

UNCLASSIFIED

Exhibit R-2, RDT&E Budget Item Justification: PB 2016 Defense Information Systems Agency	Date: February 2015
---	----------------------------

Appropriation/Budget Activity					R-1 Program Element (Number/Name)							
0400: Research, Development, Test & Evaluation, Defense-Wide / BA 7: Operational Systems Development					PE 0305208K / Distributed Common Ground/Surface Systems							
COST (\$ in Millions)	Prior Years	FY 2014	FY 2015	FY 2016 Base	FY 2016 OCO	FY 2016 Total	FY 2017	FY 2018	FY 2019	FY 2020	Cost To Complete	Total Cost
Total Program Element	40.223	3.348	3.400	3.239	-	3.239	3.260	3.350	3.362	3.392	Continuing	Continuing
NF1: Distributed Common Ground/Surface Systems	40.223	3.348	3.400	3.239	-	3.239	3.260	3.350	3.362	3.392	Continuing	Continuing

A. Mission Description and Budget Item Justification

As the sole joint interoperability certification agent, the Joint Interoperability Test Command established and maintains a Distributed Development and Test Enterprise 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). DCGS is an integral and critical component of the overall DoD Intelligence, Surveillance, and Reconnaissance interoperability and data integration strategy which provides world-wide capabilities to receive, process, exploit, and disseminate data from airborne and national reconnaissance sensors/platforms and commercial sources.

B. Program Change Summary (\$ in Millions)	FY 2014	FY 2015	FY 2016 Base	FY 2016 OCO	FY 2016 Total
Previous President's Budget	3.348	3.400	3.400	-	3.400
Current President's Budget	3.348	3.400	3.239	-	3.239
Total Adjustments	-	-	-0.161	-	-0.161
• Congressional General Reductions	-	-			
• Congressional Directed Reductions	-	-			
• Congressional Rescissions	-	-			
• Congressional Adds	-	-			
• Congressional Directed Transfers	-	-			
• Reprogrammings	-	-			
• SBIR/STTR Transfer	-	-			
• Other Adjustments	-	-	-0.161	-	-0.161

Change Summary Explanation

The FY 2016 decrease of -\$0.161 is due to testing remotely rather than on-site following automation improvements.

UNCLASSIFIED

Exhibit R-2A, RDT&E Project Justification: PB 2016 Defense Information Systems Agency										Date: February 2015		
Appropriation/Budget Activity 0400 / 7					R-1 Program Element (Number/Name) PE 0305208K / <i>Distributed Common Ground/Surface Systems</i>				Project (Number/Name) NF1 / <i>Distributed Common Ground/Surface Systems</i>			
COST (\$ in Millions)	Prior Years	FY 2014	FY 2015	FY 2016 Base	FY 2016 OCO	FY 2016 Total	FY 2017	FY 2018	FY 2019	FY 2020	Cost To Complete	Total Cost
NF1: <i>Distributed Common Ground/Surface Systems</i>	40.223	3.348	3.400	3.239	-	3.239	3.260	3.350	3.362	3.392	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 Intelligence Agencies to conduct Joint/Distributed Common Ground/Surface System (DCGS) testing and analysis, including event coordination, configuration, instrumentation and integration functions on the Distributed Development and Test Enterprise (DDTE). Under the DCGS Governance, this effort, referred to as the DCGS Test and Evaluation (T&E) Focus Team (FT), is composed of three parts: the DDTE Focus Group, providing and sustaining a distributed development network; the Strategy Focus Group, looking at current and future net-enabled enterprise T&E methods; and the Execution Focus Group, which leverages the Strategy Focus Group's methodologies in executing DCGS Enterprise assessment events, such as the annual DCGS demonstration, ENTERPRISE CHALLENGE. These efforts improve systems engineering and T&E throughout all phases of the DCGS life-cycle, resulting in improved capabilities to share net-centric data and services between the DCGS Programs of Record (PoRs) and the overarching Defense Intelligence Information Enterprise (DI2E).

Operates and maintains the DDTE, providing DCGS PoRs a virtual operationally relevant assessment environment maintaining connectivity between Service facilities, National Agency capabilities, and Coalition partners. DDTE allows robust integration of modeling and simulation T&E capabilities across Joint DCGS events without introducing vulnerabilities to operational Command and Control networks and has enabled improvements in systems engineering, instrumentation and T&E throughout all phases of the DCGS life cycle.

DCGS PoRs and Coalition partners use the DDTE network, which supports the net-centric maturity assessment of the DCGS Enterprise under the DCGS Governance, to integrate architecture, standards, and capabilities for implementation of the DCGS Integration Backbone and support the migration to net-centricity, including DCGS Enterprise services for the Military Departments, DCGS-Special Operations Forces and the DCGS Intelligence Community. National Agency capabilities supporting DCGS include Geospatial Intelligence, Signals Intelligence, Measurement and Signature Intelligence and Human Intelligence, which are integrated and tested in the DDTE domain.

B. Accomplishments/Planned Programs (\$ in Millions)

	FY 2014	FY 2015	FY 2016
Title: Distributed Common Ground/Surface Systems (DCGS)	3.348	3.400	3.239
FY 2014 Accomplishments:			
Continued to support DDTE and provide enhanced functionality with expanding T&E capability, with a focus on increasingly automated evaluations of net-centric data and web services. Determined the extent DCGS Enterprise capabilities comply with established visible, accessible, understandable, and interoperable (VAUSI) standards that and make made them available and accessible in a "storefront" that enhances enhanced the sharing of net-centric data and services. Hosted or			

UNCLASSIFIED

Exhibit R-2A, RDT&E Project Justification: PB 2016 Defense Information Systems Agency		Date: February 2015	
Appropriation/Budget Activity 0400 / 7	R-1 Program Element (Number/Name) PE 0305208K / <i>Distributed Common Ground/Surface Systems</i>	Project (Number/Name) NF1 / <i>Distributed Common Ground/Surface Systems</i>	
B. Accomplishments/Planned Programs (\$ in Millions)		FY 2014	FY 2015
provided access to a T&E framework that provides provided validated, automated test tools for compliance testing, and will supported reciprocity with other T&E organizations using accepted T&E environments and tools to provide data for DCGS Enterprise maturity assessments. Enterprise T&E support will continued to include Enterprise-level assessment events for the DCGS PoRs, National Agencies and Coalition Partners. Continued development and instrumentation for data collection and testing support on the 15 DCGS network domains and enclaves. These efforts will bewere measured by the EMM and documented in an annual DCGS T&E FT Enterprise Assessment Report. FY 2015 Plans: Will continue to support DDTE and provide enhanced functionality with expanding T&E capability, with a focus on increasingly automated evaluations of net-centric data and web services. To further DCGS Enterprise capabilities, will establish procedures and conduct compliance testing of services against established standards prior to making them available and accessible in a "storefront" that enhances the sharing of net-centric data and services and promotes reuse of capabilities. Will establish and host initial "Testing as a Service" capabilities that will enable DCGS entities to test for standards compliance early and often during the development and acquisition processes. Enterprise T&E support will continue to include Enterprise-level assessment events such as Enterprise Challenge and Unified Vision for the DCGS PoRs, National Agencies and Coalition Partners. Will continue development and instrumentation for data collection and testing support on the DCGS network domains and enclaves; the number of active DDTE nodes is projected to increase as mission-based testing starts to span other communities of interest such as command and control. Data collected by these assessment efforts will continue to be reflected in the EMM and documented in an annual DCGS Enterprise Assessment Report. The increase of +\$0.052 from FY 2014 to FY 2015 is for advancement of DCGS T&E Focus Team (FT) Strategy and expansion of specific analytic software. FY 2016 Plans: Continuing to support DDTE and to provide enhanced functionality with expanding T&E capability, with a focus on increasingly automated evaluations of net-centric data and web services. Incorporating new technologies such as cloud computing, mobile technology, and "big data" in assessment methodologies and practices. To further DCGS Enterprise and associated Defense Intelligence Information Enterprise (DI2E) capabilities, conducting compliance testing of data, metadata, and services against established standards to enhance the sharing and promote reuse of net centric capabilities. Enhancing "Testing as a Service" (TaaS) capabilities that enable DCGS entities and other communities of interest (COIs), such as industry partners, to test for standards compliance early and often during the development and acquisition processes. Enterprise T&E support continues to include Enterprise-level assessment events such as Enterprise Challenge for the DCGS PoRs, National Agencies and Coalition Partners. Continuing development and instrumentation for data collection and testing support on the DCGS network domains and enclaves; with the number of active DDTE nodes increasing from 19 to 21 as the DCGS Programs of Record (PoRs) participate in			

UNCLASSIFIED

Exhibit R-2A, RDT&E Project Justification: PB 2016 Defense Information Systems Agency		Date: February 2015	
Appropriation/Budget Activity 0400 / 7	R-1 Program Element (Number/Name) PE 0305208K / <i>Distributed Common Ground/Surface Systems</i>	Project (Number/Name) NF1 / <i>Distributed Common Ground/Surface Systems</i>	
B. Accomplishments/Planned Programs (\$ in Millions)		FY 2014	FY 2015
assessment venues with other DI2E entities. Developing and implementing passive instrumentation on operational networks that can gather data on capabilities not instantiated on the DDTE test domain to provide a more robust evaluation of the net-centric maturity of the DCGS Enterprise. Data collected by these assessment efforts are reflected in the Enterprise Maturity Model (EMM) and documented in an annual DCGS Enterprise Assessment Report.			
The decrease of -\$0.161 from FY 2015 to FY 2016 is due to testing remotely rather than on-site following automation improvements and delay of end of life hardware replacement.			
Accomplishments/Planned Programs Subtotals		3.348	3.400
C. Other Program Funding Summary (\$ in Millions) N/A			
Remarks			
D. Acquisition Strategy A T&E Mission Support Services (MSS) cost plus fixed fee contract provides T&E support by performing a wide range of non-personal services to encompass testing, scientific, engineering, logistic, administrative, and ancillary support of the DISA T&E missions.			
E. Performance Metrics The DCGS T&E FT performs a minimum of six DCGS Enterprise assessments per year, and the results are consolidated into the T&E FT Enterprise Assessment Report annually. The T&E FT also provides input to the DCGS Enterprise Focus Team's State of the Enterprise (SoE) Report, which includes the Enterprise Maturity Model (EMM) and shows measurable DCGS Enterprise net-centric maturity progress over time. The T&E FT also leverages Joint Interoperability Certification testing to support the evaluation of DCGS Enterprise maturity. In FY14, of the six DCGS PoR systems, three hold current Joint Staff (JS), Command, Control, Communications, & Computers/Cyber (J6) Interoperability (IOP) Certifications and continue to conduct IOP testing on emerging releases. One DCGS PoR has completed interoperability testing, and the joint IOP certification is pending. The remaining two PoRs are not required to be JS J6 certified, but the T&E FT leverages data collected during periodic IOP assessments of these programs during enterprise-level demonstrations and test events. Due to increased automation for data collection, parsing and analysis, in addition to advances in PoR and Enterprise maturity, the T&E FT increases the cumulative number of net-centric capability evaluations each year. This trend is expected to continue in FY15 and FY16. This effort provides the basis for the DCGS Enterprise Assessment, allowing the Office of the Under Secretary of Defense (Intelligence) to measure the level of maturity of the DCGS Enterprise supported by the DCGS Governance.			

UNCLASSIFIED

Exhibit R-3, RDT&E Project Cost Analysis: PB 2016 Defense Information Systems Agency												Date: February 2015			
Appropriation/Budget Activity 0400 / 7						R-1 Program Element (Number/Name) PE 0305208K / <i>Distributed Common Ground/Surface Systems</i>						Project (Number/Name) NF1 / <i>Distributed Common Ground/Surface Systems</i>			
Support (\$ in Millions)				FY 2014		FY 2015		FY 2016 Base		FY 2016 OCO		FY 2016 Total			
Cost Category Item	Contract Method & Type	Performing Activity & Location	Prior Years	Cost	Award Date	Cost	Award Date	Cost	Award Date	Cost	Award Date	Cost	Cost To Complete	Total Cost	Target Value of Contract
In-House Contracts	Various	N/A : N/A	18.059	1.004	Oct 2013	1.000	Oct 2014	0.900	Oct 2015	-		0.900	Continuing	Continuing	Continuing
Subtotal			18.059	1.004		1.000		0.900		-		0.900	-	-	-
Test and Evaluation (\$ in Millions)				FY 2014		FY 2015		FY 2016 Base		FY 2016 OCO		FY 2016 Total			
Cost Category Item	Contract Method & Type	Performing Activity & Location	Prior Years	Cost	Award Date	Cost	Award Date	Cost	Award Date	Cost	Award Date	Cost	Cost To Complete	Total Cost	Target Value of Contract
Engineering/Technical Services 1	C/T&M	Interop : Ft. Hua, AZ	3.763	-		-		-		-		-	-	3.763	3.376
Engineering/Technical Services 2	C/T&M	NGMS : Ft. Hua, AZ	12.927	-		-		-		-		-	-	12.927	12.927
Engineering/Technical Services 3	C/T&M	NGIT : Ft. Hua, AZ	3.612	-		-		-		-		-	-	3.612	3.612
Engineering/Technical Services 4	C/Various	Various : Various	0.157	0.586	Oct 2013	0.600	Oct 2014	0.209	Oct 2015	-		0.209	Continuing	Continuing	Continuing
Engineering/Technical Services 5	C/CPFF	TASC, Inc : Andover, MA	1.705	1.758	Oct 2013	1.800	Oct 2014	2.130	Oct 2015	-		2.130	-	-	-
Subtotal			22.164	2.344		2.400		2.339		-		2.339	-	-	-
			Prior Years	FY 2014		FY 2015		FY 2016 Base		FY 2016 OCO		FY 2016 Total	Cost To Complete	Total Cost	Target Value of Contract
Project Cost Totals			40.223	3.348		3.400		3.239		-		3.239	-	-	-
Remarks															

UNCLASSIFIED

Exhibit R-4, RDT&E Schedule Profile: PB 2016 Defense Information Systems Agency										Date: February 2015	
Appropriation/Budget Activity 0400 / 7					R-1 Program Element (Number/Name) PE 0305208K / <i>Distributed Common Ground/Surface Systems</i>					Project (Number/Name) NF1 / <i>Distributed Common Ground/Surface Systems</i>	

	FY 2014				FY 2015				FY 2016				FY 2017				FY 2018				FY 2019				FY 2020			
	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																												
DCGS T&E IPT																												
Connectivity to Other Testbeds & Test Event Conduct																												
DDTE Operation and Maintenance Support																												

UNCLASSIFIED

Exhibit R-4A, RDT&E Schedule Details: PB 2016 Defense Information Systems Agency			Date: February 2015
Appropriation/Budget Activity 0400 / 7	R-1 Program Element (Number/Name) PE 0305208K / <i>Distributed Common Ground/Surface Systems</i>	Project (Number/Name) NF1 / <i>Distributed Common Ground/Surface Systems</i>	

Schedule Details

Events by Sub Project	Start		End	
	Quarter	Year	Quarter	Year
DCGS				
DCGS T&E IPT	1	2014	4	2020
Connectivity to Other Testbeds & Test Event Conduct	1	2014	4	2020
DDTE Operation and Maintenance Support	1	2014	4	2020