Transfer				
Adjustments to Budget Years			678781	536387

Change Summary Explanation: Pursuant to National Defense Authorization Act for Fiscal Year 2006 - Section 214: Separate Program Elements for Significant Systems Development and Demonstration Projects for Armored Systems Modernization Program, the PM FCS (BCT) established this Program Element (0604665A Project FC6) for FCS Network Hardware and Software SDD efforts.

This budget request is a continuation of the previous SDD efforts funded in FY07 under Program Element 0604645A Project F61; therefore, this budget request should not be construed as a new start program nor should it be constrained by "new start" program requirements and funding allocation (i.e. CRA) restrictions.

<u><b>C. Other Program Funding Summary</b></u>	FY 2006	FY 2007	FY 2008	FY 2009	FY 2010	FY 2011	FY 2012	FY 2013	To Compl	Total Cost
0604660A FCS Manned Grd Vehicles & Common Grd Vehicle Components			696333	772458	791186	361201	215665	103885	Continuing	Continuing
0604661A FCS System of Systems Engr & Program Management			1589466	1407410	1888349	1929853	1299062	1034307	Continuing	Continuing
0604662A FCS Reconnaissance (UAV) Platforms			41164	34220	14398	9301	4587	1344	Continuing	Continuing
0604663A FCS Unmanned Ground Vehicles			90667	96666	65206	43912	27038	3603	Continuing	Continuing
0604664A FCS Unattended Ground Sensors			10999	12942	19103	16874			Continuing	Continuing
0604665A FCS Network Hardware & Software			678781	536387	336471	367894	292770	170602	Continuing	Continuing
0604646A Non Line of Sight - Launch System	216668	320650	253410	199064	40329	6000			Continuing	Continuing
0604647A Non Line of Sight - Cannon	132223	110998	137802	89189	71906	43531	28971		Continuing	Continuing
0604666A FCS Spin Outs			64796	32442	65000	50000	50000	10000	Continuing	Continuing

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0603639A FCS MRM			44578	45733	71961	56698	107077	51079	Continuing	Continuing
0604715A STRICOM/NAWCTSD Support			381	391	401	409	418	429	Continuing	Continuing
WTCV G86100 FCS Core Program			79483	155838	149367	683788	2194625	5795292	Continuing	Continuing
WTCV G86200 FCS Spin Out Program			20123	172746	373790	557060	779742	958060	Continuing	Continuing
0604645 F52 UAV Recon & Sensors	50692	26360							Continuing	Continuing
0604645 F53 UGV	121528	106516							Continuing	Continuing
0604645 F54 UGS	31242	10612							Continuing	Continuing
0604645 F55 SUSTAINMENT	139389	106517							Continuing	Continuing
0604645 F57 MANNED GROUND VEHICLES	499469	563946							Continuing	Continuing
0604645 F61 SoS Engineering and Program Management	2027766	2142970							Continuing	Continuing

Comment:

**D. Acquisition Strategy** Fiscally constrained Budgets, coupled with the fiscal challenge to meet the Army's reset and modernization requirements, have caused the Army to implement FCS program adjustments. These adjustments maintain the Army's focus on FCS-equipped Brigade Combat Team development and minimize the efforts on operational requirements. The adjustments to the FCS Program acquisition strategy fall into the following categories:

1. Defer the following platforms from the FCS(BCT): ARV-A, ARV-RSTA, UAV Class II, UAV Class III
2. Refine the schedules for the development of the Core and Spin Out capabilities so that the Army can benefit from the savings realized with concurrent testing.
3. Increase the rate of fielding of FCS technologies to the current force.
4. Fully fund the Spin Out technology Insertion program and development and fielding of the Mid-Range Munitions (MRM) and Advanced Kinetic Energy (AKE) munitions.
5. Revise platform configurations to decrease the production cost of a single Core FCS BCT from \$6.2 billion to \$5.9 billion (FY03 Constant dollars) by deferring/deleting selected sensors and other associate hardware (such as the XM307 machine gun).

The following is a history of the LSI SDD Contract.

	Contract Award	Definitization Date
Original Contract Award	30 May 2003	10 Dec 2003
Modified for POM 06-11 Changes	6 Aug 2004	2 Mar 2005
Conversion to FAR Base Contract	23 Sep 2005	28 Mar 2006
Modification for POM 8-13 Adjustments	Feb 2007	May 2007

The R forms are based on estimated effects of the Army adjustment. Upon completion of negotiation of the contract modification, caused by this adjustment, reprogramming actions may be required to realign the funding buckets to the contract.

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BUDGET ACTIVITY

PE NUMBER AND TITLE

PROJECT

**5 - System Development and Demonstration**

**0604665A - FCS Sustainment & Training R&D**

**FC6**

Termination Liability associated with this contract is included in PE 0604661A Project FC2.

IAW Section 214 of the FY2006 National Defense Authorization Act, this project was converted to a stand alone Program Element (0604662A Project FC3) commencing with the FY2008 President's Budget submission to Congress.

# ARMY RDT&E COST ANALYSIS (R3)

February 2007

BUDGET ACTIVITY 5 - System Development and Demonstration			PE NUMBER AND TITLE 0604665A - FCS Sustainment & Training R&D									PROJECT FC6		
I. Product Development	Contract Method & Type	Performing Activity & Location	Total PYs Cost	FY 2006 Cost	FY 2006 Award Date	FY 2007 Cost	FY 2007 Award Date	FY 2008 Cost	FY 2008 Award Date	FY 2009 Cost	FY 2009 Award Date	Cost To Complete	Total Cost	Target Value of Contract
SoSCOE / INFO MGT SYSTEM SOFTWARE	FAR	THE BOEING COMPANY, ST LOUIS, MO,						68092	1-3Q	59520	1-3Q		127612	
COMMUNICATIONS SYSTEMS SOFTWARE & NETWORK MGT SOFTWARE	FAR	THE BOEING COMPANY, ST LOUIS, MO, see remark 2						37329	1-3Q	31894	1-3Q		69223	
BATTLE COMMAND SOFTWARE	FAR	THE BOEING COMPANY, ST LOUIS, MO, see remarks 3,5,6,7						67575	1-3Q	64584	1-3Q		132159	
FUSION SOFTWARE	FAR	THE BOEING COMPANY, ST LOUIS, MO, see remarks 1, 7						15224	1-3Q	18712	1-3Q		33936	
ACE APPLICATIONS SOFTWARE	FAR	THE BOEING COMPANY, ST LOUIS, MO,						1021	1-3Q	2626	1-3Q		3647	
EMBEDDED TRAINING SOFTWARE FY08	FAR	THE BOEING COMPANY, ST LOUIS, MO, all tier one subcontractors						17789	1-3Q				17789	
EMBEDDED TRAINING SOFTWARE FY09	FAR	THE BOEING COMPANY, ST LOUIS, MO, all tier one subcontractors								15878	1-3Q		15878	
CONTRACTOR LOG PRODUCTS SOFTWARE	FAR	THE BOEING COMPANY, ST LOUIS, MO, see remarks 4,12,13						51248	1-3Q	32757	1-3Q		84005	
GROUND SENSOR INTEGRATOR HARDWARE	FAR	THE BOEING COMPANY, ST						202163	1-3Q	141299	1-3Q		343462	

# ARMY RDT&E COST ANALYSIS (R3)

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		LOUIS, MO, see remark 8														
AIR SENSOR INTEGRATOR SOFTWARE	FAR	THE BOEING COMPANY, ST LOUIS, MO, see remarks 9						16462	1-3Q	12683	1-3Q		29145			
COMMUNICATION HARDWARE - AIR & GROUND	FAR	THE BOEING COMPANY, ST LOUIS, MO, see remark 10						67284	1-3Q	42952	1-3Q		110236			
ICS COMPUTER PROCESSING HARDWARE AND SOFTWARE	FAR	THE BOEING COMPANY, ST LOUIS, MO, see remark 11						81414	1-3Q	63729	1-3Q		145143			
CONTRACTOR C4ISR SYSTEM IAT&C & MANAGEMENT	FAR	THE BOEING COMPANY, ST LOUIS, MO,						10345	1-3Q	10669	1-3Q		21014			
Subtotal:								635946		497303			1133249			

Remarks: 1: Subcontractor: LM Integrated Systems and Solutions, San Diego, CA, (ISR Level 1 Fusion).  
 2: Subcontractor: Northrop Grumman Network Management Systems, Carson, CA, (Network Mgt Sys).  
 3: Subcontractor: Boeing Mesa, Mesa, AZ, (Warfighter Machine Interface)  
 4: Subcontractor: Northrop Grumman Mission System, Carson, CA, (Logistics Decision Support Software)  
 5: Subcontractor: Raytheon, Fort Wayne, IN, (Battle Command & Mission Execution)  
 6: Subcontractor: Network Centric Systems/Austin Info Systems, Austin, TX, (Situational Understanding)  
 7: Subcontractor: General Dynamics C4 Systems, Scottsdale, AZ, (Sensor Data Mgt)(Planning & Preparation Services)  
 8: Subcontractor: Raytheon Network Centric Sys, Plano, TX, (Ground Sensor Integrator)  
 9: Subcontractor: Northrop Grumman Electronic Sys CMS, Belcamp, MD, (Air Sensor Integrator)  
 10. Subcontractor: BAE Systems, Wayne, NJ, (Air & Ground Communication Integration)  
 11. Subcontractor: General Dynamics Adv Info Sys, Bloomington, MN (Integrated Computer Systems)  
 12. Subcontractor: Honeywell Defense & Electronics System, Albuquerque, NM, (Platform Soldier Mission Readiness System)  
 13. Subcontractor: IBM, Bethesda, MD (Logistics Data Management Systems)

II. Support Costs	Contract Method & Type	Performing Activity & Location	Total PYs Cost	FY 2006 Cost	FY 2006 Award Date	FY 2007 Cost	FY 2007 Award Date	FY 2008 Cost	FY 2008 Award Date	FY 2009 Cost	FY 2009 Award Date	Cost To Complete	Total Cost	Target Value of Contract
GOVERNMENT - GFX	DIRECT	PM FCS(BCT), ST						15409	1Q	17787	1Q		33196	

# ARMY RDT&E COST ANALYSIS (R3)

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		LOUIS,MO												
GOVERNMENT - Statutory Reductions	DIRECT	OSD						27426	1Q	21297	1Q		48723	
Subtotal:								42835		39084			81919	

III. Test And Evaluation	Contract Method & Type	Performing Activity & Location	Total PYs Cost	FY 2006 Cost	FY 2006 Award Date	FY 2007 Cost	FY 2007 Award Date	FY 2008 Cost	FY 2008 Award Date	FY 2009 Cost	FY 2009 Award Date	Cost To Complete	Total Cost	Target Value of Contract
Subtotal:														

IV. Management Services	Contract Method & Type	Performing Activity & Location	Total PYs Cost	FY 2006 Cost	FY 2006 Award Date	FY 2007 Cost	FY 2007 Award Date	FY 2008 Cost	FY 2008 Award Date	FY 2009 Cost	FY 2009 Award Date	Cost To Complete	Total Cost	Target Value of Contract
Subtotal:														

<b>Project Total Cost:</b>								<b>678781</b>		<b>536387</b>			<b>1215168</b>	
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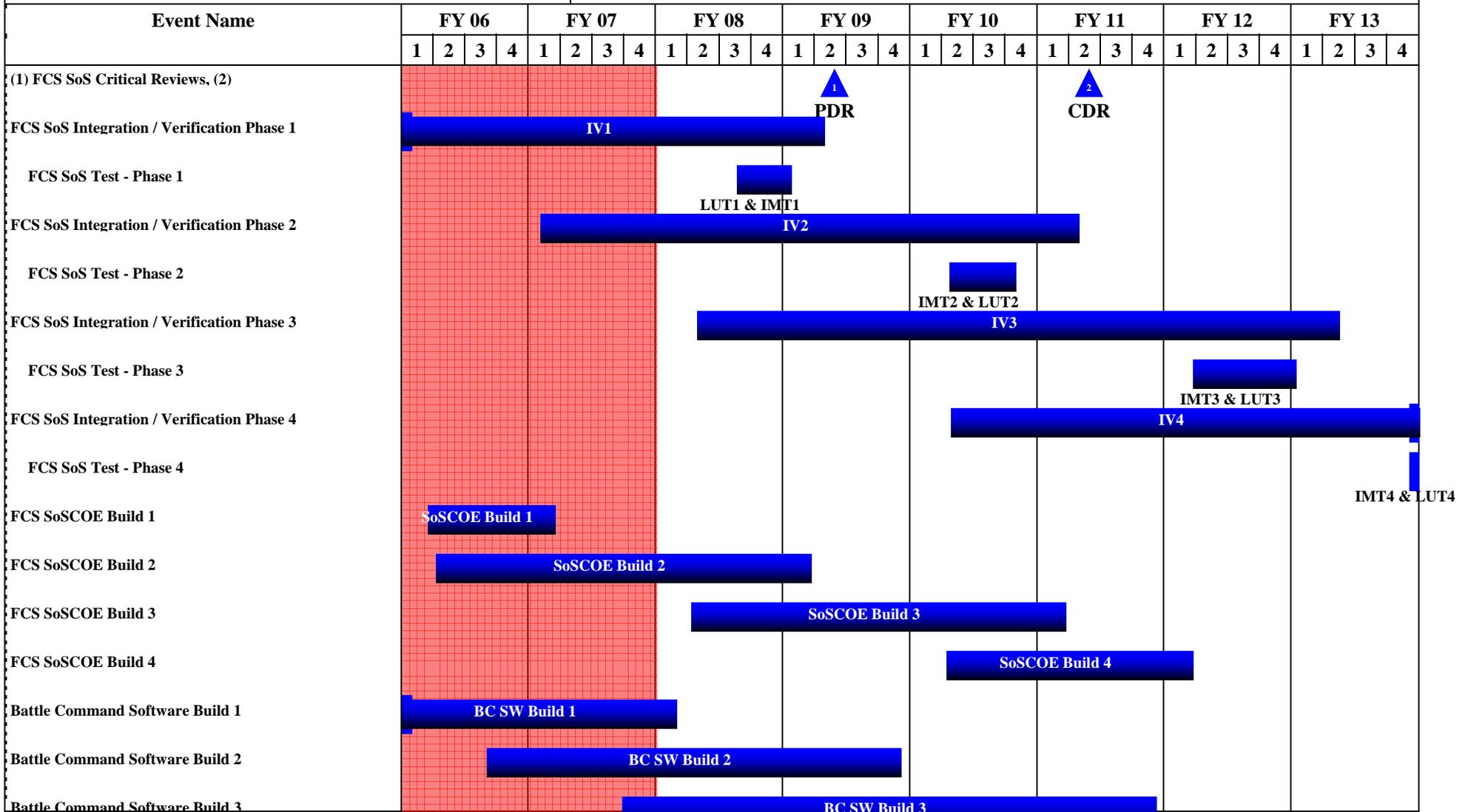
# Schedule Profile (R4 Exhibit)

February 2007

BUDGET ACTIVITY  
**5 - System Development and Demonstration**

PE NUMBER AND TITLE  
**0604665A - FCS Sustainment & Training R&D**

PROJECT  
**FC6**



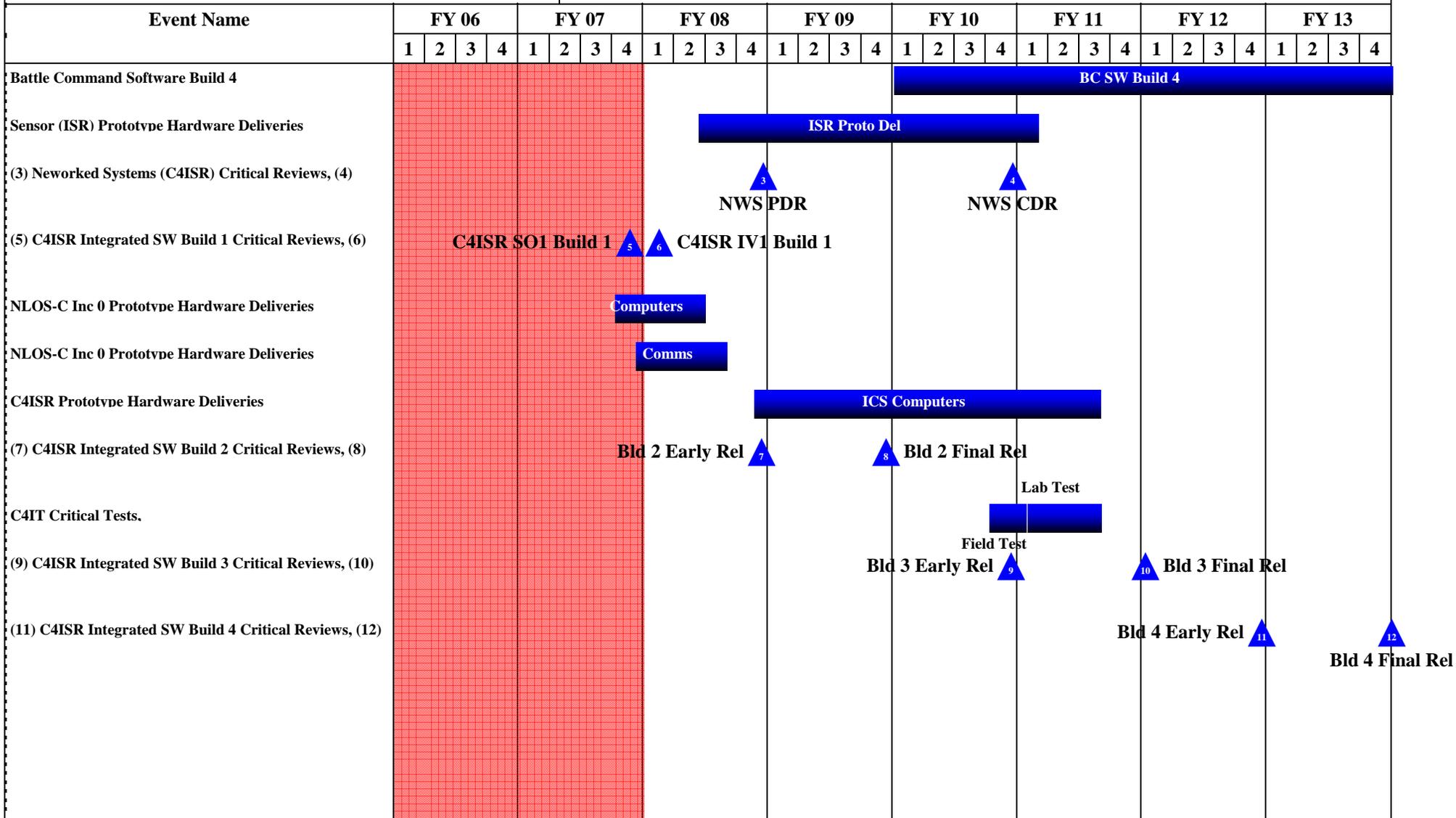
# Schedule Profile (R4 Exhibit)

February 2007

BUDGET ACTIVITY  
**5 - System Development and Demonstration**

PE NUMBER AND TITLE  
**0604665A - FCS Sustainment & Training R&D**

PROJECT  
**FC6**



# Schedule Detail (R4a Exhibit)

February 2007

BUDGET ACTIVITY <b>5 - System Development and Demonstration</b>		PE NUMBER AND TITLE <b>0604665A - FCS Sustainment &amp; Training R&amp;D</b>						PROJECT <b>FC6</b>	
<u>Schedule Detail</u>	<u>FY 2006</u>	<u>FY 2007</u>	<u>FY 2008</u>	<u>FY 2009</u>	<u>FY 2010</u>	<u>FY 2011</u>	<u>FY 2012</u>	<u>FY 2013</u>	
FCS SoS Critical Reviews				2Q					
						2Q			
FCS SoS Integration / Verification Phase 1	1Q - 4Q	1Q - 4Q	1Q - 4Q	1Q - 2Q					
FCS SoS Test - Phase 1			3Q - 4Q	1Q					
FCS SoS Integration / Verification Phase 2		1Q - 4Q	1Q - 4Q	1Q - 4Q	1Q - 4Q	1Q - 2Q			
FCS SoS Test - Phase 2					2Q - 4Q				
FCS SoS Integration / Verification Phase 3			2Q - 4Q	1Q - 2Q					
FCS SoS Test - Phase 3							1Q - 4Q	1Q	
FCS SoS Integration / Verification Phase 4					2Q - 4Q	1Q - 4Q	1Q - 4Q	1Q - 4Q	
FCS SoS Test - Phase 4								4Q	
FCS SoSCOE Build 1	1Q - 4Q	1Q							
FCS SoSCOE Build 2	2Q - 4Q	1Q - 4Q	1Q - 4Q	1Q					
FCS SoSCOE Build 3			2Q - 4Q	1Q - 4Q	1Q - 4Q	1Q			
FCS SoSCOE Build 4					2Q - 4Q	1Q - 4Q	1Q		
Battle Command Software Build 1	1Q - 4Q	1Q - 4Q	1Q						
Battle Command Software Build 2	3Q - 4Q	1Q - 4Q	1Q - 4Q	1Q - 4Q					
Battle Command Software Build 3		3Q - 4Q	1Q - 4Q	1Q - 4Q	1Q - 4Q	1Q - 4Q			
Battle Command Software Build 4					1Q - 4Q	1Q - 4Q	1Q - 4Q	1Q - 4Q	
Sensor (ISR) Prototype Hardware Deliveries			2Q - 4Q	1Q - 4Q	1Q - 4Q	1Q			
Neworked Systems (C4ISR) Critical Reviews			4Q						
					4Q				
C4ISR Integrated SW Build 1 Critical Reviews		4Q							
			1Q						
NLOS-C Inc 0 Prototype Hardware Deliveries		4Q	1Q - 2Q						
NLOS-C Inc 0 Prototype Hardware Deliveries		4Q	1Q - 3Q						

C4ISR Prototype Hardware Deliveries			4Q	1Q - 4Q	1Q - 4Q	1Q - 3Q		
C4ISR Integrated SW Build 2 Critical Reviews			4Q					
				4Q				
C4IT Critical Tests					4Q	1Q		
						1Q - 3Q		
C4ISR Integrated SW Build 3 Critical Reviews					4Q			
							1Q	
C4ISR Integrated SW Build 4 Critical Reviews							4Q	