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**Exhibit R-2, RDT&E Budget Item Justification:** PB 2024 Army **Date:** March 2023

<b>Appropriation/Budget Activity</b> 2040: Research, Development, Test & Evaluation, Army / BA 8: Software and Digital Technology Pilot Programs	<b>R-1 Program Element (Number/Name)</b> PE 0608041A / Defensive CYBER - Software Prototype Development
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COST (\$ in Millions)	Prior Years	FY 2022	FY 2023	FY 2024 Base	FY 2024 OCO	FY 2024 Total	FY 2025	FY 2026	FY 2027	FY 2028	Cost To Complete	Total Cost
Total Program Element	-	108.041	94.831	83.570	-	83.570	72.059	71.660	72.447	72.559	0.000	575.167
CD1: Defensive Cyber - Software Prototype Devel	-	108.041	86.292	83.570	-	83.570	72.059	71.660	72.447	72.559	0.000	566.628
DD2: Joint Cyber Warfighting Architecture Software	-	-	8.539	-	-	-	-	-	-	-	0.000	8.539

**Note**  
Project DD2: Joint Cyber Warfighting Architecture Software has no requested funding in FY 2024.

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

Defensive Cyber Operations (DCO) programs are key elements of the DCO Maneuver Baseline infrastructure, platform, and tools. The employment of defensive capabilities achieves the following objectives: deter, destroy and defeat cyberspace threats; gain time; economy of force; control key terrain; protect tasked critical assets and infrastructure; and develop intelligence.

Defensive Cyber Operations (DCO) consists of platform and software programs which are key elements of the DCO Maneuver Baseline infrastructure, platform, and tools. DCO supports the Army Cyber Command (ARCYBER), Information Warfare Operations Center (IWOC), FORSCOM, (5) Regional Cyber Centers (RCCs), Cyber Warfare Battalion (CWB), Multi-Domain Task Force (MDTF), Cyber Protection Brigade (CPB), and (41) Cyber Protection Teams (CPTs) in COMPO 1/2/3.

**Defensive Cyber Tools and Analytics:**

- \* DCO - Cyberspace Analytics - (PEO EIS) - Strategic Level
- \* DCO - Mission Planning - (PEO EIS) - Strategic Level (Program sunsetting in FY 2023)
- \* DCO - Tools Suite - (PEO EIS) - Garrison/Tactical Level
- \* DCO - User Activity Monitoring - (PEO EIS) - Strategic Level
- \* DCO - Forensics and Malware Analysis - (PEO EIS) - Garrison/Tactical Level
- \* DCO - Threat Emulation - (PEO EIS) - Strategic Level
- \* DCO - DCO Development Environment (DCODE) - (PEO EIS)
- \* DCO - Counter Infiltration - (PEO EIS) - Garrison/Tactical Level (Funding beginning in FY 2023)

**Platforms/Levels:**

- \* DCO - Garrison DCO Platform - (PEO EIS) - Base Level

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<b>B. Program Change Summary (\$ in Millions)</b>	<b><u>FY 2022</u></b>	<b><u>FY 2023</u></b>	<b><u>FY 2024 Base</u></b>	<b><u>FY 2024 OCO</u></b>	<b><u>FY 2024 Total</u></b>
Previous President's Budget	108.841	94.888	11.809	-	11.809
Current President's Budget	108.041	94.831	83.570	-	83.570
Total Adjustments	-0.800	-0.057	71.761	-	71.761
• Congressional General Reductions	-	-			
• Congressional Directed Reductions	-	-			
• Congressional Rescissions	-	-			
• Congressional Adds	-	-			
• Congressional Directed Transfers	-	-			
• Reprogrammings	-0.800	-			
• SBIR/STTR Transfer	-	-			
• Adjustments to Budget Years	-	-	71.761	-	71.761
• FFRDC Transfer	-	-0.057	-	-	-

**Change Summary Explanation**

FY 2024 funding \$71.761 million to properly restore Defensive Cyber funding to Army from CYBERCOM.

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<b>Appropriation/Budget Activity</b> 2040 / 8					<b>R-1 Program Element (Number/Name)</b> PE 0608041A / <i>Defensive CYBER - Software Prototype Development</i>				<b>Project (Number/Name)</b> CD1 / <i>Defensive Cyber - Software Prototype Devel</i>			
<b>COST (\$ in Millions)</b>	<b>Prior Years</b>	<b>FY 2022</b>	<b>FY 2023</b>	<b>FY 2024 Base</b>	<b>FY 2024 OCO</b>	<b>FY 2024 Total</b>	<b>FY 2025</b>	<b>FY 2026</b>	<b>FY 2027</b>	<b>FY 2028</b>	<b>Cost To Complete</b>	<b>Total Cost</b>
CD1: <i>Defensive Cyber - Software Prototype Devel</i>	-	108.041	86.292	83.570	-	83.570	72.059	71.660	72.447	72.559	0.000	566.628
Quantity of RDT&E Articles	-	-	-	-	-	-	-	-	-	-		

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

Defensive Cyber Operations (DCO) programs are key elements of the DCO Maneuver Baseline infrastructure, platform, and tools. The employment of defensive capabilities achieves the following objectives: deter, destroy and defeat cyberspace threats; gain time; economy of force; control key terrain; protect tasked critical assets and infrastructure; and develop intelligence.

Defensive Cyber Operations (DCO) consists of platform and software programs which are key elements of the DCO Maneuver Baseline infrastructure, platform, and tools. DCO supports the Army Cyber Command (ARCYBER), Information Warfare Operations Center (IWOC), FORSCOM, (5) Regional Cyber Centers (RCCs), Cyber Warfare Battalion (CWB), Multi-Domain Task Force (MDTF), Cyber Protection Brigade (CPB), and (41) Cyber Protection Teams (CPTs) in COMPO 1/2/3.

Defensive Cyber Tools and Analytics:

- \* DCO - Cyberspace Analytics - (PEO EIS) - Strategic Level
- \* DCO - Mission Planning - (PEO EIS) - Strategic Level (Program sunseting in FY 2023)
- \* DCO - Tools Suite - (PEO EIS) - Garrison/Tactical Level
- \* DCO - User Activity Monitoring - (PEO EIS) - Strategic Level
- \* DCO - Forensics and Malware Analysis - (PEO EIS) - Garrison/Tactical Level
- \* DCO - Threat Emulation - (PEO EIS) - Strategic Level
- \* DCO - DCO Development Environment (DCODE) - (PEO EIS)
- \* DCO - Counter Infiltration - (PEO EIS) - Garrison/Tactical Level (Funding beginning in FY 2023)
- \* ARCYBER Rapid Cyber Prototyping - (ARCYBER)

Platforms/Levels:

- \* DCO - Garrison DCO Platform - (PEO EIS) - Base Level

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

	<b>FY 2022</b>	<b>FY 2023</b>	<b>FY 2024</b>
<b>Title:</b> Defensive Cyber Operations (DCO) - Tactical DCO Infrastructure (TDI) (PEO C3T)	5.545	-	-
<b>Description:</b> TDI is a software only program that pre-configures applications from DCO's Tool Suite to allow local and remote Cyber defenders the ability to conduct cyberspace surveillance and maneuver against an adversary traversing within the tactical			

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<b>B. Accomplishments/Planned Programs (\$ in Millions)</b>		<b>FY 2022</b>	<b>FY 2023</b>	<b>FY 2024</b>
network. The TDI capability is hosted on the TSI and will reside within the Command Post at echelon Army Service Component Commands (ASCC) through Brigade.				
<p><b>Title:</b> Defensive Cyber Operations - Cyber Analytics (PEO EIS)</p> <p><b>Description:</b> DCO Cyberspace Analytics Big Data Platform (BDP) is a scalable software-based capability hosted in the cloud, called Gabriel Nimbus (GN), which offers interfaces and visualization accessible by cyberspace defenders at all levels to facilitate counter-reconnaissance activities meant to discover the presence of advanced or sophisticated cyber threats and vulnerabilities.</p> <p><b>FY 2023 Plans:</b> Prior to BA8 Pilot program, this capability was funded with RDTE funding (PE 0605041A EV5). FY 2023 funding provides for managed professional services to support Risk Management Framework/Authorization to Operate (RFM/ATO), security updates, system support, patches, and the orchestration tool, Rapid Analytic Deployment Management Framework (RADMF), licenses needed for system operations. FY 2023 funding supports the Lower Echelon Analytic Platform (LEAP) fielding and new equipment training (NET) and the LEAP Tactical (LTAC) integration, testing, and installation on DCO tactical and regional level systems. FY 2023 funding also supports continuous development of BDP applications and analytics to include the associated engineering, integration, cybersecurity, testing, and training for new capability releases through the Cyberspace Analytics Development Support Contract.</p> <p><b>FY 2024 Plans:</b> Prior to BA8 Pilot program, this capability was funded with RDTE funding (PE 0605041A EV5). FY 2024 funds managed professional services, hardware integration, LEAP/LTAC fielding and testing, security updates, system support, patches, and Rapid Analytic Deployment Management Framework (RADMF) licenses for management, orchestration, and continuous modernization of Gabriel Nimbus up to 14.7 petabytes (PB). Additionally, FY 2024 funds supports the continuous development of BDP applications and analytics to include the associated engineering, integration, cybersecurity, testing, and training for new capability releases through the Cyberspace Analytics Development Support Contract.</p> <p><b>FY 2023 to FY 2024 Increase/Decrease Statement:</b> FY 2024 funding increased by \$1.394 million for development of BDP applications and analytics to include the associated engineering, integration, cybersecurity, testing, training for new capability releases, and continuous modernization through the Cyberspace Analytics Development Support Contract and development of an organic BDP management and orchestration tool.</p>		35.794	20.712	22.106
<p><b>Title:</b> Defensive Cyber Operations (DCO) - Mission Planning (PEO EIS)</p> <p><b>Description:</b> DCO Mission Planning (DCOMP) Solution is a software solution that facilitates situational awareness and understanding, workflow for order execution, and capabilities that bridge the gap between strategic, operational, and tactical cyberspace operators which enable targeted decision support products on existing DCO systems.</p>		2.085	2.809	-

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<b>B. Accomplishments/Planned Programs (\$ in Millions)</b>	<b>FY 2022</b>	<b>FY 2023</b>	<b>FY 2024</b>
<p><b><i>FY 2023 Plans:</i></b> Prior to BA8 Pilot program, this capability was funded with RDTE funding (PE 0605041A EV5). FY 2023 DCOMP solution will transition to Joint Cyber Command and Control (JCC2) in FY 2023. The funding supports the transition and sustainment of the DCOMP applications during the transition to JCC2. FY 2023 also supports development of the Army's specific requirements not delivered through the joint solution under JCC2.</p> <p><b><i>FY 2023 to FY 2024 Increase/Decrease Statement:</i></b> There is no funding request in FY 2024. DCOMP transitioned to JCC2 in FY 2023.</p>			
<p><b><i>Title:</i></b> Defensive Cyber Operations (DCO) - Tools Suite (PEO EIS)</p> <p><b><i>Description:</i></b> DCO Tools Suite is a flexible and dynamic software based suite of warfighting capabilities that enables Cyber Protection Teams (CPTs), Regional Cyber Centers (RCCs), and in some cases local defenders to perform DCO and cybersecurity actions. DCO tools consists of prepositioned and tailorable software packages that are integrated and available at all echelons to support or directly cause effects through the execution of Cyber Mission Force (CMF) and cyberspace workforce tasks. They are executed or managed within a DCO platform.</p> <p><b><i>FY 2023 Plans:</i></b> Prior to BA8 Pilot program, this capability would have been funded with OPA funding (PE 0128B63000) and OMA funding. FY 2023 OPA Plans: \$2.793 million FY 2023 OMA Plans: \$18.693 million FY 2023 funding supports new tools, training, license renewals, and professional services.</p> <p><b><i>FY 2024 Plans:</i></b> Prior to BA8 Pilot program, this capability would have been funded with OPA funding (PE 0128B63000) and OMA funding. FY 2024 OPA Plans: \$2.985 million FY 2024 OMA Plans: \$19.978 million FY 2024 funding continues to support new tools, training, license renewals, and professional services.</p> <p><b><i>FY 2023 to FY 2024 Increase/Decrease Statement:</i></b> FY 2024 funding increased by \$1.477 million to support the next generation of GDP and DDS-M operating systems. The DDS and GDP capabilities require virtual operating systems to run DCO Tools on the hardware platforms. Without the hypervisor that runs through the operating system, cyber defenders will not have the ability to access virtual machines inherent on the hardware platforms and will not have the ability to conduct defensive cyber operations.</p>	21.287	21.486	22.963
<p><b><i>Title:</i></b> Defensive Cyber Operations (DCO) - User Activity Monitoring (PEO EIS)</p>	14.870	12.155	10.514

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<b>B. Accomplishments/Planned Programs (\$ in Millions)</b>	<b>FY 2022</b>	<b>FY 2023</b>	<b>FY 2024</b>
<p><b>Description:</b> DCO User Activity Monitoring (UAM) is the primary capability within the Army's overall Insider Threat (InT) program. UAM is mainly a software-based, scalable solution that has an on-premise solution and a cloud solution. It proactively identifies and mitigates internal risks associated with the theft or misuse of critical, mission essential data. It utilizes an integrated approach with a centralized UAM cell sending data to a core Insider Threat Hub.</p> <p><b>FY 2023 Plans:</b> Prior to BA8 Pilot program, this capability was funded with RDTE funding (PE 0605041A EV5). FY 2023 funding supports continued system security updates and patches, accreditation, and hardware maintenance of the COTS UAM on-premise tool suite (UAM-P) on the SIPR and JWICS networks in support of the Army's Insider Threat program. Additionally, FY 2023 funding supports the hardware maintenance, system security updates and patching, and software licenses for the deployment of the UAM Special Access Program (SAP) capability to monitor, capture, and analyze data for behavioral analysis on the Army's SAP network. FY 2023 funding also supports the continuous modernization of the UAM capability for the development, engineering, testing, accreditation, and integration of the Big Data Platform (BDP) applications for a cloud-based UAM capability (UAM-C) fully integrated with the Army's Big Data Platform.</p> <p><b>FY 2024 Plans:</b> Prior to BA8 Pilot program, this capability was funded with RDTE funding (PE 0605041A EV5). FY 2024 funding supports continued hardware maintenance, system security updates and patching, and software licenses for the current COTS UAM tool suite of the on-premises UAM (UAM-P) capability and migration of data to the Army's Big Data Platform to support the deployment of the UAM-C capability. Additionally, FY 2024 funding supports the hardware maintenance, system security updates and patching, and software licenses for the UAM Special Access Program (SAP) solution fielded in FY 2023. FY 2024 funding also supports the continued development, engineering, testing, accreditation, and integration of the Big Data Platform (BDP) applications to deploy the UAM-C capability to replace the current UAM-P capability.</p> <p><b>FY 2023 to FY 2024 Increase/Decrease Statement:</b> FY 2024 funding decreased by \$1.641 million as a result of reduced software licensing costs due to the transition from UAM-P to UAM-C and the integration of the Collection Tool capability.</p>			
<p><b>Title:</b> Defensive Cyber Operations (DCO) - Forensics and Malware Analysis (PEO EIS)</p> <p><b>Description:</b> DCO Forensics and Malware Analysis (F&amp;MA) capability is a software/hardware based solution enabling global, regional, and local cyberspace defenders to perform forensics either remotely or locally. Forensics is evidence related and Malware capabilities provides a sandboxlike, virtual environment that allows for the conduct of real-time, automated and dynamic malware decomposition and behavior analysis. Forensics gives cyberspace defenders the ability to collect, process, search, and</p>	1.190	2.116	2.477

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<b>B. Accomplishments/Planned Programs (\$ in Millions)</b>		<b>FY 2022</b>	<b>FY 2023</b>	<b>FY 2024</b>
analyze evidence from portable electronic devices, removable media, system hard drives, and random access memory. This process rapidly triages an incident and place the impacted system(s) back in service.				
<p><b>FY 2023 Plans:</b> Prior to BA8 Pilot program, this capability would have been funded with OMA funding. FY 2023 funding supports annual licenses renewals, maintenance, professional services for completion of fielding, and program support costs.</p> <p><b>FY 2024 Plans:</b> Prior to BA8 Pilot program, this capability would have been funded with OMA funding. FY 2024 funding supports annual licenses renewals, maintenance, professional services for completion of fielding, and program support costs.</p> <p><b>FY 2023 to FY 2024 Increase/Decrease Statement:</b> FY 2024 funding increased by \$0.361 million to support additional training events for new and incoming team members in ARCYBER's F&amp;MA Cell, Regional Cyber Center (RCC), Cyber Protection Brigade (CPB), and Cyber Protection Team (CPT).</p>				
<p><b>Title:</b> Defensive Cyber Operations (DCO) - Threat Emulation (PEO EIS)</p> <p><b>Description:</b> DCO Threat Emulation capability is a software based suite of tools used to gain access to evaluated networks through multi-vectors of unknown, partially known, or known access methods. Threat Emulation will enable the implementation of real world threat tactics, techniques, and procedures (TTPs) against risk areas such as web services, endpoints, passwords and identities, phishing and social engineering, mobile devices, and wired/wireless network systems in order to reveal critical security exposures.</p> <p><b>FY 2023 Plans:</b> Prior to BA8 Pilot program, this capability was funded with RDTE funding (PE 0605041A EV5). FY 2023 funds licenses, new equipment training (NET), travel, engineering support, and professional services needed for the deployment of up to 5000 endpoint agents and 12 on-premises Virtual Machine (VM) Management Consoles for the key operational user footprint consisting of Multi-Domain Task Force (MDTF), Persistent Cyber Training Environment (PCTE), Regional Cyber Center - Europe (RCC-E), RCC-Pacific, RCC-CONUS, RCC-South West Asia, and RCC-Korea.</p> <p><b>FY 2024 Plans:</b> Prior to BA8 Pilot program, this capability was funded with RDTE funding (PE 0605041A EV5).</p>		3.346	6.686	5.239

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<b>B. Accomplishments/Planned Programs (\$ in Millions)</b>		<b>FY 2022</b>	<b>FY 2023</b>	<b>FY 2024</b>
<p>FY 2024 funds yearly licenses to support 25 On-Premises VM Management Consoles and Network Modules and up to the 10,000 endpoint agents needed to operate Threat Emulation software fielded at all designated locations. Additionally, FY 2024 funds system security updates, patches, and continuous modernization of the Threat Emulation software.</p> <p><b>FY 2023 to FY 2024 Increase/Decrease Statement:</b> FY 2024 funding decreased by \$1.447 million due to decrease in deployment activities and NET as most of the deployments will occur in FY 2023.</p>				
<p><b>Title:</b> Defensive Cyber Operations (DCO) - Garrison DCO Platform - Next Generation (PEO EIS)</p> <p><b>Description:</b> The Garrison DCO Platform (GDP) is a system that provides the Army's cyberspace defenders with the capability to defend garrison network environments from a remote location. It ingests data via Test Access Points (TAPs), enables the employment of the software tools necessary to compute and analyze the data, and offers a storage and forwarding capability to ensure necessary data is retained locally or easily accessible via the Big Data Platform (BDP).</p> <p><b>FY 2023 Plans:</b> Prior to BA8 Pilot program, this capability was funded with OPA funding (PE 0128B63000). Garrison DCO Platform (GDP) was added to Defensive Cyber - Software Prototype Development PE 0608041A, Project Code CD1, in FY 2023 to support development of GDP next generation garrison platform capabilities and/or enhancements.</p> <p><b>FY 2024 Plans:</b> Prior to BA8 Pilot program, this capability was funded with OPA funding (PE 0128B63000). FY 2024 funding supports the research and development of the next generation / enhancement of the GDP and continued procurement of the capability.</p> <p><b>FY 2023 to FY 2024 Increase/Decrease Statement:</b> FY 2024 funding increased by \$1.247 million to support additional GDP next generation system development, engineering and integration for these efforts.</p>		-	5.755	7.002
<p><b>Title:</b> Defensive Cyber Operations (DCO) - Counter Infiltration (PEO EIS)</p> <p><b>Description:</b> Counter Infiltration (formerly Threat Deception) supports the global defenders the ability to conduct Counter Infiltration operations to detect and respond to advanced persistent threat (APT) within the defended network enclave. Our Cyber Defenders employ this capability to conduct defensive cyberspace operations (DCO) internal defensive measures (DCO-IDM) to detect and respond to adversary malicious presence and actions. This capability provides the functional ability conduct DCO-IDM using deception tactics, techniques, and procedures (TTP). This capability provides the means employing fundamental military principles of deception (ways) to conduct effective DCO-IDM mission.</p>		-	1.255	1.833

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<b>B. Accomplishments/Planned Programs (\$ in Millions)</b>	<b>FY 2022</b>	<b>FY 2023</b>	<b>FY 2024</b>
<p><b><i>FY 2023 Plans:</i></b> Prior to BA8 Pilot program, this capability would have been funded with OPA funding (PE 0128B63000). Counter Infiltration was added to Defensive Cyber - Software Prototype Development PE 0608041A, Project Code CD1, in FY 2023 to support prototyping effort for Counter Infiltration capability.</p> <p><b><i>FY 2024 Plans:</i></b> Prior to BA8 Pilot program, this capability would have been funded with OPA funding (PE 0128B63000). FY 2024 funding supports the procurement of 25,000 licenses per Regional Cyber Center (RCC).</p> <p><b><i>FY 2023 to FY 2024 Increase/Decrease Statement:</i></b> FY 2024 funding increased by \$0.578 million to support the deployment of counter infiltration capability to the RCC.</p>			
<p><b><i>Title:</i></b> Defensive Cyber Operations (DCO) - DCO Development Environment (PEO EIS)</p> <p><b><i>Description:</i></b> DCO Development Environment (DCODE) (formerly Forge) is a physical and virtual assets that provides continual integration, upgrade, assess, optimization and Soldier operational environment. It is designed to provide centralized lifecycle management and consists of the following capabilities: (1) Forge - physical or virtual asset that provides integration and assessment capabilities during the development and integration phases of operations (centrally managed patching and security); and (2) Development Network - provides the capability to remote into multiple networks (provides safe and secure infrastructure framework for Cyber Protection Teams (CPTs)).</p>	12.467	-	-
<p><b><i>Title:</i></b> Defensive Cyber Operations (DCO) - Management Services (PEO EIS)</p> <p><b><i>Description:</i></b> Funding provides program management services and support from a mix of government matrix and contractors that perform mission critical implementation, fielding, system engineering, logistics, programmatic, and acquisition support for nine ACAT IV programs in various phases of development and production.</p> <p><b><i>FY 2023 Plans:</i></b> Prior to BA8 Pilot program, this capability was funded with RDTE funding (PE 0605041A EV5) and OPA funding (PE 0128B63000). FY 2023 funding provides continued program management services and support from a mix of government matrix personnel and contractors that perform mission critical implementation, fielding, system engineering, logistics, programmatic, and acquisition support for nine ACAT IV programs in various phases of development and production.</p> <p><b><i>FY 2024 Plans:</i></b> Prior to BA8 Pilot program, this capability was funded with RDTE funding (PE 0605041A EV5) and OPA funding (PE 0128B63000).</p>	9.592	13.318	10.136

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<b>B. Accomplishments/Planned Programs (\$ in Millions)</b>		<b>FY 2022</b>	<b>FY 2023</b>	<b>FY 2024</b>
<p>FY 2024 funding provides continued program management services and support from a mix of government matrix personnel and contractor that perform mission critical implementation, fielding, system engineering, logistics, programmatic, and acquisition support for eight ACAT IV programs in various phases of development and production.</p> <p><b>FY 2023 to FY 2024 Increase/Decrease Statement:</b> FY 2024 funding decreased by \$3.182 million to fund other DCO critical efforts within the Defensive Cyber - Software Prototype Development PE 0608041A, Project Code CD1, in development of tools, analytics, and platforms supporting Cyber Mission Forces.</p>				
<p><b>Title:</b> Defensive Cyber Operations (DCO) - Rapid Cyber Prototyping (ARCYBER)</p> <p><b>Description:</b> ARCYBER Rapid Cyber Prototyping program provides the ability to very quickly identify, prototype, pilot, and assess cutting-edge non-program-of-record cyber-operations peculiar technologies and capabilities against ARCYBER's realistic environments and data to tailor capabilities and prototypes to ARCYBER's needs. The ARCYBER Technical Warfare Center (TWC) executes these pilot and prototyping efforts through its Army Technology Transfer Program (ATTP)-designated Technology and Innovation Center (ArCTIC) laboratory.</p> <p><b>FY 2024 Plans:</b> Prior to BA8 Pilot program, this capability was funded with RDTE funding (PE 0605041A EV5). ARCYBER plans to focus its FY 2024 rapid cyber prototyping efforts on identifying and assessing novel non-program-of-record defensive cyberspace operations and big data platform-related solutions for automated vulnerability and anomaly detection, network monitoring and visualization, and advanced modeling and predictive analytics. ARCYBER will continue to mature its Cyber Fusion Innovation Center (CFIC) by increasing industry and academia outreach to drive ARCYBER, industry, and academia collaboration on state-of-the-art approaches to cyber operations problem-sets.</p> <p><b>FY 2023 to FY 2024 Increase/Decrease Statement:</b> FY 2024 funding increased by \$1.300 million will support ARCYBER's capacity to assess current state-of-the-art capabilities from industry and academia, and increase the throughput of relevant non-program-of-record prototypes to achieve ARCYBER's operational outcomes and to inform future portfolio investments. FY 2024 funding allows ARCYBER to conduct rapid cyber prototyping of capabilities such as advanced defensive cyberspace operations (DCO) advanced analytics and algorithms, hyper automation of cyber-related workflows, and provably secure systems, among other DCO-relevant technology areas.</p>		1.865	-	1.300
<b>Accomplishments/Planned Programs Subtotals</b>		108.041	86.292	83.570

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**Exhibit R-2A, RDT&E Project Justification:** PB 2024 Army **Date:** March 2023

<b>Appropriation/Budget Activity</b> 2040 / 8	<b>R-1 Program Element (Number/Name)</b> PE 0608041A / <i>Defensive CYBER - Software Prototype Development</i>	<b>Project (Number/Name)</b> CD1 / <i>Defensive Cyber - Software Prototype Devel</i>
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**C. Other Program Funding Summary (\$ in Millions)**

Line Item	FY 2022	FY 2023	FY 2024	FY 2024	FY 2024	FY 2025	FY 2026	FY 2027	FY 2028	Cost To	
			Base	OCO	Total					Complete	Total Cost
• B63103: <i>Advanced Cyber Tool Development</i>	27.389	-	13.848	-	13.848	16.144	20.942	20.626	20.643	0.000	119.592
• B66350: <i>ARCYBER DEFENSIVE CYBER OPERATIONS</i>	-	18.239	0.000	-	0.000	-	-	-	-	0.000	18.239
• B89001: <i>Insider Threat Program - Unit Activity Monitoring</i>	-	1.796	1.502	-	1.502	1.753	1.760	1.761	1.763	0.000	10.335
• 0605041A: <i>Defensive CYBER Tool Development</i>	18.811	39.029	27.714	-	27.714	24.268	21.430	21.494	21.620	0.000	174.366

**Remarks**

OPA PE B63103 - DCO hardware procurement, fielding, and new equipment training for Garrison DCO Platform (GDP), Deployable Defensive Systems (DDS), and DCODE Armory.  
 OPA PE B66350 (FY 2023 only) - DCO hardware procurement, fielding, and new equipment training for GDP, DDS, and DCODE Armory.  
 OPA PE B89001 - DCO Insider Threat Program - Unit Activity Monitoring for UAM operations conducted in support of the Army's insider threat program.  
 RDTE PE 0605041A Project EV5 - DCO platform infrastructure, integration, and assessments.

**D. Acquisition Strategy**

The DCO Information System Initial Capabilities Document (IS ICD) was approved on 19 December 2017 by the Army Requirements Oversight Council (AROC). DCO programs are under an IT Box construct with five-year term (FY 2018-2022) which aligns with current Requirements Definition Packages (RDPs). IT Box establishes funding thresholds, by appropriation, for a program over the capability's projected lifecycle of five (5) years. FY 2018-2022 IT Box expired in 4Q FY 2022. FY 2023-2027 IT Box Revalidation in staffing for approval.

The ARB approved GDP on 27 February 2018; Cyber Analytics and DCO Tool Suite RDPs on 18 May 2018; Mission Planning on 8 November 2018; User Activity Monitoring and Forensics and Malware Analysis on 18 March 2019; Threat Emulation on 24 August 2020; and Counter Infiltration on 10 February 2023. The MDA designated these as ACAT IV programs. Under subsequent reviews, the MDA approved agile acquisition approach to develop and deliver pre-configured software in a series of releases and capability drops in order to deliver full functional values of the RDP that align with DCO priorities. DCO programs utilize standard and FY 2018 National Defense Authorization Act (NDAA) Section 874 agile pilot evolutionary acquisition processes (30-90 rapid acquisition approach). DCO continually delivers new technologies and capabilities as a prototype and fields updated capabilities. DCO contract strategy utilizes multiple existing contracts vehicles to include Other Transactional Authority (OTA), Federal Acquisition Regulation (FAR)-based, Blanket Purchase Agreement (BPA), and Basic Ordering Agreement (BOA).

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**Exhibit R-3, RDT&E Project Cost Analysis: PB 2024 Army** **Date:** March 2023

<b>Appropriation/Budget Activity</b> 2040 / 8	<b>R-1 Program Element (Number/Name)</b> PE 0608041A / <i>Defensive CYBER - Software Prototype Development</i>	<b>Project (Number/Name)</b> CD1 / <i>Defensive Cyber - Software Prototype Dev</i>
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<b>Management Services (\$ in Millions)</b>				FY 2022		FY 2023		FY 2024 Base		FY 2024 OCO		FY 2024 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
DCO -Tactical DCO Infrastructure (TDI) (PEO C3T)	Various	CACI;CECOM : APG, MD	0.376	0.582	Mar 2022	-		-		-		-	Continuing	Continuing	-
DCO - Management Services (PEO EIS)	Various	Various : Various	9.009	10.667	Feb 2022	13.318	Mar 2023	10.136	Mar 2024	-		10.136	Continuing	Continuing	-
<b>Subtotal</b>			9.385	11.249		13.318		10.136		-		10.136	Continuing	Continuing	N/A

<b>Product Development (\$ in Millions)</b>				FY 2022		FY 2023		FY 2024 Base		FY 2024 OCO		FY 2024 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
DCO - Tactical DCO Infrastructure (TDI) (PEO C3T)	Various	Parsons; CECOM SEC; CCDC : APG, MD	4.065	4.176	Dec 2021	-		-		-		-	Continuing	Continuing	-
DCO - Cyber Analytics (PEO EIS)	C/FFP	Army Contracting Command - Rock Island (ACC-RI) : Rock Island, IL	16.127	35.699	Jul 2022	20.712	Feb 2023	22.106	Jan 2024	-		22.106	Continuing	Continuing	-
DCO - Tools Suite (PEO EIS)	MIPR	GSA, FEDSIM : Washington, DC	18.541	21.428	Jun 2022	21.486	Mar 2023	22.963	Mar 2024	-		22.963	Continuing	Continuing	-
DCO - Mission Planning (PEO EIS)	C/FFP	ACC-RI : Rock Island, IL	1.110	2.085	Nov 2021	2.809	Nov 2022	-		-		-	0.000	6.004	-
DCO - User Activity Monitoring (PEO EIS)	C/FFP	ACC-RI : Rock Island, IL	3.639	14.852	Apr 2022	12.155	Jan 2023	10.514	Jan 2024	-		10.514	Continuing	Continuing	-
DCO - Forensics and Malware (PEO EIS)	C/FFP	ACC-RI : Rock Island, IL	1.231	1.190	Jun 2022	2.116	Mar 2023	2.477	Mar 2024	-		2.477	Continuing	Continuing	-
DCO - Threat Emulation (PEO EIS)	C/FFP	ACC-RI : Rock Island, IL	1.584	3.350	Oct 2021	6.686	Feb 2023	5.239	Feb 2024	-		5.239	Continuing	Continuing	-
DCO - Garrison DCO Platform (PEO EIS)	C/FFP	ACC-RI : Rock Island, IL	-	-		5.755	Mar 2023	7.002	Mar 2024	-		7.002	Continuing	Continuing	-
DCO - Counter Infiltration (PEO EIS)	C/FFP	ACC-RI : Rock Island, IL	-	-		1.255	May 2023	1.833	Apr 2024	-		1.833	Continuing	Continuing	-

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**Exhibit R-3, RDT&E Project Cost Analysis: PB 2024 Army** **Date:** March 2023

<b>Appropriation/Budget Activity</b> 2040 / 8	<b>R-1 Program Element (Number/Name)</b> PE 0608041A / <i>Defensive CYBER - Software Prototype Development</i>	<b>Project (Number/Name)</b> CD1 / <i>Defensive Cyber - Software Prototype Devel</i>
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<b>Product Development (\$ in Millions)</b>				FY 2022		FY 2023		FY 2024 Base		FY 2024 OCO		FY 2024 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			
DCO - Rapid Cyber Prototyping (ARCYBER)	C/FFP	ACC-RI : Rock Island, IL	0.465	2.501	Apr 2022	-		1.300		-		1.300	Continuing	Continuing	-
<b>Subtotal</b>			46.762	85.281		72.974		73.434		-		73.434	Continuing	Continuing	N/A

<b>Support (\$ in Millions)</b>				FY 2022		FY 2023		FY 2024 Base		FY 2024 OCO		FY 2024 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			
DCO - Tactical DCO Infrastructure (TDI) (PEO C3T)	Various	DLA; CECOM ILSC : Philadelphia, PA; APG, MD	0.179	0.213	Jun 2022	-		-		-		-	Continuing	Continuing	-
<b>Subtotal</b>			0.179	0.213		-		-		-		-	Continuing	Continuing	N/A

<b>Test and Evaluation (\$ in Millions)</b>				FY 2022		FY 2023		FY 2024 Base		FY 2024 OCO		FY 2024 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			
DCO - Tactical DCO Infrastructure (TDI) (PEO C3T)	Various	ATEC; CTSF : APG, MD; Ft. Hood TX	0.380	0.574	Mar 2022	-		-		-		-	Continuing	Continuing	-
DCO - DCO Development Environment (PEO EIS)	MIPR	ATEC, SEC and TYAD : Various	-	10.724	Jan 2022	-		-		-		-	Continuing	Continuing	-
<b>Subtotal</b>			0.380	11.298		-		-		-		-	Continuing	Continuing	N/A

	Prior Years	FY 2022	FY 2023	FY 2024 Base	FY 2024 OCO	FY 2024 Total	Cost To Complete	Total Cost	Target Value of Contract	
<b>Project Cost Totals</b>		56.706	108.041	86.292	83.570	-	83.570	Continuing	Continuing	N/A

**Remarks**  
 Tactical DCO Infrastructure (TDI) funding transferred to Defensive Cyber Operations PE 0605041A, Project Code XU3 beginning in FY 2023.  
 Contract award dates reflect when contract option years plan to be exercised/when funding plans to be obligated.

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<b>Exhibit R-4, RDT&amp;E Schedule Profile: PB 2024 Army</b>		<b>Date:</b> March 2023
<b>Appropriation/Budget Activity</b> 2040 / 8	<b>R-1 Program Element (Number/Name)</b> PE 0608041A / <i>Defensive CYBER - Software Prototype Development</i>	<b>Project (Number/Name)</b> CD1 / <i>Defensive Cyber - Software Prototype Devel</i>

Event Name	FY 2022				FY 2023				FY 2024				FY 2025				FY 2026				FY 2027				FY 2028			
	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
DCO - TDI Development/Integration/Fixes - CD 2	[Bar]																											
	TDI Dev/Int/Fix - CD 2																											
DCO - TDI Testing - CD 2	[Bar]																											
	TDI Testing - CD 2																											
DCO - TDI CD 2 Delivery																												
DCO - TDI Development/Integration/Fixes - CD 3	[Bar]																											
	TDI Dev/Int/Fix - CD 3																											
DCO - TDI Testing - CD 3					[Bar]																							
					TDI Testing - CD 3																							
DCO - Cyber Analytics POR Contract	[Bar]																											
	DCO Cyber Analytics POR Contract																											
DCO-Cyber Analytics GN Expansion II	[Bar]																											
	DCO Cyber Analytic GN Expansion II																											
DCO-Cyber Analytics Lower Echelon Analytics Platform (LE...)	[Bar]																											
	DCO Cyber Analytics LEAP Release																											
DCO-Cyber Analytics LEAP Tactical (LTAC) Release	[Bar]																											
	DCO Cyber Analytics LTAC Release																											
DCO-Cyber Analytics Enhancements, Testing & Deployment	[Bar]				[Bar]				[Bar]																			
	DCO Cyber Analytics Enhancements, Testing & Deployment				DCO Cyber Analytics Enhancements, Testing & Deployment				DCO Cyber Analytics Enhancements, Testing & Deployment																			
DCO-Cyber Analytics Capability Release 11	[Bar]																											
	DCO Cyber Analytics CR11																											
DCO-Cyber Analytics Development Support Contract	[Bar]				[Bar]				[Bar]																			
	DCO Cyber Analytics Development Support Contract				DCO Cyber Analytics Development Support Contract				DCO Cyber Analytics Development Support Contract																			
DCO-Cyber Analytics Capability Release 12	[Bar]																											
	DCO Cyber Analytics CR12																											

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<b>Exhibit R-4, RDT&amp;E Schedule Profile: PB 2024 Army</b>		<b>Date:</b> March 2023
<b>Appropriation/Budget Activity</b> 2040 / 8	<b>R-1 Program Element (Number/Name)</b> PE 0608041A / <i>Defensive CYBER - Software Prototype Development</i>	<b>Project (Number/Name)</b> CD1 / <i>Defensive Cyber - Software Prototype Devel</i>

Event Name	FY 2022				FY 2023				FY 2024				FY 2025				FY 2026				FY 2027				FY 2028			
	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
DCO-Cyber Analytics Capability Release 13			■																									
				■																								
DCO-Cyber Analytics - Full Operational Capability												▲																
DCO-Cyber Analytics Capability Release 15								■																				
DCO-Cyber Analytics GN Expansion III									■																			
DCO-Cyber Analytics Capability Release 16								■																				
DCO-Cyber Analytics Capability Release 17												■																
DCO-Cyber Analytics Capability Release 18																■												
DCO-Mission Planning POR Contract	■				■																							
DCO-Mission Planning - Initial Operational Capability																												
DCO-Mission Planning Capability Release 6	■				■																							
DCO-Tools Suite v4			■																									
DCO-Tools Suite v5												■																

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<b>Exhibit R-4, RDT&amp;E Schedule Profile: PB 2024 Army</b>		<b>Date:</b> March 2023
<b>Appropriation/Budget Activity</b> 2040 / 8	<b>R-1 Program Element (Number/Name)</b> PE 0608041A / <i>Defensive CYBER - Software Prototype Development</i>	<b>Project (Number/Name)</b> CD1 / <i>Defensive Cyber - Software Prototype Devel</i>

Event Name	FY 2022				FY 2023				FY 2024				FY 2025				FY 2026				FY 2027				FY 2028			
	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
DCO-Tools Suite v6																												
DCO-Tools Suite v7																												
DCO-Tools Suite v8																												
DCO-User Activity Monitor POR Contract																												
DCO-User Activity Monitoring - Behavioral Analysis																												
DCO-User Activity Monitoring - Integrate with BDP																												
DCO-User Activity Monitoring - Total NET Employment																												
DCO-User Activity Monitoring Capability - Full Operation...																												
DCO-Forensics and Malware -Initial Operating Capability																												
DCO-Forensics and Malware - Ida Pro Procurement 1 (BY)																												
DCO-Forensics and Malware - Sandbox Solution																												
DCO-Forensics and Malware - Ida Pro Procurement 1 (OY1)																												
DCO-Forensics and Malware - Full Operating Capability																												

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<b>Exhibit R-4, RDT&amp;E Schedule Profile: PB 2024 Army</b>		<b>Date:</b> March 2023
<b>Appropriation/Budget Activity</b> 2040 / 8	<b>R-1 Program Element (Number/Name)</b> PE 0608041A / <i>Defensive CYBER - Software Prototype Development</i>	<b>Project (Number/Name)</b> CD1 / <i>Defensive Cyber - Software Prototype Devel</i>

Event Name	FY 2022				FY 2023				FY 2024				FY 2025				FY 2026				FY 2027				FY 2028			
	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
DCO-Forensics and Malware - Ida Pro Procurement 1 (OY2)																												
DCO-Forensics and Malware - Ida Pro Procurement 2 (BY)																												
DCO-Forensics and Malware - Ida Pro Procurement 2 (OY1)																												
DCO-Forensics and Malware - Encase Investigator Maintena...																												
DCO-Forensics and Malware - Encase Investigator Maintena...																												
DCO-Forensics and Malware - Encase Investigator Maintena...																												
DCO-Forensics and Malware - Encase Investigator Maintena...																												
DCO-Threat Emulation POR Contract																												
DCO-Threat Emulation - Social Engineering Toolkit																												
DCO-Threat Emulation - Exploit Code Generator																												
DCO-Threat Emulation - Proprietary Interface																												
DCO-Threat Emulation - Initial Operational Capability																												
DCO-Threat Emulation - Full Operational Capability																												

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<b>Exhibit R-4, RDT&amp;E Schedule Profile: PB 2024 Army</b>			<b>Date:</b> March 2023
<b>Appropriation/Budget Activity</b> 2040 / 8	<b>R-1 Program Element (Number/Name)</b> PE 0608041A / <i>Defensive CYBER - Software Prototype Development</i>	<b>Project (Number/Name)</b> CD1 / <i>Defensive Cyber - Software Prototype Devel</i>	

Event Name	FY 2022				FY 2023				FY 2024				FY 2025				FY 2026				FY 2027				FY 2028			
	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
DCO-Garrison DCO Platform - Next Generation Pilot																												
DCO-Garrison DCO Platform - Next Generation Procurement																												
DCO-Counter Infiltration - Prototyping / Procurement																												
DCO-Counter Infiltration - Procurement / Renewals																												
DCO-DCO Development Environment																												
DCO-ARCYBER Rapid Cyber Prototyping (Rapid Proto / Capab..)																												
DCO-ARCYBER Rapid Cyber Prototyping (Rapid Proto / Capab..)																												

**Note**  
Tactical DCO Infrastructure (TDI) scheduled events and milestones beginning in FY 2023 are reflected within Defensive Cyber Operations PE 0605041A, Project Code XU3.

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<b>Exhibit R-4A, RDT&amp;E Schedule Details: PB 2024 Army</b>		<b>Date:</b> March 2023
<b>Appropriation/Budget Activity</b> 2040 / 8	<b>R-1 Program Element (Number/Name)</b> PE 0608041A / <i>Defensive CYBER - Software Prototype Development</i>	<b>Project (Number/Name)</b> CD1 / <i>Defensive Cyber - Software Prototype Devel</i>

Schedule Details

Events	Start		End	
	Quarter	Year	Quarter	Year
DCO - TDI CD 1 Delivery	4	2021	4	2021
DCO - TDI Development/Integration/Fixes - CD 2	1	2021	3	2022
DCO - TDI Testing - CD 2	3	2021	3	2022
DCO - TDI CD 2 Delivery	3	2022	3	2022
DCO - TDI Development/Integration/Fixes - CD 3	1	2022	4	2022
DCO - TDI Testing - CD 3	4	2022	4	2022
DCO - Cyber Analytics POR Contract	2	2019	1	2022
DCO-Cyber Analytics GN Expansion II	1	2021	4	2022
DCO-Cyber Analytics Capability Release 7	1	2021	1	2021
DCO-Cyber Analytics Lower Echelon Analytics Platform (LEAP) Release	1	2021	4	2022
DCO-Cyber Analytics LEAP Tactical (LTAC) Release	2	2021	4	2022
DCO-Cyber Analytics Enhancements, Testing & Deployment	2	2021	4	2024
DCO-Cyber Analytics Capability Release 8	2	2021	2	2021
DCO-Cyber Analytics Capability Release 9	3	2021	3	2021
DCO-Cyber Analytics Capability Release 10	4	2021	4	2021
DCO-Cyber Analytics Capability Release 11	1	2022	1	2022
DCO-Cyber Analytics Development Support Contract	2	2022	2	2025
DCO-Cyber Analytics Capability Release 12	2	2022	2	2022
DCO-Cyber Analytics Capability Release 13	3	2022	3	2022
DCO-Cyber Analytics Capability Release 14	4	2022	4	2022
DCO-Cyber Analytics - Full Operational Capability	4	2024	4	2024
DCO-Cyber Analytics Capability Release 15	1	2023	1	2023

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**Exhibit R-4A, RDT&E Schedule Details: PB 2024 Army** **Date:** March 2023

<b>Appropriation/Budget Activity</b> 2040 / 8	<b>R-1 Program Element (Number/Name)</b> PE 0608041A / <i>Defensive CYBER - Software Prototype Development</i>	<b>Project (Number/Name)</b> CD1 / <i>Defensive Cyber - Software Prototype Devel</i>
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Events	Start		End	
	Quarter	Year	Quarter	Year
DCO-Cyber Analytics GN Expansion III	1	2023	4	2027
DCO-Cyber Analytics Capability Release 16	2	2023	2	2023
DCO-Cyber Analytics Capability Release 17	3	2023	3	2023
DCO-Cyber Analytics Capability Release 18	4	2023	4	2023
DCO-Mission Planning POR Contract	1	2021	1	2023
DCO-Mission Planning Capability Release 5	2	2021	4	2021
DCO-Mission Planning - Initial Operational Capability	4	2022	4	2022
DCO-Mission Planning Capability Release 6	1	2022	1	2023
DCO-Tools Suite v2	4	2020	2	2021
DCO-Tools Suite v3	2	2021	4	2021
DCO-Tools Suite v4	2	2022	4	2022
DCO-Tools Suite v5	2	2023	4	2023
DCO-Tools Suite v6	2	2024	4	2024
DCO-Tools Suite v7	2	2025	4	2025
DCO-Tools Suite v8	2	2026	4	2026
DCO-User Activity Monitor POR Contract	1	2021	3	2024
DCO-User Activity Monitoring - Behavioral Analysis	1	2021	4	2023
DCO-User Activity Monitoring - Integrate with BDP	2	2021	2	2024
DCO-User Activity Monitoring - Total NET Employment	1	2024	2	2024
DCO-User Activity Monitoring Capability - Full Operational Capability	2	2024	2	2024
DCO-Forensics and Malware -Initial Operating Capability	2	2023	2	2023
DCO-Forensics and Malware - Ida Pro Procurement 1 (BY)	2	2021	2	2022
DCO-Forensics and Malware - Sandbox Solution	1	2022	4	2022
DCO-Forensics and Malware - Ida Pro Procurement 1 (OY1)	2	2022	2	2023
DCO-Forensics and Malware - Full Operating Capability	4	2023	4	2023

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**Exhibit R-4A, RDT&E Schedule Details: PB 2024 Army** **Date:** March 2023

<b>Appropriation/Budget Activity</b> 2040 / 8	<b>R-1 Program Element (Number/Name)</b> PE 0608041A / <i>Defensive CYBER - Software Prototype Development</i>	<b>Project (Number/Name)</b> CD1 / <i>Defensive Cyber - Software Prototype Devel</i>
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Events	Start		End	
	Quarter	Year	Quarter	Year
DCO-Forensics and Malware - Ida Pro Procurement 1 (OY2)	2	2023	2	2024
DCO-Forensics and Malware - Ida Pro Procurement 2 (BY)	2	2024	2	2025
DCO-Forensics and Malware - Ida Pro Procurement 2 (OY1)	2	2025	2	2026
DCO-Forensics and Malware - Encase Investigator Maintenance (BY)	2	2021	2	2022
DCO-Forensics and Malware - Encase Investigator Maintenance (OY1)	2	2022	2	2023
DCO-Forensics and Malware - Encase Investigator Maintenance (OY2)	2	2023	2	2024
DCO-Forensics and Malware - Encase Investigator Maintenance (OY3)	2	2024	2	2025
DCO-Threat Emulation POR Contract	1	2021	4	2025
DCO-Threat Emulation - Social Engineering Toolkit	1	2021	4	2025
DCO-Threat Emulation - Exploit Code Generator	3	2021	2	2022
DCO-Threat Emulation - Proprietary Interface	1	2022	4	2022
DCO-Threat Emulation - Initial Operational Capability	1	2022	2	2023
DCO-Threat Emulation - Full Operational Capability	4	2024	4	2024
DCO-Garrison DCO Platform - Next Generation Pilot	2	2023	4	2024
DCO-Garrison DCO Platform - Next Generation Procurement	1	2025	4	2027
DCO-Counter Infiltration - Prototyping / Procurement	1	2023	4	2023
DCO-Counter Infiltration - Procurement / Renewals	1	2024	4	2027
DCO-DCO Development Environment	1	2022	4	2022
DCO-ARCYBER Rapid Cyber Prototyping (Rapid Proto / Capablity Assessments) (FY 2022)	3	2021	2	2023
DCO-ARCYBER Rapid Cyber Prototyping (Rapid Proto / Capablity Assessments) (FY 2024)	1	2024	4	2024

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<b>Exhibit R-2A, RDT&amp;E Project Justification:</b> PB 2024 Army										<b>Date:</b> March 2023		
<b>Appropriation/Budget Activity</b> 2040 / 8					<b>R-1 Program Element (Number/Name)</b> PE 0608041A / <i>Defensive CYBER - Software Prototype Development</i>				<b>Project (Number/Name)</b> DD2 / <i>Joint Cyber Warfighting Architecture Software</i>			
<b>COST (\$ in Millions)</b>	<b>Prior Years</b>	<b>FY 2022</b>	<b>FY 2023</b>	<b>FY 2024 Base</b>	<b>FY 2024 OCO</b>	<b>FY 2024 Total</b>	<b>FY 2025</b>	<b>FY 2026</b>	<b>FY 2027</b>	<b>FY 2028</b>	<b>Cost To Complete</b>	<b>Total Cost</b>
DD2: <i>Joint Cyber Warfighting Architecture Software</i>	-	-	8.539	-	-	-	-	-	-	-	0.000	8.539
Quantity of RDT&E Articles	-	-	-	-	-	-	-	-	-	-		

**Note**  
Project DD2: Joint Cyber Warfighting Architecture Software has no requested funding in FY 2024.

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

Defensive Cyber Operations (DCO) programs are key elements of the DCO Maneuver Baseline infrastructure, platform, and tools. The employment of defensive capabilities achieves the following objectives: deter, destroy and defeat cyberspace threats; gain time; economy of force; control key terrain; protect tasked critical assets and infrastructure; and develop intelligence.

FY 2023 funding was aligned from Defensive Cyber - Software Prototype Development PE 0608041A, Project Code CD1, in FY 2023 only.

Defensive Cyber Operations (DCO) consists of platform and software programs which are key elements of the DCO Maneuver Baseline infrastructure, platform, and tools. DCO supports the Army Cyber Command (ARCYBER), Information Warfare Operations Center (IWOC), FORSCOM, (5) Regional Cyber Centers (RCCs), Cyber Warfare Battalion (CWB), Multi-Domain Task Force (MDTF), Cyber Protection Brigade (CPB), and (41) Cyber Protection Teams (CPTs) in COMPO 1/2/3.

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

	<b>FY 2022</b>	<b>FY 2023</b>	<b>FY 2024</b>
<b>Title:</b> Defensive Cyber Operations (DCO) - Tools Suite (PEO EIS)	-	8.539	-
<b>Description:</b> DCO Tools Suite is a flexible and dynamic software based suite of warfighting capabilities that enables Cyber Protection Teams (CPTs), Regional Cyber Centers (RCCs), and in some cases local defenders to perform DCO and cybersecurity actions. DCO tools consists of prepositioned and tailorable software packages that are integrated and available at all echelons to support or directly cause effects through the execution of Cyber Mission Force (CMF) and cyberspace workforce tasks. They are executed or managed within a DCO platform.			
<b>FY 2023 Plans:</b> Prior to BA8 Pilot program, this capability would have been funded with OMA funding. FY 2023 funding was aligned from Defensive Cyber - Software Prototype Development PE 0608041A, Project Code CD1, in FY 2023 only. FY 2023 funding provides software licenses, professional services, and training.			
<b>FY 2023 to FY 2024 Increase/Decrease Statement:</b>			

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<b>Exhibit R-2A, RDT&amp;E Project Justification:</b> PB 2024 Army		<b>Date:</b> March 2023
<b>Appropriation/Budget Activity</b> 2040 / 8	<b>R-1 Program Element (Number/Name)</b> PE 0608041A / <i>Defensive CYBER - Software Prototype Development</i>	<b>Project (Number/Name)</b> DD2 / <i>Joint Cyber Warfighting Architecture Software</i>

<b>B. Accomplishments/Planned Programs (\$ in Millions)</b>	<b>FY 2022</b>	<b>FY 2023</b>	<b>FY 2024</b>
There is no FY 2024 funding for Defensive Cyber - Software Prototype Development PE 0608041A, Project Code DD2 because the efforts are transferring to CYBERCOM.			
<b>Accomplishments/Planned Programs Subtotals</b>	-	8.539	-

<b>C. Other Program Funding Summary (\$ in Millions)</b>											
<b>Line Item</b>	<b>FY 2022</b>	<b>FY 2023</b>	<b>FY 2024 Base</b>	<b>FY 2024 OCO</b>	<b>FY 2024 Total</b>	<b>FY 2025</b>	<b>FY 2026</b>	<b>FY 2027</b>	<b>FY 2028</b>	<b>Cost To Complete</b>	<b>Total Cost</b>
• 0605041A: <i>Defensive CYBER Tool Development</i>	18.811	39.029	27.714	-	27.714	24.268	21.430	21.494	21.620	0.000	174.366
• B63103: <i>Advanced Cyber Tool Development</i>	27.389	-	13.848	-	13.848	16.144	20.942	20.626	20.643	0.000	119.592
• B66350: <i>ARCYBER DEFENSIVE CYBER OPERATIONS</i>	-	18.239	0.000	-	0.000	-	-	-	-	0.000	18.239
• B89001: <i>Insider Threat Program - Unit Activity Monitoring</i>	-	1.796	1.502	-	1.502	1.753	1.760	1.761	1.763	0.000	10.335

**Remarks**  
 RDTE PE 0605041A Project EV5 - DCO platform infrastructure, integration, and assessments.  
 OPA PE B63103 - DCO hardware procurement, fielding, and new equipment training for Garrison DCO Platform (GDP), Deployable Defensive Systems (DDS), and DCODE Armory.  
 OPA PE B66350 (FY 2023 only) - DCO hardware procurement, fielding, and new equipment training for GDP, DDS, and DCODE Armory.  
 OPA PE B89001 - DCO Insider Threat Program - Unit Activity Monitoring for UAM operations conducted in support of the Army's insider threat program.

**D. Acquisition Strategy**  
 The DCO Information System Initial Capabilities Document (IS ICD) was approved on 19 December 2017 by the Army Requirements Oversight Council (AROC). DCO programs are under an IT Box construct with five-year term (FY 2018-2022) which aligns with current Requirements Definition Packages (RDPs). IT Box establishes funding thresholds, by appropriation, for a program over the capability's projected lifecycle of five (5) years. FY 2018-2022 IT Box expired in 4Q FY 2022. FY 2023-2027 IT Box Revalidation in staffing for approval.  
  
 The ARB approved DDS RDP on 27 February 2018, and DCO Tools Suite on 18 May 2018. The MDA designated this as ACAT IV program. Under subsequent reviews, the MDA approved agile acquisition approach to develop and deliver pre-configured software in a series of releases and capability drops in order to deliver full functional values of the RDP that align with DCO priorities. DCO programs utilize standard and FY 2018 National Defense Authorization Act (NDAA) Section 874 agile pilot evolutionary acquisition processes (30-90 rapid acquisition approach). DCO continually delivers new technologies and capabilities as a prototype and fields updated

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<b>Exhibit R-2A, RDT&amp;E Project Justification:</b> PB 2024 Army		<b>Date:</b> March 2023
<b>Appropriation/Budget Activity</b> 2040 / 8	<b>R-1 Program Element (Number/Name)</b> PE 0608041A / <i>Defensive CYBER - Software Prototype Development</i>	<b>Project (Number/Name)</b> DD2 / <i>Joint Cyber Warfighting Architecture Software</i>

capabilities. DCO contract strategy utilizes multiple existing contracts vehicles to include Other Transactional Authority (OTA), Federal Acquisition Regulation (FAR)-based, Blanket Purchase Agreement (BPA), and Basic Ordering Agreement (BOA).

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**Exhibit R-3, RDT&E Project Cost Analysis: PB 2024 Army** **Date:** March 2023

<b>Appropriation/Budget Activity</b> 2040 / 8	<b>R-1 Program Element (Number/Name)</b> PE 0608041A / <i>Defensive CYBER - Software Prototype Development</i>	<b>Project (Number/Name)</b> DD2 / <i>Joint Cyber Warfighting Architecture Software</i>
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<b>Product Development (\$ in Millions)</b>				FY 2022		FY 2023		FY 2024 Base		FY 2024 OCO		FY 2024 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			
DCO - Tools Suite (PEO EIS)	MIPR	GSA, FEDSIM National : Washington, DC	-	-		8.539	Mar 2023	-		-		-	0.000	8.539	-
<b>Subtotal</b>			-	-		8.539		-		-		-	0.000	8.539	N/A
<b>Project Cost Totals</b>			-	-		8.539		-		-		-	0.000	8.539	N/A

**Remarks**  
FY 2023 funding was aligned from Defensive Cyber - Software Prototype Development PE 0608041A, Project Code CD1, in FY 2023 only.

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<b>Exhibit R-4, RDT&amp;E Schedule Profile: PB 2024 Army</b>			<b>Date: March 2023</b>		
<b>Appropriation/Budget Activity</b> 2040 / 8		<b>R-1 Program Element (Number/Name)</b> PE 0608041A / <i>Defensive CYBER - Software Prototype Development</i>		<b>Project (Number/Name)</b> DD2 / <i>Joint Cyber Warfighting Architecture Software</i>	

Event Name	FY 2022				FY 2023				FY 2024				FY 2025				FY 2026				FY 2027				FY 2028			
	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
DCO - Tools Suite					<div style="background-color: blue; color: white; padding: 2px;">DCO - Tools Suite</div>																							

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<b>Exhibit R-4A, RDT&amp;E Schedule Details:</b> PB 2024 Army		<b>Date:</b> March 2023
<b>Appropriation/Budget Activity</b> 2040 / 8	<b>R-1 Program Element (Number/Name)</b> PE 0608041A / <i>Defensive CYBER - Software Prototype Development</i>	<b>Project (Number/Name)</b> DD2 / <i>Joint Cyber Warfighting Architecture Software</i>

Schedule Details

Events	Start		End	
	Quarter	Year	Quarter	Year
DCO - Tools Suite	2	2023	4	2023