

ARMY RDT&E BUDGET ITEM JUSTIFICATION (R2 Exhibit)

February 2006

BUDGET ACTIVITY

PE NUMBER AND TITLE

7 - Operational system development

0305208A - Distributed Common Ground/Surface Systems (JMIP)

COST (In Thousands)	FY 2005 Estimate	FY 2006 Estimate	FY 2007 Estimate	FY 2008 Estimate	FY 2009 Estimate	FY 2010 Estimate	FY 2011 Estimate	Cost to Complete	Total Cost
Total Program Element (PE) Cost	54013	91859	120562	83369	75365	18749	11172	Continuing	Continuing
956 Distributed Common Ground System (DCGS) (JMIP)	17413	17153	11805	12181	12582	3130	3089	Continuing	135673
D06 DCGS-A FUSION INTEGRATION (JMIP)	8983	18040	24561	24706	22937	4483	1107	Continuing	106127
D07 DCGS-A COMMON MODULES (JMIP)	17589	46136	76070	34901	28251	6397	4319	Continuing	234810
D08 DCGS-A SENSOR INTEGRATION (JMIP)	9389	9894	7456	10910	10926	4074	2003	Continuing	55675
D15 MUSE & TES TADSS (TIARA)	639	636	670	671	669	665	654	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. 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 to See First, Understand First, Act First and Finish Decisively. 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. DCGS-A 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.

Project 956 provides the DCGS-A enterprise system level design, net-centric architecture and infrastructure, to include integration of the U.S. Air Force developed DCGS Integrated Backbone (DIB). Project D06 provides single and Multi-INT automated fusion capabilities. Project D07 funds Technology Insertion of DCGS-A capabilities into Current Force systems, and System Development and Demonstration (SDD), to include a common set of ISR analysis tools. D08 provides sensor integration to include sensor control, tasking and interoperability. Project D15 funds Training Aids, Devices, Simulators and Simulations (TADSS) for the Tactical Exploitation System (TES).

DCGS-A includes hardware for Fixed and Mobile configurations 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 hardware and software are scaleable and tailored by echelon and to the requirements of each mission, task, and purpose. Within the Brigade Combat Teams (BCTs), DCGS-A provides the Mobile ISR capability as well as an embedded software application on the Future Combat System (FCS) FoS and other select platforms. At the Corps, Division and Echelons Above Corps (EAC), 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 Common Sensor (GRCS) Intelligence Processing Facility (IPF), Prophet Control, Common Ground Station (CGS), Digital Topographic Support System (DTSS) and Integrated Meteorological System (IMETS), sensor control and processing of select UAVs and Enhanced Trackwolf processing capabilities. DCGS-A will also integrate the capabilities currently developed and deployed by the Joint Intelligence Operations Capability-Iraq (JIOC-I) as a Quick Reaction Capability (QRC) in support of Operation Iraqi Freedom (OIF). DCGS-A is a key component of Transformation and a top Army priority.

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

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<u>B. Program Change Summary</u>	FY 2005	FY 2006	FY 2007
Previous President's Budget (FY 2006)	53911	91587	118891
Current BES/President's Budget (FY 2007)	54013	91859	120562
Total Adjustments	102	272	1671
Congressional Program Reductions		-10402	
Congressional Rescissions		-926	
Congressional Increases		11600	
Reprogrammings	102		
SBIR/STTR Transfer			
Adjustments to Budget Years			1671

Conference Language: Decrease of \$10 million due to funding ahead of need.

Project D06: + \$1.1 million for Distributed Common Ground Station-Army

Project D08: + \$3.0 million for Automatic Target Cueing System

Project 956: + \$4.1 million for National Defense Imagery Processing Program (NDIP)

Project 956: + \$3.4 million for Distributed Common Ground System

ARMY RDT&E BUDGET ITEM JUSTIFICATION (R2a Exhibit)								February 2006		
BUDGET ACTIVITY 7 - Operational system development			PE NUMBER AND TITLE 0305208A - Distributed Common Ground/Surface Systems (JMIP)					PROJECT 956		
COST (In Thousands)		FY 2005 Estimate	FY 2006 Estimate	FY 2007 Estimate	FY 2008 Estimate	FY 2009 Estimate	FY 2010 Estimate	FY 2011 Estimate	Cost to Complete	Total Cost
956	Distributed Common Ground System (DCGS) (JMIP)	17413	17153	11805	12181	12582	3130	3089	Continuing	135673
<p><u>A. Mission Description and Budget Item Justification:</u> 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 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.</p> <p>This project establishes the DCGS-A Federated Network Centric Enterprise, 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. An enterprise level approach based on a Service Oriented Architecture (SOA) 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.</p> <p>FY07 funds design, development and test of the DCGS-A enterprise level architecture and completes integration of the JIOC-I capability into the DCGS-A product line.</p>										
<u>Accomplishments/Planned Program</u>							<u>FY 2005</u>	<u>FY 2006</u>	<u>FY 2007</u>	
Joint interoperability test and evaluation to include Version 3 CTSF testing and FCS 1.1.							200	520	1500	
Design and development of DCGS-A enterprise level net-centric architecture in support of Current and Future Force systems.							16050	4965	9125	
Evaluate, integrate and test JIOC-I and other existing and new software applications and components for incorporation into the DCGS-A baseline.							1163	4168	1180	
Intelligence Data Exchange for Execution and Planning (IDEEP)							0	3400	0	
National Defense Imagery Processing Program							0	4100	0	
Total							17413	17153	11805	
<u>B. Other Program Funding Summary</u>		FY 2005	FY 2006	FY 2007	FY 2008	FY 2009	FY 2010	FY 2011	To Compl	Total Cost

ARMY RDT&E BUDGET ITEM JUSTIFICATION (R2a Exhibit)							February 2006		
BUDGET ACTIVITY 7 - Operational system development			PE NUMBER AND TITLE 0305208A - Distributed Common Ground/Surface Systems (JMIP)					PROJECT 956	
PE 0604321 CI/HUMINT Software Products (B41) (TIARA)	914	918	3278	1657	1724	3017	3223	CONT	CONT
BK5275 CI HUMINT Info Management System	33670	720	19694	26310	35087	10215	12494	CONT	CONT
<p>C. Acquisition Strategy DCGS-A will be executed via an evolutionary acquisition approach, providing incremental capability through Technology Insertion of Current Force systems and system development and demonstration (SDD) of CDD requirements. Each increment will incorporate and validate select DCGS-A capabilities into the overall DCGS-A system baseline, emphasizing migration of current force capabilities through integrated testing and continuous evaluation opportunities.</p>									

ARMY RDT&E COST ANALYSIS (R3)										February 2006		
BUDGET ACTIVITY				PE NUMBER AND TITLE						PROJECT		
7 - Operational system development				0305208A - Distributed Common Ground/Surface Systems (JMIP)						956		
I. Product Development	Contract Method & Type	Performing Activity & Location	Total PYs Cost	FY 2005 Cost	FY 2005 Award Date	FY 2006 Cost	FY 2006 Award Date	FY 2007 Cost	FY 2007 Award Date	Cost To Complete	Total Cost	Target Value of Contract
SETA Support to Visualization/Data Sharing, Models, Simulation & Prototypes	T&M	Booz-Allen, Eatontown, NJ	5523	3088	1-2Q	2417	1Q	1780	1-2Q	0	0	0
DCGS-A Product Selection and Integration	CP	CERDEC/Battle Labs	0	11150	2Q	1580	2Q	5178	1-4Q	0	0	Continue
SIL Integration of Version 3 and JIOC-I	MIPR	CERDEC/RDCOM Ft. Monmouth, NJ	0	1125	2-4Q	3820	1-4Q	0		0	0	0
Intelligence Data Exchange for Execution and Planning (IDEEP)	MIPR	Battle Labs	0	0		3400	2Q	0		0	0	0
National Defense Imagery Processing Program	MIPR	Battle Labs	0	0		4100	2Q	0		0	0	0
Subtotal:			5523	15363		15317		6958		0	0	Continue
II. Support Costs	Contract Method & Type	Performing Activity & Location	Total PYs Cost	FY 2005 Cost	FY 2005 Award Date	FY 2006 Cost	FY 2006 Award Date	FY 2007 Cost	FY 2007 Award Date	Cost To Complete	Total Cost	Target Value of Contract
Objective Doctrine/TTP Development To Support a Milestone B for ODCGS-A	MIPR	Ft. Huachuca, AZ	5623	1000	1-2Q	100	2Q	0		0	0	0
Matrix Support	MIPR	CECOM, Fort Monmouth NJ	3774	600	1Q	500	1Q	600	1Q	Continue	0	Continue
Subtotal:			9397	1600		600		600		Continue	0	Continue
III. Test And Evaluation	Contract Method & Type	Performing Activity & Location	Total PYs Cost	FY 2005 Cost	FY 2005 Award Date	FY 2006 Cost	FY 2006 Award Date	FY 2007 Cost	FY 2007 Award Date	Cost To Complete	Total Cost	Target Value of Contract
Joint Interoperability Test and	MIPR	INSCOM	1938	200	1-2Q	400	1-2Q	1500	2Q	0	0	0

ARMY RDT&E COST ANALYSIS (R3)									February 2006			
BUDGET ACTIVITY 7 - Operational system development				PE NUMBER AND TITLE 0305208A - Distributed Common Ground/Surface Systems (JMIP)						PROJECT 956		
Evaluation												
Test support for DCGS-A development	MIPR	CTSF, Ft. Hood	0	0	1-2Q	336	1Q	1997	2Q	0	0	0
Subtotal:			1938	200		736		3497		0	0	0
IV. Management Services	Contract Method & Type	Performing Activity & Location	Total PYs Cost	FY 2005 Cost	FY 2005 Award Date	FY 2006 Cost	FY 2006 Award Date	FY 2007 Cost	FY 2007 Award Date	Cost To Complete	Total Cost	Target Value of Contract
Project Management	In-House	PM, DCGS-A	4682	250	1Q	500	1Q	750	1Q	Continue	0	Continue
Subtotal:			4682	250		500		750		Continue	0	Continue
Project Total Cost:			21540	17413		17153		11805		Continue	0	Continue

Schedule Profile (R4 Exhibit)																	February 2006																		
BUDGET ACTIVITY								PE NUMBER AND TITLE																	PROJECT										
7 - Operational system development								0305208A - Distributed Common Ground/Surface Systems (JMIP)																	956										
Event Name								FY 05				FY 06				FY 07				FY 08				FY 09				FY 10				FY 11			
								1	2	3	4	1	2	3	4	1	2	3	4	1	2	3	4	1	2	3	4	1	2	3	4	1	2	3	4
(1) System Integration Lab (SIL) Standup								▲ ₁ SIL Standup																											
(2) Fixed Site Initial Operational Capability (IOC)												▲ ₂ Fixed Site IOC																							
(3) DCGS-A Version 3.0 Release												▲ ₃ Version 3.0 Release																							
(4) DCGS-A Transit Case Configuration IOC																▲ ₄ Transit Case IOC																			
(5) DCGS-A Participation in FCS Ex 1.1																▲ ₅ FCS Ex 1.1																			
(6) Version 4 BCT IOC																▲ ₆ Version 4 BCT IOC																			
(7) Version 4 Corps/Div IOC																▲ ₇ Version 4 Corps/Div IOC																			
(8) Milestone B																▲ ₈ Milestone B																			
(9) Limited User Test																				▲ ₉ LUT															
(10) Low Rate Initial Production																								▲ ₁₀ LRIP											
(11) DCGS-A IOT&E																												▲ ₁₁ IOT&E							
(12) Full Rate Production Decision																																▲ ₁₂ FRP			

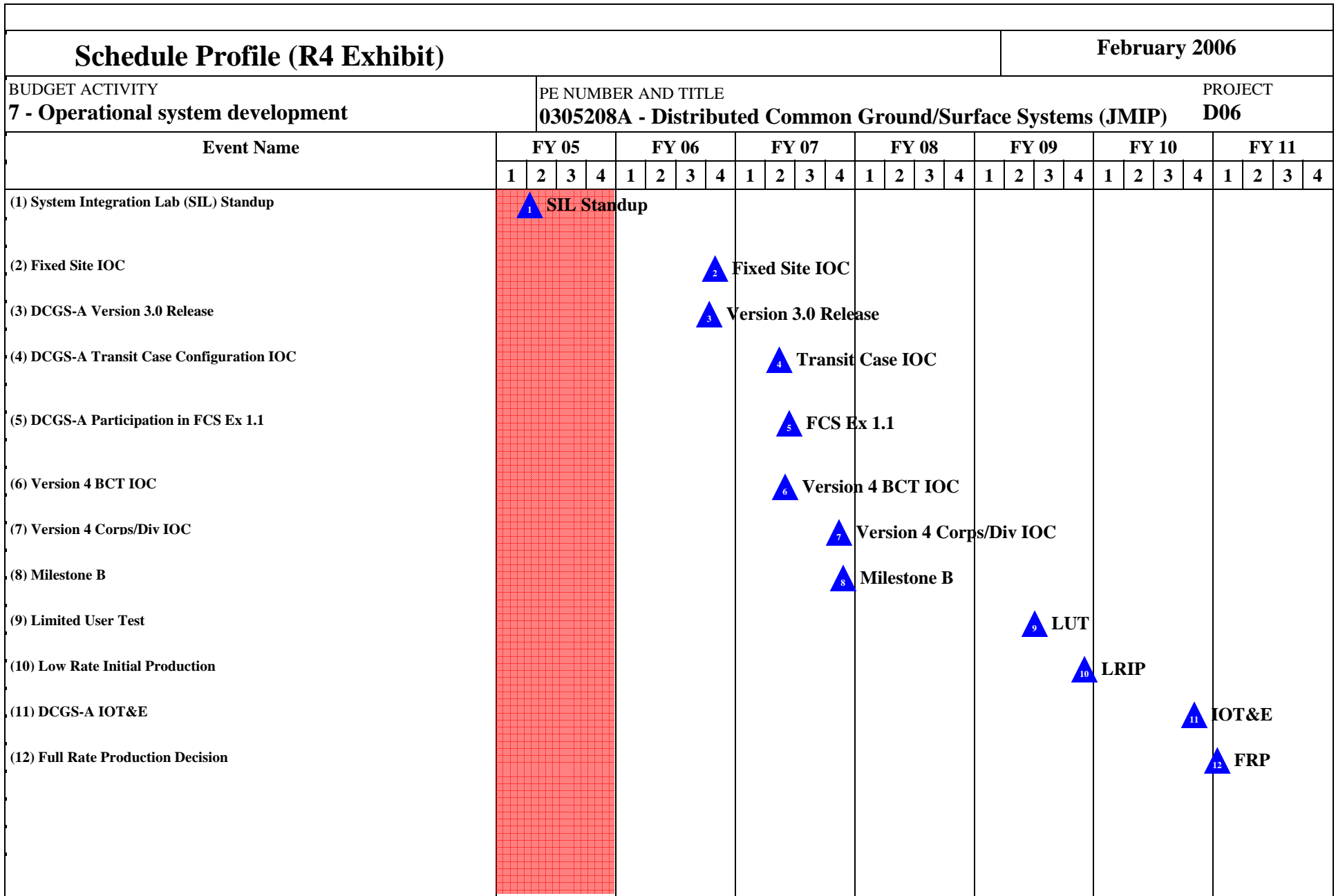
Schedule Detail (R4a Exhibit)						February 2006	
BUDGET ACTIVITY 7 - Operational system development			PE NUMBER AND TITLE 0305208A - Distributed Common Ground/Surface Systems (JMIP)				PROJECT 956
<u>Schedule Detail</u>	<u>FY 2005</u>	<u>FY 2006</u>	<u>FY 2007</u>	<u>FY 2008</u>	<u>FY 2009</u>	<u>FY 2010</u>	<u>FY 2011</u>
System Integration Lab (SIL) Standup	2Q						
Fixed Site Initial Operational Capability (IOC)		3-4Q					
DCGS-A Version 3.0 Release		3Q					
DCGS-A Transit Case Configuration IOC			2Q				
DCGS-A Participation in FCS Ex 1.1			2-3Q				
Version 4 BCT IOC			2Q				
Version 4 Corps/Div IOC			4Q				
Milestone B			4Q				
Limited User Test					3Q		
Low Rate Initial Production					4Q		
DCGS-A IOT&E						4Q	
Full Rate Production Decision							1Q

ARMY RDT&E BUDGET ITEM JUSTIFICATION (R2a Exhibit)								February 2006	
BUDGET ACTIVITY 7 - Operational system development				PE NUMBER AND TITLE 0305208A - Distributed Common Ground/Surface Systems (JMIP)				PROJECT D06	
COST (In Thousands)	FY 2005 Estimate	FY 2006 Estimate	FY 2007 Estimate	FY 2008 Estimate	FY 2009 Estimate	FY 2010 Estimate	FY 2011 Estimate	Cost to Complete	Total Cost
D06 DCGS-A FUSION INTEGRATION (JMIP)	8983	18040	24561	24706	22937	4483	1107	Continuing	106127
<p>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.</p> <p>This project establishes DCGS-A sensor fusion and all source production capabilities, leveraging previously completed algorithm, on-going Future Combat System (FCS) and Science and Technology (S&T) developmental efforts 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. The Sensor Fusion capability will address 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 sensor fusion capability will support all types of units across a broad spectrum of both traditional and non-traditional (e.g., SASO, SSC, NEO) operations, and improve interoperability with Joint, Allied, and Coalition forces.</p> <p>FY07 funds the development and integration of traditional and non-traditional multi-intelligence sensor fusion products and technologies into the DCGS-A baseline to produce a fully automated fusion capability.</p>									
Accomplishments/Planned Program						<u>FY 2005</u>	<u>FY 2006</u>	<u>FY 2007</u>	
Normalization and integration of sensor fusion process and Multi-INT sources, geospatial and weather data.						3656	6575	12583	
Enhance controlled interface technology for improved product distribution at multiple security levels.						1000	2839	4262	
Studies, analysis, and prototyping for porting sensor fusion mission applications into the FCS environment.						1500	1510	1899	
Transition of sensor fusion processes and Current Force systems capabilities into DCGS-A architecture/SOA environment.						2827	7116	5817	
Total						8983	18040	24561	

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BUDGET ACTIVITY 7 - Operational system development				PE NUMBER AND TITLE 0305208A - Distributed Common Ground/Surface Systems (JMIP)				PROJECT D06	
<u>B. Other Program Funding Summary</u>	FY 2005	FY 2006	FY 2007	FY 2008	FY 2009	FY 2010	FY 2011	To Compl	Total Cost
PE 654321, ASAS Evolutionary Acquisition	5353	7807	3462	3436	3417	3387	3387	CONT	CONT
<p><u>C. Acquisition Strategy</u> DCGS-A will be executed via an evolutionary acquisition approach, providing incremental capability through Technology Insertion of Current Force systems and system development and demonstration (SDD) of CDD requirements. Each increment will incorporate and validate select DCGS-A capabilities into the overall DCGS-A system baseline, emphasizing migration of current force capabilities through integrated testing and continuous evaluation opportunities.</p>									

ARMY RDT&E COST ANALYSIS (R3)										February 2006		
BUDGET ACTIVITY 7 - Operational system development				PE NUMBER AND TITLE 0305208A - Distributed Common Ground/Surface Systems (JMIP)						PROJECT D06		
I. Product Development	Contract Method & Type	Performing Activity & Location	Total PYs Cost	FY 2005 Cost	FY 2005 Award Date	FY 2006 Cost	FY 2006 Award Date	FY 2007 Cost	FY 2007 Award Date	Cost To Complete	Total Cost	Target Value of Contract
Enhancement of interfaces between sensor fusion processes and various INT domains.	MIPR	PM IE, Ft. Belvoir	910	3327	1Q	7175	1Q	917	1Q	0	0	Continue
Integrate FCS fusion capabilities into V3 baseline	MIPR	PM UA, TACOM	0	3156	1Q	2116	2-3Q	2065	2-3Q	44000	0	Continue
Transition of sensor fusion processes and Current Force systems capabilities to DCGS-A	MIPR	CERDEC/RDCOM	0	0		5749	1-4Q	18679	1-4Q	0	0	Continue
Integration of Overwatch capability	MIPR	PM IE	0	0		1100	1-2Q	0		0	0	0
Subtotal:			910	6483		16140		21661		44000	0	Continue
II. Support Costs	Contract Method & Type	Performing Activity & Location	Total PYs Cost	FY 2005 Cost	FY 2005 Award Date	FY 2006 Cost	FY 2006 Award Date	FY 2007 Cost	FY 2007 Award Date	Cost To Complete	Total Cost	Target Value of Contract
Matrix Support	MIPR	CECOM/RDCOM, Ft. Monmouth, NJ	100	400	1Q	620	1Q	620	1Q	Continue	0	Continue
SETA Support	Competitive T&M	Sytex, Vienna, VA	150	1900	1Q	880	1Q	980	1Q	Continue	0	Continue
Subtotal:			250	2300		1500		1600		Continue	0	Continue
III. Test And Evaluation	Contract Method & Type	Performing Activity & Location	Total PYs Cost	FY 2005 Cost	FY 2005 Award Date	FY 2006 Cost	FY 2006 Award Date	FY 2007 Cost	FY 2007 Award Date	Cost To Complete	Total Cost	Target Value of Contract
Prototype Test & Evaluation	MIPR	ATEC/EPG	0	0		150	1Q	950	1Q	Continue	0	Continue
Subtotal:			0	0		150		950		Continue	0	Continue

ARMY RDT&E COST ANALYSIS (R3)									February 2006			
BUDGET ACTIVITY 7 - Operational system development				PE NUMBER AND TITLE 0305208A - Distributed Common Ground/Surface Systems (JMIP)							PROJECT D06	
IV. Management Services	Contract Method & Type	Performing Activity & Location	Total PYs Cost	FY 2005 Cost	FY 2005 Award Date	FY 2006 Cost	FY 2006 Award Date	FY 2007 Cost	FY 2007 Award Date	Cost To Complete	Total Cost	Target Value of Contract
Project Management	In House	PM I&E/DCGS-A	150	200	1-2Q	250	1-2Q	350	1-2Q	Continue	0	Continue
Subtotal:			150	200		250		350		Continue	0	Continue
Project Total Cost:			1310	8983		18040		24561		Continue	0	Continue















Schedule Detail (R4a Exhibit)						February 2006	
BUDGET ACTIVITY 7 - Operational system development			PE NUMBER AND TITLE 0305208A - Distributed Common Ground/Surface Systems (JMIP)			PROJECT D06	
<u>Schedule Detail</u>	<u>FY 2005</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>
System Integration Lab (SIL) Standup	2Q						
Fixed Site Initial Operational Capability (IOC)		3-4Q					
DCGS-A Version 3.0 Release		3Q					
DCGS-A Transit Case Configuration IOC			2Q				
DCGS-A Participation in FCS Ex 1.1			2-3Q				
Version 4 BCT IOC			2Q				
Version 4 Corps/Div IOC			4Q				
Milestone B			4Q				
Limited User Test					3Q		
Low Rate Initial Production					4Q		
DCGS-A IOT&E						4Q	
Full Rate Production Decision							1Q

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BUDGET ACTIVITY 7 - Operational system development				PE NUMBER AND TITLE 0305208A - Distributed Common Ground/Surface Systems (JMIP)				PROJECT D07	
COST (In Thousands)	FY 2005 Estimate	FY 2006 Estimate	FY 2007 Estimate	FY 2008 Estimate	FY 2009 Estimate	FY 2010 Estimate	FY 2011 Estimate	Cost to Complete	Total Cost
D07 DCGS-A COMMON MODULES (JMIP)	17589	46136	76070	34901	28251	6397	4319	Continuing	234810
<p>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.</p> <p>This project provides for the design, development, integration and test of the DCGS-A system of systems at all echelons, from embedded DCGS-A up to Fixed Site operations. The effort includes system engineering, software integration and development, test & evaluation, and use of M&S to develop DCGS-A Mobile systems with common multi-function hardware and software combinations (i.e. user workstations) capable of performing all DCGS-A functions. Development will focus on common module hardware and software that is scaleable to allow commanders increased flexibility in the intelligence force package deployed such that it can be tailored to the echelon, location, and mission that DCGS-A will be required to support. Included in the development will be the stand-up of a Federated Systems Integration Lab (SIL) to assess and implement existing and new candidate software applications and components into the DCGS-A baseline design. A common set of ISR Analysis Tools to support collaboration, exploitation, fusion and collection management will developed that operate within the construct of distributed, reach operations within the DCGS-A enterprise in order to maximize data access and minimize forward footprint. This will ultimately result in a DCGS-A design that reduces physical and logistics footprint, eases training burden, and decreases sustainability requirements.</p> <p>FY07 funds Technology Insertion of DCGS-A capabilities into Current Force systems, common module multi-function hardware, and the DCGS-A V3 Transit Case configuration Initial Operational Capability (IOC). A System Integration Lab (SIL) will evaluate and integrate candidate software applications and implement the DoD mandated 10.2 DCGS Integration Backbone (DIB) for integration of Joint common components and interoperability amongst the Services.</p>									
Accomplishments/Planned Program						<u>FY 2005</u>	<u>FY 2006</u>	<u>FY 2007</u>	
SIL design, planning and implementation to include integration of 10.2 DIB and the JIOC-I Brain.						5800	6550	3970	
Embedded DCGS-A design/analysis and FCS support.						1500	2550	2950	
Evaluate, integrate and test existing and new software applications. Integrate Best Value components from DoD wide systems into DCGS-A baseline.						3089	20653	38295	
Two-way Battle Command to include Joint Command and Control (JC2)interoperability.						0	6033	8125	

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BUDGET ACTIVITY 7 - Operational system development			PE NUMBER AND TITLE 0305208A - Distributed Common Ground/Surface Systems (JMIP)					PROJECT D07		
Technology Insertion of integrated DCGS-A baseline into Current Force systems.						0	10350	22730		
FIA/Migration of TES-M to DCGS-A Fixed Site.						7200	0	0		
Total						17589	46136	76070		
B. Other Program Funding Summary		FY 2005	FY 2006	FY 2007	FY 2008	FY 2009	FY 2010	FY 2011	To Compl	Total Cost
BZ7316 DCGS-A Unit of Employment		10216	38003	65424	96042	100227	155275	167162	CONT	CONT
<u>C. Acquisition Strategy</u> DCGS-A will be executed via an evolutionary acquisition approach, providing incremental capability through Technology Insertion of Current Force systems and system development and demonstration (SDD) of CDD requirements. Each increment will incorporate and validate select DCGS-A capabilities into the overall DCGS-A system baseline, emphasizing migration of current force capabilities through integrated testing and continuous evaluation opportunities.										

ARMY RDT&E COST ANALYSIS (R3)										February 2006		
BUDGET ACTIVITY 7 - Operational system development				PE NUMBER AND TITLE 0305208A - Distributed Common Ground/Surface Systems (JMIP)						PROJECT D07		
I. Product Development	Contract Method & Type	Performing Activity & Location	Total PYs Cost	FY 2005 Cost	FY 2005 Award Date	FY 2006 Cost	FY 2006 Award Date	FY 2007 Cost	FY 2007 Award Date	Cost To Complete	Total Cost	Target Value of Contract
Embedded DCGS-A scalability design/analysis and FCS support	Competitive CPIF/CPAF	Boeing Corp, CA	3500	1500	2Q	2550	2Q	2805	2Q	Continue	0	Continue
System integration and test support for Spirals 1, 2 & 3	Sole Source CPIF/CPAF	Northrup Grumman, Linthicum, MD	3700	1873	1Q	0		0		0	0	0
Evaluate, integrate and test existing and new software applications and components into DCGS-A SOA	Multiple FFP/CPFF	TBD	3767	0		21460	2Q	30720	2Q	Continue	0	Continue
Technology Insertion of integrated DCGS-A baseline into Current Force systems	Multiple FFP/CPFF	TBD	0	0		10050	2-3Q	22330	2Q	0	0	0
SIL design, planning and implementation of 10.2 DIB and JIOC-I Brain	Sole Source	CERDEC, Ft. Monmouth	0	5000	2Q	5950	1Q	5580	1Q	Continue	0	Continue
FIA/TES-M Migration to Fixed Site	Sole Source	ASPO/Northrop Grumman	9600	7200	2Q	0		0		0	16800	0
Subtotal:			20567	15573		40010		61435		Continue	16800	Continue
II. Support Costs	Contract Method & Type	Performing Activity & Location	Total PYs Cost	FY 2005 Cost	FY 2005 Award Date	FY 2006 Cost	FY 2006 Award Date	FY 2007 Cost	FY 2007 Award Date	Cost To Complete	Total Cost	Target Value of Contract
Matrix Support	MIPR	RDCOM/CECOM, Ft. Monmouth, NJ	532	592	1Q	950	1Q	1125	1Q	Continue	0	Continue
SETA Support	Competitive T&M	Booz-Allen Hamilton	0	500	1-4Q	1138	1-2Q	0		0	0	0
SETA Support	Competitive T&M	TBD	0	0		1050	2-3Q	5175	1-2Q	0	0	0
Subtotal:			532	1092		3138		6300		Continue	0	Continue

ARMY RDT&E COST ANALYSIS (R3)									February 2006			
BUDGET ACTIVITY 7 - Operational system development				PE NUMBER AND TITLE 0305208A - Distributed Common Ground/Surface Systems (JMIP)							PROJECT D07	
III. Test And Evaluation	Contract Method & Type	Performing Activity & Location	Total PYs Cost	FY 2005 Cost	FY 2005 Award Date	FY 2006 Cost	FY 2006 Award Date	FY 2007 Cost	FY 2007 Award Date	Cost To Complete	Total Cost	Target Value of Contract
Test support	MIPR	ATEC	0	97		1500	2Q	4000	2Q	0	0	0
Subtotal:			0	97		1500		4000		0	0	0
IV. Management Services	Contract Method & Type	Performing Activity & Location	Total PYs Cost	FY 2005 Cost	FY 2005 Award Date	FY 2006 Cost	FY 2006 Award Date	FY 2007 Cost	FY 2007 Award Date	Cost To Complete	Total Cost	Target Value of Contract
Project Management	In House	PM DCGS-A	1048	827	1Q	1488	1Q	4335	1Q	Continue	0	Continue
Subtotal:			1048	827		1488		4335		Continue	0	Continue
Project Total Cost:			22147	17589		46136		76070		Continue	16800	Continue

Schedule Profile (R4 Exhibit)																	February 2006																		
BUDGET ACTIVITY								PE NUMBER AND TITLE																	PROJECT										
7 - Operational system development								0305208A - Distributed Common Ground/Surface Systems (JMIP)																	D07										
Event Name								FY 05				FY 06				FY 07				FY 08				FY 09				FY 10				FY 11			
								1	2	3	4	1	2	3	4	1	2	3	4	1	2	3	4	1	2	3	4	1	2	3	4	1	2	3	4
(1) System Integration Lab (SIL) Standup								 SIL Standup																											
(2) Fixed Site IOC												 Fixed Site IOC																							
(3) DCGS-A Version 3.0 Release												 Version 3.0 Release																							
(4) DCGS-A Transit Case IOC																 Transit Case IOC																			
(5) DCGS-A Participation in FCS Ex 1.1																 FCS Ex 1.1																			
(6) Version 4 BCT IOC																 Version 4 BCT IOC																			
(7) Version 4 Corps/Div IOC																				 Version 4 Corps/Div IOC															
(8) Milestone B																				 Milestone B															
(9) Limited User Test																								 LUT											
(10) Low Rate Initial Production																								 LRIP											
(11) DCGS-A IOT&E																												 IOT&E							
(12) Full Rate Production Decision																												 FRP							

Schedule Detail (R4a Exhibit)						February 2006	
BUDGET ACTIVITY 7 - Operational system development			PE NUMBER AND TITLE 0305208A - Distributed Common Ground/Surface Systems (JMIP)			PROJECT D07	
<u>Schedule Detail</u>	<u>FY 2005</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>
System Integration Lab (SIL) Standup	2Q						
Fixed Site Initial Operational Capability		3-4Q					
DCGS-A Version 3.0 Release		3Q					
DCGS-A Transit Case Configuration IOC			2Q				
DCGS-A Participation in FCS Ex 1.1			3-4Q				
Version 4 BCT IOC			2Q				
Version 4 Corps/Div IOC			4Q				
Milestone B			4Q				
Limited User Test					3Q		
Low Rate Initial Production					4Q		
DCGS-A IOT&E						4Q	
Full Rate Production Decision							1Q

ARMY RDT&E BUDGET ITEM JUSTIFICATION (R2a Exhibit)								February 2006																						
BUDGET ACTIVITY 7 - Operational system development				PE NUMBER AND TITLE 0305208A - Distributed Common Ground/Surface Systems (JMIP)				PROJECT D08																						
COST (In Thousands)		FY 2005 Estimate	FY 2006 Estimate	FY 2007 Estimate	FY 2008 Estimate	FY 2009 Estimate	FY 2010 Estimate	FY 2011 Estimate	Cost to Complete	Total Cost																				
D08	DCGS-A SENSOR INTEGRATION (JMIP)	9389	9894	7456	10910	10926	4074	2003	Continuing	55675																				
<p>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.</p> <p>This project addresses ISR sensor integration and interoperability with existing and new platforms and sensors to include a common data link solution.</p> <p>FY07 funds transition, test and integration of new and Current Force sensors into the DCGS-A system design and architecture.</p>																														
<u>Accomplishments/Planned Program</u>						<u>FY 2005</u>	<u>FY 2006</u>	<u>FY 2007</u>																						
Isolate and integrate Current Force Multi-INT sensor (HUMINT, IMINT, SIGINT, MASINT) modules into the DCGS-A network.						6054	3840	3300																						
Planning and analysis of Future Force Multi-INT sensor modules for incorporation into the DCGS-A network.						755	950	1152																						
Refactor Current Force ISR capabilities in the DCGS-A infrastructure.						2580	5104	3004																						
Total						9389	9894	7456																						
<p><u>B. Other Program Funding Summary</u></p> <table border="1"> <tr> <td></td> <td>FY 2005</td> <td>FY 2006</td> <td>FY 2007</td> <td>FY 2008</td> <td>FY 2009</td> <td>FY 2010</td> <td>FY 2011</td> <td>To Compl</td> <td>Total Cost</td> </tr> <tr> <td>BZ7316 DCGS-A Unit of Employment</td> <td>10216</td> <td>38003</td> <td>65424</td> <td>96042</td> <td>100227</td> <td>155275</td> <td>167162</td> <td>CONT</td> <td>CONT</td> </tr> </table>												FY 2005	FY 2006	FY 2007	FY 2008	FY 2009	FY 2010	FY 2011	To Compl	Total Cost	BZ7316 DCGS-A Unit of Employment	10216	38003	65424	96042	100227	155275	167162	CONT	CONT
	FY 2005	FY 2006	FY 2007	FY 2008	FY 2009	FY 2010	FY 2011	To Compl	Total Cost																					
BZ7316 DCGS-A Unit of Employment	10216	38003	65424	96042	100227	155275	167162	CONT	CONT																					
<p>C. Acquisition Strategy DCGS-A will be executed via an evolutionary acquisition approach, providing incremental capability through Technology Insertion of Current Force systems and system development and demonstration (SDD) of CDD requirements. Each increment will incorporate and validate select DCGS-A capabilities into the overall</p>																														

ARMY RDT&E BUDGET ITEM JUSTIFICATION (R2a Exhibit)	February 2006
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ARMY RDT&E BUDGET ITEM JUSTIFICATION (R2a Exhibit)	February 2006
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BUDGET ACTIVITY
7 - Operational system development

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

PROJECT
D08

7 - Operational system development

0305208A - Distributed Common Ground/Surface Systems (JMIP)

D08

ARMY RDT&E COST ANALYSIS (R3)										February 2006		
BUDGET ACTIVITY				PE NUMBER AND TITLE						PROJECT		
7 - Operational system development				0305208A - Distributed Common Ground/Surface Systems (JMIP)						D08		
I. Product Development	Contract Method & Type	Performing Activity & Location	Total PYs Cost	FY 2005 Cost	FY 2005 Award Date	FY 2006 Cost	FY 2006 Award Date	FY 2007 Cost	FY 2007 Award Date	Cost To Complete	Total Cost	Target Value of Contract
Develop and Integrate DCGS-A Multi-INT Sensor Modules	MIPR	CERDEC, Ft. Monmouth	0	5827	2Q	5264	2Q	3567	1Q	Continue	0	Continue
Develop and Integrate components for sensor data distribution in DCGS-A	Sole Source CPIF	SRE, Susquehanna, PA	0	2498	3Q	3000	2Q	3339	1Q	Continue	0	Continue
Subtotal:			0	8325		8264		6906		Continue	0	Continue
II. Support Costs	Contract Method & Type	Performing Activity & Location	Total PYs Cost	FY 2005 Cost	FY 2005 Award Date	FY 2006 Cost	FY 2006 Award Date	FY 2007 Cost	FY 2007 Award Date	Cost To Complete	Total Cost	Target Value of Contract
Matrix Support	MIPR	CECOM	75	150	1Q	150	1Q	150	1Q	Continue	525	Continue
Subtotal:			75	150		150		150		Continue	525	Continue
III. Test And Evaluation	Contract Method & Type	Performing Activity & Location	Total PYs Cost	FY 2005 Cost	FY 2005 Award Date	FY 2006 Cost	FY 2006 Award Date	FY 2007 Cost	FY 2007 Award Date	Cost To Complete	Total Cost	Target Value of Contract
Integration and test of Current Force sensor modules into DCGS-A Spirals.	Competitive CPIF/CPAF	Northrop Grumman, Linthicum, MD	833	0		0		0		0	833	0
Subtotal:			833	0		0		0		0	833	0
IV. Management Services	Contract Method & Type	Performing Activity & Location	Total PYs Cost	FY 2005 Cost	FY 2005 Award Date	FY 2006 Cost	FY 2006 Award Date	FY 2007 Cost	FY 2007 Award Date	Cost To Complete	Total Cost	Target Value of Contract
Program Management	In House	PM DCGS-A	115	914	1Q	1480	1Q	400	1Q	Continue	0	Continue

ARMY RDT&E COST ANALYSIS (R3)							February 2006		
BUDGET ACTIVITY 7 - Operational system development	PE NUMBER AND TITLE 0305208A - Distributed Common Ground/Surface Systems (JMIP)						PROJECT D08		
Subtotal:	115	914		1480		400	Continue	0	Continue
Project Total Cost:	1023	9389		9894		7456	Continue	1358	Continue

Schedule Profile (R4 Exhibit)																		February 2006																	
BUDGET ACTIVITY								PE NUMBER AND TITLE																		PROJECT									
7 - Operational system development								0305208A - Distributed Common Ground/Surface Systems (JMIP)																		D08									
Event Name								FY 05				FY 06				FY 07				FY 08				FY 09				FY 10				FY 11			
								1	2	3	4	1	2	3	4	1	2	3	4	1	2	3	4	1	2	3	4	1	2	3	4	1	2	3	4
(1) System Integration Lab (SIL) Standup								▲ ₁ SIL Standup																											
(2) Fixed Site IOC												▲ ₂ Fixed Site IOC																							
(3) DCGS-A Version 3.0 Release												▲ ₃ Version 3.0 Release																							
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(6) Version 4 BCT IOC																▲ ₆ Version 4 BCT IOC																			
(7) Version 4 Corps/Div IOC																▲ ₇ Version 4 Corps/Div IOC																			
(8) Milestone B																▲ ₈ Milestone B																			
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(10) Low Rate Initial Production																								▲ ₁₀ LRIP											
(11) DCGS-A IOT&E																												▲ ₁₁ IOT&E							
(12) Full Rate Production Decision																																▲ ₁₂ FRP			

Schedule Detail (R4a Exhibit)						February 2006	
BUDGET ACTIVITY 7 - Operational system development			PE NUMBER AND TITLE 0305208A - Distributed Common Ground/Surface Systems (JMIP)				PROJECT D08
<u>Schedule Detail</u>	<u>FY 2005</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>
System Integration Lab (SIL) Standup	2Q						
Fixed Site Initial Operational Capability (IOC)		3-4Q					
DCGS-A Version 3.0 Release		3Q					
DCGS-A Transit Case Configuration			2Q				
DCGS-A Participation in FCS Ex 1.1			2Q				
Version 4 BCT IOC			2Q				
Version 4 Corps/Div IOC			4Q				
Milestone B			4Q				
Limited User Test					3Q		
Low Rate Initial Production					4Q		
DCGS-A IOT&E						4Q	
Full Rate Production Decision							1Q