Exhibit R-2, RDT&E Budget Item Justification: PB 2011 Army										DATE: February 2010	
APPROPRIATION/BUDGET ACTIVITY 2040: *Research, Development, Test & Evaluation, Army* BA 7: *Operational Systems Development*				R-1 ITEM NOMENCLATURE PE 0305208A: *Distributed Common Ground/Surface Systems*							
COST ($ in Millions)	**FY 2009 Actual**	**FY 2010 Estimate**	**FY 2011 Base Estimate**	**FY 2011 OCO Estimate**	**FY 2011 Total Estimate**	**FY 2012 Estimate**	**FY 2013 Estimate**	**FY 2014 Estimate**	**FY 2015 Estimate**	**Cost To Complete**	**Total Cost**
Total Program Element	88.483	188.465	103.002	16.200	119.202	31.699	28.692	20.426	20.900	Continuing	Continuing
956: *Distributed Common Ground System (DCGS) (MIP)*	22.470	187.815	102.382	16.200	118.582	31.699	28.692	20.426	20.900	Continuing	Continuing
D06: *DCGS-A FUSION INTEGRATION (MIP)*	6.604	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	Continuing	Continuing
D07: *DCGS-A COMMON MODULES (MIP)*	47.872	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	Continuing	Continuing
D08: *DCGS-A SENSOR INTEGRATION (MIP)*	10.872	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	Continuing	Continuing
D15: *MUSE & TES TADSS (MIP)*	0.665	0.650	0.620	0.000	0.620	0.000	0.000	0.000	0.000	Continuing	Continuing

A. Mission Description and Budget Item Justification

Distributed Common Ground System - Army (DCGS-A) is the Intelligence, Surveillance and Reconnaissance (ISR) system of systems for Joint, Interagency, Allied, Coalition, and National data analysis, information sharing and collaboration. DCGS-A is also the ISR component of the modular and future force Battle Command System (BCS) and the Army's primary system for ISR tasking of sensors, processing of data, exploitation of data, and dissemination of intelligence information about the threat, weather, and terrain at all echelons. It provides access to theater and national intelligence collection, analysis, early warning and targeting capabilities in support of commanders at all echelons. DCGS-A will vertically and horizontally synchronize ISR Task, Post, Process and Use (TPPU) efforts; and operate in a networked environment at multiple security levels. DCGS-A provides a single integrated ISR ground processing system composed of joint common components that are interoperable with sensors, other information sources, all Battlefield Operating Systems (BOS), and the Department of Defense (DoD) DCGS Family of Systems. DCGS-A software is tailored by echelon and scalable to the requirements of each mission, task, and purpose. 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 by providing continuous acquisition and synthesis of data and information from Joint, Interagency, Intergovernmental, and Multi-national (JIIM) sources that will permit the future Modular Force to maintain an updated and accurate understanding of the operational environment. DCGS-A will facilitate Seeing and Knowing on the battlefield- the fundamental precursor to the understanding that underpins the Army's Battle Command concept. DCGS-A will contribute to visualization and situational awareness, thereby enhancing tactical maneuver, maximizing combat power and enhancing the ability to operate in an unpredictable and changing environment throughout the operational spectrum. It will facilitate the rapid planning, execution and synchronization of all Warfighting Functions resulting in the current and Future Force ability to operate within the enemy's decision cycle. 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 of relevant red (threat), gray (non-

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aligned), and environmental (weather and terrain) information. DCGS-A replaces the ground processing capabilities of nine current force systems with a common, integrated capability that is fully interoperable with Network Centric Enterprise Services (NCES). DCGS-A will provide a net-centric, enterprised Intelligence, Surveillance, and Reconnaissance (ISR), weather, geospatial engineering, and space operations capability to Maneuver, Maneuver Support and Maneuver Sustainment Support organizations at all echelons from the Battalion to the Joint Task Force (JTF). DCGS-A Mobile will provide the capabilities necessary for Commanders to access information, task organic sensors, and synchronize non-organic sensor assets with their organic assets. These services (provided by the Network-Centric Enterprise Services (NCES)) will be shared by Joint Commanders across an enterprise using the DCGS Integration Backbone (DIB) to enhance interoperability of ISR information through the use of common enterprise standards and services. DCGS-A will enable theater and national intelligence organizations to provide dedicated "tactical overwatch" primarily from fixed locations through focused multi-discipline and all-source fusion applications and analysis. In all modes of operations, the Commander will receive timely and accurate targeting information, intelligence products and predictions on probable enemy courses of action. DCGS-A Projects D06 (Fusion Integration), D07 (Common Modules) and D08 (Sensor Integration) have been consolidated into a single DCGS-A Project (956) for ease of reporting purposes beginning in FY10. Project 956 provides the DCGS-A enterprise system level design, net-centric architecture and infrastructure, integration of the DCGS Integrated Backbone (DIB), single and Multi-Intelligence automated fusion capabilities, development of a common set of ISR analysis tools, and 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 scalable and tailored by echelon and is interoperable with sensors, other Battlefield Operating Systems (BOS), and the DoD Distributed Common Ground/Surface System (DCG/SS) Family of Systems (FoS). Within the Brigade Combat Teams (BCTs), DCGS-A provides the Mobile ISR capability as well as an embedded software application for future battle command 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: Joint Intelligence Operations Capability-Iraq (JIOC-I), All Source Analysis System (ASAS), Counter Intelligence/Human Intelligence (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 Unmanned Aerial Vehicles (UAVs) and Enhanced Trackwolf processing capabilities. DCGS-A is a key component of Transformation and a top Army priority.

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B. Program Change Summary ($ in Millions)

	FY 2009	FY 2010	FY 2011 Base	FY 2011 OCO	FY 2011 Total
Previous President's Budget	68.662	188.414	34.149	0.000	34.149
Current President's Budget	88.483	188.465	103.002	16.200	119.202
Total Adjustments	19.821	0.051	68.853	16.200	85.053
• Congressional General Reductions		-0.989			
• Congressional Directed Reductions		0.000			
• Congressional Rescissions	0.000	0.000			
• Congressional Adds		1.040			
• Congressional Directed Transfers		0.000			
• Reprogrammings	19.821	0.000			
• SBIR/STTR Transfer	0.000	0.000			
• Adjustments to Budget Years	0.000	0.000	68.853	16.200	85.053

Change Summary Explanation

Change Summary Explanation: Funding - FY 2009: Project D07 $9,821 BTR and $10,000 ATR for continued development of new capabilities for Mobile Basic. FY 2011 Project 956 $16,200 Anticipated FY 2011 Overseas Contingency Operations request. FY 2011: Project 956 $68,853 increase to support continued Distributed Common Ground System-Army development.

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COST ($ in Millions)	FY 2009 Actual	FY 2010 Estimate	FY 2011 Base Estimate	FY 2011 OCO Estimate	FY 2011 Total Estimate	FY 2012 Estimate	FY 2013 Estimate	FY 2014 Estimate	FY 2015 Estimate	Cost To Complete	Total Cost
956: *Distributed Common Ground System (DCGS) (MIP)*	22.470	187.815	102.382	16.200	118.582	31.699	28.692	20.426	20.900	Continuing	Continuing
Quantity of RDT&E Articles											

A. Mission Description and Budget Item Justification

Distributed Common Ground System - Army (DCGS-A) is the Army's primary system for Intelligence, Surveillance and Reconnaissance (ISR) tasking of sensors, posting of data, processing information, using /exploiting intelligence information about the threat, weather, and terrain at all echelons, and disseminating data, information within a network-centric enterprise. DCGS-A will provide the capabilities necessary for Commanders to access information, task organic sensors, and synchronize non-organic sensor assets with their organic assets. DCGS-A continuously acquires and synthesizes data from Joint, Interagency, Intergovernmental, and Multi-national (JIIM) sources that permits the future Modular Force to maintain an updated and accurate understanding of the operational environment. DCGS-A will contribute to visualization and situational awareness, thereby enhancing tactical maneuver, maximizing combat power and enhancing the ability to operate in an unpredictable and changing environment throughout the operational spectrum. It will facilitate the rapid planning, execution, and synchronization of all warfighting functions resulting in the Current and Future Force's ability to operate within the enemy's decision cycle.DCGS-A is an integrated ISR ground processing system, operating in a secure, distributed, and collaborative environment, enabled by a network-centric enterprise, across multiple security levels and networks (JWICS, SIPRNET, NSANet, NIPRNET, and coalition). It provides distributed ISR planning, management, control and tasking, multi-intelligence fusion, and robust joint, allied, and coalition forces interoperability. It empowers commanders, decision makers, and analysts with ISR information and fused products at all echelons to support the execution of battle command, synchronization of fires and effects, rapid shifting of battle focus, situational understanding, and force protection, thereby enabling them to fight in ways that exceed the limitations of current doctrine. DCGS-A is the centerpiece of the Army ISR framework and the enabler for all intelligence operations at Joint Task Force (JTF) and below. It is the ISR component of the Army's Future Force Battle Command System (BCS) and will be fully interoperable with the Army Battle Command Systems (ABCS).DCGS-A Mobile Basic establishes the architecture to achieve DCGS-A requirements by providing an organic net-centric ISR capability in a mobile (vehicle mounted) configuration that will support deployed Army Forces with connectivity to tactical, Joint, and National ISR data, information, and intelligence. It consolidates and replaces the capabilities of nine current systems with a common, integrated capability, interoperable with Network Centric Services and Future Combat Systems. It provides the foundation from which the full DCGS-A requirements will be realized. This foundation includes the system design, hardware and software architecture, and infrastructure based on a Service Oriented Architecture providing Commanders access to ISR ground stations, and data exchange with Battle Command systems, thereby improving intelligence sharing and understanding. It will achieve joint, allied and coalition interoperability through implementation of the DCGS Integration Backbone (DIB). It will mature sensor fusion and all source production capabilities and will leverage Science and Technology (S&T) efforts as applicable to meet the requirements for battle management, situational awareness, intelligence preparation of the battlespace , battle damage assessments, course of action/predictive analysis, wargaming, target development, collection management, ISR synchronization, electronic warfare/countermeasures, force protection, indications and warnings, operational security, and battlefield visualization. It also addresses ISR sensor integration and interoperability with existing and new platforms and sensors including a common data link solution.FY2011 Core ($102,382) funds complete the design, development and test of the DCGS-A Mobile Basic configuration, including the DCGS-A Software

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Baseline (DSB). It includes: program management; system design; and software development, test, and integration; quality assurance, material procurement; fabrication; assembly; system integration and test; training development; logistics support; and modeling and simulation required to develop DCGS-A Mobile Basic. Earned Value Management, Risk Management, and Configurations Management, and program security are essential functions of system development. With the delivery of test articles to support operational testing and post test deployment to operational units are training materials, Technical Manuals, and any required post test fixes with Field Service support. It provides system documentation required to proceed to Low Rate Initial Production (LRIP) and Full Rate Production after the appropriate acquisition decisions.FY2011 OCO ($16,200) Provides $16.2M for the (1) extension of the DCGS-A SIPR Cloud architecture and infrastructure to include access, ingestion, processing, exploitation, dissemination, and integrated visualization of next generation data sets (i.e., FMV, High Resolution Imagery, DOMEX, Biometric, SIGINT, MASINT); (2) development of next generation tools for search, discovery, and advanced analytics, to include multi-Cloud discovery and federated query, content extraction, precision search for targeting, automated imagery registration, and context search across all data sets; (3) cloud-cloud data exchange; (4) PL3 or greater security; (5) virtual system and data management to include automated / dynamic provisioning and enhanced scalability, (6) extended development and test environment; and (7) participation in capability demonstrations (i.e., Empire Challenge). Capability will be leveraged from DoD and IC. Provides life cycle cost savings through commodity hardware, unified data architecture, shared resources (i.e., tools, processors) and enterprise accessThe DCGS-A program will allow Commanders to focus intelligence resources, achieve decisive impact and define deliberately acceptable risk supporting Brigade Combat Team and Division/Corps operations. The DCGS-A program will field capabilities following the Army Force Generation (ARFORGEN) model to ensure deploying units can maintain relevance against an adaptive threat in a rapidly changing operational environment that encompasses a wide range of Irregular Warfare (IW) and Major Combat Operations (MCO), with provisions for deployment of emerging analytics/tools and a promise of making the power of peta-scale information stores available to individual Commanders

B. Accomplishments/Planned Program ($ in Millions)

	FY 2009	FY 2010	FY 2011 Base	FY 2011 OCO	FY 2011 Total
Program #1	5.640	123.431	102.382	0.000	102.382
Continue design and development of DCGS-A enterprise level net-centric architecture to include: Development & Integration of DCGS-A Software; Development and Assembly of Competitive Data Package; Limited User Test, Developmental Testing, Mobile Basic Data and Program Management support costs					
FY 2009 Accomplishments: FY 2009					
FY 2010 Plans: FY 2010					

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B. Accomplishments/Planned Program ($ in Millions)

	FY 2009	FY 2010	FY 2011 Base	FY 2011 OCO	FY 2011 Total
FY 2011 Base Plans: FY 2011 Base *FY 2011 OCO Plans:* FY 2011 OCO					
Program #2 OCO Global Unified Data Environment (Cloud) development - creates near real-time multi-intelligence analytics environment, extends access and reduces analytic response time. *FY 2009 Accomplishments:* FY 2009 *FY 2010 Plans:* FY 2010 *FY 2011 Base Plans:* FY 2011 Base *FY 2011 OCO Plans:* FY 2011 OCO	0.000	0.000	0.000	13.200	13.200
Program #3 Human Terrain Teams - Develop software for the MAP-HT system for capabilities above the baseline 1.0 release. *FY 2009 Accomplishments:* FY 2009	0.000	0.000	0.000	3.000	3.000

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B. Accomplishments/Planned Program ($ in Millions)

	FY 2009	FY 2010	FY 2011 Base	FY 2011 OCO	FY 2011 Total
FY 2010 Plans: FY 2010 *FY 2011 Base Plans:* FY 2011 Base *FY 2011 OCO Plans:* FY 2011 OCO					
Program #4 Continue to evaluate, integrate and test new software applications and components for incorporation into the DCGS-A Software Baseline (DSB). *FY 2009 Accomplishments:* FY 2009 *FY 2010 Plans:* FY 2010 *FY 2011 Base Plans:* FY 2011 Base *FY 2011 OCO Plans:* FY 2011 OCO	2.160	21.601	0.000	0.000	0.000
Program #5 Ongoing Army and Joint interoperability testing and evaluation to include Central Test Support Facility (CTSF) testing.	2.110	1.600	0.000	0.000	0.000

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B. Accomplishments/Planned Program ($ in Millions)

	FY 2009	FY 2010	FY 2011 Base	FY 2011 OCO	FY 2011 Total
FY 2009 Accomplishments: FY 2009 *FY 2010 Plans:* FY 2010 *FY 2011 Base Plans:* FY 2011 Base *FY 2011 OCO Plans:* FY 2011 OCO					
Program #6 Continue to migrate sensor fusion processes and Current Force systems capabilities (multi-INT sources, geospatial and weather data) into DCGS-A Service Oriented Architecture (SOA) environment. Continue development and integration of SIGINT and All Source applications and the integration framework for DCGS-A Multi-Function Workstation (MFWS). (previously Project D06) *FY 2009 Accomplishments:* FY 2009 *FY 2010 Plans:* FY 2010 *FY 2011 Base Plans:* FY 2011 Base	1.360	2.558	0.000	0.000	0.000

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B. Accomplishments/Planned Program ($ in Millions)

	FY 2009	FY 2010	FY 2011 Base	FY 2011 OCO	FY 2011 Total
FY 2011 OCO Plans: FY 2011 OCO					
Program #7 Standard Sharable Geospatial Foundation Development to support Unified Battle Command Shared Low Bandwidth Imagery *FY 2009 Accomplishments:* FY 2009 *FY 2010 Plans:* FY 2010 *FY 2011 Base Plans:* FY 2011 Base *FY 2011 OCO Plans:* FY 2011 OCO	0.000	3.550	0.000	0.000	0.000
Program #8 Continue to develop and enhance two-way Battle Command to include Joint Command and Control (JC2) interoperability. (previously Project D07) *FY 2009 Accomplishments:* FY 2009 *FY 2010 Plans:* FY 2010	0.000	5.665	0.000	0.000	0.000

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B. Accomplishments/Planned Program ($ in Millions)

	FY 2009	FY 2010	FY 2011 Base	FY 2011 OCO	FY 2011 Total
FY 2011 Base Plans: FY 2011 Base *FY 2011 OCO Plans:* FY 2011 OCO					
Program #9 Continue to isolate and integrate Current Force Multi-INT sensor (Human Intelligence, Imagery Intelligence, Signal Intelligence, Measurement and Signature Intelligence) modules into the DCGS-A network. Continued planning and analysis of Future Force Multi-INT sensor modules for incorporation into the DCGS-A network. (previously Project D08) *FY 2009 Accomplishments:* FY 2009 *FY 2010 Plans:* FY 2010 *FY 2011 Base Plans:* FY 2011 Base *FY 2011 OCO Plans:* FY 2011 OCO	0.000	5.370	0.000	0.000	0.000
Program #10 Continue Asymmetric Threat Response and Analysis Project (ATRAP).	2.400	0.000	0.000	0.000	0.000

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B. Accomplishments/Planned Program ($ in Millions)

	FY 2009	FY 2010	FY 2011 Base	FY 2011 OCO	FY 2011 Total
FY 2009 Accomplishments: FY 2009 *FY 2010 Plans:* FY 2010 *FY 2011 Base Plans:* FY 2011 Base *FY 2011 OCO Plans:* FY 2011 OCO					
Program #11 Continue Effects Based Approach to Operations. *FY 2009 Accomplishments:* FY 2009 *FY 2010 Plans:* FY 2010 *FY 2011 Base Plans:* FY 2011 Base *FY 2011 OCO Plans:* FY 2011 OCO	1.600	0.000	0.000	0.000	0.000
Program #12	2.000	1.040	0.000	0.000	0.000

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B. Accomplishments/Planned Program ($ in Millions)

	FY 2009	FY 2010	FY 2011 Base	FY 2011 OCO	FY 2011 Total
Continue Heuristic Internet Protocol Engine. *FY 2009 Accomplishments:* FY 2009 *FY 2010 Plans:* FY 2010 *FY 2011 Base Plans:* FY 2011 Base *FY 2011 OCO Plans:* FY 2011 OCO					
Program #13 Develop Constant Look Operational Support Environment (CLOSE). *FY 2009 Accomplishments:* FY 2009 *FY 2010 Plans:* FY 2010 *FY 2011 Base Plans:* FY 2011 Base *FY 2011 OCO Plans:* FY 2011 OCO	1.600	0.000	0.000	0.000	0.000

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B. Accomplishments/Planned Program ($ in Millions)

	FY 2009	FY 2010	FY 2011 Base	FY 2011 OCO	FY 2011 Total
Program #14	0.800	0.000	0.000	0.000	0.000
Develop Blast Risk Analysis and Mitigation Application (BRAMA). *FY 2009 Accomplishments:* FY 2009 *FY 2010 Plans:* FY 2010 *FY 2011 Base Plans:* FY 2011 Base *FY 2011 OCO Plans:* FY 2011 OCO					
Program #15	0.800	0.000	0.000	0.000	0.000
Develop Beyond Line of Sight (BLOS) Network for MASINT Sensors. *FY 2009 Accomplishments:* FY 2009 *FY 2010 Plans:* FY 2010 *FY 2011 Base Plans:* FY 2011 Base *FY 2011 OCO Plans:* FY 2011 OCO					

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B. Accomplishments/Planned Program ($ in Millions)

	FY 2009	FY 2010	FY 2011 Base	FY 2011 OCO	FY 2011 Total
Program #16 Develop Silver Fox and MANTA. *FY 2009 Accomplishments:* FY 2009 *FY 2010 Plans:* FY 2010 *FY 2011 Base Plans:* FY 2011 Base *FY 2011 OCO Plans:* FY 2011 OCO	2.000	0.000	0.000	0.000	0.000
Program #17 Modify Intelligence Integrated Architecture (I2A) to apply cloud computing technology to operational and tactical DCGS-A architecture. *FY 2009 Accomplishments:* FY 2009 *FY 2010 Plans:* FY 2010 *FY 2011 Base Plans:* FY 2011 Base	0.000	23.000	0.000	0.000	0.000

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B. Accomplishments/Planned Program ($ in Millions)

	FY 2009	FY 2010	FY 2011 Base	FY 2011 OCO	FY 2011 Total
FY 2011 OCO Plans: FY 2011 OCO					
Accomplishments/Planned Programs Subtotals	22.470	187.815	102.382	16.200	118.582

C. Other Program Funding Summary ($ in Millions)

Line Item	FY 2009	FY 2010	FY 2011 Base	FY 2011 OCO	FY 2011 Total	FY 2012	FY 2013	FY 2014	FY 2015	Cost To Complete	Total Cost
• Ord. #1: *PE 654321 All Source Analysis System (B19)(MIP)*	3.400	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0	3.400
• Ord. #2: *PE 0604321 CI/HUMINT Software Products (B41) (MIP)*	1.716	3.116	6.330	0.000	6.330	3.375	3.548	3.754	3.833	Continuing	Continuing
• Ord. #3: *K28801 ASAS Modules (MIP)*	86.861	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0	86.861
• Ord. #4: *BK5275 CI HUMINT Automated Reporting and Collection (CHARCS)(MIP)*	30.021	38.703	7.416	52.277	59.693	10.421	10.042	10.395	10.679	Continuing	Continuing
• Ord. #5: *BZ7316 DCGS-A (MIP)*	197.348	252.184	137.424	197.092	334.516	146.124	242.888	403.150	420.026	Continuing	Continuing

D. Acquisition Strategy

The Distributed Common Ground System-Army (DCGS-A) program was created in response to the Department of Defense (DoD) Distributed Common Ground/Surface System (DCGS) Mission Area Initial Capabilities Document (MA ICD) dated 13 Aug 2004, which captured the overarching requirements for an Intelligence, Surveillance, and Reconnaissance (ISR) Family of Systems (FoS) that will contribute to Joint and combined Warfighter needs. That ICD was updated as the Distributed Common Ground/Surface System (DCG/SS) Enterprise ICD, and approved by the Joint Requirements Oversight Council (JROC) 27 Feb 2009. The Army requirements were refined in the DCGS-A Capabilities Development Document (CDD), and approved by the JROC 31 Oct 2005. The DCGS-A program is currently in the Engineering, Manufacturing and Development (EMD) phase as authorized by the PEO IEW&S ADM dated 6 April 2006. DCGS-A was designated as a pre-Major Automated Information System (Pre-MAIS) in OSD(NII) Memorandum, 26 December 2007. DCGS-A is following an evolutionary acquisition approach to develop and field system capabilities over time to satisfy the requirements of the DCGS-A Capability Development Document (CDD). Following this approach, the first increment, DCGS-A Mobile Basic was defined and a Capability Production Document (CPD) was created with full consideration

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of all of the preceding supporting documents and analysis. The CPD is currently in formal staffing, it is anticipated that the JROC approval will be in 4th Quarter FY 10. The DCGS-A System Engineering Plan (SEP) updated the current development effort and was approved by OSD DASD (C4ISR & IT Acquisition) on 3 December 2009. The DCGS-A Mobile Basic Acquisition Strategy was approved by the Army Acquisition Executive on 24 July 2009, revalidated as approved in December 2009 and as of January 2010 it was pending final OSD approval. It is anticipated the DCGS-A Mobile Basic program will be designated as an Acquisition Category (ACAT) IAM in 2nd Quarter FY10. The DCGS-A Mobile Basic program is currently preparing for a Limited User Test (LUT) in 3rd Quarter FY 11 that will serve as its Operational Evaluation to support an OSD MS C decision in 1st Quarter FY12. In summary, the program is on track for cost, schedule and performance.

E. Performance Metrics

Performance metrics used in the preparation of this justification material may be found in the FY 2010 Army Performance Budget Justification Book, dated May 2010.

Exhibit R-3, RDT&E Project Cost Analysis: PB 2011 Army		DATE: February 2010
APPROPRIATION/BUDGET ACTIVITY 2040: *Research, Development, Test & Evaluation, Army* BA 7: *Operational Systems Development*	R-1 ITEM NOMENCLATURE PE 0305208A: *Distributed Common Ground/ Surface Systems*	PROJECT 956: *Distributed Common Ground System (DCGS) (MIP)*

Product Development ($ in Millions)

				FY 2010		FY 2011 Base		FY 2011 OCO		FY 2011 Total			
Cost Category Item	Contract Method & Type	Performing Activity & Location	Total Prior Years Cost	Cost	Award Date	Cost	Award Date	Cost	Award Date	Cost	Cost To Complete	Total Cost	Target Value of Contract
Design and development of DCGS-A architecture, software baseline and mobile hardware configuration.	C/CPAF	Northrop Grumman Location could not be determined.	0.000	145.505		74.699		0.000		74.699	Continuing	Continuing	0
SETA Support to Visualization/Data Sharing, Modeling & Simulation	C	Booz-Allen Eatontown, NJ	15.225	0.000		0.000		0.000		0.000	Continuing	Continuing	0
DCGS-A Product Selection and Integration	C	CERDEC/SEC Ft. Monmouth, NJ	17.270	0.000		0.000		0.000		0.000	Continuing	Continuing	0
SIL Software Integration	C	CERDEC/RDCOM Ft. Monmouth NJ	10.285	1.250		0.000		0.000		0.000	Continuing	Continuing	0
Metadata Catalog	C	MITRE Eatontown, NJ	6.014	4.135		6.595		0.000		6.595	Continuing	Continuing	0
Asymmetric Threat Response and Analysis Project	C	Battle Labs Location could not be determined.	2.500	0.000		0.000		0.000		0.000	Continuing	Continuing	0
Effects Based Approach to Operations	C	Battle Labs Location could not be determined.	1.000	0.000		0.000		0.000		0.000	Continuing	Continuing	0
DCGS-A ASAS Integration	C	Battle Labs Location could not be determined.	0.000	0.000		0.000		0.000		0.000	Continuing	Continuing	0
Advanced Architecture Designs for NCW	C	Battle Labs Location could not be determined.	0.000	0.000		0.000		0.000		0.000	Continuing	Continuing	0

Exhibit R-3, RDT&E Project Cost Analysis: PB 2011 Army		DATE: February 2010
APPROPRIATION/BUDGET ACTIVITY 2040: *Research, Development, Test & Evaluation, Army* BA 7: *Operational Systems Development*	R-1 ITEM NOMENCLATURE PE 0305208A: *Distributed Common Ground/ Surface Systems*	PROJECT 956: *Distributed Common Ground System (DCGS) (MIP)*

Product Development ($ in Millions)

				FY 2010		FY 2011 Base		FY 2011 OCO		FY 2011 Total			
Cost Category Item	Contract Method & Type	Performing Activity & Location	Total Prior Years Cost	Cost	Award Date	Cost	Award Date	Cost	Award Date	Cost	Cost To Complete	Total Cost	Target Value of Contract
Heuristic Internet Protocol Engine	C	Battle Labs Location could not be determined.	0.000	1.040		0.000		0.000		0.000	Continuing	Continuing	0
Blast Risk Analysis and Mitigation Application	C	Battle Labs Location could not be determined.	1.050	0.000		0.000		0.000		0.000	Continuing	Continuing	0
Constant Look Operational Support Environment (CLOSE)	C	Battle Labs Location could not be determined.	0.000	0.000		0.000		0.000		0.000	Continuing	Continuing	0
Beyond Line of Sight (BLOS) Network for MASINT Sensors	C	Battle Labs Location could not be determined.	0.000	0.000		0.000		0.000		0.000	Continuing	Continuing	0
Silver Fox and MANTA	C	Battle Labs Location could not be determined.	0.000	0.000		0.000		0.000		0.000	Continuing	Continuing	0
Global Unified Data Environment (Cloud) Development	C	CERDEC/SEC Ft Monmouth, NJ	0.000	23.000		0.000		13.200		13.200	Continuing	Continuing	0
Human Terrain Teams - Develop software for the MAP-HT system for capabilities above the baseline 1.0	C	Nothing entered for Activity and Location. Location could not be determined.	0.000	0.000		0.000		3.000		3.000	Continuing	Continuing	0
		Subtotal	53.344	174.930		81.294		16.200		97.494			0.000

Remarks

Exhibit R-3, RDT&E Project Cost Analysis: PB 2011 Army		DATE: February 2010
APPROPRIATION/BUDGET ACTIVITY 2040: *Research, Development, Test & Evaluation, Army* BA 7: *Operational Systems Development*	R-1 ITEM NOMENCLATURE PE 0305208A: *Distributed Common Ground/ Surface Systems*	PROJECT 956: *Distributed Common Ground System (DCGS) (MIP)*

Support ($ in Millions)

				FY 2010		FY 2011 Base		FY 2011 OCO		FY 2011 Total			
Cost Category Item	Contract Method & Type	Performing Activity & Location	Total Prior Years Cost	Cost	Award Date	Cost	Award Date	Cost	Award Date	Cost	Cost To Complete	Total Cost	Target Value of Contract
Objective Doctrine/TTP Development	C	Ft. Huachuca AZ	6.923	0.000		0.000		0.000		0.000	Continuing	Continuing	0
Matrix Support	C	CECOM Fort Monmouth NJ	5.974	3.765		3.591		0.000		3.591	Continuing	Continuing	0
		Subtotal	12.897	3.765		3.591		0.000		3.591			0.000

Remarks

Test and Evaluation ($ in Millions)

				FY 2010		FY 2011 Base		FY 2011 OCO		FY 2011 Total			
Cost Category Item	Contract Method & Type	Performing Activity & Location	Total Prior Years Cost	Cost	Award Date	Cost	Award Date	Cost	Award Date	Cost	Cost To Complete	Total Cost	Target Value of Contract
Joint Interoperability Test and Evaluation	C	CTSF Ft. Hood	3.263	0.250		0.000		0.000		0.000	Continuing	Continuing	0
Development Test	C	Nothing entered for Activity and Location. Location could not be determined.	0.000	0.000		2.738		0.000		2.738	Continuing	Continuing	0
Operational Test support for DCGS-A	C	ATEC Location could not be determined.	2.669	1.450		2.421		0.000		2.421	Continuing	Continuing	0
LUT	C	ATEC	0.000	0.000		5.381		0.000		5.381	Continuing	Continuing	0

Exhibit R-3, RDT&E Project Cost Analysis: PB 2011 Army			DATE: February 2010
APPROPRIATION/BUDGET ACTIVITY 2040: *Research, Development, Test & Evaluation, Army* BA 7: *Operational Systems Development*	R-1 ITEM NOMENCLATURE PE 0305208A: *Distributed Common Ground/ Surface Systems*	PROJECT 956: *Distributed Common Ground System (DCGS) (MIP)*	

Test and Evaluation ($ in Millions)

Cost Category Item	Contract Method & Type	Performing Activity & Location	Total Prior Years Cost	FY 2010 Cost	FY 2010 Award Date	FY 2011 Base Cost	FY 2011 Base Award Date	FY 2011 OCO Cost	FY 2011 OCO Award Date	FY 2011 Total Cost	Cost To Complete	Total Cost	Target Value of Contract
		Location could not be determined.											
		Subtotal	5.932	1.700		10.540		0.000		10.540			0.000

Remarks

Management Services ($ in Millions)

Cost Category Item	Contract Method & Type	Performing Activity & Location	Total Prior Years Cost	FY 2010 Cost	FY 2010 Award Date	FY 2011 Base Cost	FY 2011 Base Award Date	FY 2011 OCO Cost	FY 2011 OCO Award Date	FY 2011 Total Cost	Cost To Complete	Total Cost	Target Value of Contract
Project Management	C	PM DCGS-A	7.075	7.420		6.957		0.000		6.957	Continuing	Continuing	0
		Subtotal	7.075	7.420		6.957		0.000		6.957			0.000

Remarks

	Total Prior Years Cost	FY 2010		FY 2011 Base		FY 2011 OCO		FY 2011 Total	Cost To Complete	Total Cost	Target Value of Contract
Project Cost Totals	79.248	187.815		102.382		16.200		118.582			0.000

Remarks

Exhibit R-4, RDT&E Schedule Profile: PB 2011 Army		**DATE:** February 2010
APPROPRIATION/BUDGET ACTIVITY 2040: *Research, Development, Test & Evaluation, Army* BA 7: *Operational Systems Development*	**R-1 ITEM NOMENCLATURE** PE 0305208A: *Distributed Common Ground/ Surface Systems*	**PROJECT** 956: *Distributed Common Ground System (DCGS) (MIP)*

	FY 2009				FY 2010				FY 2011				FY 2012				FY 2013				FY 2014				FY 2015			
	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
Version 3.1 Fielding	#	#	#	#	#	#	#	#	#	#																		
Mobile Basic Army Interoperability Certification (AIC)									#																			
Mobile Basic LUT										#	#																	
Mobile Basic Milestone C												#																
Mobile Basic Initial Operational Capability (IOC)														#														
Mobile Basic Initial Operational Test & Eval (IOT&E)																			#									

Exhibit R-4A, RDT&E Schedule Details: PB 2011 Army		DATE: February 2010
APPROPRIATION/BUDGET ACTIVITY 2040: *Research, Development, Test & Evaluation, Army* BA 7: *Operational Systems Development*	**R-1 ITEM NOMENCLATURE** PE 0305208A: *Distributed Common Ground/ Surface Systems*	**PROJECT** 956: *Distributed Common Ground System (DCGS) (MIP)*

Schedule Details

	Start		End	
Event	**Quarter**	**Year**	**Quarter**	**Year**
Version 3.1 Fielding	1	2009	2	2011
Mobile Basic Army Interoperability Certification (AIC)	1	2011	1	2011
Mobile Basic LUT	2	2011	3	2011
Mobile Basic Milestone C	4	2011	4	2011
Mobile Basic Initial Operational Capability (IOC)	2	2012	2	2012
Mobile Basic Initial Operational Test & Eval (IOT&E)	3	2013	3	2013

Exhibit R-2A, RDT&E Project Justification: PB 2011 Army			DATE: February 2010
APPROPRIATION/BUDGET ACTIVITY 2040: *Research, Development, Test & Evaluation, Army* BA 7: *Operational Systems Development*	R-1 ITEM NOMENCLATURE PE 0305208A: *Distributed Common Ground/ Surface Systems*	PROJECT D06: *DCGS-A FUSION INTEGRATION (MIP)*	

COST ($ in Millions)	FY 2009 Actual	FY 2010 Estimate	FY 2011 Base Estimate	FY 2011 OCO Estimate	FY 2011 Total Estimate	FY 2012 Estimate	FY 2013 Estimate	FY 2014 Estimate	FY 2015 Estimate	Cost To Complete	Total Cost
D06: *DCGS-A FUSION INTEGRATION (MIP)*	6.604	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	Continuing	Continuing
Quantity of RDT&E Articles											

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 Intelligence, Surveillance and Reconnaissance (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 algorithm, on-going 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 operations, and improve interoperability with Joint, Allied, and Coalition forces. FY09 funds the development and integration of traditional and non-traditional multi-intelligence sensor fusion products and technologies into the DCGS-A Fixed, Mobile and Embedded configurations to produce a fully automated fusion capability.Funding for this effort continues under Project 956 beginning in FY 2010.

B. Accomplishments/Planned Program ($ in Millions)

Exhibit R-2A, RDT&E Project Justification: PB 2011 Army		DATE: February 2010
APPROPRIATION/BUDGET ACTIVITY 2040: *Research, Development, Test & Evaluation, Army* BA 7: *Operational Systems Development*	R-1 ITEM NOMENCLATURE PE 0305208A: *Distributed Common Ground/ Surface Systems*	PROJECT D06: *DCGS-A FUSION INTEGRATION (MIP)*

B. Accomplishments/Planned Program ($ in Millions)

	FY 2009	FY 2010	FY 2011 Base	FY 2011 OCO	FY 2011 Total
Program #1 Continue normalization and integration of sensor fusion process and Multi-INT sources, geospatial and weather data. *FY 2009 Accomplishments:* FY 2009 *FY 2010 Plans:* FY 2010 *FY 2011 Base Plans:* FY 2011 Base *FY 2011 OCO Plans:* FY 2011 OCO	2.145	0.000	0.000	0.000	0.000
Program #2 Continue to enhance controlled interface technology for improved product distribution at multiple security levels. *FY 2009 Accomplishments:* FY 2009 *FY 2010 Plans:* FY 2010 *FY 2011 Base Plans:* FY 2011 Base	2.119	0.000	0.000	0.000	0.000

Exhibit R-2A, RDT&E Project Justification: PB 2011 Army		DATE: February 2010
APPROPRIATION/BUDGET ACTIVITY 2040: *Research, Development, Test & Evaluation, Army* BA 7: *Operational Systems Development*	R-1 ITEM NOMENCLATURE PE 0305208A: *Distributed Common Ground/ Surface Systems*	PROJECT D06: *DCGS-A FUSION INTEGRATION (MIP)*

B. Accomplishments/Planned Program ($ in Millions)

	FY 2009	FY 2010	FY 2011 Base	FY 2011 OCO	FY 2011 Total
FY 2011 OCO Plans: FY 2011 OCO					
Program #3 Continued analysis and prototyping for porting sensor fusion mission applications into the FCS environment. *FY 2009 Accomplishments:* FY 2009 *FY 2010 Plans:* FY 2010 *FY 2011 Base Plans:* FY 2011 Base *FY 2011 OCO Plans:* FY 2011 OCO	1.043	0.000	0.000	0.000	0.000
Program #4 Continue to migrate sensor fusion processes and Current Force systems capabilities into DCGS-A architecture/ Service Oriented Architecture (SOA) environment. *FY 2009 Accomplishments:* FY 2009 *FY 2010 Plans:* FY 2010	1.297	0.000	0.000	0.000	0.000

Exhibit R-2A, RDT&E Project Justification: PB 2011 Army		DATE: February 2010
APPROPRIATION/BUDGET ACTIVITY 2040: *Research, Development, Test & Evaluation, Army* BA 7: *Operational Systems Development*	R-1 ITEM NOMENCLATURE PE 0305208A: *Distributed Common Ground/ Surface Systems*	PROJECT D06: *DCGS-A FUSION INTEGRATION (MIP)*

B. Accomplishments/Planned Program ($ in Millions)

	FY 2009	FY 2010	FY 2011 Base	FY 2011 OCO	FY 2011 Total
FY 2011 Base Plans: FY 2011 Base *FY 2011 OCO Plans:* FY 2011 OCO					
Accomplishments/Planned Programs Subtotals	6.604	0.000	0.000	0.000	0.000

C. Other Program Funding Summary ($ in Millions)

Line Item	FY 2009	FY 2010	FY 2011 Base	FY 2011 OCO	FY 2011 Total	FY 2012	FY 2013	FY 2014	FY 2015	Cost To Complete	Total Cost
• Ord. #1: *PE 654321 ASAS Evolutionary ACQ (B19) (TIARA)*	3.400	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0	3.400
• Ord. #2: *K28801 ASAS Modules*	86.861	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0	86.861

D. Acquisition Strategy

Funding for this efffort continues under Project 956 beginning in FY 2010.

E. Performance Metrics

Performance metrics used in the preparation of this justification material may be found in the FY 2010 Army Performance Budget Justification Book, dated May 2010.

Exhibit R-2A, RDT&E Project Justification: PB 2011 Army			DATE: February 2010
APPROPRIATION/BUDGET ACTIVITY 2040: *Research, Development, Test & Evaluation, Army* BA 7: *Operational Systems Development*	R-1 ITEM NOMENCLATURE PE 0305208A: *Distributed Common Ground/ Surface Systems*	PROJECT D07: *DCGS-A COMMON MODULES (MIP)*	

COST ($ in Millions)	FY 2009 Actual	FY 2010 Estimate	FY 2011 Base Estimate	FY 2011 OCO Estimate	FY 2011 Total Estimate	FY 2012 Estimate	FY 2013 Estimate	FY 2014 Estimate	FY 2015 Estimate	Cost To Complete	Total Cost
D07: *DCGS-A COMMON MODULES (MIP)*	47.872	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	Continuing	Continuing
Quantity of RDT&E Articles											

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 Intelligence, Surveillance and Reconnaissance (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 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 Modeling and Simulation (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 be 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.FY09 funds development of Technology Insertion modules providing DCGS-A capabilities into Current Force systems, common module multi-function hardware, Battle Command interoperability and integration and test of new software applications. Funding for this effort continues under Project 956 beginning in FY 2010.

B. Accomplishments/Planned Program ($ in Millions)

Exhibit R-2A, RDT&E Project Justification: PB 2011 Army		DATE: February 2010
APPROPRIATION/BUDGET ACTIVITY 2040: *Research, Development, Test & Evaluation, Army* BA 7: *Operational Systems Development*	R-1 ITEM NOMENCLATURE PE 0305208A: *Distributed Common Ground/ Surface Systems*	PROJECT D07: *DCGS-A COMMON MODULES (MIP)*

B. Accomplishments/Planned Program ($ in Millions)

	FY 2009	FY 2010	FY 2011 Base	FY 2011 OCO	FY 2011 Total
Program #1 Continuation of Embedded DCGS-A design/analysis and Future Combat System (FCS) support. *FY 2009 Accomplishments:* FY 2009 *FY 2010 Plans:* FY 2010 *FY 2011 Base Plans:* FY 2011 Base *FY 2011 OCO Plans:* FY 2011 OCO	3.140	0.000	0.000	0.000	0.000
Program #2 Continue to evaluate, integrate and test existing and new software applications. Integrate Best Value components from DoD wide systems into DCGS-A baseline. *FY 2009 Accomplishments:* FY 2009 *FY 2010 Plans:* FY 2010 *FY 2011 Base Plans:* FY 2011 Base	3.350	0.000	0.000	0.000	0.000

Exhibit R-2A, RDT&E Project Justification: PB 2011 Army		DATE: February 2010
APPROPRIATION/BUDGET ACTIVITY 2040: *Research, Development, Test & Evaluation, Army* BA 7: *Operational Systems Development*	R-1 ITEM NOMENCLATURE PE 0305208A: *Distributed Common Ground/ Surface Systems*	PROJECT D07: *DCGS-A COMMON MODULES (MIP)*

B. Accomplishments/Planned Program ($ in Millions)

	FY 2009	FY 2010	FY 2011 Base	FY 2011 OCO	FY 2011 Total
FY 2011 OCO Plans: FY 2011 OCO					
Program #3 Continue to develop and enhance two-way Battle Command to include Joint Command and Control (JC2) interoperability. *FY 2009 Accomplishments:* FY 2009 *FY 2010 Plans:* FY 2010 *FY 2011 Base Plans:* FY 2011 Base *FY 2011 OCO Plans:* FY 2011 OCO	2.475	0.000	0.000	0.000	0.000
Program #4 Continued Technology Insertion of Current Force capabilities into integrated DCGS-A baseline. *FY 2009 Accomplishments:* FY 2009 *FY 2010 Plans:* FY 2010	19.101	0.000	0.000	0.000	0.000

Exhibit R-2A, RDT&E Project Justification: PB 2011 Army		DATE: February 2010
APPROPRIATION/BUDGET ACTIVITY 2040: *Research, Development, Test & Evaluation, Army* BA 7: *Operational Systems Development*	**R-1 ITEM NOMENCLATURE** PE 0305208A: *Distributed Common Ground/ Surface Systems*	**PROJECT** D07: *DCGS-A COMMON MODULES (MIP)*

B. Accomplishments/Planned Program ($ in Millions)

	FY 2009	FY 2010	FY 2011 Base	FY 2011 OCO	FY 2011 Total
FY 2011 Base Plans: FY 2011 Base *FY 2011 OCO Plans:* FY 2011 OCO					
Program #5 Continued development of new capabilities for Mobile Basic *FY 2009 Accomplishments:* FY 2009 *FY 2010 Plans:* FY 2010 *FY 2011 Base Plans:* FY 2011 Base *FY 2011 OCO Plans:* FY 2011 OCO	19.806	0.000	0.000	0.000	0.000
Accomplishments/Planned Programs Subtotals	47.872	0.000	0.000	0.000	0.000

C. Other Program Funding Summary ($ in Millions)

Line Item	FY 2009	FY 2010	FY 2011 Base	FY 2011 OCO	FY 2011 Total	FY 2012	FY 2013	FY 2014	FY 2015	Cost To Complete	Total Cost
• Ord. #1: *BZ7316 DCGS-A (MIP)*	197.348	252.184	137.424	197.092	334.516	146.124	242.888	403.150	420.026	Continuing	Continuing
	36.207	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0	36.207

Exhibit R-2A, RDT&E Project Justification: PB 2011 Army		DATE: February 2010
APPROPRIATION/BUDGET ACTIVITY 2040: *Research, Development, Test & Evaluation, Army* BA 7: *Operational Systems Development*	R-1 ITEM NOMENCLATURE PE 0305208A: *Distributed Common Ground/ Surface Systems*	PROJECT D07: *DCGS-A COMMON MODULES (MIP)*

C. Other Program Funding Summary ($ in Millions)

Line Item	FY 2009	FY 2010	FY 2011 Base	FY 2011 OCO	FY 2011 Total	FY 2012	FY 2013	FY 2014	FY 2015	Cost To Complete	Total Cost
• Ord. #2: *KA2550 Digital Topographic SPT SYS (DTSS)*											

D. Acquisition Strategy

Funding for this efffort continues under Project 956 beginning in FY 2010.

E. Performance Metrics

Performance metrics used in the preparation of this justification material may be found in the FY 2010 Army Performance Budget Justification Book, dated May 2010.

Exhibit R-2A, RDT&E Project Justification: PB 2011 Army			DATE: February 2010
APPROPRIATION/BUDGET ACTIVITY 2040: *Research, Development, Test & Evaluation, Army* BA 7: *Operational Systems Development*	R-1 ITEM NOMENCLATURE PE 0305208A: *Distributed Common Ground/ Surface Systems*	PROJECT D08: *DCGS-A SENSOR INTEGRATION (MIP)*	

COST ($ in Millions)	FY 2009 Actual	FY 2010 Estimate	FY 2011 Base Estimate	FY 2011 OCO Estimate	FY 2011 Total Estimate	FY 2012 Estimate	FY 2013 Estimate	FY 2014 Estimate	FY 2015 Estimate	Cost To Complete	Total Cost
D08: *DCGS-A SENSOR INTEGRATION (MIP)*	10.872	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	Continuing	Continuing
Quantity of RDT&E Articles											

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 Intelligence, Surveillance and Reconnaissance (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 addresses Intelligence, Surveillance and Reconnaissance (ISR) sensor integration and interoperability with existing and new platforms and sensors to include a common data link solution.FY09 funds integration of new and modified sensor data into DCGS-A Systems, Test and Training of the new capability.Funding for this effort continues under Project 956 beginning in FY 2010.

B. Accomplishments/Planned Program ($ in Millions)

	FY 2009	FY 2010	FY 2011 Base	FY 2011 OCO	FY 2011 Total
Program #1	2.344	0.000	0.000	0.000	0.000
Continue to isolate and integrate Current Force Multi-INT sensor (Human Intelligence, Imagery Intelligence, Signal Intelligence, Measurement and Signature Intelligence)data into the DCGS-A network.					
FY 2009 Accomplishments: FY 2009					

Exhibit R-2A, RDT&E Project Justification: PB 2011 Army		DATE: February 2010
APPROPRIATION/BUDGET ACTIVITY 2040: *Research, Development, Test & Evaluation, Army* BA 7: *Operational Systems Development*	R-1 ITEM NOMENCLATURE PE 0305208A: *Distributed Common Ground/ Surface Systems*	PROJECT D08: *DCGS-A SENSOR INTEGRATION (MIP)*

B. Accomplishments/Planned Program ($ in Millions)

	FY 2009	FY 2010	FY 2011 Base	FY 2011 OCO	FY 2011 Total
FY 2010 Plans: FY 2010 *FY 2011 Base Plans:* FY 2011 Base *FY 2011 OCO Plans:* FY 2011 OCO					
Program #2 Continued planning and analysis of Future Force Multi-INT sensor modules for incorporation into the DCGS-A network. *FY 2009 Accomplishments:* FY 2009 *FY 2010 Plans:* FY 2010 *FY 2011 Base Plans:* FY 2011 Base *FY 2011 OCO Plans:* FY 2011 OCO	4.283	0.000	0.000	0.000	0.000
Program #3 Continue to refactor Current Force ISR capabilities in the DCGS-A infrastructure.	1.020	0.000	0.000	0.000	0.000

Exhibit R-2A, RDT&E Project Justification: PB 2011 Army		DATE: February 2010
APPROPRIATION/BUDGET ACTIVITY 2040: *Research, Development, Test & Evaluation, Army* BA 7: *Operational Systems Development*	R-1 ITEM NOMENCLATURE PE 0305208A: *Distributed Common Ground/ Surface Systems*	PROJECT D08: *DCGS-A SENSOR INTEGRATION (MIP)*

B. Accomplishments/Planned Program ($ in Millions)

	FY 2009	FY 2010	FY 2011 Base	FY 2011 OCO	FY 2011 Total
FY 2009 Accomplishments: FY 2009 *FY 2010 Plans:* FY 2010 *FY 2011 Base Plans:* FY 2011 Base *FY 2011 OCO Plans:* FY 2011 OCO					
Program #4 Continued development of training materials for V3 and Mobile systems. *FY 2009 Accomplishments:* FY 2009 *FY 2010 Plans:* FY 2010 *FY 2011 Base Plans:* FY 2011 Base *FY 2011 OCO Plans:* FY 2011 OCO	3.225	0.000	0.000	0.000	0.000
Accomplishments/Planned Programs Subtotals	10.872	0.000	0.000	0.000	0.000

Exhibit R-2A, RDT&E Project Justification: PB 2011 Army		DATE: February 2010
APPROPRIATION/BUDGET ACTIVITY 2040: *Research, Development, Test & Evaluation, Army* BA 7: *Operational Systems Development*	R-1 ITEM NOMENCLATURE PE 0305208A: *Distributed Common Ground/ Surface Systems*	PROJECT D08: *DCGS-A SENSOR INTEGRATION (MIP)*

C. Other Program Funding Summary ($ in Millions)

Line Item	FY 2009	FY 2010	FY 2011 Base	FY 2011 OCO	FY 2011 Total	FY 2012	FY 2013	FY 2014	FY 2015	Cost To Complete	Total Cost
• Ord. #1: *BZ7316 DCGS-A (MIP)*	197.348	252.184	137.424	197.092	334.516	146.124	242.888	403.150	420.026	Continuing	Continuing

D. Acquisition Strategy

Funding for this efffort continues under Project 956 beginning in FY 2010.

E. Performance Metrics

Performance metrics used in the preparation of this justification material may be found in the FY 2010 Army Performance Budget Justification Book, dated May 2010.

Exhibit R-2A, RDT&E Project Justification: PB 2011 Army			DATE: February 2010
APPROPRIATION/BUDGET ACTIVITY 2040: *Research, Development, Test & Evaluation, Army* BA 7: *Operational Systems Development*	R-1 ITEM NOMENCLATURE PE 0305208A: *Distributed Common Ground/ Surface Systems*	PROJECT D15: *MUSE & TES TADSS (MIP)*	

COST ($ in Millions)	FY 2009 Actual	FY 2010 Estimate	FY 2011 Base Estimate	FY 2011 OCO Estimate	FY 2011 Total Estimate	FY 2012 Estimate	FY 2013 Estimate	FY 2014 Estimate	FY 2015 Estimate	Cost To Complete	Total Cost
D15: *MUSE & TES TADSS (MIP)*	0.665	0.650	0.620	0.000	0.620	0.000	0.000	0.000	0.000	Continuing	Continuing
Quantity of RDT&E Articles											

A. Mission Description and Budget Item Justification

Mission Description and Budget Item Justification is not defined.

B. Accomplishments/Planned Program ($ in Millions)

	FY 2009	FY 2010	FY 2011 Base	FY 2011 OCO	FY 2011 Total
Program #1	0.665	0.650	0.620	0.000	0.620
Continue Training Aids, Devices, Simulators and Simulations (TADSS) *FY 2009 Accomplishments:* FY 2009 *FY 2010 Plans:* FY 2010 *FY 2011 Base Plans:* FY 2011 Base *FY 2011 OCO Plans:* FY 2011 OCO					
Accomplishments/Planned Programs Subtotals	0.665	0.650	0.620	0.000	0.620

Exhibit R-2A, RDT&E Project Justification: PB 2011 Army		DATE: February 2010
APPROPRIATION/BUDGET ACTIVITY 2040: *Research, Development, Test & Evaluation, Army* BA 7: *Operational Systems Development*	**R-1 ITEM NOMENCLATURE** PE 0305208A: *Distributed Common Ground/ Surface Systems*	**PROJECT** D15: *MUSE & TES TADSS (MIP)*

C. Other Program Funding Summary ($ in Millions)

N/A

D. Acquisition Strategy

N/A

E. Performance Metrics

Performance metrics used in the preparation of this justification material may be found in the FY 2010 Army Performance Budget Justification Book, dated May 2010.