

UNCLASSIFIED

Exhibit R-2, RDT&E Budget Item Justification: PB 2011 Defense Information Systems Agency **DATE:** February 2010

APPROPRIATION/BUDGET ACTIVITY 0400: <i>Research, Development, Test & Evaluation, Defense-Wide</i> BA 7: <i>Operational Systems Development</i>				R-1 ITEM NOMENCLATURE PE 0305208K: <i>Distributed Common Ground/Surface System</i>							
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	3.218	3.145	3.513	0.000	3.513	3.703	3.690	3.825	3.883	Continuing	Continuing
NF1: <i>Distributed Common Ground/Surface Systems</i>	3.218	3.145	3.513	0.000	3.513	3.703	3.690	3.825	3.883	Continuing	Continuing

A. Mission Description and Budget Item Justification

As the sole joint interoperability certification agent, the Joint Interoperability Test Command (JITC) established and maintains a Distributed Development and Test Enterprise (DDTE) for the Department of Defense (DoD) Distributed Common Ground/Surface System (DCGS) program, as directed by the Office of the Under Secretary of Defense (Intelligence) (OUSD-I). JITC chairs the DCGS Test & Evaluation (T&E) Focus Team, provides test & evaluation for assessing DCGS systems, engineers and operates the DDTE network. JITC evaluates the DCGS systems' compliance with the DCGS Enterprise Initial Capabilities Document (ICD) and elements of the Net-Ready Key Performance Parameter (NR-KPP) to assess the information needs, timelines and assurance as well as net-ready attributes required for both the technical exchange of information and the end-to-end operational effectiveness of that exchange. DCGS is an integral and critical component of the overall DoD Intelligence, Surveillance, and Reconnaissance (ISR) interoperability and data integration strategy which provides world-wide ground/surface capabilities to receive, process, exploit, and disseminate data from airborne and national reconnaissance sensors/platforms and commercial sources. The key tenets of network-centric operations and the future of DCGS operations lie in the ability for any user to discover, access, and understand the data.

The FY 2011 request of \$3.513 million will fund the DDTE, which provides the DCGS Community of Interest (COI) an operationally relevant environment by establishing and maintaining connectivity between National Agency and Service facilities at unclassified, collateral, Sensitive Compartmented Information (SCI), and coalition levels, and also supports the DCGS Enterprise assessment, as directed by OUSD(I), and DCGS Governance.

A reduction in funding will result in reduced support to all components of the DCGS Program, including crucial DDTE network and DCGS Enterprise assessments necessary for ensuring the optimum operation of the DCGS systems.

UNCLASSIFIED

R-1 Line Item #230

Page 1 of 9

UNCLASSIFIED

Exhibit R-2, RDT&E Budget Item Justification: PB 2011 Defense Information Systems Agency	DATE: February 2010
---	----------------------------

APPROPRIATION/BUDGET ACTIVITY 0400: <i>Research, Development, Test & Evaluation, Defense-Wide</i> BA 7: <i>Operational Systems Development</i>	R-1 ITEM NOMENCLATURE PE 0305208K: <i>Distributed Common Ground/Surface System</i>
---	--

B. Program Change Summary (\$ in Millions)

	<u>FY 2009</u>	<u>FY 2010</u>	<u>FY 2011 Base</u>	<u>FY 2011 OCO</u>	<u>FY 2011 Total</u>
Previous President's Budget	3.218	3.158	0.000	0.000	0.000
Current President's Budget	3.218	3.145	3.513	0.000	3.513
Total Adjustments	0.000	-0.013	3.513	0.000	3.513
• Congressional General Reductions		-0.013			
• Congressional Directed Reductions		0.000			
• Congressional Rescissions	0.000	0.000			
• Congressional Adds		0.000			
• Congressional Directed Transfers		0.000			
• Reprogrammings	0.000	0.000			
• SBIR/STTR Transfer	0.000	0.000			
• Other Adjustments	0.000	0.000	3.513	0.000	3.513

Change Summary Explanation

Change Summary Explanation: The FY 2010 decrease of \$0.013 million, is due to Congressional adjustments for Economic Assumptions. The DoD did not estimate FY 2011 cost when the FY 2010 President's Budget was prepared.

UNCLASSIFIED

R-1 Line Item #230

Page 2 of 9

UNCLASSIFIED

Exhibit R-2A, RDT&E Project Justification: PB 2011 Defense Information Systems Agency **DATE:** February 2010

APPROPRIATION/BUDGET ACTIVITY 0400: <i>Research, Development, Test & Evaluation, Defense-Wide</i> BA 7: <i>Operational Systems Development</i>	R-1 ITEM NOMENCLATURE PE 0305208K: <i>Distributed Common Ground/ Surface System</i>	PROJECT NF1: <i>Distributed Common Ground/Surface Systems</i>
---	---	---

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
NF1: <i>Distributed Common Ground/ Surface Systems</i>	3.218	3.145	3.513	0.000	3.513	3.703	3.690	3.825	3.883	Continuing	Continuing
Quantity of RDT&E Articles											

A. Mission Description and Budget Item Justification

Joint Interoperability Test Command (JITC) coordinates with the Military Services and Defense Agencies on integrating, modeling and simulation capabilities, and performing Joint/Distributed Common Ground/Surface System (DCGS) event coordination, configuration, and integration functions on the Distributed Development and Test Enterprise (DDTE). These program components enable improved systems engineering and test and evaluation throughout all phases of the DCGS life-cycle.

DCGS uses the DDTE, which is composed of three parts: a distributed development network; a net-enabled enterprise testing and evaluation; and an annual DCGS demonstration or exercise (e.g., Empire Challenge) to integrate architecture, standards, and capabilities for implementation of the DCGS Integration Backbone (DIB) and supports the migration to net-centricity, including convergence with Net-Centric Enterprise Services (NCES), for the following programs: DCGS-Army (DCGS-A), DCGS-Navy (DCGS-N), Air Force DCGS (AF DCGS), DCGS-Marine Corps (DCGS-MC), and DCGS-Special Operations Forces (DCGS-SOF). The net enabled enterprise testing is designed to more closely simulate the complexities of an actual combat environment. JITC engineers and operates the DDTE network; and provides test strategy, planning and execution to support the assessment of the DCGS Enterprise. National Agency capabilities supporting DCGS include Imagery Intelligence (IMINT), Signals Intelligence (SIGINT), Measurement and Signature Intelligence (MASINT) and Human Intelligence (HUMINT), which will also be integrated and tested in the DDTE. The DCGS programs use the DDTE to improve/validate interoperability with the reconnaissance platforms and sensors, and to integrate into the Joint Command and Control environment.

JITC will implement the DDTE, providing DCGS an off-line operationally relevant environment by: establishing and maintaining connectivity between national agency and Service facilities; integrating modeling and simulation capabilities; and performing Joint/DCGS event coordination, configuration, and integration functions. This will enable improved systems engineering and test and evaluation throughout all phases of the DCGS life cycle.

A reduction in funding will result in reduced support to all of the following: DDTE support, operation and maintenance; DCGS systems testing and evaluation; responsibilities associated with the Chair of the DCGS Test and Evaluation Focus Team; DCGS Enterprise test strategy development; and Exercise support. The DDTE network and DCGS Enterprise assessments are crucial for ensuring the capabilities of the DCGS systems are adequate before they are allowed on the operational networks.

UNCLASSIFIED

R-1 Line Item #230

Page 3 of 9

UNCLASSIFIED

Exhibit R-2A, RDT&E Project Justification: PB 2011 Defense Information Systems Agency				DATE: February 2010				
APPROPRIATION/BUDGET ACTIVITY 0400: <i>Research, Development, Test & Evaluation, Defense-Wide</i> BA 7: <i>Operational Systems Development</i>		R-1 ITEM NOMENCLATURE PE 0305208K: <i>Distributed Common Ground/Surface System</i>		PROJECT NF1: <i>Distributed Common Ground/Surface Systems</i>				
B. Accomplishments/Planned Program (\$ in Millions)								
				FY 2009	FY 2010	FY 2011 Base	FY 2011 OCO	FY 2011 Total
Enterprise T&E Support \$1.610 million. The FY 2010 to FY 2011 increase of \$0.368 million is due to increased support for DDTE Capability Service and DCGS Enterprise T&E. If not fully funded for FY 2011, visibility of the DCGS Enterprise and the DDTE network status will be lost, leaving the DCGS Communities of Interest (COI) with vastly reduced testing capability.								
Accomplishments/Planned Programs Subtotals				3.218	3.145	3.513	0.000	3.513
C. Other Program Funding Summary (\$ in Millions)								
N/A								
D. Acquisition Strategy								
DCGS uses an evolutionary acquisition approach. JITC will support the effort by leveraging its existing three prime contracts, with multiple sub-contracts, to support this project. These competitively-awarded, performance-based, non-personal-services contracts provide maximum flexibility for JITC supporting its numerous customers for cost and technical effectiveness, and allows for expansion and contraction of staff years as workload expands and contracts. The current prime contractors that support this effort are Northrop Grumman Mission Systems, Northrop Grumman Information Technology, and INTEROP Joint Venture.								
E. Performance Metrics								
Number of operational DDTE nodes that enable the Services/agencies to participate in joint/enterprise level test and evaluation (IOC) = 14.								
Number of additional DDTE nodes planned for installation in FY 2010 = 2. At this time, no additional nodes are planned for FY 2011.								

UNCLASSIFIED

R-1 Line Item #230

Page 5 of 9

UNCLASSIFIED

Exhibit R-3, RDT&E Project Cost Analysis: PB 2011 Defense Information Systems Agency **DATE:** February 2010

APPROPRIATION/BUDGET ACTIVITY 0400: <i>Research, Development, Test & Evaluation, Defense-Wide</i> BA 7: <i>Operational Systems Development</i>	R-1 ITEM NOMENCLATURE PE 0305208K: <i>Distributed Common Ground/ Surface System</i>	PROJECT NF1: <i>Distributed Common Ground/Surface Systems</i>
---	---	---

Support (\$ in Millions)

Cost Category Item	Contract Method & Type	Performing Activity & Location	Total Prior Years Cost	FY 2010		FY 2011 Base		FY 2011 OCO		FY 2011 Total	Cost To Complete	Total Cost	Target Value of Contract
				Cost	Award Date	Cost	Award Date	Cost	Award Date	Cost			
In-House Contracts	Various/ Various	N/A N/A	17.170	1.708	Oct 2009	1.891	Oct 2010	0.000		1.891	Continuing	Continuing	Continuing
Subtotal			17.170	1.708		1.891		0.000		1.891			

Remarks

Test and Evaluation (\$ in Millions)

Cost Category Item	Contract Method & Type	Performing Activity & Location	Total Prior Years Cost	FY 2010		FY 2011 Base		FY 2011 OCO		FY 2011 Total	Cost To Complete	Total Cost	Target Value of Contract
				Cost	Award Date	Cost	Award Date	Cost	Award Date	Cost			
Engineering/Technical Services 1	TM	Interop Ft. Hua, AZ	1.525	0.383	Oct 2009	0.423	Oct 2010	0.000		0.423	Continuing	Continuing	Continuing
Engineering/Technical Services 2	TM	NGMS Ft. Hua, AZ	6.282	0.798	Oct 2009	0.908	Oct 2010	0.000		0.908	Continuing	Continuing	Continuing
Engineering/Technical Services 3	TM	NGIT Ft. Hua, AZ	1.306	0.256	Oct 2009	0.291	Oct 2010	0.000		0.291	Continuing	Continuing	Continuing
Subtotal			9.113	1.437		1.622		0.000		1.622			

Remarks

UNCLASSIFIED

R-1 Line Item #230

Page 6 of 9

UNCLASSIFIED

Exhibit R-4, RDT&E Schedule Profile: PB 2011 Defense Information Systems Agency **DATE:** February 2010

APPROPRIATION/BUDGET ACTIVITY 0400: <i>Research, Development, Test & Evaluation, Defense-Wide</i> BA 7: <i>Operational Systems Development</i>	R-1 ITEM NOMENCLATURE PE 0305208K: <i>Distributed Common Ground/Surface System</i>	PROJECT NF1: <i>Distributed Common Ground/Surface Systems</i>
---	--	---

	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
DCGS T&E IPT	■	■	■	■	■	■	■	■	■	■	■	■																
Establishment of Infrastructure	■	■	■	■																								
Connectivity to Other Testbeds & Test Event Conduct	■	■	■	■	■	■	■	■	■	■	■	■																
O&M	■	■	■	■	■	■	■	■	■	■	■	■																

UNCLASSIFIED

UNCLASSIFIED

Exhibit R-4A, RDT&E Schedule Details: PB 2011 Defense Information Systems Agency **DATE:** February 2010

APPROPRIATION/BUDGET ACTIVITY 0400: <i>Research, Development, Test & Evaluation, Defense-Wide</i> BA 7: <i>Operational Systems Development</i>	R-1 ITEM NOMENCLATURE PE 0305208K: <i>Distributed Common Ground/Surface System</i>	PROJECT NF1: <i>Distributed Common Ground/Surface Systems</i>
---	--	---

Schedule Details

Event	Start		End	
	Quarter	Year	Quarter	Year
DCGS T&E IPT	1	2009	4	2011
Establishment of Infrastructure	1	2009	4	2009
Connectivity to Other Testbeds & Test Event Conduct	1	2009	4	2011
O&M	1	2009	4	2011

UNCLASSIFIED