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Exhibit R-2, RDT&E Budget Item Justification: PB 2021 Defense Information Systems Agency **Date:** February 2020

Appropriation/Budget Activity 0400: <i>Research, Development, Test & Evaluation, Defense-Wide I BA 8: Software and Digital Technology Pilot Programs</i>	R-1 Program Element (Number/Name) PE 0303150K / <i>Global Command and Control System Software and Digital Technology Pilot Program</i>
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COST (\$ in Millions)	Prior Years	FY 2019	FY 2020	FY 2021 Base	FY 2021 OCO	FY 2021 Total	FY 2022	FY 2023	FY 2024	FY 2025	Cost To Complete	Total Cost
Total Program Element	-	0.000	0.000	86.750	-	86.750	37.928	33.364	33.097	34.934	Continuing	Continuing
CC01: <i>Global Command and Control</i>	-	0.000	0.000	86.750	-	86.750	37.928	33.364	33.097	34.934	Continuing	Continuing

A. Mission Description and Budget Item Justification

This is not a new start. Effort continues from FY 2020, funded in PE 0303150K, Global Command and Control System. The Global Command and Control System-Joint (GCCS-J) funds a Joint Command and Control (JC2) portfolio which includes: GCCS-J, Joint Planning and Execution Services (JPES), and JC2 Architecture.

The GCCS-J Program is the Department of Defense (DoD) Joint C2 system of record. It incorporates core planning and assessment tools required by Combatant Commanders and their subordinate Joint Task Force Commanders while meeting the readiness support requirements of the Services. GCCS-J is used by all nine Combatant Commands (COCOMs) at sites around the world, supporting joint and coalition operations. The Services rely heavily on GCCS-J components to reduce their command and control (C2) operational costs. It provides support for commanders and staffs as they conduct joint and multinational operations by providing a fused picture of the battle space within an integrated system that is supporting joint warfighter needs today. GCCS-J is currently focused on sustainment, synchronization, and modernization to meet emerging operational needs by modifying and enhancing elements or capabilities in order to implement new requirements, enhance functionality, increase efficiency and lower operating and deployment costs while taking advantage of the progress made by current operational systems and technologies. The GCCS-J program is also executing incremental modernization of C2 capabilities using the Joint Requirements Oversight Council (JROC) approved needs.

B. Program Change Summary (\$ in Millions)	FY 2019	FY 2020	FY 2021 Base	FY 2021 OCO	FY 2021 Total
Previous President's Budget	0.000	0.000	0.000	-	0.000
Current President's Budget	0.000	0.000	86.750	-	86.750
Total Adjustments	0.000	0.000	86.750	-	86.750
• Congressional General Reductions	-	-			
• Congressional Directed Reductions	-	-			
• Congressional Rescissions	-	-			
• Congressional Adds	-	-			
• Congressional Directed Transfers	-	-			
• Reprogrammings	-	-			
• SBIR/STTR Transfer	-	-			
• Reprogrammings	-	-	86.750	-	86.750

Change Summary Explanation

The increase of +\$86.750 in FY 2021 is due to realigning funds from O&M appropriation and RDT&E BA 7 to the newly created BA 8: Software and Digital Technology for the Software Pilot Program.

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Exhibit R-2A, RDT&E Project Justification: PB 2021 Defense Information Systems Agency										Date: February 2020		
Appropriation/Budget Activity 0400 / 8					R-1 Program Element (Number/Name) PE 0303150K / <i>Global Command and Control System Software and Digital Technology Pilot Program</i>					Project (Number/Name) CC01 / <i>Global Command and Control</i>		
COST (\$ in Millions)	Prior Years	FY 2019	FY 2020	FY 2021 Base	FY 2021 OCO	FY 2021 Total	FY 2022	FY 2023	FY 2024	FY 2025	Cost To Complete	Total Cost
CC01: <i>Global Command and Control</i>	-	0.000	0.000	86.750	-	86.750	37.928	33.364	33.097	34.934	Continuing	Continuing

A. Mission Description and Budget Item Justification

The Global Command and Control System-Joint (GCCS-J) funds a Joint Command and Control (JC2) portfolio which includes: GCCS-J, Joint Planning and Execution Services (JPES), and JC2 Architecture.

The GCCS-J Program is the Department of Defense (DoD) Joint C2 system of record. It incorporates core planning and assessment tools required by Combatant Commanders and their subordinate Joint Task Force Commanders while meeting the readiness support requirements of the Services. GCCS-J is used by all nine Combatant Commands (COCOMs) at sites around the world, supporting joint and coalition operations. The Services rely heavily on GCCS-J components to reduce their command and control (C2) operational costs. It provides support for commanders and staffs as they conduct joint and multinational operations by providing a fused picture of the battle space within an integrated system that is supporting joint warfighter needs today. GCCS-J is currently focused on sustainment, synchronization, and modernization to meet emerging operational needs by modifying and enhancing elements or capabilities in order to implement new requirements, enhance functionality, increase efficiency and lower operating and deployment costs while taking advantage of the progress made by current operational systems and technologies. The GCCS-J program is also executing incremental modernization of C2 capabilities using the Joint Requirements Oversight Council (JROC) approved needs.

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

	FY 2019	FY 2020	FY 2021
Title: Development and Strategic Planning	0.000	-	86.750
Description: Develop, publish, and execute a GCCS-J migration and modernization strategy that achieves the following GCCS-J Modernization objectives in accordance with Joint C2 Mission operational priorities and the DoD's JC2 Reference Architecture:			
<ul style="list-style-type: none"> • Continue to decompose applicable existing applications into services • Limit local deployment and move as much to the enterprise as possible • Continue to expose data and scale services to support an enterprise implementation • Continue to evolve more economical hardware and software architecture without impact to the operational user or Family of Systems (FoS)/interface partners • Reduce overall sustainment cost through use of more cost effective and appropriate Commercial-off-the-Shelf (COTS) and Hardware (HW) products • Evolve to use of agile development practices • Consolidation of clients and tools 			
FY 2021 Plans:			

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B. Accomplishments/Planned Programs (\$ in Millions)	FY 2019	FY 2020	FY 2021
<p>FY 2021 O&M Plans: \$63.724</p> <p>In FY21, continue to support the Operational Community by incrementally developing, testing, and fielding additional GCCS-J 6.0 capabilities, as identified and prioritized by the Joint Staff and User community. Most notably, this will involve enhancements to the following capability sets: 1) Identification Friend or Foe (IFF), 2) Personnel Recovery Report & Locate (PRRL), and 3) Early Missile Warning. In addition, in FY21, continue to support the Operational Community by incrementally developing, testing, and fielding upgrades to modernize, and enhance the cyber security posture of, the existing baseline in the following areas: 1) pursue IPv6 compliance, 2) modernize the server deployment, 3) enhance cyber security by addressing high priority focus areas, and 4) conducting database consolidation to increase overall system efficiency and performance. These activities will be accomplished utilizing the GCCS-J 4 - 8 weeks Maintenance Release Process (MRP).</p> <p>FY 2021 RDT&E Plans: \$23.026</p> <p>Cyber security analysis is an ongoing aspect of the software lifecycle required to keep the system securely deployed. Continue to maintain the synchronization across DOD of GCCS-J, joint interfaces and the GCCS Family of Systems; continue to deliver capabilities as prioritized by the warfighter; and meet emerging operational priorities.</p> <p>Continue the development of the GCCS-JE Framework to meet the programs Initial Operational Capability. In addition we will execute a development, integration and sustainment contract that will develop the functional capability that will be integrated in the framework design and sustain the capability as it is operationally deployed to the warfighter.</p> <p><i>FY 2020 to FY 2021 Increase/Decrease Statement:</i></p> <p>The increase from FY 2020 to FY 2021 is due to the implementation of a pilot Budget Authority that combines the GCCS-J funding lines to better support the movement of GCCS-JE System capabilities from development and testing to implementation and sustainment.</p>			
Accomplishments/Planned Programs Subtotals	0.000	-	86.750

C. Other Program Funding Summary (\$ in Millions)											
Line Item	FY 2019	FY 2020	FY 2021 Base	FY 2021 OCO	FY 2021 Total	FY 2022	FY 2023	FY 2024	FY 2025	Cost To Complete	Total Cost
• PE 0303150K: <i>Operation & Maintenance, Defense-Wide</i>	0.000	0.000	27.426	0.000	27.426	26.829	27.199	25.825	25.932	Continuing	Continuing

Remarks

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Exhibit R-2A, RDT&E Project Justification: PB 2021 Defense Information Systems Agency		Date: February 2020
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D. Acquisition Strategy

Use of performance-based contract awards is maximized while use of Time and Material contracts is minimized to those providing programmatic support versus software development, integration, or testing. All development, integration, and migration efforts within the portfolio are primarily supported through Cost Reimbursable Task Orders issued under competitively awarded contracts. Acquisition Strategies are structured to retain contractors capable of satisfying cost, schedule, and performance objectives. Contract awards incorporate provisions requiring contractors to establish and manage specific earned value data. This strategy mitigates risk by requiring monthly Contract Performance Reviews (CPRs) and utilizing award fee contracts where appropriate to incentivize performance. Both GCCS-J and JPES apply formal acquisition rigor to include reporting requirements, as appropriate, by acquisition program designation.

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Exhibit R-3, RDT&E Project Cost Analysis: PB 2021 Defense Information Systems Agency **Date:** February 2020

Appropriation/Budget Activity 0400 / 8	R-1 Program Element (Number/Name) PE 0303150K / <i>Global Command and Control System Software and Digital Technology Pilot Program</i>	Project (Number/Name) CC01 / <i>Global Command and Control</i>
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Product Development (\$ in Millions)				FY 2019		FY 2020		FY 2021 Base		FY 2021 OCO		FY 2021 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
Product Development	C/CPFF	NMGS: GCCS-J Sustainment : Reston, VA	-	-		-		45.400	Dec 2020	-		45.400	Continuing	Continuing	-
Product Development	C/CPFF	C2 Systems Engineering : TBD	-	-		-		5.200	Dec 2021	-		5.200	Continuing	Continuing	-
Product Development	C/CPFF	GCCS-J Development : TBD	-	-		-		19.575	Jan 2021	-		19.575	Continuing	Continuing	-
Product Development	C/FFP	Configuration Management : Montgomery	-	-		-		1.000	Oct 2020	-		1.000	Continuing	Continuing	-
Product Development	C/FFP	Milcloud Hosting : TBD	-	-		-		3.000	Jan 2021	-		3.000	Continuing	Continuing	-
Product Development	C/FFP	Software Maintenance GEMFIRE : TBD	-	-		-		1.214	Apr 2021	-		1.214	Continuing	Continuing	-
Product Development	C/FFP	Software Maintenance: VMWare : TBD	-	-		-		0.150	Apr 2021	-		0.150	Continuing	Continuing	-
Product Development	C/FFP	Software Maitenance: Redhat : TBD	-	-		-		0.487	Dec 2020	-		0.487	Continuing	Continuing	-
Product Development	C/FFP	Software Maintenance Sybase : TBD	-	-		-		0.652	Sep 2021	-		0.652	Continuing	Continuing	-
Product Development	C/FFP	Software Maintenance : TBD	-	-		-		2.500	Jan 2021	-		2.500	Continuing	Continuing	-
Subtotal			-	-		-		79.178		-		79.178	Continuing	Continuing	N/A

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Support (\$ in Millions)				FY 2019		FY 2020		FY 2021 Base		FY 2021 OCO		FY 2021 Total	Cost To Complete	Total Cost	Target Value of Contract
Cost Category Item	Contract Method & Type	Performing Activity & Location	Prior Years	Cost	Award Date	Cost	Award Date	Cost	Award Date	Cost	Award Date	Cost			
Support Cost	C/FFP	TBD : TBD	-	-		-		1.300	May 2021	-		1.300	Continuing	Continuing	-
Subtotal			-	-		-		1.300		-		1.300	Continuing	Continuing	N/A

Test and Evaluation (\$ in Millions)				FY 2019		FY 2020		FY 2021 Base		FY 2021 OCO		FY 2021 Total	Cost To Complete	Total Cost	Target Value of Contract
Cost Category Item	Contract Method & Type	Performing Activity & Location	Prior Years	Cost	Award Date	Cost	Award Date	Cost	Award Date	Cost	Award Date	Cost			
Test & Evaluation	MIPR	JITC : Various	-	-		-		2.500	Oct 2020	-		2.500	Continuing	Continuing	-
Test & Evaluation	MIPR	DAA : STRATCOM:Various	-	-		-		0.672	Oct 2020	-		0.672	Continuing	Continuing	-
Test & Evaluation	MIPR	RME : Variuos	-	-		-		2.500	Oct 2020	-		2.500	Continuing	Continuing	-
Subtotal			-	-		-		5.672		-		5.672	Continuing	Continuing	N/A

Management Services (\$ in Millions)				FY 2019		FY 2020		FY 2021 Base		FY 2021 OCO		FY 2021 Total	Cost To Complete	Total Cost	Target Value of Contract
Cost Category Item	Contract Method & Type	Performing Activity & Location	Prior Years	Cost	Award Date	Cost	Award Date	Cost	Award Date	Cost	Award Date	Cost			
Management Services	FFRDC	MITRE : Various	-	-		-		0.600	Oct 2020	-		0.600	Continuing	Continuing	-
Subtotal			-	-		-		0.600		-		0.600	Continuing	Continuing	N/A

	Prior Years	FY 2019	FY 2020	FY 2021 Base	FY 2021 OCO	FY 2021 Total	Cost To Complete	Total Cost	Target Value of Contract	
Project Cost Totals		-	-	0.000	86.750	-	86.750	Continuing	Continuing	N/A

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Exhibit R-4, RDT&E Schedule Profile: PB 2021 Defense Information Systems Agency		Date: February 2020
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	FY 2019				FY 2020				FY 2021				FY 2022				FY 2023				FY 2024				FY 2025			
	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

<i>Development and Strategic Planning</i>																												
Development and Strategic Planning																												
<i>Integration and Test</i>																												
Integration and Test																												

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Exhibit R-4A, RDT&E Schedule Details: PB 2021 Defense Information Systems Agency		Date: February 2020
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Schedule Details

Events by Sub Project	Start		End	
	Quarter	Year	Quarter	Year
<i>Development and Strategic Planning</i>				
Development and Strategic Planning	1	2020	4	2025
<i>Integration and Test</i>				
Integration and Test	1	2020	4	2025