Exhibit R-2, RDT&E Budget Item Justification: PB 2016 Navy **Date:** February 2015

Appropriation/Budget Activity

R-1 Program Element (Number/Name)

1319: Research, Development, Test & Evaluation, Navy I BA 7: Operational

PE 0305208M I (U)Distributed Common Ground/Surface Systems

Systems Development

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	57.183	5.207	11.606	1.105	-	1.105	0.143	0.985	1.488	0.286	Continuing	Continuing
2268: Distributed Common Ground System (DCGS-MC)	57.183	5.207	11.606	1.105	-	1.105	0.143	0.985	1.488	0.286	Continuing	Continuing

Note

Effective FY 2014 the Increment II Advanced Analytics/All Source capability was realigned to Intelligence Analysis System (PE 0206625M). Effective FY 2015 the Joint Surveillance Target Attack Radar System (JSTARS) capability (PE 0206625M) is subsumed by DCGS-MC. Topographic Production Capability (TPC) Family of Systems (FOS) and Tactical Exploitation Group (TEG) Family of Systems (FOS) have merged into DCGS-MC. Funding for these efforts under PE 0206625M has been realigned to DCGS-MC PE 0305208M effective FY 2011.

A. Mission Description and Budget Item Justification

DCGS-MC, in compliance with the Department of Defense DCGS Family of Systems (FOS) concept, is a service-level effort to migrate select USMC Intelligence, Surveillance and Reconnaissance (ISR) processing and exploitation capabilities into a single, integrated, net-centric baseline that will be interoperable with other services and agencies.

Multiple functional capability sets will be configured to support Marine intelligence analysts across the Marine Air-Ground Task Force (MAGTF). The goal of DCGS-MC is to make external and internal ISR data more visible, accessible, and understandable.

B. Program Change Summary (\$ in Millions)	FY 2014	FY 2015	FY 2016 Base	FY 2016 OCO	FY 2016 Total
Previous President's Budget	5.527	11.613	1.123	-	1.123
Current President's Budget	5.207	11.606	1.105	-	1.105
Total Adjustments	-0.320	-0.007	-0.018	-	-0.018
 Congressional General Reductions 	-	-0.007			
 Congressional Directed Reductions 	-	-			
 Congressional Rescissions 	-	-			
 Congressional Adds 	-	-			
 Congressional Directed Transfers 	-	-			
 Reprogrammings 	-0.320	-			
SBIR/STTR Transfer	-	-			
 Rate/Misc Adjustments 	-	-	-0.018	-	-0.018

Change Summary Explanation

Funding increase from FY 2014 to FY 2015 supports Virtual Imagery Processor - Marine Corps (VIP-MC) engineering and manufacturing development and research, development and testing of geospatial intelligence (GEOINT) optimization efforts, hardware refresh and antenna optimization. The funding decrease

UNCLASSIFIED

Exhibit R-2, RDT&E Budget Item Justification: PB 2016 Navy		Date: February 2015
Appropriation/Budget Activity	R-1 Program Element (Number/Name)	
319: Research, Development, Test & Evaluation, Navy I BA 7: Operational Systems Development	PE 0305208M I (U)Distributed Common Ground/Surfa	ace Systems
from FY 2015 to FY 2016 is attributed to the completion of testing ass optimization, antenna optimization, Geodetic Survey Sets and integra		P-MC) hardware and software

PE 0305208M: *(U)Distributed Common Ground/Surface Sys...*Navy

Exhibit R-2A, RDT&E Project Ju	ustification:	: PB 2016 N	lavy							Date: Febr	uary 2015	
Appropriation/Budget Activity 1319 / 7		R-1 Program Element (Number/Name) PE 0305208M I (U)Distributed Common Ground/Surface Systems Project (Number/Name) 2268 I Distributed Common G (DCGS-MC)						,	nd System			
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
2268: Distributed Common Ground System (DCGS-MC)	57.183	5.207	11.606	1.105	-	1.105	0.143	0.985	1.488	0.286	Continuing	Continuing
Quantity of RDT&E Articles		-	-	-	-	-	-	-	-	-		

Note

Effective 2014 the Rapid Technology Insertion Efforts/All Source capability was realigned to Intelligence Analysis System (PE 0206625M). Effective FY 2015 the Joint Surveillance Target Attack Radar System (JSTARS) capability (PE 0206625M) is subsumed by DCGS-MC.

A. Mission Description and Budget Item Justification

Distributed Common Ground /Surface System-Marine Corps (DCGS-MC), in compliance with the Department of Defense DCGS Family of Systems concept, is a Service-level effort to migrate select USMC Intelligence, Surveillance and Reconnaissance (ISR) processing and exploitation capabilities into a single, integrated, netcentric baseline that will be interoperable with other Services and Agencies.

Multiple functional capability sets will be configured to support Marine intelligence analysts across the Marine Air-Ground Task Force (MAGTF). The goal of DCGS-MC is to make external and internal ISR data more visible, accessible, and understandable. The funding decrease (\$10.501M) from FY2015 to FY2016 is attributed to the completion of testing associated with Virtual Imagery Processor-Marine Corps (VIP-MC) hardware and software optimization, antennae optimization, Geodetic Survey Set and integration into DCGS.

B. Accomplishments/Planned Programs (\$ in Millions, Article Quantities in Each)			FY 2016	FY 2016	FY 2016
	FY 2014	FY 2015	Base	oco	Total
Title: Test and Evaluation	1.089	3.500	0.623	-	0.623
Articles.	-	-	-	-	-
FY 2014 Accomplishments:					
-Continued Developmental Testing in support of DCGS-MC GEOINT IOT&E initiatives.					
-Continued Developmental Testing in association with OUSD-I C4ISR related Exercises.					
-Completed VIP-MC field user evaluation					
-Initiated TEG prototype testing					
FY 2015 Plans:					
-Initiate Post Milestone C System Engineering Test Review (SETR) activities associated with DCGS-MC					
Engineering Change Proposals, software integration and associated test events.					
-Continue EDS-MC and VIP-MC test efforts to support commonality of HW/SW baselines.					

UNCLASSIFIED
Page 3 of 11

Exhibit R-2A, RDT&E Project Justification: PB 2016 Navy				Date: Febr			
Appropriation/Budget Activity 1319 / 7	R-1 Program Element (Number/ PE 0305208M / (U)Distributed Co Ground/Surface Systems			(Number/Name) Distributed Common Ground Syst MC)			
B. Accomplishments/Planned Programs (\$ in Millions, Article (Quantities in Each)	FY 2014	FY 2015	FY 2016 Base	FY 2016 OCO	FY 2016 Total	
-Initiate testing of TEG and TPC Common hardware and software	baseline.		1 1 2010			1000	
FY 2016 Base Plans: -Continue testing and information assurance assessments on major	or DCGS-MC/GEOINT FoS S/W updates.						
FY 2016 OCO Plans: N/A							
Title: Product Development	Articles:	3.259	5.763 -	-	-	-	
-Continued research and development efforts for DCGS-MC GEOI development associated with the Ozone Widget framework, DCGS Link (CDL) enhancements. -Continued research and development efforts associated with follo Backbone (DIB). -Continued DCGS-MC CDL optimization and Human Systems Inte Effective FY14 the Advanced Analytics/All Source capability was re 0206625M). -Continued to support architecture studies related to intelligence, s Virtual Rapid Prototyping Lab (VRPL), resulting in delivery of Full Market Contribution to DCGS "enterprise" software development software FY 2015 Plans: -Continue development and optimization efforts for DCGS-MC GEO-Expand services and development associated with the Ozone Widgend CDL enhancements. -Continue research and development efforts associated with follow Backbone (DIB). -Continue DCGS-MC Common Data Link (CDL) optimization between System (JSTARS) and Tactical Wideband Interoperable Surface T-Initiate development of Virtual Imagery Processor - Marine Corps across the Enterprise DIB Services (EDS).	S-Enterprise StoreFront and Common Data w-on versions of the DCGS Integration rface (HSI) analysis and refinement. ealigned to Intelligence Analysis System (PE urveillance, and reconnaissance activities and Motion Video Capability. as a part of the DCGS enterprise core OINT. dget framework, DCGS-Enterprise StoreFront r-on versions of the DCGS Integration een Joint Surveillance Target Attack Radar erminal antennas (TWISTER).						

UNCLASSIFIED Page 4 of 11

Exhibit R-2A, RDT&E Project Justification: PB 2016 Navy			<u> </u>	Date: Febr	uary 2015		
Appropriation/Budget Activity 1319 / 7	R-1 Program Element (Number/ PE 0305208M / (U)Distributed Co Ground/Surface Systems				lame) Common Ground System		
Propriation/Budget Activity 19 / 7 R-1 Program Element (PE 0305208M / (U)Distri Ground/Surface Systems Accomplishments/Planned Programs (\$ in Millions, Article Quantities in Each) Itiate integration of future enhancements via capability drops into the current DCGS-MC software base ective FY 2015, JSTARS (PE 0206625M) capability is subsumed into DCGS-MC. evelop EMD prototypes for Imagery workstation If 2016 Base Plans: Accomplishments: Intinued System requirements analysis and review associated with DCGS-MC GEOINT Optimization gineering Change Proposals (ECPs), Configuration Control Boards, and agile aligned Preliminary Desview (PDR). If 2015 Plans: Intinue requirements analysis that align to future enhancements with updated technology. Intinue requirements analysis that align to future enhancements with updated technology. Intinue requirements analysis that align to future enhancements with updated technology. Intinue requirements analysis that align to future enhancements with updated technology. Intinue requirements analysis that align to future enhancements with updated technology. Intinue requirements analysis that align to future enhancements with updated technology. Intinue requirements analysis that align to future enhancements with updated technology. Intinue requirements analysis that align to future enhancements with updated technology. Intinue ongoing software upgrades across all DCGS-GEOINT programs to ensure capability remains ormation Assurance (IA) compliant. Intinue the processor - Marine Corps (VIP-MC) Systems Verification Review (SVR) Product adiness Review (PRR) Physical Configuration Audit (PCA) and Critical Design Review (CDR). If 2016 Base Plans: Accomplishments.		FY 2014	FY 2015	FY 2016 Base	FY 2016 OCO	FY 2016 Total	
FY 2016 Base Plans: N/A							
FY 2016 OCO Plans: N/A							
Title: Management Services - Engineering and Technical Services	Articles:	0.276	0.300				
-Continue ongoing software upgrades across all DCGS-GEOINT programs Information Assurance (IA) compliantInitiate Virtual Imagery Processor - Marine Corps (VIP-MC) Systems Verific Readiness Review (PRR) Physical Configuration Audit (PCA) and Critical D	to ensure capability remains cation Review (SVR) Product esign Review (CDR).						
FY 2016 Base Plans: N/A							
FY 2016 OCO Plans: N/A							
Title: Support	Articles:	0.583	2.043	0.482		0.482	
FY 2014 Accomplishments:							

UNCLASSIFIED
Page 5 of 11

PE 0305208M: *(U)Distributed Common Ground/Surface Sys...* Navy

R-1 Line #217

Exhibit R-2A, RDT&E Project Justification: PB 2016 Navy				Date: Febr	uary 2015			
Appropriation/Budget Activity 1319 / 7	R-1 Program Element (Number/ PE 0305208M / (U)Distributed Co Ground/Surface Systems		• •	(Number/Name) Distributed Common Ground Sy -MC)				
B. Accomplishments/Planned Programs (\$ in Millions, Article Quantit	ties in Each)	FY 2014	FY 2015	FY 2016 Base	FY 2016 OCO	FY 2016 Total		
-Conducted DCGS-MC Common Data Link (CDL) optimization and Huma refinement.	n Systems Interface (HSI) analysis and							
FY 2015 Plans: -Conduct DCGS-MC Common Data Link (CDL) optimization between JST-Establish VIP-MC HW baseline using commonality across the EDSContinue system/engineering requirement analysis and review for future Fusion and Signals Intelligence.								
FY 2016 Base Plans: -Will refine system requirements through government lab supportContinue system/engineering requirement analysis and review for future Fusion and Signals Intelligence.	Capability Drops such as All Source							
FY 2016 OCO Plans:								

C. Other Program Funding Summary (\$ in Millions)

			FY 2016	FY 2016	<u>FY 2016</u>					Cost To	
<u>Line Item</u>	FY 2014	FY 2015	Base	000	<u>Total</u>	FY 2017	FY 2018	FY 2019	FY 2020	Complete	Total Cost
 PMC 4767: Distributed 	11.392	20.620	1.947	-	1.947	2.168	7.976	13.005	12.878	-	83.113
Common Ground System											

Accomplishments/Planned Programs Subtotals

5.207

11.606

1.105

1.105

Remarks

N/A

D. Acquisition Strategy

The Acquisition Strategy shall follow a hybrid approach consisting of a viable mix of alternatives that allows flexibility, agility and rapid fielding of new capabilities. An evolutionary acquisition approach will provide users with time-phased increments of capabilities that (while less than the full requirement), promote earlier delivery, improve affordability, and reduce risk. The evolutionary approach enables DCGS-MC to effectively assess and leverage emerging technologies to accelerate introduction into MCISR-E. The DCGS-MC capabilities will be fielded in increments through operational capability drops

E. Performance Metrics

- -Milestone Assessment Team (MAT) Reviews 15 July 2014 and 18 Aug 2014
- -Quarterly Dashboard Input

UNCLASSIFIED

PE 0305208M: (U)Distributed Common Ground/Surface Sys... Navy Page 6 of 11 R-1 Line #217

Appropriation/Budget ActivityR-1 Program Element (Number/Name)Project1319 / 7PE 0305208M / (U)Distributed Common2268 /	ct (Number/Name) Distributed Common Ground System
Ground/Surface Systems (DCGS	S-MC)
-IOT&E	

Exhibit R-3, RDT&E Project Cost Analysis: PB 2016 Navy

Appropriation/Budget Activity R-1 Program Element (Number/Name) Project (Number/Name)

1319 / 7 PE 0305208M / (U)Distributed Common Ground/Surface Systems (DCGS

Project (Number/Name)
2268 I Distributed Common Ground System
(DCGS-MC)

Product Developme	nt (\$ in M	illions)		FY 2	2014	FY 2	2015		2016 ise		2016 CO	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	Total Cost	Target Value of Contract
DCGS PRIOR YEAR CUMMULATIVE FUNDING	Various	N/A : N/A	18.676	-		-		-		-		-	-	18.676	-
DCGS	WR	NRL : Washington, DC	2.541	-		1.575	Feb 2015	-		-		-	Continuing	Continuing	Continuing
DCGS	WR	SSCA : Charleston, SC	26.658	0.819	Mar 2014	3.775	Jan 2015	-		-		-	Continuing	Continuing	Continuing
DCGS	C/FFP	MCSELMS : Quantico, VA	0.000	0.332	Apr 2014	-		-		-		-	-	0.332	-
DCGS	WR	NSWC : Crane, IN	0.000	0.550	Mar 2014	0.413	Jan 2015	-		-		-	-	0.963	-
DCGS	C/FFP	SSC-A : Charleston, SC	0.000	0.958	Aug 2014	-		-		-		-	-	0.958	-
DCGS	WR	DMO : Boston, MA	0.000	0.600	Jan 2014	-		-		-		-	-	0.600	-
		Subtotal	47.875	3.259		5.763		-		-		-	-	-	-

Support (\$ in Million	ıs)			FY 2	2014	FY 2	2015		2016 ise		2016 CO	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	Total Cost	Target Value of Contract
DCGS PRIOR YEAR CUMMULATIVE FUNDING	Various	N/A : N/A	2.202	-		-		-		-		-	-	2.202	-
DCGS	C/FFP	Seaport : Stafford, VA	0.779	0.583	Mar 2014	-		-		-		-	-	1.362	-
DCGS	C/FFP	SSCA : Charleston, SC	1.189	-		1.107	Feb 2015	-		-		-	-	2.296	-
DCGS	WR	SSC-P : San Diego, CA	0.000	-		0.616	Mar 2015	-		-		-	-	0.616	-
DCGS	C/FFP	DMO : Hanscom AFB, MA	0.000	-		0.320	Feb 2015	0.175	Feb 2016	-		0.175	-	0.495	-
DCGS	C/BA	SDL : Logan, Utah	0.000	-		-		0.307	Nov 2015	-		0.307	-	0.307	-

Exhibit R-3, RDT&E	Project C	ost Analysis: PB 2	2016 Navy	/								Date:	February	2015	
Appropriation/Budget Activity 1319 / 7						R-1 Program Element (Number/Name) PE 0305208M I (U)Distributed Common Ground/Surface Systems				Project (Number/Name) 2268 I Distributed Common Ground System (DCGS-MC)					
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
		Subtotal	4.170	0.583		2.043		0.482		-		0.482	-	7.278	-
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
DCGS PRIOR YEAR CUMMULATIVE FUNDING	Various	N/A : N/A	2.418	-		-		-		-		-	-	2.418	-
DCGS	WR	NRL : Washington, DC	0.625	0.600	Feb 2014	-		0.208	Dec 2015	-		0.208	-	1.433	-
DCGS	C/FFP	SSCA : Charleston, SC	1.297	0.190	Jun 2014	3.068	Feb 2015	0.208	Dec 2015	-		0.208	-	4.763	-
DCGS	WR	NSWC-CRANE : Crane, IA	0.000	-		0.432	Jan 2015	0.207	Jan 2016	-		0.207	-	0.639	-
DCGS	WR	MCOTEA : Washington, DC	0.000	0.299	Oct 2013	-		-		-		-	-	0.299	-
		Subtotal	4.340	1.089		3.500		0.623		-		0.623	-	9.552	-
Management Services (\$ 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
DCGS	C/FFP	MITRE : Stafford, Va	0.798		Apr 2014	0.300	Jan 2015	-		-		-	-	1.374	
		Subtotal	0.798	0.276		0.300		-		-		-	-	1.374	-
			Prior Years	FY 2014		FY 2015		FY 2016 Base		FY 2016 OCO		FY 2016 Total	Cost To	Total Cost	Target Value of Contract
		Project Cost Totals	57.183	5.207		11.606		1.105		_		1.105		_	_

PE 0305208M: *(U)Distributed Common Ground/Surface Sys...*Navy

UNCLASSIFIED
Page 9 of 11

R-1 Line #217

Exhibit R-4, RDT&E Schedule Profile: PB 2016 Navy Date: February 2015 R-1 Program Element (Number/Name) Project (Number/Name) **Appropriation/Budget Activity** PE 0305208M I (U)Distributed Common 2268 I Distributed Common Ground System 1319 / 7 Ground/Surface Systems (DCGS-MC) Operations & E&MD Support 2019 Fiscal Year 2014 2015 2016 2017 2018 2020 Quarter Q1 | Q2 | Q3 | Q4 Q1 | Q2 | Q3 | Q4 Q1 Q2 Q3 Q4 Q1 | Q2 | Q3 | Q4 FOC 0 Fielding ADM FDD ADM FOC GEOINT HW Delivery Decision MCOTEA ACAT MS C ADM OIOC Concurrence VIP-MC Delivery Decision Acquisition / Milestone Events ____FĎD │ ▲ FDD Request TWISTER Delivery Decision TPC Delivery Decision MS C/LD Imagery HW **\rightarrow** ICDRTRB SVR PCA PCA SVR/PRR HW Refresh SVR/PRR PCA ECP Cap #2 All Source ECP **V**PCAVTRR TRRSVR $\Diamond \Diamond \Diamond$ PCAT TRR Systems Engineering IRR TRR SVR IRR TRR SVR Topo HW ECP IRR TRR SVR Imagery SW Optimization/Consolidation PCA 4.3.x PCA 4.2.x MCIA ⏷ \forall Sust ILA Sust ILA ILA ΪLΑ Life Cycle Sustainment III MEF Fielding SAM Val/Ver II MEF Fielding V Sust ILA V Sust ILA Log Assessment PIR ▼ SUM Val/Ver Logistics Sust ILA Sust ILA TWISTER Deliver Provisioning Conference TPC Fielding Log Assessment Sust ILA Drop 1 Drop 2 SIGINT SIPR OTRR All Source ∇ DT 4 SQT RAT SQT RATI SOT RAT SQT RATI Imagery HW RAM Test & Evaluation TEMP FÜE Env Test - - Continuous Monitoring & Lifecycle Maintenance Δ \triangle 77 IA Patch Patch Patch Patch Patch itch Patch Patch Patch Patch Patch Pat ATO atch Patch Patch Patch Patch Patch ATO Pen/ Pen Update Update

Exhibit R-4A, RDT&E Schedule Details: PB 2016 Navy			Date: February 2015
Appropriation/Budget Activity 1319 / 7	,	, ,	umber/Name) ributed Common Ground System C)

Schedule Details

	Sta	art	End		
Events by Sub Project	Quarter	Year	Quarter	Year	
Proj 2268					
DCGS-MC GEOINT, Milestone C for Enterprise DIB Services (EDS)	2	2014	2	2014	
DCGS-MC GEOINT Initial Operational Test and Evaluation for EDS	3	2014	3	2014	
DCGS-MC GEOINT Fielding Decision for EDS	2	2015	2	2015	
DCG-MC GEOINT Initial Operational Capability for EDS	2	2015	2	2015	
DCGS-MC GEOINT Full Operational Capability for EDS	2	2016	2	2016	
Fielding DCGS-MC Imagery Workstations	4	2015	4	2015	
Fielding VIP-MC	4	2015	4	2015	