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Exhibit R-2, RDT&E Budget Item Justification: PB 2017 Navy **Date:** February 2016

Appropriation/Budget Activity	R-1 Program Element (Number/Name)											
1319: <i>Research, Development, Test & Evaluation, Navy I BA 7: Operational Systems Development</i>	PE 0305208M I (U) <i>Distributed Common Ground/Surface Systems</i>											
COST (\$ in Millions)	Prior Years	FY 2015	FY 2016	FY 2017 Base	FY 2017 OCO	FY 2017 Total	FY 2018	FY 2019	FY 2020	FY 2021	Cost To Complete	Total Cost
Total Program Element	59.849	10.916	1.105	2.100	-	2.100	2.928	2.429	1.245	0.266	Continuing	Continuing
2268: <i>Distributed Common Ground System (DCGS-MC)</i>	59.849	10.916	1.105	2.100	-	2.100	2.928	2.429	1.245	0.266	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 2015	FY 2016	FY 2017 Base	FY 2017 OCO	FY 2017 Total
Previous President's Budget	11.606	1.105	0.143	-	0.143
Current President's Budget	10.916	1.105	2.100	-	2.100
Total Adjustments	-0.690	0.000	1.957	-	1.957
• Congressional General Reductions	-	-			
• Congressional Directed Reductions	-	-			
• Congressional Rescissions	-	-			
• Congressional Adds	-	-			
• Congressional Directed Transfers	-	-			
• Reprogrammings	-0.690	0.000			
• SBIR/STTR Transfer	-	-			
• Program Adjustments	0.000	0.000	2.000	-	2.000
• Rate/Misc Adjustments	0.000	0.000	-0.043	-	-0.043

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<u>Change Summary Explanation</u> Decrease in Distributed Common Ground/Surface Systems by \$1.5M as required for the Department of the Navy to comply with the Bipartisan Budget Act of 2015. The increase of \$1.957M in FY 2017 aligns funding profile to the acquisition phase for the DCGS-MC portfolio. The increase of \$.995M from FY 2016 to FY 2017 initiates development efforts to improve interoperability between DCGS-MC All Source Fusion and DCGS-MC GEOINT, and initiates development and optimization efforts for the TPC FoS Geospatial Intelligence Framework Web Dissemination Tool (GIFWEB) and Operating System migration.		

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Exhibit R-2A, RDT&E Project Justification: PB 2017 Navy										Date: February 2016		
Appropriation/Budget Activity 1319 / 7					R-1 Program Element (Number/Name) PE 0305208M / (U)Distributed Common Ground/Surface Systems				Project (Number/Name) 2268 / Distributed Common Ground System (DCGS-MC)			
COST (\$ in Millions)	Prior Years	FY 2015	FY 2016	FY 2017 Base	FY 2017 OCO	FY 2017 Total	FY 2018	FY 2019	FY 2020	FY 2021	Cost To Complete	Total Cost
2268: <i>Distributed Common Ground System (DCGS-MC)</i>	59.849	10.916	1.105	2.100	-	2.100	2.928	2.429	1.245	0.266	Continuing	Continuing
Quantity of RDT&E Articles		-	-	-	-	-	-	-	-	-		

Note

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) Enterprise will be a Family of Systems (FoS) providing all source analysis and production within garrison and deployed Marine Corps organizations. DCGS-MC will comply with the Department of Defense (DOD) DCGS Enterprise interoperability and information sharing requirements by migrating select processing, exploitation, analysis, and production capabilities into a single, integrated, net-centric baseline within the Marine Corps Intelligence, Surveillance and Reconnaissance Enterprise (MCISRE). This baseline will enable MCISRE analysts to deliver tactically focused, operational and strategic intelligence at the tactical edge throughout all phases of operations and will provide relevant, precise decision support for Joint Task Force (JTF), Marine Air Ground Task Force (MAGTF), and subordinate Marine units. The DoD DCGS Enterprise provides worldwide garrison, and forward projection of tactical ISR capabilities at the JTF level and below. The DoD DCGS Enterprise enhances intelligence sharing within the Joint Services, the Intelligence Community, and Coalition Forces throughout all phases of operations. Each individual Military Service DCGS Program of Record provides unique and distinct capabilities to the overall DoD DCGS Enterprise. DCGS-MC GEOINT consists of GEOINT Imagery and Topographic Capability, Enterprise DCGS Integration Backbone System (EDS), Virtual Imagery Processing - Marine Corps (VIP-MC), Target Material Production (TMP) Full Motion Video - One (FMV-One), and Moving Target Indicator (MTI) systems. These capabilities will provide the USMC GEOINT analysts with the capability to process, disseminate, exploit, analyze and produce intelligence. Future capabilities will be delivered via clearly defined Capability Drops. The specific content of each Capability Drop will be determined by an integrated assessment of user needs, technology readiness, risk mitigation, and affordability.

B. Accomplishments/Planned Programs (\$ in Millions, Article Quantities in Each)

	FY 2015	FY 2016	FY 2017 Base	FY 2017 OCO	FY 2017 Total
Title: Test and Evaluation	0.836	0.650	0.543	0.000	0.543
Articles:	-	-	-	-	-
FY 2015 Accomplishments:					
- Continued Post Milestone C System Engineering Test Review (SETR) activities associated with DCGS-MC Capability Drops, software integration and associated test events.					
- Continued Developmental Testing in support of DCGS-MC GEOINT IOT&E initiatives.					
- Continued Developmental Testing in association with OUSD-I C4ISR related Exercises.					

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Appropriation/Budget Activity 1319 / 7	R-1 Program Element (Number/Name) PE 0305208M / (U)Distributed Common Ground/Surface Systems	Project (Number/Name) 2268 / Distributed Common Ground System (DCGS-MC)

B. Accomplishments/Planned Programs (\$ in Millions, Article Quantities in Each)

	FY 2015	FY 2016	FY 2017 Base	FY 2017 OCO	FY 2017 Total
<ul style="list-style-type: none"> - Continued test efforts in support of commonality of HW/SW baselines across GEOINT systems, such as DCGS-MC, VIP-MC, TEG-RWS and TPC. - Completed Marine Corps Geospatial Data Base 2.0 developmental testing in support of Ground-Warfighter Geospatial Data Model 2.2 integration within the Topographic Production Capability Family of Systems baseline -Initiated test efforts in support of Geodetic Survey Set refresh. <p>FY 2016 Plans:</p> <ul style="list-style-type: none"> - Continue Post Milestone C System Engineering Test Review (SETR) activities associated with DCGS-MC Capability Drops, software integration and associated test events. -Continue test efforts in support of commonality of HW/SW baselines across GEOINT systems, such as DCGS-MC, VIP-MC, TEG-RWS and TPC. - Complete test efforts in support of Geodetic Survey Set refresh. - Initiate EDS Graphic User Interface update. - Initiate Cyber Security Test Events to maintain system security postures. - Initiate Operating System upgrade integration into DCGS-MC GEOINT Systems. <p>FY 2017 Base Plans:</p> <ul style="list-style-type: none"> - Continue Post Milestone C System Engineering Test Review (SETR) activities associated with DCGS-MC Capability Drops, software integration and associated test events. - Continue test efforts in support of commonality of HW/SW baselines across GEOINT systems, such as DCGS-MC, VIP-MC, TEG-RWS and TPC. - Continue Cyber Security Test Events to maintain system security postures. - Complete Operating System upgrade integration into DCGS-MC GEOINT Systems. <p>FY 2017 OCO Plans: N/A</p>					
<p>Title: Product Development</p> <p align="right">Articles:</p>	7.172	0.000	1.000	0.000	1.000
<p>FY 2015 Accomplishments:</p> <ul style="list-style-type: none"> -Expanded services and development associated with the Ozone Widget framework, DCGS-Enterprise StoreFront and Common Data Link (CDL) enhancements. -Continued research and development efforts for DCGS-MC GEOINT capabilities. -Continued DCGS-MC CDL optimization and Human Systems Interface (HSI) analysis and refinement. -Continued to support architecture studies related to intelligence, surveillance, and reconnaissance activities. 	-	-	-	-	-

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Appropriation/Budget Activity 1319 / 7	R-1 Program Element (Number/Name) PE 0305208M / (U)Distributed Common Ground/Surface Systems	Project (Number/Name) 2268 / Distributed Common Ground System (DCGS-MC)				
B. Accomplishments/Planned Programs (\$ in Millions, Article Quantities in Each)						
		FY 2015	FY 2016	FY 2017 Base	FY 2017 OCO	FY 2017 Total
<p>-Completed research and development efforts associated with follow-on versions of the DCGS Integration Backbone (DIB).</p> <p>-Completed Common GEOINT Software Market Research.</p> <p>-Completed proof of concept demonstration for Common GEOINT software platform integration.</p> <p>-Completed DCGS-MC Common Data Link (CDL) optimization between Joint Surveillance Target Attack Radar System (JSTARS) and Tactical Wideband Interoperable Surface Terminal antennas (TWISTER).</p> <p>-Initiated development and optimization efforts for Server 2012 migration into the DCGS-MC portfolio of systems baseline.</p> <p>FY 2016 Plans: -N/A</p> <p>FY 2017 Base Plans: -Continue development and optimization efforts for DCGS-MC GEOINT. -Initiate development and optimization efforts for TPC FoS Geospatial Intelligence Framework Web Dissemination Tool (GIFWEB). -Initiate development and optimization efforts for the next Operating System migration as directed by HQMC/ Cyber Command. -Initiate development efforts to improve interoperability between DCGS-MC all Source Fusion and DCGS-MC GEOINT</p> <p>FY 2017 OCO Plans: N/A</p>						
Title: Management Services - Engineering and Technical Services		0.320	0.000	0.100	0.000	0.100
		Articles: -	-	-	-	-
<p>FY 2015 Accomplishments: -Continued system requirements analysis and review associated with DCGS-MC GEOINT Optimization Engineering Change Proposals (ECPs), Configuration Control Boards. -Completed system requirements analysis to reduce TEG-RWS variants from 4 to 1. -Completed systems requirements analysis to support development and fielding of VIP-MC. -Completed prototype of FMV One capability and began integration into TEG-RWS FOS.</p> <p>FY 2016 Plans:</p>						

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Appropriation/Budget Activity 1319 / 7	R-1 Program Element (Number/Name) PE 0305208M / (U)Distributed Common Ground/Surface Systems	Project (Number/Name) 2268 / Distributed Common Ground System (DCGS-MC)				
B. Accomplishments/Planned Programs (\$ in Millions, Article Quantities in Each)						
		FY 2015	FY 2016	FY 2017 Base	FY 2017 OCO	FY 2017 Total
-N/A						
FY 2017 Base Plans:						
-Initiate system requirement analysis and review for future software releases to include All Source Fusion and Signals Intelligence.						
-Initiate Requirements Traceability Mapping (RTM) for all DCGS-MC requirements to key performance parameters (KPPs), Key System Attributes (KSAs) through the systems sub-systems specs and systems requirement specs.						
-Initiate Program Engineering Change Proposals (ECPs) as necessary.						
-Initiate systems requirements review and utilize DIB Management Office (DMO) to refine all system requirements through the requirements development process (RDP).						
FY 2017 OCO Plans:						
N/A						
Title: Support						
	Articles:	2.588	0.455	0.457	0.000	0.457
		-	-	-	-	-
FY 2015 Accomplishments:						
-Conducted DCGS-MC Common Data Link (CDL) optimization between JSTARS and TWISTER antenna.						
-Established VIP-MC HW baseline using commonality across the EDS.						
-Continued system/engineering requirement analysis and review for future Capability Drops such as All Source Fusion and Signals Intelligence.						
FY 2016 Plans:						
-Continue system/engineering requirement analysis and review for future Capability Drops such as All Source Fusion and Signals Intelligence.						
FY 2017 Base Plans:						
-Continue system/engineering requirement analysis and review for future Capability Drops such as All Source Fusion and Signals Intelligence.						
FY 2017 OCO Plans:						
N/A						
Accomplishments/Planned Programs Subtotals		10.916	1.105	2.100	0.000	2.100

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Appropriation/Budget Activity 1319 / 7	R-1 Program Element (Number/Name) PE 0305208M / (U)Distributed Common Ground/Surface Systems	Project (Number/Name) 2268 / Distributed Common Ground System (DCGS-MC)
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C. Other Program Funding Summary (\$ in Millions)

<u>Line Item</u>	<u>FY 2015</u>	<u>FY 2016</u>	<u>FY 2017</u> <u>Base</u>	<u>FY 2017</u> <u>OCO</u>	<u>FY 2017</u> <u>Total</u>	<u>FY 2018</u>	<u>FY 2019</u>	<u>FY 2020</u>	<u>FY 2021</u>	<u>Cost To</u> <u>Complete</u>	<u>Total Cost</u>
• PMC 4767: <i>Distributed Common Ground System</i>	20.993	1.947	1.149	-	1.149	6.906	12.404	12.286	13.036	0.000	93.240

Remarks

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 11 March 2015 and 8 June 2015
- Quarterly Dashboard Input
- IOC

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Exhibit R-3, RDT&E Project Cost Analysis: PB 2017 Navy												Date: February 2016			
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)							
Product Development (\$ in Millions)				FY 2015		FY 2016		FY 2017 Base		FY 2017 OCO		FY 2017 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	21.116	0.000		0.000		0.000		-		0.000	0.000	21.116	-
DCGS	WR	SSCA : Charleston, SC	27.477	3.658	Jan 2015	0.000		1.000	Feb 2017	-		1.000	Continuing	Continuing	Continuing
TPC SW Development	WR	NSWC Crane : Crane, IN	0.000	0.273	May 2015	0.000		0.000		-		0.000	0.000	0.273	-
VIP-MC Technical and Develop Support	WR	NRL : Washington DC	0.000	0.221	Nov 2014	0.000		0.000		-		0.000	0.000	0.221	-
DMO DIB cost and SW Integration	MIPR	NSMA : Washington, DC	0.000	0.320	Aug 2015	0.000		0.000		-		0.000	0.000	0.320	-
VIP-MC technical and development	MIPR	NRO : Washington, DC	0.000	2.700	Feb 2015	0.000		0.000		-		0.000	0.000	2.700	-
Subtotal			48.593	7.172		0.000		1.000		-		1.000	-	-	-
Support (\$ in Millions)				FY 2015		FY 2016		FY 2017 Base		FY 2017 OCO		FY 2017 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	3.564	0.000		0.000		0.000		-		0.000	0.000	3.564	-
DCGS	WR	SSCA : Charleston, SC	1.189	0.912	Feb 2015	0.415	Feb 2016	0.457	Feb 2017	-		0.457	0.000	2.973	-
PMMI Architecture Study	C/FFP	MCSC : Quantico, VA	0.000	0.312	Feb 2015	0.000		0.000		-		0.000	0.000	0.312	-
TPC SW Integrated baseline support	WR	NSWC Crane : Crane, IN	0.000	1.181	Mar 2015	0.000		0.000		-		0.000	0.000	1.181	-
Program office travel	Various	MCSC : Quantico, VA	0.000	0.183	Sep 2015	0.040	Sep 2016	0.000		-		0.000	0.000	0.223	-
DCGS	C/FFP	DMO : Hanscom AFB, MA	0.000	0.000	Jun 2015	0.000		0.000		-		0.000	0.000	0.000	-

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Exhibit R-3, RDT&E Project Cost Analysis: PB 2017 Navy												Date: February 2016				
Appropriation/Budget Activity				R-1 Program Element (Number/Name)				Project (Number/Name)								
1319 / 7				PE 0305208M / (U) Distributed Common Ground/Surface Systems				2268 / Distributed Common Ground System (DCGS-MC)								
Support (\$ in Millions)				FY 2015		FY 2016		FY 2017 Base		FY 2017 OCO		FY 2017 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/BA	SDL : Logan, Utah	0.000	0.000		0.000		0.000		-		0.000	0.000	0.000	-	
Subtotal			4.753	2.588		0.455		0.457		-		0.457	0.000	8.253	-	
Test and Evaluation (\$ in Millions)				FY 2015		FY 2016		FY 2017 Base		FY 2017 OCO		FY 2017 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	3.942	0.000		0.000		0.000		-		0.000	0.000	3.942	-	
DCGS	C/FFP	SSCA : Charleston, SC	1.487	0.761	Jan 2015	0.321	Feb 2016	0.543	Feb 2017	-		0.543	0.000	3.112	-	
DDTE VPN Connectivity	MIPR	JITC : Indian Head, MD	0.000	0.075	Nov 2014	0.000		0.000		-		0.000	0.000	0.075	-	
TPC Integration	C/CPFF	NSWC Crane : Crane, IN	0.000	0.000		0.329	Mar 2016	0.000		-		0.000	0.000	0.329	-	
Subtotal			5.429	0.836		0.650		0.543		-		0.543	0.000	7.458	-	
Management Services (\$ in Millions)				FY 2015		FY 2016		FY 2017 Base		FY 2017 OCO		FY 2017 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	MIPR	MITRE : Stafford, Va	1.074	0.320	Nov 2014	0.000		0.100	Dec 2016	-		0.100	0.000	1.494	-	
Subtotal			1.074	0.320		0.000		0.100		-		0.100	0.000	1.494	-	
Project Cost Totals			59.849	10.916		1.105		2.100		-		2.100	-	-	-	
Remarks																

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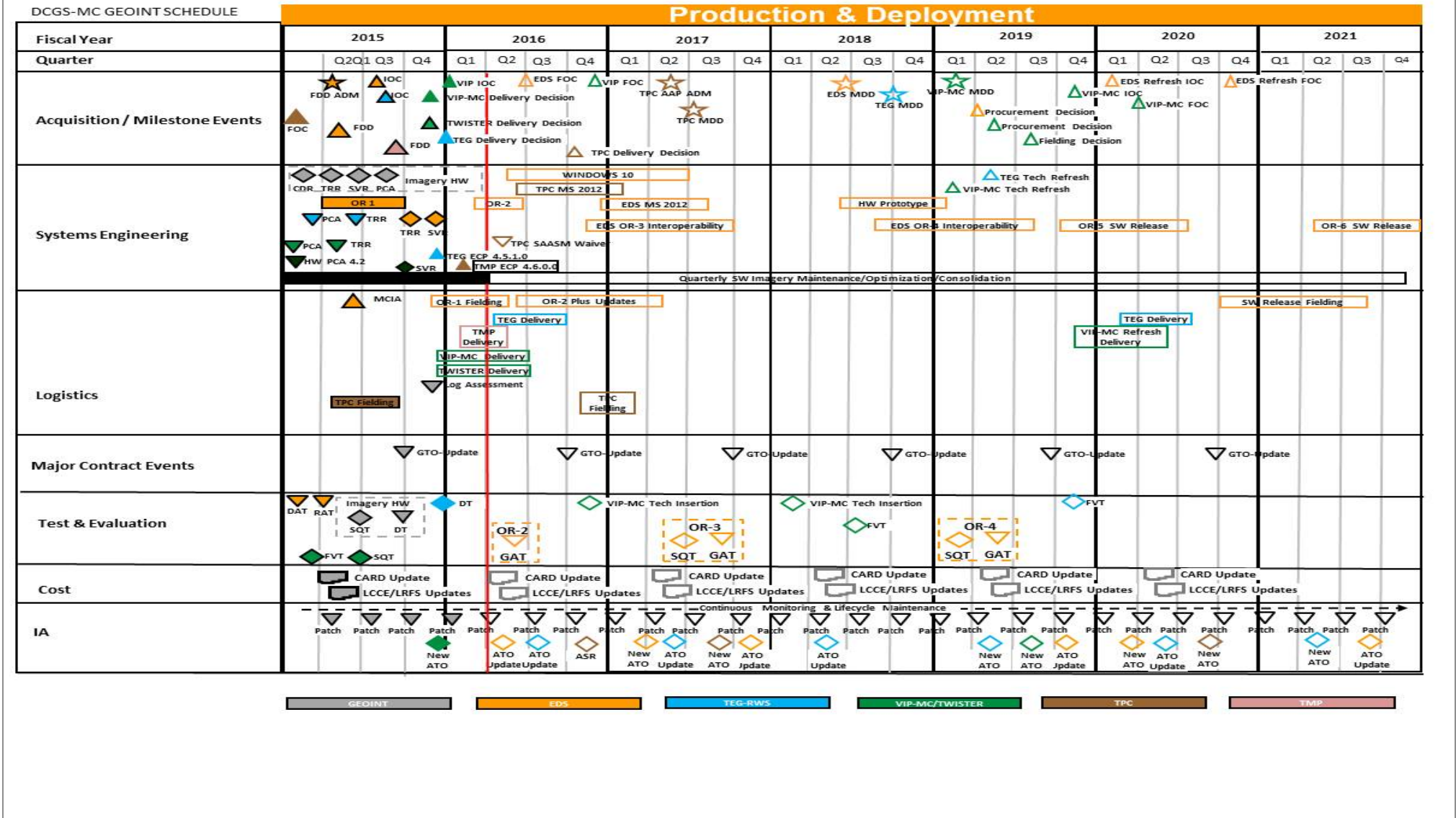
Exhibit R-4, RDT&E Schedule Profile: PB 2017 Navy

Date: February 2016

Appropriation/Budget Activity
1319 / 7

R-1 Program Element (Number/Name)
PE 0305208M / (U) Distributed Common
Ground/Surface Systems

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



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Exhibit R-4A, RDT&E Schedule Details: PB 2017 Navy		Date: February 2016
Appropriation/Budget Activity 1319 / 7	R-1 Program Element (Number/Name) PE 0305208M / (U) <i>Distributed Common Ground/Surface Systems</i>	Project (Number/Name) 2268 / <i>Distributed Common Ground System (DCGS-MC)</i>

Schedule Details

Events by Sub Project	Start		End	
	Quarter	Year	Quarter	Year
Proj 2268				
VIP-MC Delivery	4	2015	4	2015
DCGS-MC GEOINT Hardware (TEG-RWS) Delivery	2	2016	4	2016
DCGS-MC GEOINT Full Operational Capability for EDS	2	2016	2	2016
DCGS-MC GEOINT Release 2 (T&E OR-2)	1	2016	3	2016
Fielding GEOINT TPC FOS (GSS)	4	2016	1	2017
Fielding DCGS-MC (EDS, TEG-RWS, TPC FoS, VIP-MC, TMP) Windows 10 upgrade	2	2016	2	2017
DCGS-MC GEOINT Release 3 (T&E OR-3)	2	2017	4	2017

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