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Exhibit R-2, RDT&E Budget Item Justification: PB 2020 Defense Information Systems Agency	Date: March 2019
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Appropriation/Budget Activity 0400: <i>Research, Development, Test & Evaluation, Defense-Wide / BA 7: Operational Systems Development</i>					R-1 Program Element (Number/Name) PE 0302016K / <i>National Military Command System-Wide Support</i>							
COST (\$ in Millions)	Prior Years	FY 2018	FY 2019	FY 2020 Base	FY 2020 OCO	FY 2020 Total	FY 2021	FY 2022	FY 2023	FY 2024	Cost To Complete	Total Cost
Total Program Element	7.828	1.863	0.000	0.000	-	0.000	0.000	0.000	0.000	0.000	-	-
S32: <i>NMCS Command Center Engineering</i>	7.828	1.863	0.000	0.000	-	0.000	0.000	0.000	0.000	0.000	-	-

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 cryptological 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 2018	FY 2019	FY 2020 Base	FY 2020 OCO	FY 2020 Total
Previous President's Budget	1.863	0.000	0.000	-	0.000
Current President's Budget	1.863	0.000	0.000	-	0.000
Total Adjustments	0.000	0.000	0.000	-	0.000
• Congressional General Reductions	-	-			
• Congressional Directed Reductions	-	-			
• Congressional Rescissions	-	-			
• Congressional Adds	-	-			
• Congressional Directed Transfers	-	-			
• Reprogrammings	-	-			
• SBIR/STTR Transfer	-	-			

Change Summary Explanation

No vertical change statement required.

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Exhibit R-2A, RDT&E Project Justification: PB 2020 Defense Information Systems Agency										Date: March 2019		
Appropriation/Budget Activity 0400 / 7					R-1 Program Element (Number/Name) PE 0302016K / National Military Command System-Wide Support				Project (Number/Name) S32 / NMCS Command Center Engineering			
COST (\$ in Millions)	Prior Years	FY 2018	FY 2019	FY 2020 Base	FY 2020 OCO	FY 2020 Total	FY 2021	FY 2022	FY 2023	FY 2024	Cost To Complete	Total Cost
S32: NMCS Command Center Engineering	7.828	1.863	0.000	0.000	-	0.000	0.000	0.000	0.000	0.000	-	-
Quantity of RDT&E Articles	-	-	-	-	-	-	-	-	-	-		

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-3710.01 and Chairman of the Joint Chiefs of Staff Instruction (CJCSI) 3280.01C, 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-3710.01 and to develop engineering and test plans for the installation of hardware and software systems utilized within the NMCS.

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

	FY 2018	FY 2019	FY 2020
Title: NMCS Systems Engineering	1.863	-	-
Accomplishments/Planned Programs Subtotals	1.863	-	-

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

Line Item	FY 2018	FY 2019	FY 2020 Base	FY 2020 OCO	FY 2020 Total	FY 2021	FY 2022	FY 2023	FY 2024	Cost To Complete	Total Cost
• O&M, DW/PE	4.306	5.882	5.999	-	5.999	6.095	6.163	6.317	-	Continuing	Continuing
0302016K: O&M, DW											

Remarks

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Exhibit R-2A, RDT&E Project Justification: PB 2020 Defense Information Systems Agency		Date: March 2019
Appropriation/Budget Activity 0400 / 7	R-1 Program Element (Number/Name) PE 0302016K / <i>National Military Command System-Wide Support</i>	Project (Number/Name) S32 / <i>NMCS Command Center Engineering</i>
<p><u>D. Acquisition Strategy</u></p> <p>During FY2018 a full and open competition will be conducted for an NLCC Systems Engineering and Technical Assistance (SETA) contract to provided programmed support to Joint System Engineering and Integration Office (JSEIO) in FY2018 as follow-on to the previous contract with Raytheon, Arlington, VA.</p> <p><u>E. Performance Metrics</u></p> <p>The JSEIO 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.</p> <p>The NMCS is on track to and met its FY 2018 metrics by delivering suitable products on schedule and within allocated resources 100% of the time.</p>		

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Exhibit R-3, RDT&E Project Cost Analysis: PB 2020 Defense Information Systems Agency													Date: March 2019		
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Support (\$ in Millions)				FY 2018		FY 2019		FY 2020 Base		FY 2020 OCO		FY 2020 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 Support	C/CPFF	Raytheon E-Sys : Arlington VA	7.828	1.863	Jan 2018	-		-		-		-	0.000	9.691	-
Subtotal			7.828	1.863		-		-		-		-	0.000	9.691	N/A
			Prior Years	FY 2018		FY 2019		FY 2020 Base		FY 2020 OCO		FY 2020 Total	Cost To Complete	Total Cost	Target Value of Contract
Project Cost Totals			7.828	1.863		0.000		-		-		-	0.000	9.691	N/A
Remarks															

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Exhibit R-4, RDT&E Schedule Profile: PB 2020 Defense Information Systems Agency							Date: March 2019			
Appropriation/Budget Activity 0400 / 7				R-1 Program Element (Number/Name) PE 0302016K / <i>National Military Command System-Wide Support</i>				Project (Number/Name) S32 / <i>NMCS Command Center Engineering</i>		

	FY 2011				FY 2012				FY 2013				FY 2014				FY 2015				FY 2016				FY 2017			
	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
NMCS																												
Maintenance/Update of NMCS Reference Guide (ongoing-real-time)																												
Maintenance/Update of the Primary Control Center (PCC) Toolkit																												
Completion of Study: Network Computer Communication (NC2) over Internet Protocol (IP)																												
Completion of Super High Frequency (SHF) Upgrade																												
Inspection/Maintenance of High-Altitude Electromagnetic Pulse (HEMP) sites in the National Capital Region (NCR)																												
Moderinize Non-Secure Conferencing Networks																												
Implement PCC Dashboard																												
Milstar Cryptological Modernization																												

	FY 2018				FY 2019				FY 2020				FY 2021				FY 2022				FY 2023				FY 2024			
	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
NMCS																												
Maintenance/Update of NMCS Reference Guide (ongoing-real-time)																												
Maintenance/Update of the Primary Control Center (PCC) Toolkit																												

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Exhibit R-4, RDT&E Schedule Profile: PB 2020 Defense Information Systems Agency

Date: March 2019

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R-1 Program Element (Number/Name)	Program Element Description	Program Element Type	Program Element Status	Program Element Location	Program Element Contact	Program Element Date	Program Element Comments

PE 0302016K / National Military Command
System-Wide Support

Project (Number/Name)	Start Date	End Date	Duration (Days)	Actual Cost	Budgeted Cost	Variance	Cost Index	Performance Index	Cost Variance	Cost Performance Index	Cost Variance at Completion	Cost Performance Index at Completion
101	10/1/2010	10/1/2010	1	1000	1000	0	1.00	1.00	0	1.00	0	1.00
102	10/1/2010	10/1/2010	1	1000	1000	0	1.00	1.00	0	1.00	0	1.00
103	10/1/2010	10/1/2010	1	1000	1000	0	1.00	1.00	0	1.00	0	1.00
104	10/1/2010	10/1/2010	1	1000	1000	0	1.00	1.00	0	1.00	0	1.00
105	10/1/2010	10/1/2010	1	1000	1000	0	1.00	1.00	0	1.00	0	1.00
106	10/1/2010	10/1/2010	1	1000	1000	0	1.00	1.00	0	1.00	0	1.00
107	10/1/2010	10/1/2010	1	1000	1000	0	1.00	1.00	0	1.00	0	1.00
108	10/1/2010	10/1/2010	1	1000	1000	0	1.00	1.00	0	1.00	0	1.00
109	10/1/2010	10/1/2010	1	1000	1000	0	1.00	1.00	0	1.00	0	1.00
110	10/1/2010	10/1/2010	1	1000	1000	0	1.00	1.00	0	1.00	0	1.00
111	10/1/2010	10/1/2010	1	1000	1000	0	1.00	1.00	0	1.00	0	1.00
112	10/1/2010	10/1/2010	1	1000	1000	0	1.00	1.00	0	1.00	0	1.00
113	10/1/2010	10/1/2010	1	1000	1000	0	1.00	1.00	0	1.00	0	1.00
114	10/1/2010	10/1/2010	1	1000	1000	0	1.00	1.00	0	1.00	0	1.00
115	10/1/2010	10/1/2010	1	1000	1000	0	1.00	1.00	0	1.00	0	1.00
116	10/1/2010	10/1/2010	1	1000	1000	0	1.00	1.00	0	1.00	0	1.00
117	10/1/2010	10/1/2010	1	1000	1000	0	1.00	1.00	0	1.00	0	1.00
118	10/1/2010	10/1/2010	1	1000	1000	0	1.00	1.00	0	1.00	0	1.00
119	10/1/2010	10/1/2010	1	1000	1000	0	1.00	1.00	0	1.00	0	1.00
120	10/1/2010	10/1/2010	1	1000	1000	0	1.00	1.00	0	1.00	0	1.00
121	10/1/2010	10/1/2010	1	1000	1000	0	1.00	1.00	0	1.00	0	1.00
122	10/1/2010	10/1/2010	1	1000	1000	0	1.00	1.00	0	1.00	0	1.00
123	10/1/2010	10/1/2010	1	1000	1000	0	1.00	1.00	0	1.00	0	1.00
124	10/1/2010	10/1/2010	1	1000	1000	0	1.00	1.00	0	1.00	0	1.00
125	10/1/2010	10/1/2010	1	1000	1000	0	1.00	1.00	0	1.00	0	1.00
126	10/1/2010	10/1/2010	1	1000	1000	0	1.00	1.00	0	1.00	0	1.00
127	10/1/2010	10/1/2010	1	1000	1000	0	1.00	1.00	0	1.00	0	1.00
128	10/1/2010	10/1/2010	1	1000	1000	0	1.00	1.00	0	1.00	0	1.00
129	10/1/2010	10/1/2010	1	1000	1000	0	1.00	1.00	0	1.00	0	1.00
130	10/1/2010	10/1/2010	1	1000	1000							

S32 / NMCS Command Center Engineering

	FY 2018				FY 2019				FY 2020				FY 2021				FY 2022				FY 2023				FY 2024			
	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
Completion of Study: Network Computer Communication (NC2) over Internet Protocol (IP)																												
Completion of Super High Frequency (SHF) Upgrade																												
Inspection/Maintenance of High-Altitude Electromagnetic Pulse (HEMP) sites in the National Capital Region (NCR)																												
Moderinize Non-Secure Conferencing Networks																												
Implement PCC Dashboard																												
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Exhibit R-4A, RDT&E Schedule Details: PB 2020 Defense Information Systems Agency			Date: March 2019
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Schedule Details

Events by Sub Project	Start		End	
	Quarter	Year	Quarter	Year
NMCS				
Maintenance/Update of NMCS Reference Guide (ongoing-real-time)	1	2017	4	2018
Maintenance/Update of the Primary Control Center (PCC) Toolkit	1	2017	2	2018
Completion of Study: Network Computer Communication (NC2) over Internet Protocol (IP)	1	2017	2	2018
Completion of Super High Frequency (SHF) Upgrade	1	2017	1	2018
Inspection/Maintenance of High-Altitude Electromagnetic Pulse (HEMP) sites in the National Capital Region (NCR)	4	2017	4	2018
Moderinize Non-Secure Conferencing Networks	4	2017	1	2018
Implement PCC Dashboard	4	2017	1	2018
Milstar Cryptological Modernization	4	2017	4	2018