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**Exhibit R-2, RDT&E Budget Item Justification: PB 2023 Army** **Date:** April 2022

<b>Appropriation/Budget Activity</b> 2040: <i>Research, Development, Test &amp; Evaluation, Army / BA 7: Operational Systems Development</i>	<b>R-1 Program Element (Number/Name)</b> PE 0303141A / <i>Global Combat Support System</i>
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COST (\$ in Millions)	Prior Years	FY 2021	FY 2022	FY 2023 Base	FY 2023 OCO	FY 2023 Total	FY 2024	FY 2025	FY 2026	FY 2027	Cost To Complete	Total Cost
Total Program Element	-	70.652	45.297	27.100	-	27.100	0.000	0.000	0.000	0.000	0.000	143.049
083: <i>Global Combat Support Sys - Army</i>	-	20.883	14.933	27.100	-	27.100	-	-	-	-	0.000	62.916
EK2: <i>GCSS-A Increment 2</i>	-	49.769	30.364	-	-	-	-	-	-	-	0.000	80.133

**Note**

Effective February 2, 2017, the Department of Defense Instruction (DODI) 5000.75 was issued to establish policy for use of Business Capability Acquisition Cycle for Defense Business Systems. The DODI 5000.75 supersedes DODI 5000.02, improving the alignment of business systems to commercial best practices as well as optimizing efficiencies and effectiveness across the DOD for the acquisition of business systems. Decisions rendered by the Milestone Decision Authority, as outlined in the DODI 5000.75, are referred to as "Authority To Proceed" and replace DODI 5000.02 "Milestones."

**A. Mission Description and Budget Item Justification**

(Project 083) GCSS-Army Increment 1 gives combat forces a decisive edge by providing soldiers a seamless flow of timely, accurate, accessible, and secure logistics information to get combat power at the right place, at the right time. The GCSS-Army program is an information and communications technology investment that provides key enabling support to the transformation of the Army into a network-centric, knowledge-based future force. The GCSS-Army approved Capability Description Document (CDD) and Capability Production Document (CPD) require an enterprise approach to replace current logistics and maintenance Standard Army Management Information Systems (STAMIS) to include supply, maintenance, ammunition, aviation, and property book. GCSS-Army implements best business practices to streamline supply, accountability, maintenance, distribution, and reporting procedures in support of the future force transition path of The Army Campaign Plan.

GCSS-A must take critical steps towards integration and implementation of the next generation of Enterprise Business Systems capabilities. This effort will address the obsolescence of existing SAP Enterprise Resource Planning (ERP) logistics and financial management platforms that the vendor plans to sunset by FY 28. GCSS-A's modernization work sets the conditions for development of a converged, post-modern Defense Business System that streamlines and integrates the Army's core business functions.

GCSS-A must identify redundant processes as candidates for business process re-engineering. Funding will support the 1) market research of Industry best practices, 2) Initiation of an Army Enterprise Development Environment to enable prototyping which reduces risk by aiding the requirements development. This environment includes: Cloud-hosted infrastructure, applications, and programs and tools, 3) government Program Management and Systems Engineering and Technical Assistance (SETA) contractors needed to plan for and manage the initiation of the post-modern system implementation effort.

(Project EK2) GCSS-Army Increment 2 consists of three waves: Wave 1- Enterprise Aviation (EAVN); Wave 2- Business Intelligence/Business Warehouse (BI/BW); Wave 3- Army Prepositioned Stocks (APS). Increment 2 builds on the current foundation by providing auditable EAVN maintenance, enhanced BI/BW, and APS functional capabilities which will directly impact the speed at which a deploying unit can draw combat equipment. Waves 1 and 2 will deliver greater efficiencies to

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<b>Appropriation/Budget Activity</b> 2040: <i>Research, Development, Test &amp; Evaluation, Army / BA 7: Operational Systems Development</i>	<b>R-1 Program Element (Number/Name)</b> PE 0303141A / <i>Global Combat Support System</i>	
<p>Aviation Logistics warfighters and improved information flow and accuracy in real time to decision makers, helping them make better decisions faster on the battlefield. Wave 3 will sunset the Army War Reserve Deployment System (AWRDS) legacy system.</p> <p>The funds in the GCSS-Army Increment 1 Research Development Test &amp; Evaluation (RDT&amp;E) line are for building the software solution for disconnected supply, maintenance and accountability. The funds in FY 2020 are for critical change requests, coming from the warfighter and prioritized by the Combat Developer. In FY 2021, the Army will begin design, development and build of disconnected operations capability to support ground operations and will complete this effort in FY 2022.</p> <p>In FY 2020, the Army Acquisition Executive (AAE) approved a change in technical approach for GCSS-Army Increment 2 due to unforeseen technical complexities identified by the vendor which would have significantly increased cost and schedule. The new technical approach will deliver capability in five capability drops for Waves 1 and 2 to be developed and deployed incrementally from FY 2020 thru FY 2023. FY 2022 funding will continue the GCSS-Army Enterprise Aviation development and deployment of the final three capability drops for Wave 1 and the third and fourth capability drops for Wave 2.</p> <p>During this timeframe GCSS-Army Enterprise Aviation will integrate the Aircraft Notebook (ACN) data into GCSS-Army via an interface with the Enterprise Aviation Middleware components.</p> <p>This interface between ACN and GCSS-Army will provide Warfighter level data to be populated into the Enterprise system that will provide Senior Leaders with a flight line view of Aviation assets as well as supports the data for Aviation reports through the Business Intelligence / Business Warehouse (BI/BW) application. The funding also supports trade studies, analysis and market research for SAP based ERP integration, consolidation and efficiencies.</p> <p>Enterprise Resource Plan (ERP) modernization will consolidate the major Army Finance and Logistics ERPs &amp; top tier Defense Business Systems into a Post Modern ERP environment with integration to enduring systems and microservices. Beginning in FY21, ERP Modernization is a product of Continuous Process and Product Improvements from both the Logistics and Financial Management domains, which starts with Business Process Re-engineering, modernization of Army Business Enterprise Architecture, reevaluation of an evolving Army infrastructure, concepts and business needs, with emphasis on better serving our Soldiers through improved user experience and user interface (UI/UX).</p>		

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<b>Exhibit R-2, RDT&amp;E Budget Item Justification:</b> PB 2023 Army	<b>Date:</b> April 2022
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<b>Appropriation/Budget Activity</b> 2040: <i>Research, Development, Test &amp; Evaluation, Army / BA 7: Operational Systems Development</i>	<b>R-1 Program Element (Number/Name)</b> PE 0303141A / <i>Global Combat Support System</i>
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<b>B. Program Change Summary (\$ in Millions)</b>	<b>FY 2021</b>	<b>FY 2022</b>	<b>FY 2023 Base</b>	<b>FY 2023 OCO</b>	<b>FY 2023 Total</b>
Previous President's Budget	70.652	52.739	0.000	-	0.000
Current President's Budget	70.652	45.297	27.100	-	27.100
Total Adjustments	0.000	-7.442	27.100	-	27.100
• Congressional General Reductions	-	-			
• Congressional Directed Reductions	-	-7.442			
• Congressional Rescissions	-	-			
• Congressional Adds	-	-			
• Congressional Directed Transfers	-	-			
• Reprogrammings	-	-			
• SBIR/STTR Transfer	-	-			
• Adjustments to Budget Years	-	-	27.100	-	27.100

**Change Summary Explanation**

FY2023 funding increased by \$27.1 Million in Feb 2022 for ERP Modernization.

FY2023 funding increase reflects the fact that the FY2022 President's Budget request did not include out year funding.

FY2022 marks: \$5.442M project 083 for Disconnected Ops; \$2.000M project EK2 for testing.

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<b>Exhibit R-2A, RDT&amp;E Project Justification:</b> PB 2023 Army										<b>Date:</b> April 2022		
<b>Appropriation/Budget Activity</b> 2040 / 7					<b>R-1 Program Element (Number/Name)</b> PE 0303141A / <i>Global Combat Support System</i>				<b>Project (Number/Name)</b> 083 / <i>Global Combat Support Sys - Army</i>			
<b>COST (\$ in Millions)</b>	<b>Prior Years</b>	<b>FY 2021</b>	<b>FY 2022</b>	<b>FY 2023 Base</b>	<b>FY 2023 OCO</b>	<b>FY 2023 Total</b>	<b>FY 2024</b>	<b>FY 2025</b>	<b>FY 2026</b>	<b>FY 2027</b>	<b>Cost To Complete</b>	<b>Total Cost</b>
083: <i>Global Combat Support Sys - Army</i>	-	20.883	14.933	27.100	-	27.100	-	-	-	-	0.000	62.916
Quantity of RDT&E Articles	-	-	-	-	-	-	-	-	-	-		

**A. Mission Description and Budget Item Justification**

GCSS-Army Increment 1 provides critical Army sustainment support to the soldier with a seamless flow of timely, accurate, accessible, and secure information management that gives combat forces a decisive edge and is essential for combat readiness. The GCSS-Army approved Capability Description Document (CDD) and Capability Production Document (CPD) require an enterprise approach to replace current logistics and maintenance Standard Army Management Information Systems (STAMIS) to include supply, maintenance, ammunition and property book. GCSS-Army implements best business practices to streamline supply, accountability, maintenance, distribution, and reporting procedures in support of the future force transition path of The Army Campaign Plan. GCSS-Army is financially compliant and is a key component for the Army Enterprise Strategy to be financially auditable.

The funds in the GCSS-Army Increment 1 Research Development Test & Evaluation (RDT&E) line are for building the software solution for disconnected supply, maintenance and accountability. Aviation applications could leverage the ground disconnected operations solution for common functions without additional development. The Army requires a disconnected operations architecture for GCSS-Army to support ground mission. The FY22 funding will continue building the software solution for disconnected supply, maintenance and accountability. Currently the Army has battlefield gaps without network connectivity: inability to maintain or regenerate combat power, order/process spare parts, track battle losses, or conduct maintenance. The disconnected operations architecture will alleviate these problems when there are disruptions in communications or cyber-attacks. In FY2022 the Army will complete design, development and build of disconnected operations capability to support ground operations. The FY 2022 funding also supports critical change requests in each fiscal year, coming from the warfighter and prioritized by the Combat Developer, for the baseline system.

ERP Modernization will consolidate the major Army Finance and Logistics ERPs & top tier Defense Business Systems into a Post Modern ERP environment with integration to enduring systems and microservices. Beginning in FY21, ERP modernization was a product of Continuous Process and Product Improvements from both the Logistics and Financial Management domains, starting with Business Process Re-engineering, modernization of Army Business Enterprise Architecture, reevaluation of an evolving Army infrastructure, concepts and business needs, with emphasis on better serving our Soldiers through improved user experience and user interface (UI/UX).

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

	<b>FY 2021</b>	<b>FY 2022</b>	<b>FY 2023</b>
<b>Title:</b> Product Development	20.883	14.388	-
<b>Description:</b> The funds in the GCSS-Army Increment 1 RDT&E line are for building the software solution for disconnected supply, maintenance and accountability. The Army requires a disconnected operations architecture for GCSS-Army to support ground mission. The FY 2022 funding completes the development of the software solution for disconnected supply, maintenance and			

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<b>Appropriation/Budget Activity</b> 2040 / 7	<b>R-1 Program Element (Number/Name)</b> PE 0303141A / <i>Global Combat Support System</i>	<b>Project (Number/Name)</b> 083 / <i>Global Combat Support Sys - Army</i>		
<b>B. Accomplishments/Planned Programs (\$ in Millions)</b>		<b>FY 2021</b>	<b>FY 2022</b>	<b>FY 2023</b>
<p>accountability. Aviation applications could leverage the ground disconnected operations solution for common functions without additional development.</p> <p><b>FY 2022 Plans:</b> The FY 2022 funding will complete development of software for disconnected supply, maintenance and accountability. The disconnected operations architecture, using FY 2022 RDTE funding, will alleviate these problems when there are disruptions in communications or cyber-attacks.</p> <p><b>FY 2022 to FY 2023 Increase/Decrease Statement:</b> Decrease in funding for efforts for Disconnected operations is offset by increase in funding for convergence.</p>				
<p><b>Title:</b> Product Development and Modernization</p> <p><b>Description:</b> RDT&amp;E funding in FY23 to support ERP Modernization will focus on risk reduction, market research, provide analysis and prototype(s) demonstrating key Audit, Finance and Logistics capabilities, application and technical architecture to support the next phases of the ERP modernization. In support of this, government Program Management and Systems Engineering and Technical Assistance (SETA) contractors will be needed to plan for and manage the initiation of the ERP systems implementation effort. A cloud prototype(s) environment(s) will be established to support the development of modernized finance and logistics capabilities in compliance with Impact Level 4 (IL4) and Impact Level 6 (IL6) requirements. In addition, significant and continuous Business Process Re-engineering will be required to develop end to end processes based on commercial off the shelf software best practices to support limited to no customization approach and produce a solution that is commercial as possible and military as necessary.</p> <p><b>FY 2023 Plans:</b> RDT&amp;E funding in FY23 to support ERP Modernization will focus on risk reduction, market research, provide analysis and prototype(s) demonstrating key Audit, Finance and Logistics capabilities, application and technical architecture to support the next phases of the ERP modernization. In support of this, government Program Management and Systems Engineering and Technical Assistance (SETA) contractors will be needed to plan for and manage the initiation of the ERP systems implementation effort. A cloud prototype(s) environment(s) will be established to support the development of modernized finance and logistics capabilities in compliance with Impact Level 4 (IL4) and Impact Level 6 (IL6) requirements. In addition, significant and continuous Business Process Re-engineering will be required to develop end to end processes based on commercial off the shelf software best practices to support limited to no customization approach and produce a solution that is commercial as possible and military as necessary.</p> <p>Product and Software Development: \$9.104M</p>		-	-	9.104

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<b>B. Accomplishments/Planned Programs (\$ in Millions)</b>		<b>FY 2021</b>	<b>FY 2022</b>	<b>FY 2023</b>
Description: Software Development includes all efforts related to the system integrator labor costs for prototyping of the ERP Modernized solution in the IL4 cloud hosted environment				
<b>FY 2022 to FY 2023 Increase/Decrease Statement:</b> Decrease in funding for efforts for Disconnected operations is offset by increase in funding for ERP Modernization				
<b>Title:</b> ERP Modernization Program Management Support		-	-	13.345
<b>Description:</b> RDT&E funding in FY23 to support ERP Modernization will focus on risk reduction, market research, provide analysis and prototype(s) demonstrating key Audit, Finance and Logistics capabilities, application and technical architecture to support the next phases of the ERP modernization. In support of this, government Program Management and Systems Engineering and Technical Assistance (SETA) contractors will be needed to plan for and manage the initiation of the ERP systems implementation effort. A cloud prototype(s) environment(s) will be established to support the development of modernized finance and logistics capabilities in compliance with Impact Level 4 (IL4) and Impact Level 6 (IL6) requirements. In addition, significant and continuous Business Process Re-engineering will be required to develop end to end processes based on commercial off the shelf software best practices to support limited to no customization approach and produce a solution that is commercial as possible and military as necessary.				
<b>FY 2023 Plans:</b> RDT&E funding in FY23 to support ERP Modernization will focus on risk reduction, market research, provide analysis and prototype(s) demonstrating key Audit, Finance and Logistics capabilities, application and technical architecture to support the next phases of the ERP modernization. In support of this, government Program Management and Systems Engineering and Technical Assistance (SETA) contractors will be needed to plan for and manage the initiation of the ERP systems implementation effort. A cloud prototype(s) environment(s) will be established to support the development of modernized finance and logistics capabilities in compliance with Impact Level 4 (IL4) and Impact Level 6 (IL6) requirements. In addition, significant and continuous Business Process Re-engineering will be required to develop end to end processes based on commercial off the shelf software best practices to support limited to no customization approach and produce a solution that is commercial as possible and military as necessary.				
Program Support: \$13.345				
Description: Program support includes program operations, acquisition support, system engineering, technical management and test management for the ERP Modernized solution. Costs include government management, contractor support, travel and facilities.				
<b>FY 2022 to FY 2023 Increase/Decrease Statement:</b>				

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<b>Exhibit R-2A, RDT&amp;E Project Justification:</b> PB 2023 Army		<b>Date:</b> April 2022		
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<b>B. Accomplishments/Planned Programs (\$ in Millions)</b>		<b>FY 2021</b>	<b>FY 2022</b>	<b>FY 2023</b>
Decrease in funding for efforts for Disconnected operations is offset by increase in funding for ERP modernization				
<p><b>Title:</b> Cloud Support Development</p> <p><b>Description:</b> RDT&amp;E funding in FY23 to support ERP Modernization will focus on risk reduction, market research, provide analysis and prototype(s) demonstrating key Audit, Finance and Logistics capabilities, application and technical architecture to support the next phases of the ERP modernization. In support of this, government Program Management and Systems Engineering and Technical Assistance (SETA) contractors will be needed to plan for and manage the initiation of the ERP systems implementation effort. A cloud prototype(s) environment(s) will be established to support the development of modernized finance and logistics capabilities in compliance with Impact Level 4 (IL4) and Impact Level 6 (IL6) requirements. In addition, significant and continuous Business Process Re-engineering will be required to develop end to end processes based on commercial off the shelf software best practices to support limited to no customization approach and produce a solution that is commercial as possible and military as necessary.</p> <p><b>FY 2023 Plans:</b> RDT&amp;E funding in FY23 to support ERP Modernization will focus on risk reduction, market research, provide analysis and prototype(s) demonstrating key Audit, Finance and Logistics capabilities, application and technical architecture to support the next phases of the ERP modernization. In support of this, government Program Management and Systems Engineering and Technical Assistance (SETA) contractors will be needed to plan for and manage the initiation of the ERP systems implementation effort. A cloud prototype(s) environment(s) will be established to support the development of modernized finance and logistics capabilities in compliance with Impact Level 4 (IL4) and Impact Level 6 (IL6) requirements. In addition, significant and continuous Business Process Re-engineering will be required to develop end to end processes based on commercial off the shelf software best practices to support limited to no customization approach and produce a solution that is commercial as possible and military as necessary.</p> <p>Cloud Support Development \$4.651M Cloud support includes all costs related to cloud support provider (CSP), managed services provider (MSP), remote access for vendors, in support of Impact Level 4 and Impact Level 6 environments. Environments will include sandbox and development for the vendors conducting the prototypes for ERP Modernization.</p> <p><b>FY 2022 to FY 2023 Increase/Decrease Statement:</b> Decrease in funding for efforts for Disconnected operations is offset by increase in funding for ERP modernization</p>		-	-	4.651
<p><b>Title:</b> FY22 SBIR/STTR Transfer</p> <p><b>Description:</b> Funding transferred in accordance with Title 15 USC ?638</p>		-	0.545	-

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<b>Exhibit R-2A, RDT&amp;E Project Justification:</b> PB 2023 Army		<b>Date:</b> April 2022
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<b>B. Accomplishments/Planned Programs (\$ in Millions)</b>	<b>FY 2021</b>	<b>FY 2022</b>	<b>FY 2023</b>
<b><i>FY 2022 Plans:</i></b> Funding transferred in accordance with Title 15 USC ?638			
<b><i>FY 2022 to FY 2023 Increase/Decrease Statement:</i></b> Funding transferred in accordance with Title 15 USC ?638			
<b>Accomplishments/Planned Programs Subtotals</b>	20.883	14.933	27.100

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

N/A

**Remarks**

**D. Acquisition Strategy**

GCSS-Army will design and develop the software solution for disconnected ground operations . The program will design and build user screens for disconnected supply, maintenance and accountability. The Army will use a disconnected operations architecture for GCSS-Army to support the ground missions. Aviation applications could leverage the ground disconnected operations solution for common functions without additional development. In FY21, the program office awarded a development/production base year (FY21) and option year (FY22) contract for the disconnected operations solution

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**Exhibit R-3, RDT&E Project Cost Analysis: PB 2023 Army** **Date:** April 2022

<b>Appropriation/Budget Activity</b> 2040 / 7	<b>R-1 Program Element (Number/Name)</b> PE 0303141A / <i>Global Combat Support System</i>	<b>Project (Number/Name)</b> 083 / <i>Global Combat Support Sys - Army</i>
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<b>Management Services (\$ in Millions)</b>				FY 2021		FY 2022		FY 2023 Base		FY 2023 OCO		FY 2023 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			
1. PM GCSS-Army- PMO Operations	Various	PM GCSS-Army : Fort Lee, VA 23805	103.931	-		-		-		-		-	0.000	103.931	62.385
2. PM Support - Program Management Support Services A	C/T&M	Engility Corporation : 3750 Centerview Drive Chantilly, VA 20151	1.386	-		-		-		-		-	0.000	1.386	-
FY22 SBIR/STTR Transfer	TBD	various : Various	-	-		0.545	Mar 2022	-		-		-	0.000	0.545	-
<b>Subtotal</b>			105.317	-		0.545		-		-		-	0.000	105.862	N/A

<b>Product Development (\$ in Millions)</b>				FY 2021		FY 2022		FY 2023 Base		FY 2023 OCO		FY 2023 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			
Enterprise Resource Planning (ERP) design and development	C/FPAF	Northrop Grumman Information Systems : Chester, VA 23836	467.058	-		-		-		-		-	0.000	467.058	457.056
Government Developer Subject Matter Experts	IA	ASA (FM&C), CASCOC and GFEBs : Various Locations	22.315	-		-		-		-		-	0.000	22.315	19.730
FY 2019 SBIR / STTR Transfer	TBD	TBD : TBD	0.042	-		-		-		-		-	0.000	0.042	-
Disconnected Ground Operations	SS/TBD	TBD : Arlington VA	-	20.883		14.388		-		-		-	19.218	54.489	-
ERP Modernization SW Development	Option/ TBD	TBD : TBD	-	-		-		9.104		-		9.104	6.182	15.286	-
EERP Modernization Cloud Spt Development	Option/ TBD	TBD : TBD	-	-		-		4.651		-		4.651	0.000	4.651	-
<b>Subtotal</b>			489.415	20.883		14.388		13.755		-		13.755	25.400	563.841	N/A

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**Exhibit R-3, RDT&E Project Cost Analysis: PB 2023 Army** **Date:** April 2022

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<b>Support (\$ in Millions)</b>				FY 2021		FY 2022		FY 2023 Base		FY 2023 OCO		FY 2023 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			
1. PM Support - Independent Verification and Validation (IV&V)	C/T&M	CAP Gemini : 2250 Corporate Park Dr, Herndon, VA 20171	1.031	-		-		-		-		-	0.000	1.031	1.031
3. PM Support - Program Management Support Services B	C/T&M	Logistics Management Institute : Colonial Heights, VA 23834	42.101	-		-		-		-		-	0.000	42.101	42.101
ERP Modernization Program Management	C/T&M	Logistics Management Institute : Tysons VA	-	-		-		13.345		-		13.345	0.000	13.345	-
<b>Subtotal</b>			43.132	-		-		13.345		-		13.345	0.000	56.477	N/A

<b>Test and Evaluation (\$ in Millions)</b>				FY 2021		FY 2022		FY 2023 Base		FY 2023 OCO		FY 2023 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			
1. Test and Evaluation - Test and Evaluation	C/IDIQ	Northrop Grumman : McLean VA	39.950	-		-		-		-		-	0.000	39.950	-
<b>Subtotal</b>			39.950	-		-		-		-		-	0.000	39.950	N/A

	Prior Years	FY 2021	FY 2022	FY 2023 Base	FY 2023 OCO	FY 2023 Total	Cost To Complete	Total Cost	Target Value of Contract	
<b>Project Cost Totals</b>		677.814	20.883	14.933	27.100	-	27.100	25.400	766.130	N/A

**Remarks**  
\$27.1 Million added (Feb 22) to FY23 for ERP modernization.

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<b>Exhibit R-4, RDT&amp;E Schedule Profile: PB 2023 Army</b>		<b>Date:</b> April 2022
<b>Appropriation/Budget Activity</b> 2040 / 7	<b>R-1 Program Element (Number/Name)</b> PE 0303141A / <i>Global Combat Support System</i>	<b>Project (Number/Name)</b> 083 / <i>Global Combat Support Sys - Army</i>

Event Name	FY 2021				FY 2022				FY 2023				FY 2024				FY 2025				FY 2026				FY 2027			
	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
Continuous Enhancements (Design and Development)	[Blue bar spanning FY 2021 Q1-Q4]																											
Disconnected Ground Operations (Development Test and Deployment)	[Blue bar spanning FY 2021 Q1-Q4]																											
ERP Modernization Functional Requirements ATP				▲ 1																								
ERP Modernization Risk Reduction Acquisition Decision Memorandum				▲ 2																								
ERP Modernization Other Transaction Authority Start								▲ 3																				
ERP Modernization Prototype Award 1												▲ 4																
ERP Modernization Capability Build 1													[Blue bar spanning FY 2023 Q1-Q4]															
ERP Modernization Acquisition Authority to Proceed																▲ 5												
ERP Modernization Prototype Award 2																▲ 6												
ERP Modernization Capability Build 2 and 3													[Blue bar spanning FY 2024 Q1-Q4]															
ERP Modernization Initial Limited Deployment																				▲ 7								
ERP Modernization Fielding Capability 1,2,3																					[Blue bar spanning FY 2025 Q3-Q4]							

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<b>Exhibit R-4A, RDT&amp;E Schedule Details: PB 2023 Army</b>		<b>Date:</b> April 2022
<b>Appropriation/Budget Activity</b> 2040 / 7	<b>R-1 Program Element (Number/Name)</b> PE 0303141A / <i>Global Combat Support System</i>	<b>Project (Number/Name)</b> 083 / <i>Global Combat Support Sys - Army</i>

Schedule Details

Events	Start		End	
	Quarter	Year	Quarter	Year
Seg 2 Contract Award	1	2008	1	2008
Increment 1 - Acquisition Review	2	2008	2	2008
Increment 1/Segment 1 Operational Assessment	1	2008	3	2010
Increment 1 - Milestone B	4	2008	4	2008
Increment 1/Release 1.1 DTOE	3	2010	4	2010
GCSS-Army Release 1.1 Design, Build, Test & Stabilize	1	2011	3	2011
Increment 1 - Milestone C	4	2011	4	2011
Release 1.1 Intial Operational Test and Evaluation (IOT&E)	1	2012	1	2012
Release 1.1 Stabilization	2	2011	1	2013
Lead Site Verification	1	2013	1	2013
Release 1.1 Full Deployment Decision	1	2013	1	2013
Field Wave 1	1	2013	1	2016
GCSS-Army Release 1.2 (Wave 2) Plan, Analyze, Design, Build & Test	3	2011	4	2015
Release 1.2 (Wave 2) Lead Site Verification Test	3	2015	3	2015
Release 1.2 (Wave 2) In Progress Review	4	2015	4	2015
Field Release 1.2 (Wave 2)	1	2015	1	2018
Continuous Enhancements (Design and Development)	1	2018	4	2022
Disconnected Ground Operations (Development Test and Deployment)	1	2021	4	2022
ERP Modernization Functional Requirements ATP	4	2021	4	2021
ERP Modernization Risk Reduction Acquisiton Decision Memorandum	1	2022	1	2022
ERP Modernization Otheor Transaction Authority Start	3	2022	3	2022
ERP Modernization Prototype Award 1	1	2023	1	2023

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**Exhibit R-4A, RDT&E Schedule Details: PB 2023 Army** **Date:** April 2022

<b>Appropriation/Budget Activity</b> 2040 / 7	<b>R-1 Program Element (Number/Name)</b> PE 0303141A / <i>Global Combat Support System</i>	<b>Project (Number/Name)</b> 083 / <i>Global Combat Support Sys - Army</i>
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Events	Start		End	
	Quarter	Year	Quarter	Year
ERP Modernization Capabiity Build 1	1	2023	4	2023
ERP Modernization Acquisition Authority to Proceed	4	2023	4	2023
ERP Modernization Prototype Award 2	1	2024	1	2024
ERP Modernization Capability Build 2 and 3	1	2024	3	2025
ERP Modernization Initial Limited Deployment	3	2025	3	2025
ERP Modernization Fielding Capability 1,2,3	4	2025	4	2026

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<b>Exhibit R-2A, RDT&amp;E Project Justification:</b> PB 2023 Army										<b>Date:</b> April 2022		
<b>Appropriation/Budget Activity</b> 2040 / 7					<b>R-1 Program Element (Number/Name)</b> PE 0303141A / <i>Global Combat Support System</i>				<b>Project (Number/Name)</b> EK2 / <i>GCSS-A Increment 2</i>			
<b>COST (\$ in Millions)</b>	<b>Prior Years</b>	<b>FY 2021</b>	<b>FY 2022</b>	<b>FY 2023 Base</b>	<b>FY 2023 OCO</b>	<b>FY 2023 Total</b>	<b>FY 2024</b>	<b>FY 2025</b>	<b>FY 2026</b>	<b>FY 2027</b>	<b>Cost To Complete</b>	<b>Total Cost</b>
EK2: <i>GCSS-A Increment 2</i>	-	49.769	30.364	-	-	-	-	-	-	-	0.000	80.133
Quantity of RDT&E Articles	-	-	-	-	-	-	-	-	-	-		

**A. Mission Description and Budget Item Justification**

(Project 083) GCSS-Army Increment 1 gives combat forces a decisive edge by providing soldiers a seamless flow of timely, accurate, accessible, and secure logistics information to get combat power at the right place, at the right time. The GCSS-Army program is an information and communications technology investment that provides key enabling support to the transformation of the Army into a network-centric, knowledge-based future force. GCSS-Army implements best business practices to streamline supply, accountability, maintenance, distribution, and reporting procedures in support of the future force transition path of The Army Campaign Plan.

(Project EK2) GCSS-Army Increment 2 builds on the current foundation by providing auditable Army Enterprise Aviation maintenance, enhanced Business Intelligence/ Business Warehouse (BI/BW) and Army Pre-Positioned Stocks (APS) functional capabilities and will sunset the legacy system Army War Reserve Deployment System (AWRDS). Increment 2 will deliver greater efficiencies to Aviation Logistics warfighters and improve information flow and accuracy in real time to decision makers, helping them make better decisions faster on the battlefield. This Project is undertaking to develop the underlying common architecture for the next generation Enterprise Business System converged capabilities. This will include efforts to implement updated Business Processes through Business Process Reengineering in a modernized technical capability.

In FY 2020, the Army Acquisition Executive (AAE) approved the program's technical approach that provides the software solution for Enterprise Aviation via five incremental capability drops. The change resulted from technical risk identified by the vendor which would have significantly increased cost and schedule to the program. The new approach will integrate the Aircraft Notebook (ACN) with GCSS-Army for Aviation maintenance data, usage data, readiness data, Aviation supply processes, airworthiness data for Aviation assets, fully integrate the Aviation Critical Safety Item (Aviation Tracked Components for airworthiness) Process, and provide an end to end solution for the Aviation Directed Maintenance Action process.

Implementation of the BI/BW capabilities provide enhancements in materiel and supply chain readiness analytics that are critical to improve commanders' understanding of weapons systems readiness, helping them make better decisions faster on the battlefield.

The APS capabilities directly impacts the speed at which a deploying unit can draw combat equipment while reducing the burden of the day-to-day maintenance and accountability of Army Prepositioned Stocks.

The FY 2022 funding continues design, development, and incremental testing for Enterprise Aviation capability in the GCSS-Army baseline software; FY 2022 RDTE funds also allows the Army to develop critical maintenance, supply and financial reports that will be used for Enterprise Aviation and key functional areas in order to improve readiness reporting. FY 2022 will provide the development and deployment of the final three Capability Drops that will integrate the Aircraft Notebook with GCSS-Army for Aviation supply processes, airworthiness data for Aviation assets, fully integrate the Aviation Critical Safety Item (Aviation Tracked Components for airworthiness) Process, and provide an end to end solution for the Aviation Directed Maintenance Action process.

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<b>Exhibit R-2A, RDT&amp;E Project Justification:</b> PB 2023 Army		<b>Date:</b> April 2022
<b>Appropriation/Budget Activity</b> 2040 / 7	<b>R-1 Program Element (Number/Name)</b> PE 0303141A / <i>Global Combat Support System</i>	<b>Project (Number/Name)</b> EK2 / <i>GCSS-A Increment 2</i>

<b>B. Accomplishments/Planned Programs (\$ in Millions)</b>	<b>FY 2021</b>	<b>FY 2022</b>	<b>FY 2023</b>
<p><b>Title:</b> System Design, Develop and Build</p> <p><b>Description:</b> The purpose of this phase is to begin the system development for an incremental capability that is affordable and executable to satisfy the Key Performance Parameters and Key System Attributes.</p> <p><b>FY 2022 Plans:</b> Building on the momentum initiated in FY2020 and continued through FY2021, the EAVN team will complete software design, development, and developmental testing on Capability Drops 2.3, 2.4, and 2.5 in FY2022. In addition to the planned developmental testing on these capabilities, Operational Testing is required for Capability Drops 2.3 and 2.5.</p> <p><b>FY 2022 to FY 2023 Increase/Decrease Statement:</b> Program funding ends FY22.</p>	47.809	24.891	-
<p><b>Title:</b> Government System Test and Evaluation</p> <p><b>Description:</b> Government System Test and Evaluation</p> <p><b>FY 2022 Plans:</b> FY2022 funding will provide for testing of Capability Drops 2.3, 2.4, and 2.5, including IOT&amp;E as development of the capability drops concludes.</p> <p><b>FY 2022 to FY 2023 Increase/Decrease Statement:</b> Program funding ends FY22.</p>	1.960	4.364	-
<p><b>Title:</b> FY22 SBIR/STTR Transfer</p> <p><b>Description:</b> Funding transferred in accordance with Title 15 USC ?638</p> <p><b>FY 2022 Plans:</b> Funding transferred in accordance with Title 15 USC ?638</p> <p><b>FY 2022 to FY 2023 Increase/Decrease Statement:</b> Funding transferred in accordance with Title 15 USC ?638</p>	-	1.109	-
<b>Accomplishments/Planned Programs Subtotals</b>	49.769	30.364	-

<b>C. Other Program Funding Summary (\$ in Millions)</b>											
<u>Line Item</u>	<u>FY 2021</u>	<u>FY 2022</u>	<u>FY 2023</u> <u>Base</u>	<u>FY 2023</u> <u>OCO</u>	<u>FY 2023</u> <u>Total</u>	<u>FY 2024</u>	<u>FY 2025</u>	<u>FY 2026</u>	<u>FY 2027</u>	<u>Cost To</u> <u>Complete</u>	<u>Total Cost</u>
• W11011: <i>GCSS-Army Increment 2</i>	0.794	8.715	4.102	-	4.102	-	-	-	-	0.000	13.611

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<b>Exhibit R-2A, RDT&amp;E Project Justification:</b> PB 2023 Army		<b>Date:</b> April 2022
<b>Appropriation/Budget Activity</b> 2040 / 7	<b>R-1 Program Element (Number/Name)</b> PE 0303141A / <i>Global Combat Support System</i>	<b>Project (Number/Name)</b> EK2 / <i>GCSS-A Increment 2</i>

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

<u>Line Item</u>	<u>FY 2021</u>	<u>FY 2022</u>	<u>FY 2023</u> <u>Base</u>	<u>FY 2023</u> <u>OCO</u>	<u>FY 2023</u> <u>Total</u>	<u>FY 2024</u>	<u>FY 2025</u>	<u>FY 2026</u>	<u>FY 2027</u>	<u>Cost To</u> <u>Complete</u>	<u>Total Cost</u>
• OMA - 423612000-OMA: <i>GCSS-Army Increment2</i>	16.791	-	0.000	-	0.000	-	-	-	-	0.000	16.791

**Remarks**

**D. Acquisition Strategy**

GCSS-Army Increment 2 continues the evolutionary acquisition strategy of Increment 1 and will define, develop, and deploy additional and enhanced capabilities to GCSS-Army based upon proven technology, time-phased requirements, projected threat assessments, and demonstrated manufacturing capabilities.

GCSS-Army Increment 2 is being implemented in three waves:

Wave 1 provides the Army Enterprise Aviation logistics capability. Government System Integrator is the Combat Capability Development Command (CCDC) Aviation and Missile Center, System Simulation and Software Integration (S3I) Directorate. The program office will employ System Simulation and Software Integration Directorate (S3I) to design and develop the minimum viable Aviation solution through a series of five Capability Drops which will bring Aviation data and functionality into GCSS-Army and be independently designed, developed, and deployed.

Wave 2 provides the enhanced BI/BW capability. Base contract was awarded as a small business set aside IDIQ contract, June 2019. Option year awarded June 2020.

Wave 3 provides the APS capability. Will leverage Army Shared Service Center (ASSC) contract.

GCSS-Army also leverages the partnership with the U.S. Army Communications-Electronics Command, and supplements the design and development team with architecture and engineering support from the existing support contract.

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**Exhibit R-3, RDT&E Project Cost Analysis: PB 2023 Army** **Date:** April 2022

<b>Appropriation/Budget Activity</b> 2040 / 7	<b>R-1 Program Element (Number/Name)</b> PE 0303141A / <i>Global Combat Support System</i>	<b>Project (Number/Name)</b> EK2 / <i>GCSS-A Increment 2</i>
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<b>Management Services (\$ in Millions)</b>				FY 2021		FY 2022		FY 2023 Base		FY 2023 OCO		FY 2023 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			
PMO Operations	Allot	PMO : Huntsville AL	1.860	-		-		-		-		-	0.000	1.860	-
FY22 SBIR/STTR Transfer	TBD	Various : Various	-	-		1.109	Mar 2022	-		-		-	0.000	1.109	-
<b>Subtotal</b>			1.860	-		1.109		-		-		-	0.000	2.969	N/A

<b>Product Development (\$ in Millions)</b>				FY 2021		FY 2022		FY 2023 Base		FY 2023 OCO		FY 2023 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			
EAVN Blueprinting	RO	AMRDEC : Huntsville AL	90.815	-		-		-		-		-	0.000	90.815	90.815
EAVN System Design, Develop and Build	C/T&M	CCDC Aviation and Missile Cmd : Huntsville AL	58.830	30.591	Oct 2020	19.632	Oct 2020	-		-		-	20.062	129.115	115.397
FY 2019 SBIR / STTR Transfer	C/FFP	4M : Huntsville AL	4.667	2.533		-		-		-		-	1.407	8.607	-
EAVN ADO Development	C/FFP	DOD ESI : Arlington VA	6.112	-		-		-		-		-	2.366	8.478	25.337
EAVN SME Services	C/T&M	DOD ESI : Richmond VA	1.555	1.667		-		-		-		-	1.701	4.923	5.168
EAVN SETA Supt	C/T&M	LMI : Arlington VA	12.998	7.197	Dec 2020	2.150	Dec 2020	-		-		-	6.924	29.269	27.364
BI/BW Development	C/FFP	4M : Huntsville AL	3.058	2.491		0.447		-		-		-	4.971	10.967	10.677
BI/BW Program/SETA Support	C/T&M	LMI : Arlington VA	1.886	0.889		0.258		-		-		-	1.335	4.368	4.355
Program Support	TBD	Various : Various	1.234	1.219		0.404		-		-		-	1.335	4.192	4.033
EAVN Government Matrix Supt	RO	CCDC Aviation and Missile Cmd : Huntsville A	2.285	1.222		-		-		-		-	0.000	3.507	-
<b>Subtotal</b>			183.440	47.809		22.891		-		-		-	40.101	294.241	N/A



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<b>Exhibit R-4, RDT&amp;E Schedule Profile: PB 2023 Army</b>		<b>Date:</b> April 2022
<b>Appropriation/Budget Activity</b> 2040 / 7	<b>R-1 Program Element (Number/Name)</b> PE 0303141A / <i>Global Combat Support System</i>	<b>Project (Number/Name)</b> EK2 / <i>GCSS-A Increment 2</i>

Event Name	FY 2021				FY 2022				FY 2023				FY 2024				FY 2025				FY 2026				FY 2027			
	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
Full Deployment ATP								▲1																				
Capability Support ATP												▲2																
Rel 1 Deployment	■	■																										
Release 2 EAVN Blueprinting/R2 SW Development	■	■	■																									
Rel 2 Testing	■	■	■																									
Rel 2 Deployment		■	■	■	■	■	■																					
Business Intelligence/Business Warehouse Blueprinting/Development	■	■	■																									
APS Blueprinting/Development/Testing/Deployment	■	■																										

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<b>Exhibit R-4A, RDT&amp;E Schedule Details:</b> PB 2023 Army		<b>Date:</b> April 2022
<b>Appropriation/Budget Activity</b> 2040 / 7	<b>R-1 Program Element (Number/Name)</b> PE 0303141A / <i>Global Combat Support System</i>	<b>Project (Number/Name)</b> EK2 / <i>GCSS-A Increment 2</i>

Schedule Details

Events	Start		End	
	Quarter	Year	Quarter	Year
MDA Meeting	2	2016	2	2016
Full Deployment ATP	4	2022	4	2022
Capability Support ATP	4	2023	4	2023
Rel 1 EAVN Blueprinting/ SW Development	1	2018	4	2019
Rel 1 Testing	1	2018	2	2020
Rel 1 Deployment	4	2019	2	2021
Release 2 EAVN Blueprinting/R2 SW Development	3	2019	3	2022
Rel 2 Testing	1	2021	4	2022
Rel 2 Deployment	1	2021	4	2023
Business Intelligence/Business Warehouse Blueprinting/Development	1	2019	4	2022
APS Blueprinting/Development/Testing//Deployment	1	2021	1	2022

**Note**

The schedule for GCSS-Army Increment 2 is based upon the Army Acquisition Executive (AAE) decision to utilize the Government System Integrator. Schedule reflects two releases for Enterprise Aviation (Wave 1), one release for Business Intelligence/Business Warehouse (Wave 2), and one release for Army Prepositioned Stock (Wave 3).