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

February 2003

BUDGET ACTIVITY
7 - Operational system development

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

COST (In Thousands)		FY 2002 Actual	FY 2003 Estimate	FY 2004 Estimate	FY 2005 Estimate	FY 2006 Estimate	FY 2007 Estimate	FY 2008 Estimate	FY 2009 Estimate	Cost to Complete	Total Cost
Total Program Element (PE) Cost		71836	44823	32292	42377	86579	110095	111148	115624	0	622613
956	DISTRIBUTED COMMON GROUND SYSTEM (DCGS) (JMIP)	71836	44823	8306	18167	43471	42361	46342	50380	0	333525
D06	DCGS-A ASAS INTEGRATION (JMIP)	0	0	1337	7667	14706	19597	9813	9807	0	62927
D07	DCGS-A COMMON MODULES (JMIP)	0	0	21603	9594	21373	40759	44280	44698	0	182307
D08	DCGS-A SENSOR INTEGRATION (JMIP)	0	0	1046	6949	7029	7378	10713	10739	0	43854

A. Mission Description and Budget Item Justification: Distributed Common Ground System - Army (DCGS-A) supports the Future Combat System (FCS) and Objective Force commander's ability to execute battle command, synchronize fires and effects, rapidly shift battle focus, achieve situational understanding, and protect the force. DCGS-A provides commanders access to advanced Intelligence, Surveillance and Reconnaissance (ISR) capabilities and data across echelons from strategic to tactical levels, synchronizes ISR collection, exploitation, processing, and distribution of information; and operates in a network with multiples levels of security. 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 in order to locate high value/high payoff targets and enhance the ability of the joint and Army commander to employ his forces more effectively. The core functions of DCGS-A are ISR integration, fusion of sensor information, and direction and distribution of sensor information. DCGS-A includes common software that is interoperable with sensors, other Battlefield Operating Systems (BOS), and the DoD DCGS Family of Systems (FoS). Development of a modular, scaleable, multi-intelligence DCGS-A capability with a reduced footprint is a key component of transformation and a top Army priority. 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 FCS FoS and other select platforms. At the Unit of Employment (UE) and above, DCGS-A is composed of hardware and software in deployable and fixed configurations. As an element of the Objective Force battle command architecture, DCGS-A allows the integration of all ISR assets based on the commander's critical information requirements (CCIR) to produce intelligence which contributes to the common operational picture (COP). Sensor information direction and distribution will provide sensor to commander, sensor to shooter, and sensor to analyst real time information. This system supports the Objective transition path of the Transformation Campaign Plan (TCP).

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B. Program Change Summary	FY 2002	FY 2003	FY 2004	FY 2005
Previous President's Budget (FY 2003)	72095	15683	15911	15625
Current Budget (FY 2004/2005 PB)	71836	44823	32292	42377
Total Adjustments	-259	29140	16381	26752
Congressional program reductions				
Congressional rescissions	-259	-8800		
Congressional increases		38200		
Reprogrammings		-260		
SBIR/STTR Transfer				
Adjustments to Budget Years			16381	26752

FY2004 +$16,381 provided to initiate development of DCGS-A.
FY2005 +$26,752 provided for continous development of DCGS-A.

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

February 2003

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

COST (In Thousands)		FY 2002 Actual	FY 2003 Estimate	FY 2004 Estimate	FY 2005 Estimate	FY 2006 Estimate	FY 2007 Estimate	FY 2008 Estimate	FY 2009 Estimate	Cost to Complete	Total Cost
956	DISTRIBUTED COMMON GROUND SYSTEM (DCGS) (JMIP)	71836	44823	8306	18167	43471	42361	46342	50380	0	333525

A. Mission Description and Budget Item Justification: Distributed Common Ground System - Army (DCGS-A) supports the Future Combat System (FCS) and Objective Force commander's ability to execute battle command, synchronize fires and effects, rapidly shift battle focus, achieve situational understanding, and protect the force. This project supports the system development and demonstration of the Distributed Common Ground System, Army (DCGS-A). DCGS-A supports network centric warfare through sharing and distribution of timely, multi-INT battle management and collection of sensor targeting information to Land Commanders at all echelons as well as to other services. Advanced networking, sensor connectivity, cross-cueing, data sharing and processing will provide commanders, a common view and understanding of the battlefield and access to Intelligence, Surveillance and Reconnaissance (ISR) data and products currently only available within echelons, from a specific ISR ground station. Modular and scalable components will provide flexibility for tailoring and deploying assets and capabilities in support of all types of units of employment/action and across a broad spectrum of conflicts. This project integrates and networks capabilities existent in multiple intelligence ground stations, and eventually consolidates the capabilities and replaces the hardware found in the following current force systems: All Source Analysis System (ASAS), CI/HUMINT Information Management System (CHIMS), Tactical Exploitation System (TES), Guardrail Information Node (GRIFN), Guardrail Common Sensor (GRCS) Intelligence Processing Facility (IPF), PROPHET Control, Joint Surveillance Target Attack Radar System (JSTARS) Common Ground Station (CGS), and the Tactical Unmanned Aerial Vehicle (TUAV) Ground Control Station (GCS). DCGS-A will ultimately migrate these capabilities into a common configuration. Networking these capabilities 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. Networking of multi-INT capabilities will ensure increased interoperability with other Services and reduce forward footprint and logistics burden, all critical Army transformation objectives. This project also supports the engineering development and acquisition of Army Common Imagery Ground/Surface Systems (CIG/SS). The objective of CIG/SS is to enable all systems to receive, process, exploit, and report any imagery source regardless of platform or sensor type to meet the intelligence and targeting needs of tactical commanders. The CIG/SS scheme provides the warfighter with an integrated and interoperable airborne reconnaissance imagery processing and exploitation capability that can be tailored for all levels of conflict. This project also incorporates Army funds originally divested from Defense Airborne Reconnaissance Program (DARP) for the imagery portion of the TES. This system supports the Objective transition path of the Transformation Campaign Plan (TCP).

PM DCGS-A was provided Defense Emergency Response Fund (DERF) supplemental funding as a non-add, for FY02 in the amount of $20.43M to accelerate the Interim DCGS-A capability to XVIII Airborne and III Corps. Additional DERF funding was provided to Army Space Program Office (ASPO) in the amount of $16.50M for Interop Van Functionality and SIGINT & IMINT pre-processing Architecture (S&IPA) engineering efforts, and S&IPA for Ft. Hood.

FY03 Congressional Plus-Up of $29.9M for Wideband ISR, MASINT tools, DCGS-A upgrades, integration at Echelons Above Corps (EAC), integration of

Common Data Link (CDL) and MTI/MP-RTIP integration.

DCGS-A supports the Legacy to Objective transition path of the Army Transformation Campaign Plan (TCP).

Accomplishments/Planned Program	FY 2002	FY 2003	FY 2004	FY 2005
Continue CIG/SS element engineering to implement software upgrades, and enhancements to maintain compatibility with changing the national and tactical interfaces (TES)	7492	0	0	0
AIP Upgrades into TES.	750	0	0	0
Integrate Moving Target Indicator Exploitation/Surveillance Control Data Link (MTIX/SCDL) and Signal Imagery Preprocessor Architecture (S&IPA) into TES Variants at XVIII and III Corps.	9590	0	0	0
Tactical Exploitation System - Main (TES-M) to III Corps - key element of DCGS-A Architecture.	15500	0	0	0
DCGS-A enhancements to the GR/CS Integrated Processing Facility (IPF) as a part of DCGS-A architecture to be fielded to III Corps.	14490	0	0	0
Implement Block II ACE to DCGS-A interface that provides database to database exchange capability.	7560	0	0	0
Studies, analysis and modeling and simulation for DCGS-A with an emphasis on the communications/dissemination infrastructure, trade off analysis, database structure, and data element synchronization.	963	0	0	0
Incorporate DCGS upgrades into CHIMS to provide HUMINT operator access to multi-INT databases.	2410	0	0	0
Development of requirements documentation and associated developmental, operational and interoperability (Joint Interoperability Test Center - JITC) testing.	4900	0	0	0
Develop a COMINT workstation	3180	2990	0	0
Field a DCGS-A capability to establish a 513th Military Intelligence BDE Echelons Above Corps (EAC) Home Station Operations Center (HSOC).	1241	600	0	0
Evaluate and integrate visualization and MASINT sensor tools for data sharing and collaboration of multi-INT platforms.	3760	2000	0	0
Integration and test support for XVIII and III Corps DCGS-A upgrades.	0	2500	0	0
Assess CDL and MP-RTIP alternatives.	0	9700	0	0
DCGS-A system integration to support Wideband ISR Network.	0	2460	0	0
Development of ISR modules to support FCS.	0	11943	0	0
Develop DCGS-A testbed.	0	1358	0	0

Accomplishments/Planned Program (continued)	FY 2002	FY 2003	FY 2004	FY 2005
DCGS-A Milestone B preparation.	0	1150	0	0
SAIP prototype single vehicle development, fielding, integration, and evaluation. Starting in FY03 shared coverage with 0305208, D957	0	1561	1000	0
DTES Production and Interop and Upgrade Spirals. Starting in FY03 DTES costs spread across this PE, 0305208, D957, and SSNs BZ7316 and BZ7317. FY04 and beyond covered by BZ7316 and D956	0	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.	0	439	2000	3933
TES Forward or MAIN Systems' upgrades and interoperability builds.	0	1500	4145	2250
Continued TES/DCGS-A development through Army Topographic Engineer Center (TEC) and FFRDC (Aerospace). Prior to FY 05 covered under 0305208, D957.	0	0	0	3465
Systems engineering and technical assistance, IPT participation across programs and Services, Roadmaps, and DCGS-A Transformation Plans. Prior to FY 05 covered under 0305208, D957.	0	0	0	5519
Ensures data link interoperability across Services and other programs.	0	0	1092	3000
Totals	71836	44823	8306	18167

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

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

B. Other Program Funding Summary	FY 2002	FY 2003	FY 2004	FY 2005	FY 2006	FY 2007	FY 2008	FY 2009	To Compl	Total Cost
PE 0603766A Tactical Surveillance Systems Project 907 (TIARA)	16225	16107	17068	16079	15928	16544	17223	19841	0	135015
PE 0604766A TES/DCGS-A Project D909 (TIARA)	0	1770	0	0	0	0	0	0	0	1770
BZ7316 DCGS-A (JMIP)	2277	11303	2687	9494	9885	24324	32982	33662	Continuing	Continuing
BZ7317 Tactical Exploitation System (TIARA) *1	34134	17100	0	0	0	0	0	0	0	51234
APA AZ2000 Guardrail Mods (TIARA) (DCGS-A GRIFN MDEP FPDP Only) *2	5000	0	0	0	0	0	0	0	0	5000
PE 0604766A Tactical Exploitation System (TES) / DCGS-A 957 *3	59668	55485	19695	16	0	0	0	0	0	134864
PE 0604770 Army Common Ground Station (CGS) (202)	7485	4511	4705	0	0	0	0	0	0	16701
BA1080, Army Common Ground Station (CGS)	21156	8387	8261	0	0	0	0	0	0	37804
PE 0604321 CI/HUMINT Software Products (B41) (TIARA)	2335	2323	2125	1601	1964	3409	1827	1893	Continuing	Continuing
BK5275 CI HUMINT Info Management System	2475	9472	7892	2947	3922	6548	3279	5898	Continuing	Continuing

*1 Congress reprogrammed $7.5 M from PE 305208, Project 956 into OPA BZ7317 for DCGS-A capability.
*2 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: The DCGS-A program will be developed utilizing an Evolutionary Acquisition approach, providing Blocked capabilities and spiral development within each Block. Block 1 will enhance existing systems to establish the necessary interfaces, collaboration, data sharing capabilities, Home Station Operation Center and embedded FCS modules. Block 2 will pursue competitive development to enable maximum industry participation to acquire robust processing, exploitation, analysis visualization, and dissemination applications and supporting hardware to reduce ground station footprint and provide increased processing capabilities.

ARMY RDT&E COST ANALYSIS(R-3)

February 2003

BUDGET ACTIVITY
7 - Operational system development

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

PROJECT
956

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 . ETRAC CIG/SS	C/CPAF	Northrop Grumman, Linthicum, MD	5527	0		0		0		0	5527	5527
b . MIES CIG/SS	SS/CPFF	DBA, Melbourne FL	4187	0		0		0		0	4187	4187
c . TES DCGS Sustainment & Interoperability & Retro	CPAF/FF	Northrop Grumman, Linthicum, MD	22936	10122	1Q	7393	1Q	8587	1Q	Continue	Continue	Continue
d . III Corps TES MAIN	C/CPFF	Northrop Grumman, Linthicum, MD	15500	0		0		0		0	15500	15500
e . GR/IFN component of DCGS-A	SS/CPFF	TRW, Sunnyvale, CA	14390	0		0		0		0	14390	14390
f . Visualization/Data Sharing	T&M	TRW	3560	0		0		0		0	3560	3560
g . Block II ACE to Interim DCGS Interface	MIPR	PM SW	7360	0		0		0		0	7360	7360
h . Studies, Analysis and M&S for Objective DCGS	T&M	Booz-Allen / OSEC	463	0		0		0		0	463	0
i . COMINT Workstation and ELINT Upgrade	MIPR	PM IE	3080	2661	1Q	0		0		0	5741	5741

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BUDGET ACTIVITY
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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
j . CHIMS Upgrades for HUMINT Operator Multi-INT	MIPR	PM CHIMS	2310	0		0		0		0	2310	0
k . INSCOM Home Station Nodes	MIPR	INSCOM	1200	534	1Q	0		0		0	1734	0
l . XVIII ABC & III Corps Interim DCGS	MIPR	XVIII & III Corps	0	1875	2Q	0		0		0	1875	0
m . Evaluate and Integrate Visualization and MASINT Tools	MIPR	NRO	0	1780	2Q	0		0		0	1780	0
n . Assess CDL and MP-RTIP Alternatives	CP	TBD	0	8633	2Q	0		0		0	8633	0
o . DCGS-A Integration to support Wideband ISR Network	CP	TBD	0	2189	2Q	0		0		0	2189	0
p . Development of ISR modules to support FCS	CP	TBD	0	10630	2Q	0		0		0	10630	0
q . Systems Engineering, DCGS-A Transformation Plans	CP	TBD	0	0		0		4911	1Q	Continue	Continue	Continue

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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 . Data Link Interoperability Across Services and Other Programs	CP	TBD	0	0		0		2670	1Q	Continue	Continue	Continue
Subtotal:			80513	38424		7393		16168		Continue	Continue	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 . 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	1042	1Q	249	1Q	545	1Q	Continue	Continue	Continue
Subtotal:			6001	2065		249		545		Continue	Continue	Continue

ARMY RDT&E COST ANALYSIS(R-3)

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BUDGET ACTIVITY
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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 the XVIII Airborne and III Corps DCGS-A upgrades	T&M	TBD	0	350	2Q	0		0		0	350	0
b . Develop DCGS-A Testbed	CP	TBD	0	1208	2Q	0		0		0	1208	0
Subtotal:			0	1558		0		0		0	1558	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	2776	1-4Q	664	1-4Q	1454	1-4Q	Continue	Continue	Continue
Subtotal:			500	2776		664		1454		Continue	Continue	Continue
Project Total Cost:			87014	44823		8306		18167		Continue	Continue	Continue

Schedule Profile Detail (R-4a Exhibit)

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BUDGET ACTIVITY
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PE NUMBER AND TITLE
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Schedule Detail	FY 2002	FY 2003	FY 2004	FY 2005	FY 2006	FY 2007	FY 2008	FY 2009
Development of TES Main to III Corps	3-4Q	1-4Q						
GRIFN component of DCGS-A	3-4Q	1-4Q						
Integration of Common Ground Station (CGS) /CHIMS capability into Interim DCGS-A	3-4Q	1-2Q						
TES and GRIFN integration	3-4Q	1-4Q	1-2Q					
DCGS-A requirements development	2-4Q	1-4Q						
DCGS-A fielding at XVIII Airborne (Spiral 2)			3Q					
MS B for embedded DCGS-A (FCS)		3Q						
Home Station Operation Centers (HSOC) fielding to 513th MI BDE (Spiral 1)		3-4Q						
DCGS-A fielding at III Corps (Spiral 3)	2Q							
Embedded DCGS-A development		3-4Q	1-4Q	1-4Q	1-3Q			
IOT&E for Block I (FCS EUT)					3-4Q			
MS B Block II (UE)			1Q					
Block II SDD			2-4Q	1-4Q	1-4Q	1-3Q		
Block II MS C						3Q		

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

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

February 2003

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

COST (In Thousands)		FY 2002 Actual	FY 2003 Estimate	FY 2004 Estimate	FY 2005 Estimate	FY 2006 Estimate	FY 2007 Estimate	FY 2008 Estimate	FY 2009 Estimate	Cost to Complete	Total Cost
D06	DCGS-A ASAS INTEGRATION (JMIP)	0	0	1337	7667	14706	19597	9813	9807	0	62927

A. Mission Description and Budget Item Justification: This evolutionary project supports the system development and demonstration of the Distributed Common Ground System, Army (DCGS-A), which will form the Intelligence Surveillance and Reconnaissance (ISR) knowledge backbone of the Army's Objective Force and support Battle Command On-The-Move (BCOTM). DCGS-A supports network centric warfare through timely development of enemy/threat situational assessments, and the timely sharing and distribution of multi-INT and All Source battle management and targeting information, and optimal management of collection/ISR resources. Sensor Fusion and All Source production capabilities will be 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 process will provide automated support for Fusion Levels 1, 2, 3, and 4 as defined by the Joint Directors of Laboratories Data Fusion Model. 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. All Source and multi-INT products will be produced, using collaboration techniques, in multiple formats to support all levels of interoperability (e.g., MTF, VMF, graphical displays and overlays, web-based, email) and technology (e.g., database replication, XML). The current MLS message processor/interface and controlled interface/guard technology will also be transitioned from the existing system to achieve timely distribution (push and pull) of intelligence products in multiple formats at multiple levels of classification and releaseability. This will be accomplished by leveraging current industry successes to extend into the next generation of information transfer agents with universal sets of plug-in applications for multiple media/format implementations.

Accomplishments/Planned Program	FY 2002	FY 2003	FY 2004	FY 2005
Enhance interface between All Source Sensor Fusion process and SIGINT single sources.	0	0	200	750
Enhance interface between All Source Sensor Fusion process and CI/HUMINT single source.	0	0	200	1000
Enhance All Source Sensor Fusion processing of MASINT.	0	0	200	1200
Enhance controlled interface technology for improved product distribution at multiple security levels via web.	0	0	277	750

Accomplishments/Planned Program (continued)	FY 2002	FY 2003	FY 2004	FY 2005
Studies, analysis, and prototyping for porting All Source Sensor Fusion mission applications to FCS environment.	0	0	260	1000
Studies, analysis, and prototyping of All Source Sensor Fusion processes for Block II DCGS-A.	0	0	0	1167
Initial extension of All Source Sensor Fusion guard technology into FCS environment.	0	0	200	1000
Extension of All Source Sensor Fusion controlled interface technology into Block II DCGS-A.	0	0	0	800
Totals	0	0	1337	7667

B. Other Program Funding Summary	FY 2002	FY 2003	FY 2004	FY 2005	FY 2006	FY 2007	FY 2008	FY 2009	To Compl	Total Cost
064321A All Source Analysis System, Project B19 ASAS Evolutionary Acquisition	41907	52043	18043	13947	10500	10793	11106	8896	Continuing	Continuing

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.

The DCGS-A program will be developed utilizing an Evolutionary Acquisition approach, providing Blocked capabilities and spiral development within each Block. Block 1 will enhance existing systems to establish the necessary interfaces, collaboration, data sharing capabilities, Home Station Operation Center and embedded FCS modules. Block 2 will pursue competitive development to enable maximum industry participation to acquire robust processing, exploitation, analysis visualization, and dissemination applications and supporting hardware to reduce ground station footprint and provide increased processing capabilities.

ARMY RDT&E COST ANALYSIS(R-3)

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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	TBD	TBD	0	0		937	2Q	6317	1Q	Continue	Continue	Continue
Subtotal:			0	0		937		6317		Continue	Continue	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

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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	300	1-4Q	Continue	Continue	Continue
Subtotal:			0	0		300		750		Continue	Continue	Continue
Project Total Cost:			0	0		1337		7667		Continue	Continue	Continue

Schedule Profile Detail (R-4a Exhibit)

February 2003

BUDGET ACTIVITY
7 - Operational system development

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PROJECT
D06

Schedule Detail	FY 2002	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
All-source Sensor Fusion Continuous Evaluation			1-4Q	1-4Q	1-4Q	1-4Q	1-4Q	1-4Q

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

February 2003

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

COST (In Thousands)		FY 2002 Actual	FY 2003 Estimate	FY 2004 Estimate	FY 2005 Estimate	FY 2006 Estimate	FY 2007 Estimate	FY 2008 Estimate	FY 2009 Estimate	Cost to Complete	Total Cost
D07	DCGS-A COMMON MODULES (JMIP)	0	0	21603	9594	21373	40759	44280	44698	0	182307

A. Mission Description and Budget Item Justification: DCGS-A will integrate common data management, visualization and exploitation tools that will create the software and hardware baseline for seamless multi-INT tasking, processing, exploitation, and dissemination (TPED). 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. In order to provide seamless multi-intelligence TPED, the DCGS-A program will develop fixed (Home Station Node), deployable configuration, and applications. 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 Future Combat System of Systems (FCS) and the Objective Force to provide tailored access to actionable information. DCGS-A will be Joint, Allied and Coalition interoperable. DCGS-A will be modular, scaleable, and tailorable to provide commanders flexibility in the force package to accomplish the specific mission. DCGS-A application – programs, applets, and toolsets – will be based on DoD standards and common throughout DCGS-A.

Accomplishments/Planned Program	FY 2002	FY 2003	FY 2004	FY 2005
Development of ISR modules to be embedded into Future Combat System (FCS) and other Objective Force systems.	0	0	7000	3150
Develop common processing/exploitation tools for DCGS-A Enterprise (Home Station Node, Deployable Configuration, and Embedded Application.)	0	0	3000	2000
DCGS-A Enterprise Integration (integration of processing, exploitation and dissemination capabilities)	0	0	4500	0
Test support for Block 1.	0	0	2730	864
Interoperability maintenance in support of FCS.	0	0	0	1580
DCGS-A Milestone B preparation.	0	0	500	0
DCGS-A multi-level security.	0	0	0	1000
DCGS-A modeling & simulation.	0	0	1100	500
Integrated logistics support(ILS) and training.	0	0	0	500
Imagery processing upgrades.	0	0	2773	0
Totals	0	0	21603	9594

B. Other Program Funding Summary	FY 2002	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	71836	44823	8306	18167	43471	42361	46342	50380	Continuing	Continuing
RDTE (PE 35208, Proj D08) DCGS-A JMIP	0	0	1046	6949	7029	7378	10713	10739	Continuing	Continuing
RDTE (PE 35208, Proj D06) DCGS-A JMIP	0	0	1337	7667	14706	19597	9813	9807	Continuing	Continuing
BZ7316 DCGS-A Unit of Employment	2277	11303	2687	9494	9885	24324	32982	33662	Continuing	Continuing
AZ2000 Guardrail Mods (GRIFIN only)	0	0	4966	4953	0	0	0	0	0	9919

C. Acquisition Strategy: The DCGS-A program will be developed utilizing an Evolutionary Acquisition approach, providing Blocked capabilities and spiral development within each Block. Block 1 will enhance existing systems to establish the necessary interfaces, collaboration, data sharing capabilities, Home Station Operation Center and embedded FCS modules. Block 2 will pursue competitive development to enable maximum industry participation to acquire robust processing, exploitation, analysis visualization, and dissemination applications and supporting hardware to reduce ground station footprint and provide increased processing capabilities.

ARMY RDT&E COST ANALYSIS(R-3)

February 2003

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 . Develop DCGS-A ISR Modules for FCS	Competitive CPIF/CPAF	TBD	0	0		6440	2Q	2898	1Q	Continue	Continue	Continue
b . Develop Common Processing/Exploitation tools for DCGS-A Enterprise	Competitive CPIF/CPAF	TBD	0	0		2760	2Q	1840	1Q	Continue	Continue	Continue
c . DCGS-A Enterprise Integration (processing, exploitation and dissemination capabilities)	Competitive CPIF/CPAF	TBD	0	0		4140	2Q	0		0	4140	0
d . Interoperability Maintenance in support of FCS	Competitive CPIF/CPAF	TBD	0	0		0		1453	1Q	Continue	Continue	Continue
e . DCGS-A MS B Preparation	Competitive CPIF/CPAF	TBD	0	0		460	2Q	0		0	460	0
f . DCGS-A Multi-level Security	Competitive CPIF/CPAF	TBD	0	0		0		920	1Q	Continue	Continue	Continue
g . DCGS-A Modeling and Simulation	Competitive CPIF/CPAF	TBD	0	0		1012	2Q	460	1Q	Continue	Continue	Continue

ARMY RDT&E COST ANALYSIS(R-3)

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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 . Integrated Logistics Support / Training	Competitive CPIF/CPAF	TBD	0	0		0		460	1Q	Continue	Continue	Continue
i . Imagery Processing Upgrades	Competitive CPIF/CPAF	TBD	0	0		2552	2Q	0		0	2552	0
Subtotal:			0	0		17364		8031		Continue	Continue	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		432	1Q	192	1Q	Continue	Continue	Continue
Subtotal:			0	0		432		192		Continue	Continue	Continue

ARMY RDT&E COST ANALYSIS(R-3)

February 2003

BUDGET ACTIVITY
7 - Operational system development

PE NUMBER AND TITLE
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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 for Block 1	Competitive CPIF/CPAF	TBD	0	0		2511	2Q	795	1Q	Continue	Continue	Continue
Subtotal:			0	0		2511		795		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 . Project Management	In House	PM DCGS-A	0	0		1296	1Q	576	1Q	Continue	Continue	Continue
Subtotal:			0	0		1296		576		Continue	Continue	Continue
Project Total Cost:			0	0		21603		9594		Continue	Continue	Continue

Schedule Profile Detail (R-4a Exhibit)

February 2003

BUDGET ACTIVITY
7 - Operational system development

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

PROJECT
D07

Schedule Detail	FY 2002	FY 2003	FY 2004	FY 2005	FY 2006	FY 2007	FY 2008	FY 2009
MS B for embedded DCGS-A (FCS)		3Q						
Award development contracts for DCGS-A			1Q					
Interoperability testing of DCGS-A Common Modules			4Q	1-3Q				
Embedded DCGS-A development		3-4Q	1-4Q	1-4Q	1-3Q			
IOT&E for Block I (FCS EUT)					3-4Q			
MS B for Block II (UE)			1Q					
Block II SDD			2-4Q	1-4Q	1-4Q	1-3Q		
Block II MS C						3Q		

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

February 2003

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

COST (In Thousands)		FY 2002 Actual	FY 2003 Estimate	FY 2004 Estimate	FY 2005 Estimate	FY 2006 Estimate	FY 2007 Estimate	FY 2008 Estimate	FY 2009 Estimate	Cost to Complete	Total Cost
D08	DCGS-A SENSOR INTEGRATION (JMIP)	0	0	1046	6949	7029	7378	10713	10739	0	43854

A. Mission Description and Budget Item Justification: Current limitations in Intelligence, Surveillance and Reconnaissance operations limit the ground Commander's ability to maximize use of a variety of intelligence sources. Visibility of all collection resources is unavailable to allow the tasking process to accurately and efficiently use all collection capabilities. There is limited capability to cue and slew sensors across intelligence domains and across Battlefield Operating Systems (BOS). DCGS-A will interoperate with a wide variety of Legacy and Objective Force sensors; manned and unmanned, space, air, ground platforms, and human sources. DCGS-A will provide the commander at the Unit of Action (UA) and Unit of Employment (UE) access to sensors tailored to support the mission. DCGS-A will maximize sensor access through common data and tasking formats to improve and accelerate the decision-action cycle-time. DCGS-A will receive Army, Joint, Coalition, and commercial sensor data via GIG components. DCGS-A will develop the capability to integrate the performance of Collection Management; Sensor TPPU; Single, Multi-INT, and All-Source Analysis; and Dissemination of products for use by the warfighter. DCGS-A will provide the Commander an ability to task, receive, process and exploit, analyze, disseminate, and present signals, signatures, human, imagery, terrain, and weather data, processed data, and information from US, Allied, and Coalition sensors/sources. DCGS-A sensor integration efforts completed under this project will improve the accuracy and timeliness of intelligence provided to the Commander and promote a standards-based ISR infrastructure to increase inter-Service and Agency collaboration and ISR platform management. DCGS-A will receive Army, Service, Joint, Coalition, and commercial sensor data via line of sight and beyond line of sight data links and cable communications networks.

Accomplishments/Planned Program	FY 2002	FY 2003	FY 2004	FY 2005
Develop and integrate Multi-INT sensor (HUMINT, IMINT, SIGINT, MASINT) modules into DCGS-A Enterprise.	0	0	0	2000
Develop and integrate DCGS-A geographic nodes and components for sensor data distribution in DCGS-A network.	0	0	0	3933
Develop DCGS-A Testbed	0	0	1046	1016
Totals	0	0	1046	6949

B. Other Program Funding Summary	FY 2002	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	71836	44823	8306	18167	43471	42361	46342	50380	Continuing	Continuing
RDTE (PE 35208, Proj D07) DCGS-A JMIP	0	0	21603	9594	21373	40759	44280	44698	Continuing	Continuing
RDTE (PE 35208, Proj D06) DCGS-A JMIP	0	0	1337	7667	14706	19597	9813	9807	Continuing	Continuing
BZ7316 DCGS-A Unit of Employment	2277	11303	2687	9494	9885	24324	32982	33662	Continuing	Continuing
AZ2000 GRCS Mods (DCGS-A GRIFIN only)	0	0	4966	4953	0	0	0	0	0	9919

C. Acquisition Strategy: The DCGS-A program will be developed utilizing an Evolutionary Acquisition approach, providing Blocked capabilities and spiral development within each Block. Block 1 will enhance existing systems to establish the necessary interfaces, collaboration, data sharing capabilities, Home Station Operation Center and embedded FCS modules. Block 2 will pursue competitive development to enable maximum industry participation to acquire robust processing, exploitation, analysis visualization, and dissemination applications and supporting hardware to reduce ground station footprint and provide increased processing capabilities.

ARMY RDT&E COST ANALYSIS(R-3)

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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		1840	1Q	Continue	Continue	Continue
b . Develop and Integrate DCGS-A geographic nodes and components for sensor data distribution in DCGS-A	Competitive CPIF/CPAF	TBD	0	0		0		3618	1Q	Continue	Continue	Continue
Subtotal:			0	0		0		5458		Continue	Continue	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(R-3)

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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 . Block 1 Testbed	Competitive CPIF/CPAF	TBD	0	0		846	2Q	935	1Q	0	1781	0
Subtotal:			0	0		846		935		0	1781	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		125	1Q	417	1Q	Continue	Continue	Continue
Subtotal:			0	0		125		417		Continue	Continue	Continue
Project Total Cost:			0	0		1046		6949		Continue	Continue	Continue

Schedule Profile Detail (R-4a Exhibit)

February 2003

BUDGET ACTIVITY
7 - Operational system development

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

PROJECT
D08

Schedule Detail	FY 2002	FY 2003	FY 2004	FY 2005	FY 2006	FY 2007	FY 2008	FY 2009
MS B for embedded DCGS-A (FCS)		3Q						
Embedded DCGS-A development		3-4Q	1-4Q	1-4Q	1-3Q			
IOT&E for Block I (FCS EUT)					3-4Q			
MS B Block II (UE)			1Q					
Block II SDD			2-4Q	1-4Q	1-4Q	1-3Q		
MS C for Block II						3Q		