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

R-1 Program Element (Number/Name)

0400: Research, Development, Test & Evaluation, Defense-Wide I BA 7:

PE 0302016K I National Military Command System-Wide Support

Date: February 2015

Operational Systems Development

Appropriation/Budget Activity

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	4.890	0.501	0.924	0.963	-	0.963	0.956	0.975	0.987	0.996	Continuing	Continuing
S32: NMCS Command Center Engineering	4.890	0.501	0.924	0.963	-	0.963	0.956	0.975	0.987	0.996	Continuing	Continuing

A. Mission Description and Budget Item Justification

The National Military Command System (NMCS), operated by the Chairman of the Joint Chiefs of Staff, provides the President, Secretary of Defense, and other national senior leaders the ability to maintain situational and operational awareness and command and control of military forces in all crisis and/or national emergency contingencies. DISA's NMCS engineering program meets the NMCS systems engineer responsibilities, per Department of Defense Directive (DoDD) S-5100.44 and Chairman of the Joint Chiefs of Staff Instruction (CJCSI) 3280.01B, to provide the Joint Staff with operationally efficient and cost-effective engineering solutions to ensure that components and facilities satisfy operational requirements including emergency messaging, situational awareness, crisis action, and information management.

The NMCS engineering program is vital in supporting the government's ability to safeguard national security and respond to contingencies globally and/or nuclear war. NMCS engineering focuses on implementing collaborative tools into current and crisis operations areas, integrating adequate back-up storage and recovery of voice, video and data across the continental United States to support key leaders, transitioning nuclear command and control to Internet Protocol based networks, migrating data and voice network to next generation satellites, implementing modern crypto-logical devices, and utilizing wireless networking to support warning systems and situational awareness. In addition, NMCS engineering continues to maintain the NMCS Reference Guide required by DoDD S-5100.44 and to develop engineering and test plans for the installation of hardware and software systems utilized within the NMCS.

B. Program Change Summary (\$ in Millions)	FY 2014	FY 2015	FY 2016 Base	FY 2016 OCO	FY 2016 Total
Previous President's Budget	0.512	0.924	0.970	-	0.970
Current President's Budget	0.501	0.924	0.963	-	0.963
Total Adjustments	-0.011	-	-0.007	-	-0.007
 Congressional General Reductions 	-	-			
 Congressional Directed Reductions 	-	-			
 Congressional Rescissions 	-	-			
 Congressional Adds 	-	-			
 Congressional Directed Transfers 	-	-			
 Reprogrammings 	-	-			
SBIR/STTR Transfer	-	-			
Other Adjustments	-0.011	-	-0.007	-	-0.007

•		
Exhibit R-2, RDT&E Budget Item Justification: PB 2016 Defense Informa	tion Systems Agency	Date: February 2015
Appropriation/Budget Activity 0400: Research, Development, Test & Evaluation, Defense-Wide I BA 7: Operational Systems Development	R-1 Program Element (Number/Name) PE 0302016K / National Military Command Syste	m-Wide Support
Change Summary Explanation		
The FY 2014 decrease of -\$0.011 resulted in the delay of updates to	o Joint publications.	
The FY 2016 decrease of -\$0.007 is the result of a reduction in non-	pay requirements.	

PE 0302016K: *National Military Command System-Wide Su...*Defense Information Systems Agency

Exhibit R-2A, RDT&E Project Ju	ustification:	PB 2016 D	efense Info	rmation Sy	ystems Agency						Date: February 2015		
Appropriation/Budget Activity 0400 / 7	R-1 Program Element (Number/Name) PE 0302016K I National Military Command System-Wide Support Project (Number/Name) S32 I NMCS Command Center English							ngineering					
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	
S32: NMCS Command Center Engineering	4.890	0.501	0.924	0.963	-	0.963	0.956	0.975	0.987	0.996	Continuing	Continuing	
Quantity of RDT&E Articles	-	-	-	-	-	-	-	-	-	-			

A. Mission Description and Budget Item Justification

R Accomplishments/Planned Programs (\$ in Millions)

The National Military Command System (NMCS), operated by the Chairman of the Joint Chiefs of Staff, provides the President, Secretary of Defense, and other national senior leaders the ability to maintain situational and operational awareness and command and control of military forces in all crisis and/or national emergency contingencies. DISA's NMCS engineering program meets the NMCS systems engineer responsibilities, per Department of Defense Directive (DoDD) S-5100.44 and Chairman of the Joint Chiefs of Staff Instruction (CJCSI) 3280.01B, to provide the Joint Staff with operationally efficient and cost-effective engineering solutions to ensure that components and facilities satisfy operational requirements including emergency messaging, situational awareness, crisis action, and information management.

The NMCS engineering program is vital in supporting the government's ability to safeguard national security and respond to contingencies globally and/or nuclear war. NMCS engineering focuses on implementation of collaborative tools into current and crisis operations areas, the integration of adequate back-up storage and recovery of voice, video and data across the continental United States to support key leaders, transition of nuclear command and control to Internet Protocol (IP)-based networks, migration of data and voice network to next generation satellites, implementation of modern crypto-logical devices, and the utilization of wireless networking to support warning systems and situational awareness. In addition, NMCS engineering continues to maintain the NMCS Reference Guide (NRG) required by DoDD S-5100.44 and to develop engineering and test plans for the installation of hardware and software systems utilized within the NMCS.

B. Accomplishments/ritamed riograms (4 in millions)	F1 2014	F1 2015	F1 2016	
Title: NMCS Systems Engineering	0.501	0.924	0.963	
FY 2014 Accomplishments: Maintained the NRG, PCC Toolkit and the Online Companion Reference for the CJCSI 3280.01M. Implemented a new missile warning system across the PCC's and modernized and consolidated NMCS systems. Conducted inspections of HEMP network sites.				
FY 2015 Plans: Will maintain the PCC Toolkit and the Online Companion Reference. Modernize and integrate NMCS capabilities (e.g., transmission platforms, data interfaces, security and graphical user interfaces). Will also integrate NMCS with other senior leadership and continuity command, control and communication (C3) systems that constitute the National Leadership Command Capability (NLCC). These efforts also support the Joint Systems Engineering and Integration Office (JSEIO) mission and improve situational monitoring systems across the PCCs.				

PE 0302016K: *National Military Command System-Wide Su...* Defense Information Systems Agency

EV 2014

EV 2015

EV 2016

Exhibit R-2A, RDT&E Project Justification: PB 2016 Defense Information	Exhibit R-2A, RDT&E Project Justification: PB 2016 Defense Information Systems Agency								
Appropriation/Budget Activity 0400 / 7	R-1 Program Element (Number/Name) PE 0302016K I National Military Command System-Wide Support	Project (Num S32 / NMCS (nber/Name) Command Center	Engineering					
B. Accomplishments/Planned Programs (\$ in Millions)		FY 20	014 FY 2015	FY 2016					

Accomplishments/Planned Programs Subtotals	0.501	0.924	0.963
The increase of +\$0.039 from FY 2015 to FY 2016 addresses data integration and engineering activities required to deliver enterprise level solutions to meet NMCS priorities.			
FY 2016 Plans: Will maintain the NRG and the PCC Toolkit to ensure expanded collaboration and information sharing. Update, automate and maintain the Online Companion Reference for the CJCSI 3280.01M which is critical to ongoing operations. Provide technical evaluations and strategies for implementing Nuclear Command and Control over IP into other National Leadership Command Capability (NLCC) enabling programs. Support engineering requirements and continue in identifying technical solutions to integrate NMCS with other senior leadership and continuity command, control and communication (C3) systems that constitute the NLCC. Focus on implementing collaborative tools into current and crisis operations areas, integrate adequate back-up storage and recovery of voice, video and data to support key leaders and migrate data and voice networks to next generation satellites.			
The increase of +\$0.423 from FY 2014 to FY 2015 will significantly expand the engineering efforts to integrate NMCS systems into the NLCC.			

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

			FY 2016	FY 2016	FY 2016					Cost To	
Line Item	FY 2014	FY 2015	Base	OCO	<u>Total</u>	FY 2017	FY 2018	FY 2019	FY 2020	Complete	Total Cost
 O&M, DW/PE 	3.568	3.618	3.398	-	3.398	3.393	3.417	3.410	3.444	Continuing	Continuing
0302016K: O&M, DW											

Remarks

D. Acquisition Strategy

Full and open competition resulted in a contract with Raytheon, Arlington, VA.

E. Performance Metrics

The NMCS Engineering Branch conducts regularly scheduled In-progress Program Reviews (IPRs) and Configuration Control Board (CCB) meetings to monitor status of engineering projects/tasks. Each current project/task is evaluated in terms of how well the technical work is progressing and how allocated resources are being utilized. Adjustments to resources, schedules, and technical directions are made, as required. Future projects/tasks are also discussed, thereby ensuring an integrated approach is maintained across all related project/task areas. To further increase the utility of the IPR/CCB structure, the Joint Staff customer participates in the project/task reviews. The result of this approach is a truly integrated effort of NMCS Engineering, contractor, and Joint Staff working together to achieve common program goals. Suitable products are delivered within allocated resources and delivered on schedule 90% of the time.

PE 0302016K: *National Military Command System-Wide Su...* Defense Information Systems Agency

Exhibit R-2A, RDT&E Project Justification: PB 2016 Defense Information Sy	ystems Agency	Date: February 2015
Appropriation/Budget Activity 0400 / 7	R-1 Program Element (Number/Name) PE 0302016K I National Military Command System-Wide Support	Project (Number/Name) S32 / NMCS Command Center Engineering
The NMCS met all FY 2014 performance metrics and is on track to meet its FY allocated resources 100% of the time.	Y 2015 and FY 2016 metrics by delivering suita	able products on schedule and within

PE 0302016K: *National Military Command System-Wide Su...* Defense Information Systems Agency

Exhibit R-3, RDT&E Project Cost Analysis: PB 2016 Defense Information Systems Agency Date: February 2015									
1	, ,	, ,	umber/Name) S Command Center Engineering						

Support (\$ in Millions	port (\$ 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	Total Cost	Target Value of Contract
Engineering/Tech Services	C/CPFF	Raytheon E-Sys : Arlington, VA	4.890	0.501	May 2014	0.924	Jan 2015	0.963	Jan 2016	-		0.963	Continuing	Continuing	5.525
		Subtotal	4.890	0.501		0.924		0.963		-		0.963	-	-	5.525
															Target

	Prior Years	FY	2014	FY 2	2015	FY 2 Ba	FY 2	FY 2016 Total	Cost To Complete	Total Cost	Target Value of Contract
Project Cost Totals	4.890	0.501		0.924		0.963	-	0.963	-	-	5.525

Remarks

Exhibit R-4, RDT&E Schedule Profile: PB 2016 D	efer)	nse li	nform	atio	on S	Syste	ms	Agen	су													Date	: Fe	brua	ary	2015		
Appropriation/Budget Activity 0400 / 7							I								Project (Number/Name) S32 / NMCS Command Center E					≣ngi	neerir							
		FY 2014			FY 2015		;	FY 2016			FY 2017		FY		Y 20	2018		FY 2019				FY 20		020				
	1	2	3	4	1	2	3	4	1	2 3	3 4	1	2	2 :	3	4	1	2	3	4	1	2	3	4	1	2	3	4
NMCS										'	,	,									,				,			
Maintenance/Update of NMCS Reference Guide (ongoing/real-time)																												
Maintenance/Update of the PCC Toolkit																												
Completion of Study: NC2 over IP																												
Completion of SHF Upgrade																												
Inspection/Maintenance of HEMP sites in the NCR																												
Modernize Non-Secure Conferencing Networks																												
Implement PCC Dashboard																												
Milstar Cryptological Modernization																												

Exhibit R-4A, RDT&E Schedule Details: PB 2016 Defense Information System	Date: February 2015				
	, ,	, ,	umber/Name) CS Command Center Engineering		
	System-Wide Support				

Schedule Details

	St	art	End			
Events by Sub Project	Quarter	Year	Quarter	Year		
NMCS						
Maintenance/Update of NMCS Reference Guide (ongoing/real-time)	1	2014	4	2019		
Maintenance/Update of the PCC Toolkit	1	2014	2	2018		
Completion of Study: NC2 over IP	1	2014	2	2015		
Completion of SHF Upgrade	1	2014	1	2015		
Inspection/Maintenance of HEMP sites in the NCR	1	2014	4	2018		
Modernize Non-Secure Conferencing Networks	1	2014	1	2016		
Implement PCC Dashboard	1	2014	1	2016		
Milstar Cryptological Modernization	1	2014	4	2015		