Exhibit R-2, RDT&E Budget Item Justification: PB 2015 Army												Date: March 2014
Appropriation/Budget Activity 2040: *Research, Development, Test & Evaluation, Army* / BA 5: *System Development & Demonstration (SDD)*					R-1 Program Element (Number/Name) PE 0604716A / *TERRAIN INFORMATION - ENG DEV*							
COST ($ in Millions)	**Prior Years**	**FY 2013**	**FY 2014**	**FY 2015 Base**	**FY 2015 OCO #**	**FY 2015 Total**	**FY 2016**	**FY 2017**	**FY 2018**	**FY 2019**	**Cost To Complete**	**Total Cost**
Total Program Element	-	1.008	-	-	-	-	-	-	-	-	-	1.008
579: *FIELD ARMY MAP SYS ED*	-	1.008	-	-	-	-	-	-	-	-	-	1.008

The FY 2015 OCO Request will be submitted at a later date.

A. Mission Description and Budget Item Justification

Distributed Common Ground System - Army (DCGS-A) is the Intelligence, Surveillance and Reconnaissance (ISR) System of Systems (SoS) for Joint, Interagency, Allied, Coalition, and National data analysis, sharing and collaboration. The core functions of DCGS-A are: the vertical and horizontal synchronization ISR Processing, Exploitation and Dissemination (PED) efforts and operates in a networked environment at multiple security levels; the control of select Army and joint sensor systems; the fusion of all acquired data and information, and distribution of relevant red (threat), gray (non-aligned), and environmental (weather and terrain) information; and the Warfighter's early warning and targeting capability. DCGS-A provides a single integrated ISR ground processing system composed of common components that are interoperable with sensors, other information sources, all Warfighting Functions, and the Defense Information & Intelligence Enterprise (DI2E). DCGS-A is fielded in Fixed and Mobile configurations emphasizing the use of reach and split based operations by improving accessibility of data in order to reduce forward deployed footprint. As enhanced capabilities are developed and tested, annual software releases are integrated into Army Common/commodity hardware and fielded to units IAW the Army Force Generation (ARFORGEN)cycle.

The Project Manager Distributed Common Ground System - Army is responsible for developing topographic support systems for the Army. PM DCGS-A provides automated terrain analysis, terrain data management and graphics reproduction in support of Intelligence Preparation of the Battlefield (IPB), Command and Control, Terrain Visualization, weapons and sensor systems, and other topographic information customers. Geospatial topographic support components of PM DCGS-A consists of the Digital Topographic Support System - Light (DTSS-L), DTSS-Deployable (DTSS-D), Intelligence Fusion System (IFS), DCGS-A Standard Cloud, and the High Volume Map Production (HVMP) equipment. Experimentation results from the Div XXI Army Warfighter Experiment (AWE) identified technological enhancements necessary to support the First and Second Digital Divisions (FDD) and the Transformation Brigades.

The FY 2013 funding amount is $0.928 million. Due to a system error, the number presented above could not be changed.

Program has no FY15 Base or OCO requirement.

Exhibit R-2, RDT&E Budget Item Justification: PB 2015 Army					Date: March 2014
Appropriation/Budget Activity 2040: *Research, Development, Test & Evaluation, Army* / BA 5: *System Development & Demonstration (SDD)*		R-1 Program Element (Number/Name) PE 0604716A / *TERRAIN INFORMATION - ENG DEV*			
B. Program Change Summary ($ in Millions)	**FY 2013**	**FY 2014**	**FY 2015 Base**	**FY 2015 OCO**	**FY 2015 Total**
Previous President's Budget	1.008	-	-	-	-
Current President's Budget	1.008	-	-	-	-
Total Adjustments	-	-	-	-	-
• Congressional General Reductions	-	-			
• Congressional Directed Reductions	-	-			
• Congressional Rescissions	-	-			
• Congressional Adds	-	-			
• Congressional Directed Transfers	-	-			
• Reprogrammings	-	-			
• SBIR/STTR Transfer	-	-			

Exhibit R-2A, RDT&E Project Justification: PB 2015 Army			Date: March 2014
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COST ($ in Millions)	Prior Years	FY 2013	FY 2014	FY 2015 Base	FY 2015 OCO #	FY 2015 Total	FY 2016	FY 2017	FY 2018	FY 2019	Cost To Complete	Total Cost
579: *FIELD ARMY MAP SYS ED*	-	1.008	-	-	-	-	-	-	-	-	-	1.008
Quantity of RDT&E Articles	-	-	-	-	-	-	-	-	-	-		

The FY 2015 OCO Request will be submitted at a later date.

A. Mission Description and Budget Item Justification

This Project funds development of the geospatial and terrain capability to support topographic development in support of Army operations. DCGS-A systems use Commercial Off the Shelf (COTS) software. DCGS-A topographic capability variants include: DTSS-Light (DTSS-L) which is shelter mounted on a HMMWV, Intelligence Fusion Server (IFS) which is mounted in hand carried transit cases, and the High Volume Map Production System (HVMP) which reproduces digital maps. Current force DCGS-A systems provide the commander the ability to rapidly obtain terrain information and produce digital topographic products. The traditional terrain analysis, topographic and reproduction support provided by Army Engineer Terrain Teams was a slow, labor intensive process that did not meet the needs of the digital battlefield. The DCGS-A provides digital terrain analysis and map updates to commanders and weapons platforms in support of mission planning (e.g., imagery exploitation, Cover and Concealment, other Intelligence Preparation of the Battlespace), rehearsal (e.g., 3D fly through, simulations) and execution (e.g., Common Operational Picture, route planning). The DTSS automates terrain analysis and visualization, data base (development, updating, management, and dissemination), and graphics reproduction. The DCGS-A Inetlligence, Sureveillance, and Reconnaissance (ISR) Modernization Plan emphasizes the development of a combined, integrated, tactically deployable, fully autonomous terrain analysis and graphics reproduction capability. These capabilities are being provided through virtualized software components delivered across the DCGS-A Enterprise, including HMMWV shelterized (DTSS-L) and transit case (Intelligence Fusion System (IFS)) configurations. The DTSS-L is highly mobile and capable of supporting a full range of military operations, as well as peacetime stability and support operations. The IFS provides a COTS configuration that is capable of operating all of the terrain analysis software. The IFS consists of transportable workstations and peripherals that can be set up to augment the tactical configurations. PM DCGS-A systems are deployed from Company through Echelon above Corps, Stryker Brigades and Special Forces Groups. Additionally, an institutional training classroom environment has been developed and integrated into the curriculum at the National Geospatial/Intelligence School (NGS). NGS provides critical MOS (Military Occupation Specialty) specific training on the operation and use of Conbat Terrain Information Systems (CTIS. Products developed as part of the PM DCGS-A RDT&E program (e.g., improved Battle Command Systems interoperability, migration to Joint Technical Architecture - Army (JTA-A) and Common Operating Environment (COE), improved data base management and distribution, automated feature extraction, improved tactical terrain decision aid functionality, rapid terrain visualization, battlefield terrain reasoning awareness (BTRA), and improved graphics reproduction) are being incorporated into all of the DCGS-A software architectures.

The FY 2013 funding amount is $0.928 million. Due to a system error, the number presented above could not be changed.

Program has no FY15 Base or OCO requirement.

B. Accomplishments/Planned Programs ($ in Millions, Article Quantities in Each)	FY 2013	FY 2014	FY 2015
Title: Continue P3I development for DTSS.	1.008	-	-

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B. Accomplishments/Planned Programs ($ in Millions, Article Quantities in Each)	FY 2013	FY 2014	FY 2015
Articles:	-	-	-
Description: Continue P3I development for DTSS - Initiate transition of functionality to DCGS-A, continue investigation of COTS upgrades, continue improvement of coalition/joint interoperability. ***FY 2013 Accomplishments:*** Continue P3I development for DTSS - Continue transition of functionality to DCGS-A, continue investigation of COTS upgrades, continue improvement of coalition/joint interoperability.			
Accomplishments/Planned Programs Subtotals	1.008	-	-

C. Other Program Funding Summary ($ in Millions)

Line Item	FY 2013	FY 2014	FY 2015 Base	FY 2015 OCO	FY 2015 Total	FY 2016	FY 2017	FY 2018	FY 2019	Cost To Complete	Total Cost
• DCGS-A MIP RDTE: *0305208A*	38.673	27.607	20.155	-	20.155	25.710	25.965	26.409	30.717	Continuing	Continuing
• DCGS-A MIP OPA: *BZ7316*	274.119	118.090	128.207	-	128.207	284.696	259.717	286.822	322.675	Continuing	Continuing

Remarks

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 Production and Deployment phase and was designated as a Major Automated Information System (MAIS) in OSD (AT&L) Memorandum, 29 Mar 2010.

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 was defined and a Capability Production Document (CPD) was created with full consideration of all of the preceding supporting documents and analysis. As part of its initial staffing, a Cost Benefit Analysis was completed in support of the DCGS-A CPD. This analysis projected a significant cost avoidance/savings over the life cycle by not limiting the hardware configuration to a one size fits all unit types design but rather integrating the DCGS-A SW capabilities into common servers and other IT components fielded at that echelon. This approach was included in the CPD and updated DCGS-A Acquisition Strategy. The CPD was approved by the JROC on 20 Dec 2011.

The DCGS-A System Engineering Plan (SEP) updated the current development plan and was approved by OASD (R&E) on 5 Dec 2011. The DCGS-A Revised Acquisition Strategy (AS) was approved by the Defense Acquisition Executive (DAE) on 21 Mar 2012. The DCGS-A Acquisition Program Baseline was approved on

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29 Mar 12. The DCGS-A program received a milestone C decision on 29 Feb 2012 and an operational test was completed in Jun 2012. A successful Full Deployment Decision (FDD) for Release 1 Initial Minimum Capability was obtained December 2012.

PM DCGS-A has been designated as the Command Post Computing Environment (CPCE) Lead for PEO IEW&S. As such, DCGS-A is currently aligning it's architecture to fit within the Common Operating Environment (COE) as described by the ASA(ALT) COE Implementation Plan. This alignment is in accordance with the G-3/5/7 priority to align all Army networks, procurements, and enhancements under one COE and one vision. Our acquisition strategy supports this initiative as we continue to collapse PORs and reduce footprint following our capability migration path and iterative development of software releases which continue to increase capabilities to satisfy the remaining CPD requirements beyond Initial Minimal Capability. As DCGS-A continues the path through Increment 1 and beyond, each release will focus on the COE and continually align the Command Post activities with DCGS-A Cloud and POR migration activities. The program office expects to continue as the DCGS-A System Integrator for software development and hardware integration, and will continue to access multiple vendors by leveraging a variety of competitively awarded contracts.

E. Performance Metrics

N/A

Exhibit R-3, RDT&E Project Cost Analysis: PB 2015 Army			Date: March 2014
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Product Development ($ in Millions)

Cost Category Item	Contract Method & Type	Performing Activity & Location	Prior Years	FY 2013 Cost	FY 2013 Award Date	FY 2014 Cost	FY 2014 Award Date	FY 2015 Base Cost	FY 2015 Base Award Date	FY 2015 OCO Cost	FY 2015 OCO Award Date	FY 2015 Total Cost	Cost To Complete	Total Cost	Target Value of Contract
-	TBD	- : -	1.593	1.008		-		-		-		-	-	2.601	-
		Subtotal	1.593	1.008		-		-		-		-	-	2.601	-

	Prior Years	FY 2013		FY 2014		FY 2015 Base		FY 2015 OCO		FY 2015 Total	Cost To Complete	Total Cost	Target Value of Contract
Project Cost Totals	1.593	1.008		-		-		-		-	-	2.601	-

Remarks