ARMY RDT&E BUDGET ITEM JUSTIFICATION (R2 Exhibit)

February 2004

BUDGET ACTIVITY
7 - Operational system development

PE NUMBER AND TITLE
0305208A - Distributed Common Ground Systems (JMIP)

COST (In Thousands)		FY 2003 Actual	FY 2004 Estimate	FY 2005 Estimate	FY 2006 Estimate	FY 2007 Estimate	FY 2008 Estimate	FY 2009 Estimate	Cost to Complete	Total Cost
Total Program Element (PE) Cost		44805	37375	43254	87329	111247	112105	116244	0	632067
956	DISTRIBUTED COMMON GROUND SYSTEM (DCGS) (JMIP)	44805	13654	9751	10136	10643	11104	11603	0	191371
D06	DCGS-A ASAS INTEGRATION (JMIP)	0	1323	7719	14832	19792	9895	9887	0	63448
D07	DCGS-A COMMON MODULES (JMIP)	0	21364	18140	54623	72711	79654	83278	0	329770
D08	DCGS-A SENSOR INTEGRATION (JMIP)	0	1034	6995	7090	7452	10803	10829	0	44203
D15	MUSE & TES TADSS (TIARA)	0	0	649	648	649	649	647	0	3275

A. Mission Description and Budget Item Justification: Distributed Common Ground System - Army (DCGS-A) will serve as the primary ground system of systems for airborne and ground sensor platforms defined as Future Force systems. DCGS-A enables the commander to achieve situational understanding by leveraging multiple sources of data, information, and intelligence to synchronize the elements of Joint and Combined Arms combat power (maneuver, maneuver support and maneuver sustainment support). The core functions of DCGS-A are: receipt and processing of space, airborne, ground and maritime ISR sensor data; control of select Army and joint ISR sensor systems; intelligence synchronization; ISR planning, reconnaissance and surveillance (R&S) integration; fusion of sensor information, and direction and distribution/dissemination of sensor information. It draws information from a wide variety of automated and manual sources; on-board sensors, space platforms, unattended air and ground vehicles, existing and new ISR capabilities, and an assortment of databases to enable the land component commander to execute battle command, synchronize fires and effects, rapidly shift battle focus, achieve situational understanding, protect the force, and employ his forces more effectively. DCGS-A allows commanders at all levels to visualize and understand the threat and environment, predict threat intentions, execute targeting through targeting support, conduct ISR integration and support Information Operations.
DCGS-A includes hardware for multiple configurations (Fixed, mobile, and Embedded) and common software that is interoperable with sensors, other Battlefield Operating Systems (BOS), and the DoD Distributed Common Ground/Surface System (DCG/SS) Family of Systems (FoS). The DCGS-A software is tailored by echelon and to the requirements of each mission, task, and purpose. Within the Unit of Action (UA), DCGS-A is an embedded software application on the Future Combat System (FCS) FoS and other select platforms. At the Unit of Employment (UE) and above, DCGS-A is composed of hardware and software in Mobile and Fixed site configurations. As a system of systems, DCGS-A will consolidate and replace the capabilities found in the following Current Force systems: All Source Analysis System (ASAS), CI/HUMINT Single Source Workstation, Tactical Exploitation System (TES), Guardrail Information Node (GRIFN), Guardrail Common Sensor (GRCS) Intelligence Processing Facility (IPF), Prophet Control, and Joint Surveillance Target Attack Radar System (JSTARS) Common Ground Station (CGS). DCGS-A will also contain Digital Topographic Support System (DTSS) and Integrated Meteorological System (IMETS), like capabilities, sensor control and processing capabilities of select DCGS baseline and Army organic UAV and Enhanced Trackwolf processing capabilities. DCGS-A will migrate these capabilities into an integrated system of systems that is modular, scaleable, and with a reduced footprint over Current Force systems; a key component of Transformation and a top Army priority.

This system supports the Future Force transition path of the Transformation Campaign Plan (TCP).

B. Program Change Summary	FY 2003	FY 2004	FY 2005
Previous President's Budget (FY 2004)	44823	32292	42377
Current Budget (FY 2005 PB)	44805	37375	43254
Total Adjustments	-18	5083	877
Congressional program reductions		-356	
Congressional rescissions			
Congressional increases		5500	
Reprogrammings	-18	-61	
SBIR/STTR Transfer			
Adjustments to Budget Years			877

FY2004: Congressional Add of 5,500 covers the following:
1,500 Asymmetric Warfare Intelligence Analysis Advance Tool Set (AW-IAATS)
2,800 Distributed Data Visualization & Management
1,200 National Defense Imagery Processing (NDIP) Program

FY2005:

ARMY RDT&E BUDGET ITEM JUSTIFICATION (R-2A Exhibit)

February 2004

BUDGET ACTIVITY	PE NUMBER AND TITLE	PROJECT
7 - Operational system development	**0305208A - Distributed Common Ground Systems (JMIP)**	**956**

COST (In Thousands)		FY 2003 Actual	FY 2004 Estimate	FY 2005 Estimate	FY 2006 Estimate	FY 2007 Estimate	FY 2008 Estimate	FY 2009 Estimate	Cost to Complete	Total Cost
956	DISTRIBUTED COMMON GROUND SYSTEM (DCGS) (JMIP)	44805	13654	9751	10136	10643	11104	11603	0	191371

A. Mission Description and Budget Item Justification: Distributed Common Ground System - Army (DCGS-A) will serve as the primary ground system of systems for Army airborne and ground sensor platforms defined as Future Force systems. DCGS-A enables the commander to achieve situational understanding by leveraging multiple sources of data, information, and intelligence to synchronize the elements of Joint and Combined Arms combat power (maneuver, maneuver support and maneuver sustainment support). The core functions of DCGS-A are: receipt and processing of space, airborne, ground and maritime ISR sensor data; control of select Army and joint ISR sensor systems; intelligence synchronization; ISR planning, reconnaissance and surveillance (R&S) integration; fusion of sensor information, and direction and distribution/dissemination of sensor information. It draws information from a wide variety of automated and manual sources; on-board sensors, space platforms, unattended air and ground vehicles, existing and new ISR capabilities, and an assortment of databases to enable the land component commander to execute battle command, synchronize fires and effects, rapidly shift battle focus, achieve situational understanding, protect the force, and employ his forces more effectively. DCGS-A allows commanders at all levels to visualize, analyze and understand the threat and environment, predict threat intentions, execute targeting through targeting support, conduct ISR integration and support Information Operations. This project establishes a federated Network Centric Enterprise System (NCES), facilitating system integration and network-enabled capability of existing and future intelligence, surveillance and reconnaissance (ISR) ground stations, eventually consolidating these capabilities into a single system of systems. A NCES compliant approach based on a Service Based Architecture (SBA) will provide Commanders' and Staffs' access to various ISR ground station information from any ground station, and data exchange between Army ISR ground stations for improved intelligence sharing and understanding. DCGS-A will achieve joint, allied and coalition interoperability through implementation of the 10.2 DCGS Integration Backbone (DIB) to access other Services data and information that is critical to the Land Component Commander.

FY 05 funding supports design and development of a DCGS-A prototype.

This system supports the Future Force transition path of the Transformation Campaign Plan (TCP).

Accomplishments/Planned Program	FY 2003	FY 2004	FY 2005
Develop a COMINT workstation and Fusion Cell.	6700	0	0
Field a DCGS-A capability to establish a 513th Military Intelligence BDE Echelons Above Corps (EAC) Home Station Operations Center (HSOC).	2700	0	0
Evaluate and integrate visualization and MASINT sensor tools for data sharing and collaboration of multi-INT platforms.	2000	0	0

Accomplishments/Planned Program (continued)	FY 2003	FY 2004	FY 2005
System integration and test support for Spirals 1, 2 & 3.	3400	0	0
Assess CDL and MP-RTIP alternatives.	6468	0	0
DCGS-A system integration to support Wideband ISR Network.	10750	0	0
Development of ISR modules to support FCS.	1515	0	0
Asymmetric Warfare Intelligence Analysis Advanced Tool Set (AW-IAATS)	0	1500	0
Distributed Data Visualization and Management	0	2800	0
National Defense Imagery Processing (NDIP) Program	0	1200	0
DCGS-A Milestone B preparation.	1150	0	0
DCGS-A design and development in support of ACS and other Future Force systems. This includes current system migration to DCGS-A capabilities.	0	0	9751
SAIP prototype single vehicle development, fielding, integration, and evaluation. Starting in FY03 shared funding with PE 0604766, Project D957.	1561	1000	0
DTES Production, Interoperability and Upgrade Spirals. Starting in FY03 DTES costs shared with PE, 0604766, Project D957, and SSNs BZ7316 and BZ7317. FY04 and beyond funded by BZ7316 and this Project.	6622	69	0
Field Motivated Fixes, Baseline Builds, and Configuration Control Boards. FYs 03 and 04 funding supplemented within 0305208, D957. FY 05 supplemented with BZ7316. FY 06 and beyond covered by this PE only.	439	2000	0
TES Forward or MAIN Systems' upgrades and interoperability builds.	1500	4145	0
Ensure data link interoperability across Services and other programs.	0	940	0
Totals	44805	13654	9751

ARMY RDT&E BUDGET ITEM JUSTIFICATION (R-2A Exhibit)

February 2004

BUDGET ACTIVITY	PE NUMBER AND TITLE	PROJECT
7 - Operational system development	**0305208A - Distributed Common Ground Systems (JMIP)**	**956**

B. Other Program Funding Summary	FY 2003	FY 2004	FY 2005	FY 2006	FY 2007	FY 2008	FY 2009	To Compl	Total Cost
PE 0604766A TES/DCGS-A Project D909 (TIARA)	1770	0	0	0	0	0	0	0	1770
BZ7316 DCGS-A (JMIP)	11303	2687	9647	9958	24634	33576	34211	Continuing	Continuing
BZ7317 Tactical Exploitation System (TIARA) *1	17100	0	0	0	0	0	0	0	51234
APA AZ2000 Guardrail Mods (TIARA) (DCGS-A GRIFN MDEP FPDP Only) *2	0	0	0	0	0	0	0	0	5000
PE 0604766A Tactical Exploitation System (TES) / DCGS-A 957 *3	55485	19695	22016	0	0	0	0	0	156864
PE 0604770 Army Common Ground Station (CGS) (202)	4509	4705	0	0	0	0	0	0	16699
BA1080, Army Common Ground Station (CGS)	9587	8200	0	0	0	0	0	0	38943
PE 0604321 CI/HUMINT Software Products (B41) (TIARA)	2322	2134	949	1842	3232	1733	1812	Continuing	Continuing
BK5275 CI HUMINT Info Management System	9490	14543	2924	729	6547	3280	5911	Continuing	Continuing

*1 By direction of Congress, in FY03 reprogrammed $7.5 M from PE 305208, Project 956 into OPA BZ7317 for DCGS-A capability.
*2 By direction of Congress, reprogrammed $5.0 M from PE 305208, Project 956 into APA AZ2000 for DCGS-A capability.
*3 Funding decremented for TES starting FY04.

C. Acquisition Strategy: DCGS-A will be executed via an evolutionary acquisition approach, providing incremental milestone decisions throughout the System Development and Demonstration (SDD) phase. Each incremental milestone will validate/approve requirements for DCGS-A capabilities and those DCGS-A capabilities inherent to other Future Force programs such as Aerial Common Sensor and Future Combat System. The program emphasizes migration of current force capabilities into a common baseline, multiple prototype deliveries, integrated testing and continuous evaluation opportunities.

ARMY RDT&E COST ANALYSIS(R3)

February 2004

BUDGET ACTIVITY
7 - Operational system development

PE NUMBER AND TITLE
0305208A - Distributed Common Ground Systems (JMIP)

PROJECT
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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 . Visualization/Data Sharing Studies, Analysis and M&S	T&M	Booz-Allen, Eatontown, NJ	4023	1500	3-4Q	0		0		0	5523	0
b . Block II ACE to DCGS-A Interface	MIPR	PM SW	7360	0		0		0		0	7360	0
c . GRIFN DCGS-A	CPFF	Northrup Grumman, Linthicum, MD	14390	0		0		0		0	14390	0
d . III Corps TES Main, TES upgrades, integration and evaluation.	CPFF	Northrup Grumman, Linthicum, MD	15536	1600	3Q	893	1Q	0		0	18029	0
e . TES DCGS-A Interoperability	CPFF	Northrup Grumman, Linthicum, MD	22936	6449	2Q	3500	1Q	0		0	32885	0
f . MIES CIG/SS	CPFF	DBA, Melbourne, FL	4187	0		0		0		0	4187	0
g . ETRAC CIG/SS	CPAF	Northrup Grumman, Linthicum, MD	5527	0		0		0		0	5527	0
h . COMINT Workstation and Fusion Cell	MIPR	PM IE	3080	5700	1Q	0		0		0	8780	5741
i . CHIMS Upgrades for HUMINT Operator Multi-INT	MIPR	PM CHIMS	2310	0		0		0		0	2310	0

ARMY RDT&E COST ANALYSIS(R3)

February 2004

BUDGET ACTIVITY
7 - Operational system development

PE NUMBER AND TITLE
0305208A - Distributed Common Ground Systems (JMIP)

PROJECT
956

I. Product Development (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
j . INSCOM Home Station Nodes	MIPR	INSCOM	1200	2700	1Q	0		0		0	3900	0
k . System Integration and test support for Spirals 1,2,3	MIPR	INSCOM	0	3400	2Q	0		0		0	3400	0
l . Evaluate and Integrate Visualization and MASINT Tools	MIPR	NRO	0	1500	3-4Q	0		0		0	1500	0
m . Assess CDL and MP-RTIP Alternatives	MIPR	Wright Patterson Air Force Base	0	2768	2Q	0		0		0	2768	0
n . DCGS-A Integration to support Wideband ISR Network	MIPRs	PM IE/PM SW	0	9750	2Q	0		0		0	9750	0
o . Development of ISR modules to support SIGINT migration	MIPR	PM SW	0	1533	2Q	0		0		0	1533	0
p . DCGS-A prototype development	CP	TBD	0	0		0		6814	1-3Q	0	6814	0
q . AWIAATS	MIPR	Battlelabs, Ft. Huachuca	0	0		1500	2Q	0		0	1500	0

ARMY RDT&E COST ANALYSIS(R3)

February 2004

BUDGET ACTIVITY
7 - Operational system development

PE NUMBER AND TITLE
0305208A - Distributed Common Ground Systems (JMIP)

PROJECT
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I. Product Development (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
r . Distributed Data Vis	MIPR	Battlelabs, Ft. Huachuca	0	0		2800	2Q	0		0	2800	0
s . NDIP	MIPR	Battlelabs, Ft. Huachuca	0	0		1200	2Q	0		0	1200	0
Subtotal:			80549	36900		9893		6814		0	134156	5741

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 . Objective Doctrine/TTP Development To Support a Milestone B for ODCGS-A	MIPR	Ft. Huachuca, AZ	4600	1023	2Q	0		0		0	5623	0
b . Matrix Support	MIPR	CECOM, Fort Monmouth NJ	1401	1500	1Q	873	1Q	1000	1Q	Continue	4774	Continue
Subtotal:			6001	2523		873		1000		Continue	10397	Continue

ARMY RDT&E COST ANALYSIS(R3)

February 2004

BUDGET ACTIVITY
7 - Operational system development

PE NUMBER AND TITLE
0305208A - Distributed Common Ground Systems (JMIP)

PROJECT
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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 . Test support for DCGS-A development	MIPR	INSCOM	0	1500	2Q	0		0		0	1500	0
b . Test support for DCGS-A development	MIPR	TBD	0	0		2150	2-3Q	1099	2-3Q	0	3249	0
Subtotal:			0	1500		2150		1099		0	4749	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
a . Project Management	In-House	PM, DCGS-A	500	3882	1-4Q	738	1-4Q	838	1-4Q	Continue	5958	Continue
Subtotal:			500	3882		738		838		Continue	5958	Continue
Project Total Cost:			87050	44805		13654		9751		Continue	155260	Continue

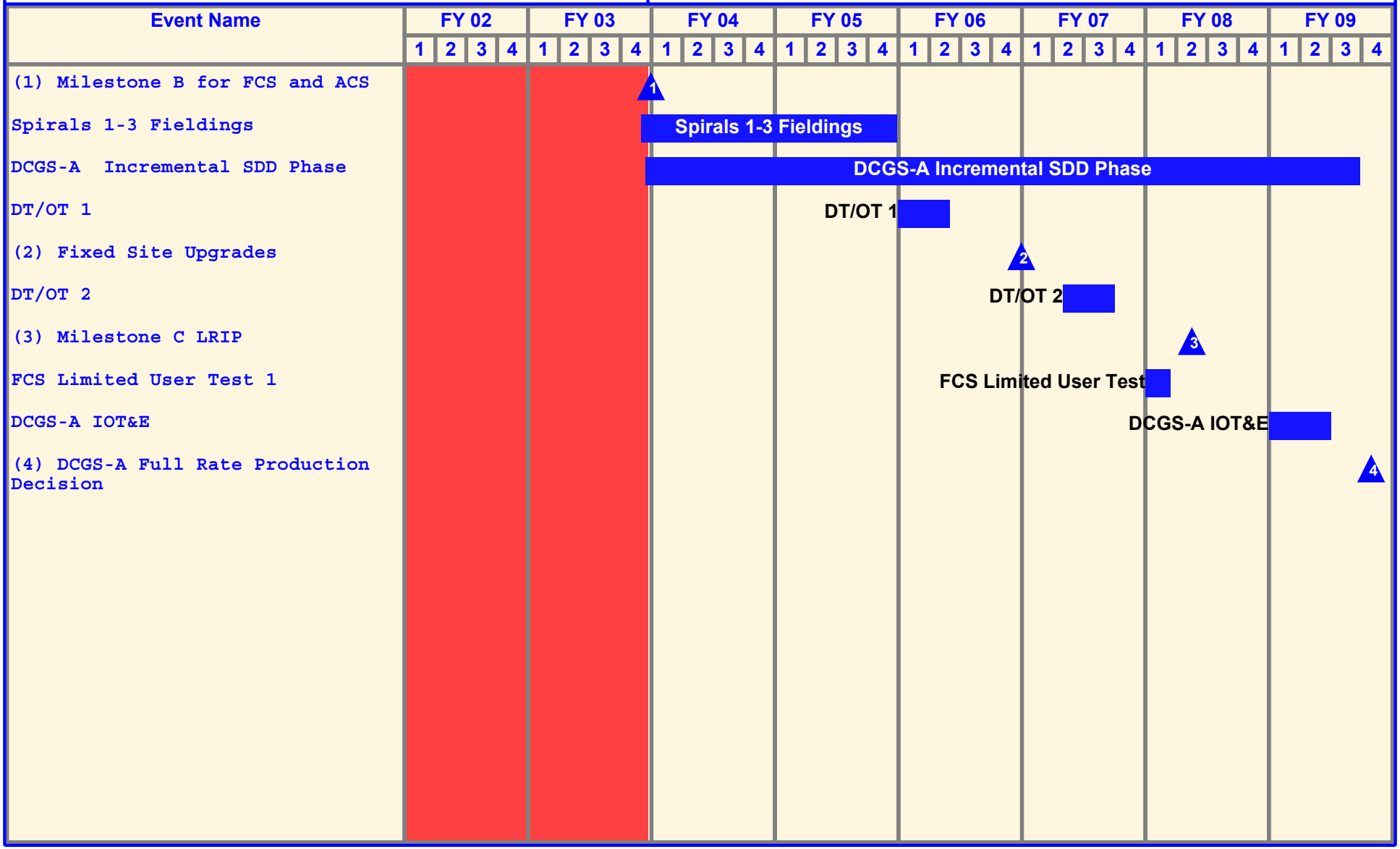
Schedule Profile (R4 Exhibit)

February 2004

BUDGET ACTIVITY
7 - Operational system development

PE NUMBER AND TITLE
0305208A - Distributed Common Ground Systems (JMIP)

PROJECT
956



Schedule Detail (R4a Exhibit)

February 2004

BUDGET ACTIVITY	PE NUMBER AND TITLE	PROJECT
7 - Operational system development	**0305208A - Distributed Common Ground Systems (JMIP)**	**956**

Schedule Detail	FY 2003	FY 2004	FY 2005	FY 2006	FY 2007	FY 2008	FY 2009
Development of TES Main to III Corps	1-4Q						
GRIFN component of DCGS-A	1-4Q						
Integration of Common Ground Station (CGS) /CHIMS capability into Interim DCGS-A	1-2Q						
TES and GRIFN integration	1-4Q	1-2Q					
DCGS-A Milestone B for FCS and ACS	3-4Q						
Spirals 1-3 Fieldings	4Q	4Q	2Q				
DCGS-A Incremental SDD Phase	4Q	1-4Q	1-4Q	1-4Q	1-4Q	1-4Q	1-4Q
DT/OT 1				1-2Q			
Fixed Site Upgrades				4Q			
DT/OT 2					2-4Q		
Milestone C LRIP (Mobile)						1Q	
FCS Limited User Test (LUT)						1Q	
DCGS-A IOT&E							1-3Q
DCGS-A Full Rate Production Decision							4Q

* The majority of TES system funding is under PE 0604766A (TES/DCGS-A)

ARMY RDT&E BUDGET ITEM JUSTIFICATION (R-2A Exhibit)

February 2004

BUDGET ACTIVITY	PE NUMBER AND TITLE	PROJECT
7 - Operational system development	**0305208A - Distributed Common Ground Systems (JMIP)**	**D06**

COST (In Thousands)		FY 2003 Actual	FY 2004 Estimate	FY 2005 Estimate	FY 2006 Estimate	FY 2007 Estimate	FY 2008 Estimate	FY 2009 Estimate	Cost to Complete	Total Cost
D06	DCGS-A ASAS INTEGRATION (JMIP)	0	1323	7719	14832	19792	9895	9887	0	63448

A. Mission Description and Budget Item Justification: Distributed Common Ground System - Army (DCGS-A) will serve as the primary ground system of systems for airborne and ground sensor platforms defined as Future Force systems. DCGS-A enables the commander to achieve situational understanding by leveraging multiple sources of data, information, and intelligence to synchronize the elements of Joint and Combined Arms combat power (maneuver, maneuver support and maneuver sustainment support). The core functions of DCGS-A are: collection and processing of space, airborne, ground and maritime ISR sensor data; control of select Army and joint ISR sensor systems; intelligence synchronization; ISR planning, reconnaissance and surveillance (R&S) integration; fusion of sensor information, and direction and distribution/dissemination of sensor information. It draws information from a wide variety of automated and manual sources; on-board sensors, space platforms, unattended air and ground vehicles, existing and new ISR capabilities, and an assortment of databases to enable the land component commander to execute battle command, synchronize fires and effects, rapidly shift battle focus, achieve situational understanding, protect the force, and employ his forces more effectively. DCGS-A allows commanders at all levels to visualize and understand the threat and environment, predict threat intentions, execute targeting through targeting support, conduct ISR integration and support Information Operations.
This project establishes DCGS-A sensor fusion and all source production capabilities, leveraging previously completed algorithms and on-going Future Combat System (FCS) developmental efforts. This includes both developed and transitioned from existing systems to meet the requirements for All Source battle management and situational awareness, intelligence preparation of the battlespace (battle damage assessments, course of action/predictive analysis, wargaming), target development (deliberate, time critical, high value/high payoff), collection/ISR management (requirement and mission), electronic warfare/countermeasures, force protection, indications and warnings, operational security, and battlefield visualization and presentation. The Sensor Fusion capability will be an All Source process that addresses both traditional intelligence disciplines (signals intelligence, imagery intelligence, human intelligence, measurements and signatures intelligence) from organic, Theater, and National assets (systems and databases), and non-traditional sources (open source intelligence, fire support) to achieve a complete and universal understanding of the situation in support of the commander/warfighter, battle command databases, and the Common Operational Picture (COP). The All Source sensor fusion capability will support all types of units of employment/action across a broad spectrum of both traditional and non-traditional (e.g., SASO, SSC, NEO) operations, and improved interoperable with Joint, Allied, and Coalition forces.
This system supports the Future Force transition path of the Transformation Campaign Plan (TCP).

FY05 funds the transition of the All Source sensor fusion products and technologies and design and prototype development of DCGS-A.

Accomplishments/Planned Program	FY 2003	FY 2004	FY 2005
Enhance interface between All Source sensor fusion process and SIGINT single sources for design and prototype development.	0	200	1750
Enhance interface between All Source sensor fusion process and CI/HUMINT single source for design and prototype development.	0	200	1000
Enhance All Source sensor fusion processing of MASINT for design and prototype development.	0	200	1250
Enhance controlled interface technology for improved product distribution at multiple security levels via web.	0	277	0
Studies, analysis, and prototyping for porting All Source sensor fusion mission applications to FCS environment.	0	248	1156
Transition of All Source sensor fusion processes and Current Force systems capabilities to DCGS-A.	0	198	2563
Totals	0	1323	7719

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

C. Acquisition Strategy: The transition of ASAS all-source production capabilities into DCGS-A builds upon and expands the capabilities and functionality developed and produced in the ASAS Block II program. Additional software capabilities will include enhanced intelligence and command and control functionality; degraded mode, distributed and reach operations; enhanced network communications; improved reliability, supportability and survivability. The all-source production domain in DCGS-A will be smaller, lighter, and cheaper, as well as more flexible and mobile than that of the Block II ASAS. The program emphasizes multiple prototype deliveries, integrated testing, and continuous evaluation opportunities. This effort builds upon the experience and feedback gained from fielded Block II ASAS modules as well as the All Source Correlation Element – Light (ACE-Light) prototype which began under the Block II ASAS program, and integration of fusion capabilities developed under the FCS program.

DCGS-A will be executed via an evolutionary acquisition approach, providing incremental milestone decisions throughout the System Development and Demonstration (SDD) phase based on validated/approved requirements for DCGS-A capabilities and those DCGS-A capability needs inherent in other Future Force programs such as Aerial Common Sensor and Future Combat System The program emphasizes migration of current force capabilities into a common baseline, multiple prototype deliveries, integrated testing and continuous evaluation opportunities.

ARMY RDT&E COST ANALYSIS(R3)

February 2004

BUDGET ACTIVITY
7 - Operational system development

PE NUMBER AND TITLE
0305208A - Distributed Common Ground Systems (JMIP)

PROJECT
D06

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 . Prototype Development and transition of Current Force systems	TBD	TBD	0	0		923	2Q	6236	1Q	Continue	7159	Continue
Subtotal:			0	0		923		6236		Continue	7159	Continue

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 . Systems Engineering	MIPR	TBD	0	0		100	1Q	100	1Q	Continue	Continue	Continue
Subtotal:			0	0		100		100		Continue	Continue	Continue

ARMY RDT&E COST ANALYSIS(R3)

February 2004

BUDGET ACTIVITY
7 - Operational system development

PE NUMBER AND TITLE
0305208A - Distributed Common Ground Systems (JMIP)

PROJECT
D06

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 . Prototype Test & Evaluation	MIPR	EPG, Ft. Huachuca, AZ	0	0		0		500	1Q	Continue	Continue	Continue
Subtotal:			0	0		0		500		Continue	Continue	Continue

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
a . Contractor	TBD	TBD	0	0		150	1Q	450	1Q	Continue	Continue	Continue
b . Govt In House		PM I&E, Ft. Belvoir, VA	0	0		150	1-4Q	433	1-4Q	Continue	583	Continue
Subtotal:			0	0		300		883		Continue	Continue	Continue
Project Total Cost:			0	0		1323		7719		Continue	Continue	Continue

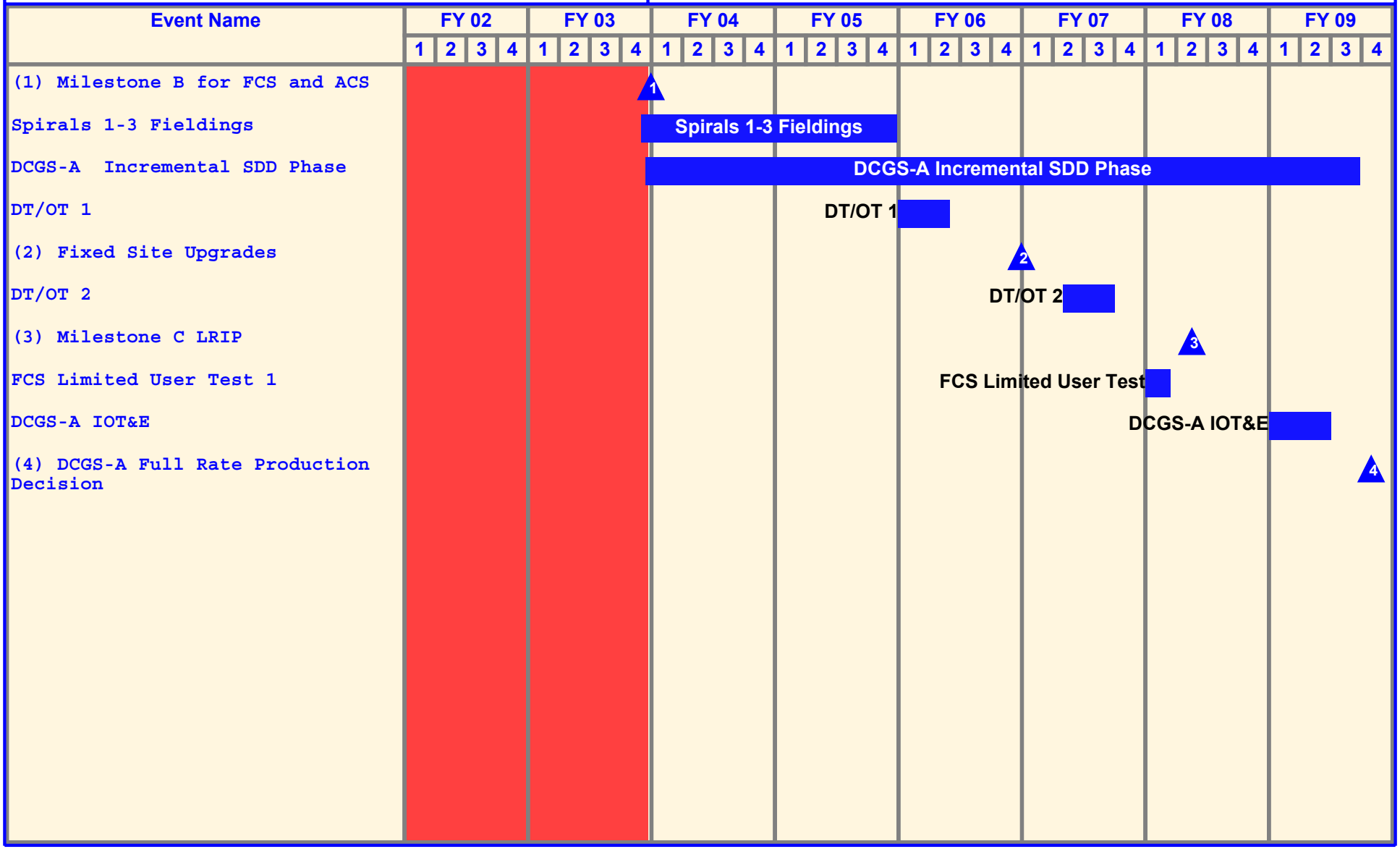
Schedule Profile (R4 Exhibit)

February 2004

BUDGET ACTIVITY
7 - Operational system development

PE NUMBER AND TITLE
0305208A - Distributed Common Ground Systems (JMIP)

PROJECT
D06



Schedule Detail (R4a Exhibit)

February 2004

BUDGET ACTIVITY	PE NUMBER AND TITLE	PROJECT
7 - Operational system development	**0305208A - Distributed Common Ground Systems (JMIP)**	**D06**

Schedule Detail	FY 2003	FY 2004	FY 2005	FY 2006	FY 2007	FY 2008	FY 2009
All-source Sensor Fusion Development		1-4Q	1-4Q	1-4Q	1-4Q	1-4Q	1-4Q
DCGS-A Milestone B for FCS and ACS	3-4Q						
Spirals 1-3 Fieldings	4Q	4Q	2Q				
DCGS-A Incremental SDD Phase	4Q	1-4Q	1-4Q	1-4Q	1-4Q	1-4Q	1-3Q
DT/OT 1				1-2Q			
Fixed Site Upgrades				4Q			
DT/OT 2					2-4Q		
Milestone C LRIP (Mobile)						1Q	
FCS Limited User Test (LUT)						1Q	
DCGS-A IOT&E							1-3Q
DCGS-A Full Rate Production Decision							4Q

ARMY RDT&E BUDGET ITEM JUSTIFICATION (R-2A Exhibit)

February 2004

BUDGET ACTIVITY	PE NUMBER AND TITLE	PROJECT
7 - Operational system development	**0305208A - Distributed Common Ground Systems (JMIP)**	**D07**

COST (In Thousands)		FY 2003 Actual	FY 2004 Estimate	FY 2005 Estimate	FY 2006 Estimate	FY 2007 Estimate	FY 2008 Estimate	FY 2009 Estimate	Cost to Complete	Total Cost
D07	DCGS-A COMMON MODULES (JMIP)	0	21364	18140	54623	72711	79654	83278	0	329770

A. Mission Description and Budget Item Justification: Distributed Common Ground System - Army (DCGS-A) will serve as the primary ground system of systems for airborne and ground sensor platforms defined as Objective Force systems. DCGS-A enables the commander to achieve situational understanding by leveraging multiple sources of data, information, and intelligence to synchronize the elements of Joint and Combined Arms combat power (maneuver, maneuver support and maneuver sustainment support). The core functions of DCGS-A are: collection and processing of space, airborne, ground and maritime ISR sensor data; control of select Army and joint ISR sensor systems; intelligence synchronization; ISR planning, reconnaissance and surveillance (R&S) integration; fusion of sensor information, and direction and distribution/dissemination of sensor information. It draws information from a wide variety of automated and manual sources; on-board sensors, space platforms, unattended air and ground vehicles, existing and new ISR capabilities, and an assortment of databases to enable the land component commander to execute battle command, synchronize fires and effects, rapidly shift battle focus, achieve situational understanding, protect the force, and employ his forces more effectively. DCGS-A allows commanders at all levels to visualize and understand the threat and environment, predict threat intentions, execute targeting through targeting support, conduct ISR integration and support Information Operations.

This project will assess (or develop as necessary) existing Best of Breed candidate capabilities from Current Force and Future Force systems and integrate common data management, visualization and exploitation tools into the DCGS-A Service Based Architecture (SBA) baseline configuration. This will create the software and hardware baseline for seamless multi-INT Tasking, Posting, Processing and Using (TPPU). This common set of automated collaboration, exploitation, fusion and collection management tools, applied at every echelon from the Unit of Action (UA) to Echelons Above Corps (EAC) will be the knowledge hub of the DCGS-A Enterprise. DCGS-A will maximize the use of common hardware/software to ease training burden, reduce logistics footprint, and decrease sustainability requirements. The DCGS-A Enterprise will include common, GIG-enabled, networking modules that provide reach and split based capability to minimize forward footprint and maximize data access. DCGS-A visualization and dissemination applications will be embedded into FCS and the Future Force to provide tailored access to actionable information. DCGS-A application - programs, applets, and toolsets – will be based on Network Centric Enterprise Service (NCES) and DoD standards and common throughout DCGS-A.

This system supports the Future Force transition path of the Transformation Campaign Plan (TCP).

FY 05 funds support completion of Spirals 2 & 3 integration and test efforts, and development/migration of new and existing capabilities onto a DCGS Integration Backbone (DIB), developed by the Air Force Distributed Common Ground System (DCGS) 10.2 program.

ARMY RDT&E BUDGET ITEM JUSTIFICATION (R-2A Exhibit)

February 2004

BUDGET ACTIVITY	PE NUMBER AND TITLE	PROJECT
7 - Operational system development	**0305208A - Distributed Common Ground Systems (JMIP)**	**D07**

Accomplishments/Planned Program	FY 2003	FY 2004	FY 2005
System integration and test support for Spirals 1, 2 & 3.	0	1700	4000
10.2 DIB implementation.	0	2700	2000
Design and prototype development.	0	8800	5702
Develop/select/modify/integrate new and existing Best of Breed DCGS-A common modules.	0	3000	1500
FCS/UA (Embedded) Augmentation	0	3263	0
Transition of Current Force systems to DCGS-A	0	1901	4938
Totals	0	21364	18140

B. Other Program Funding Summary	FY 2003	FY 2004	FY 2005	FY 2006	FY 2007	FY 2008	FY 2009	To Compl	Total Cost
RDTE (PE 35208, Proj 956) DCGS-A JMIP	44805	13504	9652	9935	10232	11060	11645	Continuing	Continuing
RDTE (PE 35208, Proj D08) DCGS-A JMIP	0	1036	7209	7227	7450	11185	11293	Continuing	Continuing
RDTE (PE 35208, Proj D06) DCGS-A JMIP	0	1325	7956	15121	19789	10244	10311	Continuing	Continuing
BZ7316 DCGS-A Unit of Employment	15803	2667	9575	9946	24632	33579	34287	Continuing	Continuing
AZ2000 Guardrail Mods (GRIFIN only)	0	0	0	0	0	0	0	0	5000

C. Acquisition Strategy: DCGS-A will be executed via an evolutionary acquisition approach, providing incremental milestone decisions throughout the System Development and Demonstration (SDD) phase. Each incremental milestone will validate/approve requirements for DCGS-A capabilities and those DCGS-A capabilities inherent to other Future Force programs such as Aerial Common Sensor and Future Combat System. The program emphasizes migration of current force capabilities into a common baseline, multiple prototype deliveries, integrated testing and continuous evaluation opportunities.

ARMY RDT&E COST ANALYSIS(R3)

February 2004

BUDGET ACTIVITY
7 - Operational system development

PE NUMBER AND TITLE
0305208A - Distributed Common Ground Systems (JMIP)

PROJECT
D07

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 . Embedded DCGS-A scalability study for FCS	Competitive CPIF/CPAF	Boeing Corp, CA	0	0		2000	1Q	0		Continue	2000	Continue
b . System integration and test support for Spirals 1, 2 & 3	Sole Source CPIF/CPAF	Northrup Grumman, Linthicum, MD	0	0		1700	1Q	4000	1Q	Continue	5700	Continue
c . Establishment of federated NCES System Integration Lab	Competitive CPIF/CPAF	TBD	0	0		2000	2Q	3526	1Q	0	5526	0
d . 10.2 DIB implementation	Competitive FFP	Air Force, Hanscom, MA	0	0		2700	2Q	2000	1Q	Continue	4700	Continue
e . DCGS-A Modeling and Simulation	Competitive CPIF/CPAF	TBD	0	0		1100	2Q	1000	1Q	0	2100	0
f . DCGS-A fixed configuration supportability enhancements	Competitive CPIF/CPAF	TBD	0	0		1000	2Q	0		Continue	1000	Continue
g . Continue DCGS-A prototype development	Competitive CPIF/CPAF	TBD	0	0		5874	2Q	1343	1Q	Continue	7217	Continue

ARMY RDT&E COST ANALYSIS(R3)

February 2004

BUDGET ACTIVITY
7 - Operational system development

PE NUMBER AND TITLE
0305208A - Distributed Common Ground Systems (JMIP)

PROJECT
D07

I. Product Development (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
h . Develop/select/integrate Best of Breed common modules	Competitive CPIF/CPAF	TBD	0	0		2710	2Q	1500	1Q	Continue	4210	Continue
i . Spiral capability migration to Current Force ISR ground stations	Competitive CPIF/CPAF	TBD	0	0		0		1600	1Q	0	1600	0
Subtotal:			0	0		19084		14969		Continue	34053	Continue

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 . Matrix Support	MIPR	CECOM	0	0		532	1Q	592	1Q	Continue	1124	Continue
Subtotal:			0	0		532		592		Continue	1124	Continue

ARMY RDT&E COST ANALYSIS(R3)

February 2004

BUDGET ACTIVITY
7 - Operational system development

PE NUMBER AND TITLE
0305208A - Distributed Common Ground Systems (JMIP)

PROJECT
D07

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 . Test support	MIPR	TBD	0	0		0		795	1Q	Continue	795	Continue
Subtotal:			0	0		0		795		Continue	795	Continue

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
a . Project Management	In House	PM DCGS-A	0	0		1748	1Q	1784	1Q	Continue	3532	Continue
Subtotal:			0	0		1748		1784		Continue	3532	Continue
Project Total Cost:			0	0		21364		18140		Continue	39504	Continue

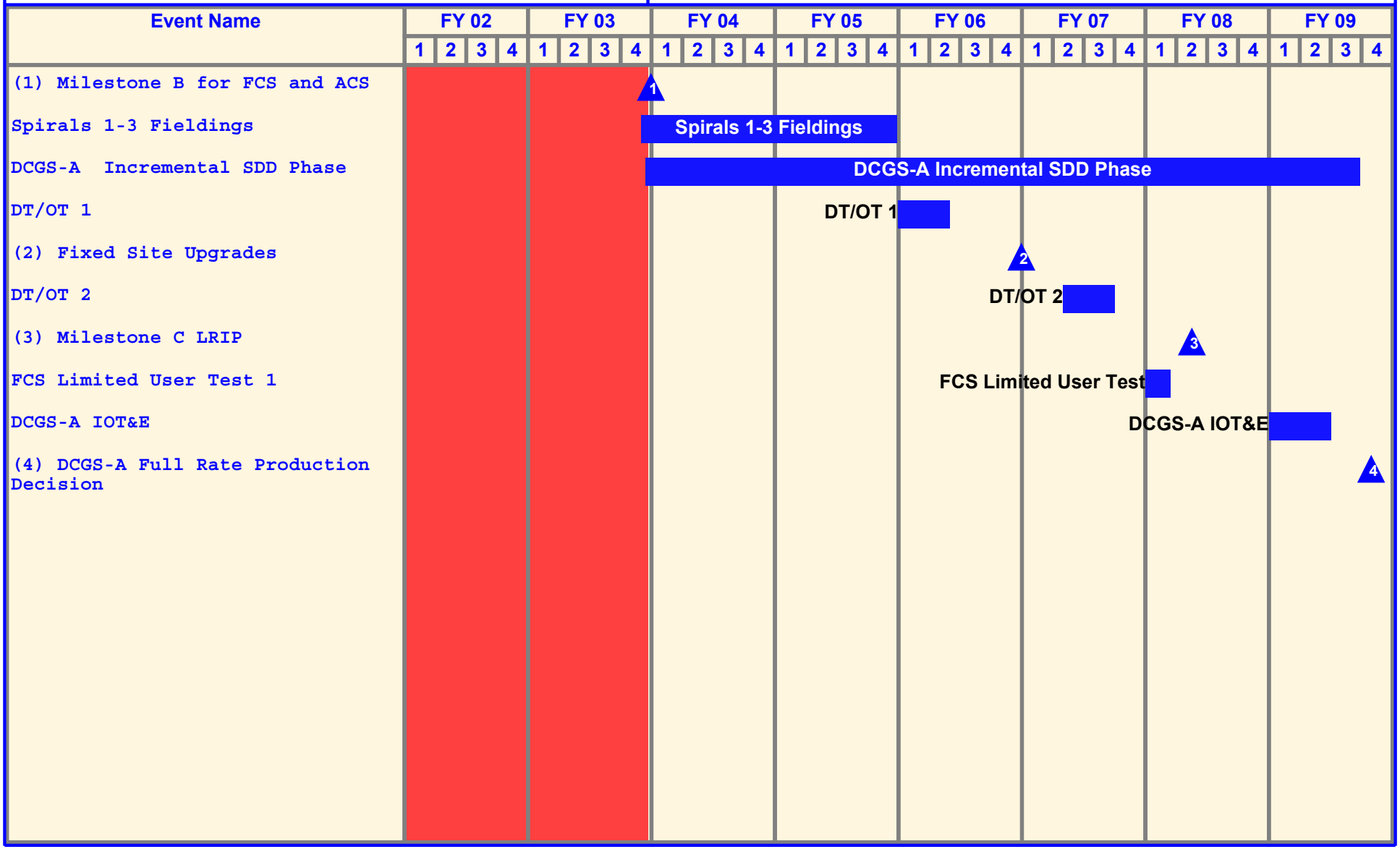
Schedule Profile (R4 Exhibit)

February 2004

BUDGET ACTIVITY
7 - Operational system development

PE NUMBER AND TITLE
0305208A - Distributed Common Ground Systems (JMIP)

PROJECT
D07



Schedule Detail (R4a Exhibit)

February 2004

BUDGET ACTIVITY	PE NUMBER AND TITLE	PROJECT
7 - Operational system development	**0305208A - Distributed Common Ground Systems (JMIP)**	**D07**

Schedule Detail	FY 2003	FY 2004	FY 2005	FY 2006	FY 2007	FY 2008	FY 2009
Milestone B for FCS and ACS	3-4Q						
Spirals 1-3 Fieldings	4Q	4Q	4Q				
DCGS-A Incremental SDD Phase	4Q	1-4Q	1-4Q	1-4Q	1-4Q	1-4Q	1-3Q
DT/OT 1				1-2Q			
Fixed Site Upgrades				4Q			
DT/OT 2					2-4Q		
Milestone C LRIP (Mobile)						1Q	
FCS Limited User Test 1						1Q	
DCGS-A IOT&E							1-3Q
DCGS-A Full Rate Production Decision							4Q

ARMY RDT&E BUDGET ITEM JUSTIFICATION (R-2A Exhibit)

February 2004

BUDGET ACTIVITY	PE NUMBER AND TITLE	PROJECT
7 - Operational system development	**0305208A - Distributed Common Ground Systems (JMIP)**	**D08**

COST (In Thousands)		FY 2003 Actual	FY 2004 Estimate	FY 2005 Estimate	FY 2006 Estimate	FY 2007 Estimate	FY 2008 Estimate	FY 2009 Estimate	Cost to Complete	Total Cost
D08	DCGS-A SENSOR INTEGRATION (JMIP)	0	1034	6995	7090	7452	10803	10829	0	44203

A. Mission Description and Budget Item Justification: Distributed Common Ground System - Army (DCGS-A) will serve as the primary ground system of systems for airborne and ground sensor platforms defined as Objective Force systems. DCGS-A enables the commander to achieve situational understanding by leveraging multiple sources of data, information, and intelligence to synchronize the elements of Joint and Combined Arms combat power (maneuver, maneuver support and maneuver sustainment support). The core functions of DCGS-A are: collection and processing of space, airborne, ground and maritime ISR sensor data; control of select Army and joint ISR sensor systems; intelligence synchronization; ISR planning, reconnaissance and surveillance (R&S) integration; fusion of sensor information, and direction and distribution/dissemination of sensor information. It draws information from a wide variety of automated and manual sources; on-board sensors, space platforms, unattended air and ground vehicles, existing and new ISR capabilities, and an assortment of databases to enable the land component commander to execute battle command, synchronize fires and effects, rapidly shift battle focus, achieve situational understanding, protect the force, and employ his forces more effectively. DCGS-A allows commanders at all levels to visualize and understand the threat and environment, predict threat intentions, execute targeting through targeting support, conduct ISR integration and support Information Operations. This project establishes sensor integration transitioned from existing systems and developed for new systems to meet the requirements for battle management and situational awareness, intelligence preparation of the battlespace (battle damage assessments, course of action/predictive analysis, wargaming), target development (deliberate, time critical, high value/high payoff), collection/ISR management (requirement and mission), electronic warfare/countermeasures, force protection, indications and warnings, operational security, and battlefield visualization and presentation.

This system supports the Future Force transition path of the Transformation Campaign Plan (TCP).

FY 05 funds transition and integration of new and Current Force sensor integration into the DCGS-A network utilizing the System Integration Lab (SIL) Best of Breed selection process.

Accomplishments/Planned Program	FY 2003	FY 2004	FY 2005
Integrate Current Force Multi-INT sensor (HUMINT, IMINT, SIGINT, MASINT) modules into the DCGS-A network.	0	0	3069
Transition and integrate Current Force components and capabilities into the DCGS-A network.	0	0	3000
Selection of sensor integration modules utilizing SIL/Best of Breed selection process.	0	1034	926
Totals	0	1034	6995

B. Other Program Funding Summary	FY 2003	FY 2004	FY 2005	FY 2006	FY 2007	FY 2008	FY 2009	To Compl	Total Cost
RDTE (PE 35208, Proj 956) DCGS-A JMIP	44805	13504	9652	9935	10232	11060	11645	Continuing	Continuing
RDTE (PE 35208, Proj D07) DCGS-A JMIP	0	21603	9594	21373	40759	44280	44698	Continuing	Continuing
RDTE (PE 35208, Proj D06) DCGS-A JMIP	0	1325	7956	15121	19789	10244	10311	Continuing	Continuing
BZ7316 DCGS-A Unit of Employment	15803	2667	9575	9946	24632	33579	34287	Continuing	Continuing
AZ2000 GRCS Mods (DCGS-A GRIFIN only)	0	0	0	0	0	0	0	0	0

C. Acquisition Strategy: DCGS-A will be executed via an evolutionary acquisition approach, providing incremental milestone decisions throughout the System Development and Demonstration (SDD) phase. Each incremental milestone will validate/approve requirements for DCGS-A capabilities and those DCGS-A capabilities inherent to other Future Force programs such as Aerial Common Sensor and Future Combat System. The program emphasizes migration of current force capabilities into a common baseline, multiple prototype deliveries, integrated testing and continuous evaluation opportunities.

ARMY RDT&E COST ANALYSIS(R3)

February 2004

BUDGET ACTIVITY
7 - Operational system development

PE NUMBER AND TITLE
0305208A - Distributed Common Ground Systems (JMIP)

PROJECT
D08

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 . Develop and Integrate DCGS-A Multi-INT Sensor Modules	Competitive CPIF/CPAF	TBD	0	0		0		2786	1Q	Continue	2786	Continue
b . Develop and Integrate components for sensor data distribution in DCGS-A	Competitive CPIF/CPAF	TBD	0	0		0		2578	1Q	Continue	2578	Continue
Subtotal:			0	0		0		5364		Continue	5364	Continue

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 . Matrix Support	MIPR	CECOM	0	0		75	2Q	139	1Q	Continue	Continue	Continue
Subtotal:			0	0		75		139		Continue	Continue	Continue

ARMY RDT&E COST ANALYSIS(R3)

February 2004

BUDGET ACTIVITY
7 - Operational system development

PE NUMBER AND TITLE
0305208A - Distributed Common Ground Systems (JMIP)

PROJECT
D08

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 . SIL/Best of Bredd Testbed	Competitive CPIF/CPAF	TBD	0	0		844	2Q	935	1Q	0	1779	0
Subtotal:			0	0		844		935		0	1779	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
a . Program Management	In House	PM DCGS-A	0	0		115	1Q	557	1Q	Continue	672	Continue
Subtotal:			0	0		115		557		Continue	672	Continue

Project Total Cost:			0	0		1034		6995		Continue	Continue	Continue

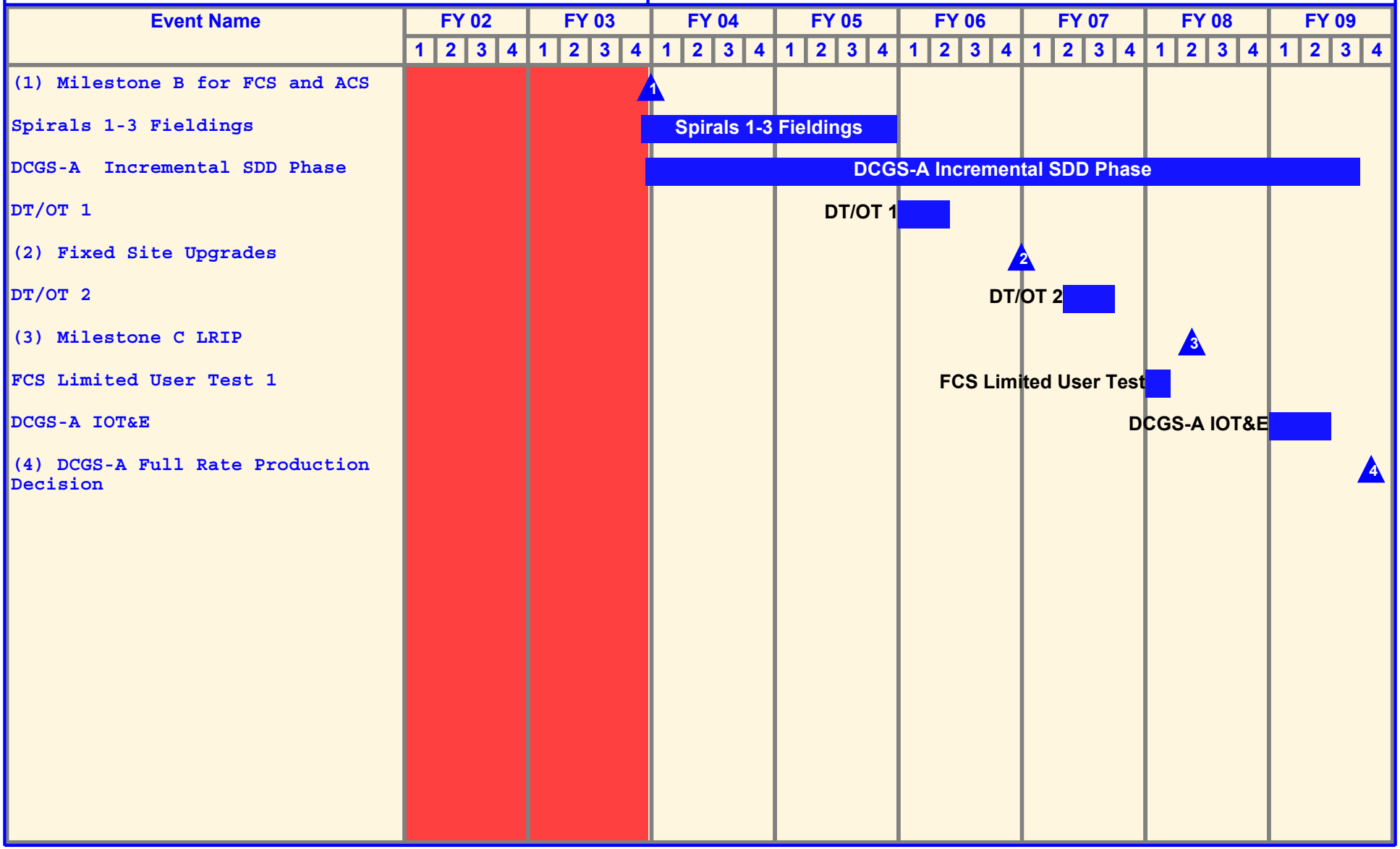
Schedule Profile (R4 Exhibit)

February 2004

BUDGET ACTIVITY
7 - Operational system development

PE NUMBER AND TITLE
0305208A - Distributed Common Ground Systems (JMIP)

PROJECT
D08



Schedule Detail (R4a Exhibit)

February 2004

BUDGET ACTIVITY	PE NUMBER AND TITLE	PROJECT
7 - Operational system development	**0305208A - Distributed Common Ground Systems (JMIP)**	**D08**

Schedule Detail	FY 2003	FY 2004	FY 2005	FY 2006	FY 2007	FY 2008	FY 2009
Milestone B for FCS and ACS	3-4Q						
Spirals 1-3 Fieldings	4Q	4Q	2Q				
DCGS-A Incremental SDD Phase	4Q	1-4Q	1-4Q	1-4Q	1-4Q	1-4Q	1-3Q
DT/OT 1				1-2Q			
Fixed Site Upgrades				4Q			
DT/OT 2					2-4Q		
Milestone C LRIP (Mobile)						1Q	
FCS Limited User Test 1						1Q	
DCGS-A IOT&E							1-3Q
DCGS-A Full Rate Production Decision							4Q