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

Appropriation/Budget Activity

R-1 Program Element (Number/Name)

2040: Research, Development, Test & Evaluation, Army I BA 7: Operational

PE 0303150A / WWMCCS/Global Command and Control System

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	-	13.852	2.150	7.053	-	7.053	9.767	8.118	7.934	5.653	-	54.527		
C86: Army Global C2 System	-	13.852	2.150	7.053	-	7.053	0.474	0.316	-	-	-	23.845		
EA5: Strategic and Joint Mission Command	-	-	-	-	-	-	9.293	7.802	7.934	5.653	-	30.682		

Note

In FY16, increase will provide support for modernization of the Defense Readiness Reporting System - Army (DRRS-A).

A. Mission Description and Budget Item Justification

Global Command and Control System-Army (GCCS-A): This project is the Army component system that directly supports the implementation of the Global Command and Control System Family of Systems. GCCS-A provides automated command and control tools for Army Strategic and Operational Theater Commanders to enhance warfighter capabilities throughout the spectrum of conflict during joint and combined operations in support of the National Security. The GCCS-A developed software systems dramatically improves the Army's ability to analyze courses of action; develop and manage Army Forces; and ensure feasibility of war plans. In accordance with Army Command Post Computing Environment and Joint Command and Control objectives, GCCS-A will be re-architected away from a scalable process architecture based server - thick client architecture to a virtualized server - web client architecture hosted on Battle Command Common Services and Mission Command Workstation by the end of Fiscal Year 2016. GCCS-A strategic tools for readiness reporting have been modernized and replaced with the Defense Readiness Reporting System -Army (DRRS-A), a suite of web based applications for Army Readiness, Force Registration and Force Projection. Strategic and Joint Mission Command funding will be used to modernize GCCS-A as outlined in the Joint Command and Control Capability Development Document (JC2 CDD) and the Army Mission Command for Unified Action Capability Definition Package (AMCUA CDP).

B. Program Change Summary (\$ in Millions)	FY 2014	FY 2015	FY 2016 Base	FY 2016 OCO	FY 2016 Total
Previous President's Budget	14.208	2.151	3.930	-	3.930
Current President's Budget	13.852	2.150	7.053	-	7.053
Total Adjustments	-0.356	-0.001	3.123	-	3.123
 Congressional General Reductions 	-	-			
 Congressional Directed Reductions 	-	-			
 Congressional Rescissions 	-	-			
 Congressional Adds 	-	-			
 Congressional Directed Transfers 	-	-			
 Reprogrammings 	-	-			
SBIR/STTR Transfer	-0.356	-0.001			
Adjustments to Budget Years	-	-	3.123	-	3.123

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Exhibit R-2A, RDT&E Project Ju	Exhibit R-2A, RDT&E Project Justification: PB 2016 Army Date: February 2015												
Appropriation/Budget Activity 2040 / 7		PE 030315	am Elemen 50A / WWM and Contro	CCS/Global	•	Project (Number/Name) C86 I Army Global C2 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	
C86: Army Global C2 System	-	13.852	2.150	7.053	-	7.053	0.474	0.316	-	-	-	23.845	
Quantity of RDT&E Articles	-	-	-	-	-	-	-	-	-	-			

Note

In FY16, \$3.123 million will provide support for modernization of the Defense Readiness Reporting System - Army (DRRS-A).

A. Mission Description and Budget Item Justification

Global Command and Control System-Army (GCCS-A): This project is the Army component of the Global Command and Control System (GCCS) Family of Systems (FoS). GCCS-A provides automated command and control tools, including Force readiness, planning and movement, and situational awareness, for Army Strategic and Operational Theater commanders to enhance warfighter capabilities throughout the spectrum of conflict during Joint and combined operations in support of National Security. GCCS-A dramatically improves the Army's ability to analyze courses of action, develop and manage Army forces and execute war plans. GCCS-A links the GCCS-Joint Common Operating Picture with the Army Mission Command systems. In accordance with Army Command Post Computing Environment and Joint Command and Control objectives, GCCS-A will be re-architected away from a scalable process architecture based server - thick client architecture to a virtualized server - web client architecture hosted on Battle Command Common Services and Mission Command Workstation by the end of Fiscal Year 2016. GCCS-A strategic tools for readiness reporting have been modernized and replaced with the Defense Readiness Reporting System - Army (DRRS-A), a suite of web based applications for Army Readiness, Force Registration and Force Projection.

Fiscal Year 2016 funding supports GCCS-A 4.3 software enhancements and certification testing of the GCCS-A Bridge Effort in conjunction with Common Operating Environment testing to ensure that GCCS-A Bridge Effort software is successfully configured as a virtual machine on Battle Command Common Services and is interoperable with Army and Joint Mission Command Systems. Additionally, the funding will provide continued support of DRRS-A Modernization efforts.

B. Accomplishments/Planned Programs (\$ in Millions)	FY 2014	FY 2015	FY 2016
Title: Software and System Engineering (Common Operating Environment (COE) System Engineering)	0.317	0.326	3.063
Description: Software and System Engineering for GCCS-A and DRRS-A Modernization			
FY 2014 Accomplishments: Software and System Engineering for GCCS-A and DRRS-A Modernization			
FY 2015 Plans: Software and System Engineering for GCCS-A and DRRS-A Modernization			
FY 2016 Plans:			

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Exhibit R-2A, RDT&E Project Justification: PB 2016 Army		Date: F	ebruary 2015			
Appropriation/Budget Activity 2040 / 7	R-1 Program Element (Number/Name) PE 0303150A / WWMCCS/Global Command and Control System	Project (Number/Name) C86 I Army Global C2 System				
B. Accomplishments/Planned Programs (\$ in Millions)		FY 2014	FY 2015	FY 2016		
Software and System Engineering DRRS-A Modernization						
Title: Sync with COE and Command Post Computing Environment	t (CP CE) and Joint C2 objective Architecture	-	-	2.910		
Description: Software ehancement efforts required to sync with C	OE/CPCE and Joint C2 objective Architecture					
FY 2016 Plans: Software enhancement efforts required to sync with COE/CPCE ar	nd Joint C2 objective Architecture					
Title: Data Engineering (COE Data Engineering)		1.385	0.678	-		
Description: Data Engineering for GCCS-A and DRRS-A Moderni	zation					
FY 2014 Accomplishments: Data Engineering for GCCS-A and DRRS-A Modernization						
FY 2015 Plans: Data Engineering for GCCS-A and DRRS-A Modernization						
Title: Software Development of Automated Command and Control	Tools (COE Automated Command and Control Tools)	10.920	-	-		
Description: Software Development of Automated Command and	Control Tools for GCCS-A and DRRS-A Modernization					
FY 2014 Accomplishments: Software Development of Automated Command and Control Tools	for GCCS-A and DRRS-A Modernization					
Title: Test and Evaluation		0.643	0.662	0.45		
Description: Test and Evaluation for GCCS-A and DRRS-A Mode	rnization					
FY 2014 Accomplishments: Test and Evaluation for GCCS-A and DRRS-A Modernization						
FY 2015 Plans: Test and Evaluation for GCCS-A and DRRS-A Modernization						
FY 2016 Plans: Test and Evaluation for GCCS-A. JITC/CTSF/SEC testing.						
Title: Program Support and Management		0.587	0.484	0.63		
Description: Support and Management for GCCS-A and DRRS-A	Modernization					
		1				

PE 0303150A: WWMCCS/Global Command and Control System Army

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Exhibit R-2A, RDT&E Project Justification: PB 2016 Army Date: February 2015									
Appropriation/Budget Activity 2040 / 7		ect (Number/l Army Global	•						
B. Accomplishments/Planned Programs (\$ in Millions)			FY 2014	FY 2015	FY 2016				
FY 2014 Accomplishments: Program Support and Management for GCCS-A and DRRS-A Modernization									
FY 2015 Plans: Program Support and Management for GCCS-A and DRRS-A Modernization									
FY 2016 Plans: Program Support and Management for GCCS-A									

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

			FY 2016	FY 2016	FY 2016					Cost To	
<u>Line Item</u>	FY 2014	FY 2015	Base	OCO	<u>Total</u>	FY 2017	FY 2018	FY 2019	FY 2020	Complete	Total Cost
• BA8250A: <i>BA8250 Army Global</i>	2.590	-	10.137	-	10.137	2.529	2.643	2.619	4.648	Continuing	Continuing
Cmd & Control Sys (AGCCS) - OPA											

Accomplishments/Planned Programs Subtotals

13.852

2.150

7.053

Remarks

D. Acquisition Strategy

GCCS-A is modernizing to meet the requirements defined in the Joint C2 Capability Development Document (CDD) and to align with the Joint and Army Enterprise architectures and Common Operating Environment (COE) standards.

In accordance with the Joint Requirements Oversight Committee (JROC) Memorandum (JROCM) 145-09 which states, "The JROC endorses efforts to develop and implement programmatic recommendations to support the "Do No Harm" Strategy", GCCS-A continues to synchronize and modernize along with the GCCS Family of Systems (FoS).

The GCCS-A Modernization Strategy will consist of two separate program efforts. (1) A Bridge effort, Acquisition Category (ACAT) III level and (2) a Modernization development effort for the Army's Joint and Strategic command and Control capabilities and Common Operating Environment (COE) infrastructure software products. The GCCS-A modernization development effort will be in compliance with Joint Command and Control Capability Development Document (JC2 CDD) and Army Mission Command for Unified Action Capability Definition Package (AMCUA CDP). DRRS-A developmental efforts will continue to satisfy readiness reporting requirements from Army Readiness Division (DAMO-ODR).

In accordance with the Training and Doctrine Command (TRADOC) requirements document approved in 2011, entitled Net Enabled Mission Command (NeMC) Initial Capabilities Document (ICD), software capability will be developed in 2-year increments as capability sets designed to Collaborate, Collapse and Converge Mission Command products. The product development funded under this R-Form is an integral part of the Mission Command System of Systems, under a strategy designed to

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Exhibit R-2A, RDT&E Project Justification: PB 2016 Army											
Appropriation/Budget Activity 2040 / 7	R-1 Program Element (Number/Name) PE 0303150A I WWMCCS/Global Command and Control System	Project (Number/Name) C86 I Army Global C2 System									
optimize opportunity for improved interoperability among the systems, to captul capability into warfighter systems. This strategy is designed to reduce the physical deployment as a virtualized server on Battle Command Common Services and	sical footprint, logistics support requirements a										
E. Performance Metrics N/A											

PE 0303150A: WWMCCS/Global Command and Control System Army

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

Date: February 2015

Appropriation/Budget Activity

R-1 Program Element (Number/Name)
PE 0303150A / WWMCCS/Global

Project (Number/Name)

2040 / 7

Command and Control System

C86 I Army Global C2 System

Management Service	Management Services (\$ in Millions)			FY 2	2014	FY 2	2015	FY 2 Ba		FY 2		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
Program Office Management	Various	Various : Various Locations	14.107	0.587	Nov 2013	0.484	Nov 2014	0.630	Nov 2015	-		0.630	-	15.808	15.805
		Subtotal	14.107	0.587		0.484		0.630		-		0.630	-	15.808	15.805

Product Development (\$ 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
Software Development (Completed Contracts)	Various	Lockheed Martin Corp (LMC) : Springfield, VA	156.206	-		-		-		-		-	-	156.206	156.206
GCCS-A and DRRS-A Bridge Effort Software Development (Completed Contract)	C/CPAF	Lockheed Martin Corp (LMC) : Springfield, VA	21.312	-		-		-		-		-	-	21.312	21.312
GCCS-A/DRRS-A Bridge Effort Software Development (Completed Contract)	Various	Software Engineering Center : Aberdeen Proving Ground, MD	15.069	-		-		-		-		-	-	15.069	16.304
Defense Readiness Reporting System-Army Bridge Effort Software Development (Completed Contract)	Various	Software Engineering Center : APG, MD	10.217	-		-		-		-		-	-	10.217	10.217
GCCS-A/DRRS-A Bridge Effort Software Development	MIPR	Software Engineering Center : APG, MD	0.000	11.237	Apr 2014	0.326	Feb 2015	5.973	Jan 2016	-		5.973	-	17.536	4.893
		Subtotal	202.804	11.237		0.326		5.973		-		5.973	-	220.340	208.932

Exhibit R-3, RDT&E	Project Co	ost Analysis: PB 2	2016 Army	/								Date:	February	2015	
Appropriation/Budg 2040 / 7	R-1 Program Element (Number/Name) PE 0303150A / WWMCCS/Global Command and Control System Project (Number/Name) C86 / Army Global C2 System							'em							
Support (\$ in Millior	ıs)			FY:	2014	FY:	2015		2016 ase		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 Complete	Total Cost	Target Value of Contract
Support Contractors	C/FP	Various : Various	15.270	1.385	Mar 2014	0.678	Feb 2015	-		-		-	-	17.333	17.33
	•	Subtotal	15.270	1.385		0.678		-		-		-	-	17.333	17.333
Test and Evaluation	(\$ in Milli	ions)		FY	2014	FY:	2015		2016 ase		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 Complete	Total Cost	Target Value of Contract
ATEC/JTIC/CTSF/SEC	MIPR	Various : Various	4.183	0.643	Feb 2014	0.662	Feb 2015	0.450	Feb 2016	-		0.450	-	5.938	6.87
		Subtotal	4.183	0.643		0.662		0.450		-		0.450	-	5.938	6.87
			Prior Years	FY 2	2014	FY:	2015	Ва	2016 ase		2016 CO	FY 2016 Total	Cost To Complete	Total Cost	Target Value of Contract
		Project Cost Totals	236.364	13.852		2.150		7.053		-		7.053	-	259.419	248.948

Remarks

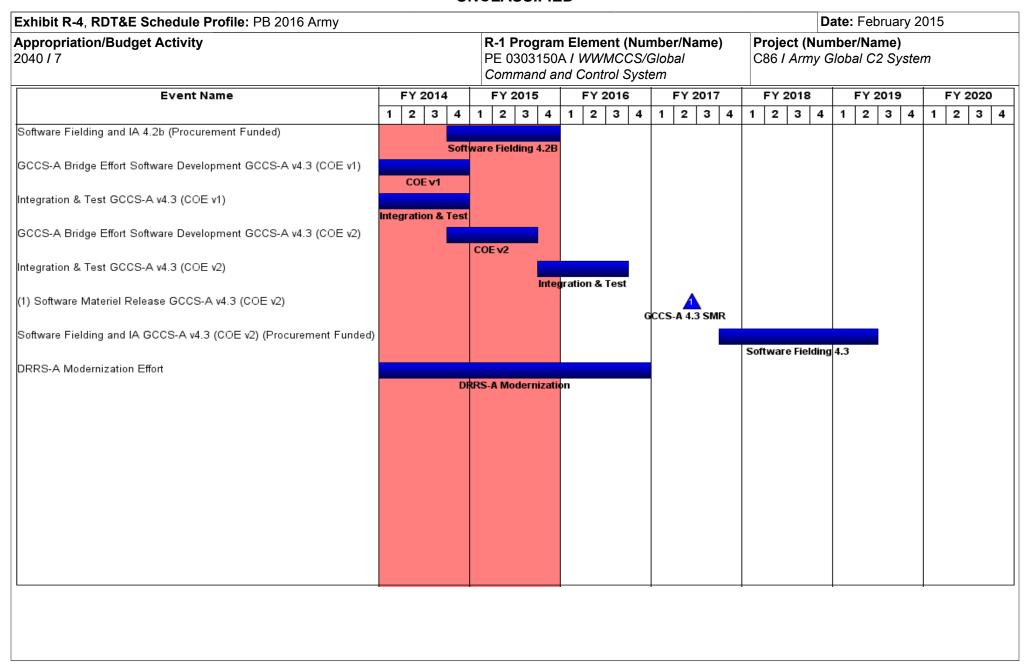


Exhibit R-4A, RDT&E Schedule Details: PB 2016 Army	Date: February 2015		
Appropriation/Budget Activity 2040 / 7	,	, ,	umber/Name) y Global C2 System

Schedule Details

	St	art	End				
Events	Quarter	Year	Quarter	Year			
Software Fielding and IA 4.2b (Procurement Funded)	4	2014	4	2015			
GCCS-A Bridge Effort Software Development GCCS-A v4.3 (COE v1)	1	2012	4	2014			
Integration & Test GCCS-A v4.3 (COE v1)	1	2013	4	2014			
GCCS-A Bridge Effort Software Development GCCS-A v4.3 (COE v2)	4	2014	3	2015			
Integration & Test GCCS-A v4.3 (COE v2)	4	2015	3	2016			
Software Materiel Release GCCS-A v4.3 (COE v2)	2	2017	2	2017			
Software Fielding and IA GCCS-A v4.3 (COE v2) (Procurement Funded)	4	2017	2	2019			
DRRS-A Modernization Effort	1	2014	4	2016			

Exhibit R-2A, RDT&E Project Ju	Date: February 2015											
Appropriation/Budget Activity 2040 / 7						am Elemen 50A / WWM and Contro	umber/Nan egic and Jo	(Name) nd Joint Mission Command				
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
EA5: Strategic and Joint Mission Command	-	-	-	-	-	-	9.293	7.802	7.934	5.653	-	30.682
Quantity of RDT&E Articles	-	-	-	-	-	-	-	-	-	-		

A. Mission Description and Budget Item Justification

Army Joint and Coalition Services – Command and Control (AJCS-C2) or "Ajax" is modernization development effort for the Army's joint and strategic C2 capabilities. AJCS-C2 provides the materiel solution in response to the Army Mission Command for Unified Action (AMCUA) Capability Definition Package. AJCS-C2 enables Army operational headquarters to integrate with the Joint Force Commands and Unified Action Partners (UAP). AJCS-C2 provides Army leaders: Joint Common Operating Picture (COP); Adaptive planning and execution capabilities for distributed, synchronous and asynchronous collaboration services to develop, revise, and execute their warfighting plans supported by theaterwide analytics; Strategic SA to coalition operations and other mission partners and Coordination and synchronization of Joint Execution Mission Management.

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

N/A

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

N/A

Remarks

D. Acquisition Strategy

N/A

E. Performance Metrics

N/A

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Exhibit R-3, RDT&E Project Cost Analysis: PB 2016 Army			Date: February 2015
Appropriation/Budget Activity 2040 / 7	R-1 Program Element (Number/Name) PE 0303150A / WWMCCS/Global Command and Control System	, ,	umber/Name) tegic and Joint Mission Command

Product Developmer	nt (\$ in M	illions)		FY 2014		FY:	2015		2016 ase		2016 CO				
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
Strategic and Joint Misson Command Development	C/CPFF	APG, MD : APG, MD	0.000	-		-		-		-		-	30.682	30.682	-
		Subtotal	0.000	-		-		-		-		-	30.682	30.682	-
			Prior Years	FY:	2014	FY:	2015		2016 ase		2016 CO	FY 2016 Total	Cost To	Total Cost	Target Value of Contract

 Years
 FY 2014
 FY 2015
 Base
 OCO
 Total
 Complete
 Cost

 Project Cost Totals
 0.000
 30.682
 30.682

Remarks

							SIF																					
Exhibit R-4, RDT&E Schedule Profile: PB 2016 Army																				D	ate	: Fe	bru	ary 2	01	5		
Appropriation/Budget Activity 2040 / 7						R-1 Program Element (Number/Name) PE 0303150A / WWMCCS/Global Command and Control System																						man
Event Name		FY	2014	4	F	FY 2015			F	Y 20	016		FY 2017			FY 2018			В	FY 2019				FY 2020				
	1 2 3 4			1 2 3 4			. 1	1 2 3 4		4	1 2 3 4		1 2 3 4			4	1	2	3	4	1	1 2 3						
Strategic and Joint Mission Command Development		1				<u> </u>	,			•	•				St	rateg	jic a	nd J	oint N	lissio	on C	omn	nand	Devel	lopn	nent		

Exhibit R-4A, RDT&E Schedule Details: PB 2016 Army			Date: February 2015
ļ · · · · ·	,	- 3 (umber/Name) tegic and Joint Mission Command

Schedule Details

	St	art	Eı	nd
Events	Quarter	Year	Quarter	Year
Strategic and Joint Mission Command Development	1	2017	4	2021