Exhibit R-2, RDT&E Budget Item Justification: PB 2022 Army											Date: May 2021	
Appropriation/Budget Activity 2040: *Research, Development, Test & Evaluation, Army* / BA 5: *System Development & Demonstration (SDD)*					R-1 Program Element (Number/Name) PE 0604798A / *Brigade Analysis, Integration and Evaluation*							
COST ($ in Millions)	**Prior Years**	**FY 2020**	**FY 2021**	**FY 2022 Base**	**FY 2022 OCO**	**FY 2022 Total**	**FY 2023**	**FY 2024**	**FY 2025**	**FY 2026**	**Cost To Complete**	**Total Cost**
Total Program Element	-	29.852	18.737	21.534	-	21.534	-	-	-	-	-	-
DY3: *NIE Test & Evaluation*	-	6.390	-	-	-	-	-	-	-	-	-	-
DY5: *Production/Field Coordination for Capability Sets*	-	0.929	1.035	-	-	-	-	-	-	-	-	-
DY7: *Army Systems Engineering, Architecture & Analysis*	-	16.740	17.702	21.534	-	21.534	-	-	-	-	-	-
DZ6: *Army Integration Management & Coordination*	-	5.793	-	-	-	-	-	-	-	-	-	-

Note

The remaining funding in Project DY5 / Production/Field Coordination for Capability Sets is tied to OCSE core manpower authorizations which are realigned to Project DY7 / Army Systems Engineering, Architecture & Analysis in Fiscal Year (FY) 2022.

A. Mission Description and Budget Item Justification

This program element is comprised of four projects: Enduring Assessments (Joint Warfighter Assessment (JWA); Production/Field Coordination for Capability Sets; Army Systems Engineering, Architecture & Analysis; Army Integration Management & Coordination; and Emerging Technology Initiatives. The specific evaluation requirements will support Mission Command Network (MCN) 2020, the Force 2025 objectives, and emerging technology insertion.

Project DY3: Enduring Assessments Test & Evaluation, synchronizes, integrates, and manages system and System of Systems (SoS) network capability evaluations in laboratory and operational environments in order to inform Army force modernization decisions that impact network improvements, interoperability compliance, operational readiness, and exploitable technology opportunities. This project was realigned to the Army Future Command's PE 0605326A (Concepts Experimentation Program) in FY 2021

Project DY5: Production/Fielding Coordination for Capability Sets, provides for the development of a synchronized Brigade/Division level plan for the Production equipment delivery and Fielding (hand-off logistics and new equipment training) of Capability Set (CS) components (both hardware/software in A and/or B Kits) upon completion of Network Integration Evaluation (NIE), Army Interoperability Certification (AIC) and Army CS fielding decision. The remaining funding is tied to OCSE core manpower authorizations which are realigned to Project DY7 in FY 2022 and beyond.

Project DY7: Provides the Army's leadership and materiel developers with the necessary modernization planning, System of Systems (SoS) engineering and analysis, technical risk analysis, architectural products, critical path analysis, cybersecurity and interoperability risk analysis and the associated mitigation planning for the Army's materiel portfolio. This project develops process, products, and policies that ensure a solid Army Systems Engineering construct across Army Program Executive and

Exhibit R-2, RDT&E Budget Item Justification: PB 2022 Army	Date: May 2021
Appropriation/Budget Activity 2040: *Research, Development, Test & Evaluation, Army I* BA 5: *System Development & Demonstration (SDD)*	**R-1 Program Element (Number/Name)** PE 0604798A *I Brigade Analysis, Integration and Evaluation*

Management Offices. This includes efforts in support of Common Operating Environment (COE) governance, the Army Futures Command's emerging development of concepts, requirements generation, resource allocation, experimentation, acquisition, logistics, and technology components of the Army Future Force Modernization Enterprise (FFME). Focus areas includes the integration of key elements of a system into one overall system engineering construct and managing it through major system engineering activities to ensure the fielding of integrated capabilities meet the mission needs of the force against any potential adversaries. Key system engineering functions include, engineering and technical analysis, integrated System of Systems (SoS) architecture products, SoS risk analysis and mitigation planning to influence the Army's materiel portfolio. This project also includes the establishment of Army systems engineering policy and implementation standards, requirements decomposition and alignment, and resource and acquisition synchronization to address cross-portfolio issues. Key tasks are the development of integrated Architecture products; Engineering Analysis and Design; Portfolio Analysis; Systems Security Engineering process, interoperability assessments, independent technical risk assessments, Cybersecurity requirements analysis, compliance, Cyber policy assessments, and coordinates the ASA(ALT) community's Data activities including Data Steward and Functional Data Manager in Army Data Governance Forums.

Project DZ6: Army Integration Management & Coordination funds resources that support the technical and management (i.e. headquarters, resource management, acquisition, human resources, and operations) aspects of the Army Rapid Capabilities Office (RCO). This project was realigned to PE 0605054A (Emerging Technologies Initiatives) in FY 2021 for greater transparency of the Army RCO efforts, now called Rapid Capabilities and Critical Technologies Office (RCCTO).

B. Program Change Summary ($ in Millions)	FY 2020	FY 2021	FY 2022 Base	FY 2022 OCO	FY 2022 Total
Previous President's Budget	38.303	19.268	19.271	-	19.271
Current President's Budget	29.852	18.737	21.534	-	21.534
Total Adjustments	-8.451	-0.531	2.263	-	2.263
• Congressional General Reductions	-	-			
• Congressional Directed Reductions	-	-			
• Congressional Rescissions	-	-			
• Congressional Adds	-	-			
• Congressional Directed Transfers	-	-			
• Reprogrammings	-7.500	-			
• SBIR/STTR Transfer	-0.951	-0.531			
• Adjustments to Budget Years	-	-	2.263	-	2.263

Change Summary Explanation

The increase reflects the funding for OCSE civilian positions in all four PE 0604798A projects, being realigned to support requirements in project DY7 moving forward. Transfers FY22 funding $2.3M from SAG 432 612 Service Wide Communications and SAG 435 212 Other Service Support, and OPA B88801 to RDTE PE 0604798A / Brigade Analysis, Integration and Evaluation, Project DY7, to align resources for the Office of Chief Systems Engineer to the RDT&E appropriation.

Exhibit R-2A, RDT&E Project Justification: PB 2022 Army			Date: May 2021
Appropriation/Budget Activity 2040 / 5	R-1 Program Element (Number/Name) PE 0604798A / *Brigade Analysis, Integration and Evaluation*	Project (Number/Name) DY3 / *NIE Test & Evaluation*	

COST ($ in Millions)	Prior Years	FY 2020	FY 2021	FY 2022 Base	FY 2022 OCO	FY 2022 Total	FY 2023	FY 2024	FY 2025	FY 2026	Cost To Complete	Total Cost
DY3: *NIE Test & Evaluation*	-	6.390	-	-	-	-	-	-	-	-	-	-
Quantity of RDT&E Articles	-	-	-	-	-	-	-	-	-	-		

A. Mission Description and Budget Item Justification

Project DY3:

Enduring Assessments Test & Evaluation funding enables the Assistant Secretary of the Army (Acquisition Logistics and Technology) to support Army Futures Command concept and capability assessments with materiel system support and integration for Joint Warfighter Assessments (JWA). This effort synchronizes, integrates, and manages system and System of Systems (SoS) capability assessments in unit training exercise environments in order to inform Army force modernization decisions that impact system requirements, interoperability compliance, operational readiness, and exploitable technology opportunities aligned with Army modernization priorities and Army/Coalition interoperability.

Mission Engineering Assessments Directorate (MEAD), acting as lead agency for Assistant Secretary of the Army (Acquisition, Logistics and Technology) (ASA (ALT)), Office of Chief Systems Engineer (OCSE), leads and coordinates ASA (ALT)'s participation in Warfighter Assessment events to enable informal and formal evaluation of new material solutions and concepts within an integrated multi-domain and multi-national environment. With support from appropriate Program Offices, provides the design, engineering, systems integration, program management functions and expertise required to integrate networked and stand-alone systems into the event architecture; and conduct technical system of system architecture assessments.

Note:
This projects funding was realigned to the Army Future Command's PE 0605326A (Concepts Experimentation Program) in FY 2021.

B. Accomplishments/Planned Programs ($ in Millions)	FY 2020	FY 2021	FY 2022
Title: Integrated Evaluations ***Description:*** These funds enable assessments of capabilities in laboratory and operational environments across the Army battlespace to assess the systems, SoS, and inform system development and fielding decisions. These funds support event planning, preparation, execution, and close-out.	6.263	-	-
Title: Infrastructure and other support ***Description:*** Title: Infrastructure and other support Description: Provides for setup, utilities, furniture, equipment and maintenance (of all equipment and facilities) used by OCSE core personnel.	0.127	-	-

Exhibit R-2A, RDT&E Project Justification: PB 2022 Army		Date: May 2021
Appropriation/Budget Activity 2040 / 5	**R-1 Program Element (Number/Name)** PE 0604798A / *Brigade Analysis, Integration and Evaluation*	**Project (Number/Name)** DY3 / *NIE Test & Evaluation*

B. Accomplishments/Planned Programs ($ in Millions)	FY 2020	FY 2021	FY 2022
Accomplishments/Planned Programs Subtotals	6.390	-	-

C. Other Program Funding Summary ($ in Millions)

Line Item	FY 2020	FY 2021	FY 2022 Base	FY 2022 OCO	FY 2022 Total	FY 2023	FY 2024	FY 2025	FY 2026	Cost To Complete	Total Cost
• DY5: *Production/Field Coordination for Capability Sets*	0.929	1.035	-	-	-	-	-	-	-	-	-
• DY7: *Army Systems Engineering, Architecture & Analysis*	16.740	17.702	21.534	-	21.534	-	-	-	-	-	-
• DZ6: *Army Integration Management & Coordination*	5.793	-	-	-	-	-	-	-	-	-	-

Remarks

D. Acquisition Strategy

This project includes competitive contracts for test support services.
This project does not have any requirement for direct procurement of hardware or software.

Exhibit R-3, RDT&E Project Cost Analysis: PB 2022 Army		Date: May 2021
Appropriation/Budget Activity 2040 / 5	**R-1 Program Element (Number/Name)** PE 0604798A / *Brigade Analysis, Integration and Evaluation*	**Project (Number/Name)** DY3 / *NIE Test & Evaluation*

Management Services ($ in Millions)

Cost Category Item	Contract Method & Type	Performing Activity & Location	Prior Years	FY 2020 Cost	FY 2020 Award Date	FY 2021 Cost	FY 2021 Award Date	FY 2022 Base Cost	FY 2022 Base Award Date	FY 2022 OCO Cost	FY 2022 OCO Award Date	FY 2022 Total Cost	Cost To Complete	Total Cost	Target Value of Contract
Core Government Labor	Allot	SoSE&I : Various	8.634	4.144	Nov 2019	-		-		-		-	Continuing	Continuing	-
Matrix Government Labor	MIPR	SoSE&I : Various	4.796	0.386	Nov 2019	-		-		-		-	Continuing	Continuing	-
MITRE Labor	FFRDC	MITRE : Various	2.730	-		-		-		-		-	Continuing	Continuing	-
Contractor SETA Labor	C/CPFF	TBD : Various	6.487	1.090	Nov 2019	-		-		-		-	Continuing	Continuing	-
Temporary Duty (TDY)	Allot	SoSE&I : Various	1.827	-		-		-		-		-	Continuing	Continuing	-
FY 2020 SBIR/STTR Transfer	TBD	Various : Various	-	0.671		-		-		-		-	0.000	0.671	-
		Subtotal	24.474	6.291		-		-		-		-	Continuing	Continuing	N/A

Remarks

- Program Activities performed at Aberdeen Proving Grounds (MD), FT Bliss (TX), White Sands Missile Range (NM) and the selected NIE/JWA unit's home station.
- Other NIE/JWA subject matter expertise support provided using existing Army contracts managed by PEO C3T, ATEC, and CERDEC.

Product Development ($ in Millions)

Cost Category Item	Contract Method & Type	Performing Activity & Location	Prior Years	FY 2020 Cost	FY 2020 Award Date	FY 2021 Cost	FY 2021 Award Date	FY 2022 Base Cost	FY 2022 Base Award Date	FY 2022 OCO Cost	FY 2022 OCO Award Date	FY 2022 Total Cost	Cost To Complete	Total Cost	Target Value of Contract
Integrated Evaluations	Various	Various : TBD	39.000	-		-		-		-		-	0.000	39.000	-
FY 2019 SBIR / STTR Transfer	TBD	Various : None	0.703	-		-		-		-		-	0.000	0.703	-
		Subtotal	39.703	-		-		-		-		-	0.000	39.703	N/A

Remarks

- Program Activities performed, Aberdeen Proving Grounds (MD), FT Bliss (TX), White Sands Missile Range (NM) and the selected NIE/JWA unit's home station.
- Vehicle Integration performed under contract W56HZV-15-D-ER03 by BRTRC and other NIE/JWA support provided using existing Army contracts managed by PEO C3T, ATEC, and CERDEC.
- Includes support services from DISA (for satellite time) and other governments agencies

Exhibit R-3, RDT&E Project Cost Analysis: PB 2022 Army			Date: May 2021
Appropriation/Budget Activity 2040 / 5	R-1 Program Element (Number/Name) PE 0604798A / *Brigade Analysis, Integration and Evaluation*	Project (Number/Name) DY3 / *NIE Test & Evaluation*	

Support ($ in Millions)

Cost Category Item	Contract Method & Type	Performing Activity & Location	Prior Years	FY 2020 Cost	FY 2020 Award Date	FY 2021 Cost	FY 2021 Award Date	FY 2022 Base Cost	FY 2022 Base Award Date	FY 2022 OCO Cost	FY 2022 OCO Award Date	FY 2022 Total Cost	Cost To Complete	Total Cost	Target Value of Contract
Vehicle Integration	C/CPFF	BRTRC : Various	7.825	-		-		-		-		-	Continuing	Continuing	Continuing
Network Integration and Baseline Systems	MIPR	PEO C3T : Various	7.647	-		-		-		-		-	Continuing	Continuing	Continuing
Infrastructure and other support	TBD	TBD : Various	9.020	0.099	Mar 2019	-		-		-		-	Continuing	Continuing	Continuing
		Subtotal	24.492	0.099		-		-		-		-	Continuing	Continuing	N/A

Remarks

- Program Activities performed at Aberdeen Proving Grounds (MD), FT Bliss (TX), White Sands Missile Range (NM) and the selected NIE/JWA unit's home station.
- Vehicle Integration performed under contract W56HZV-15-D-ER03 by BRTRC.
- Network Integration and Baseline Systems subject matter expertise support provided using existing Army contracts managed by PEO C3T and its subordinate Program Managers (PMs).

Test and Evaluation ($ in Millions)

Cost Category Item	Contract Method & Type	Performing Activity & Location	Prior Years	FY 2020 Cost	FY 2020 Award Date	FY 2021 Cost	FY 2021 Award Date	FY 2022 Base Cost	FY 2022 Base Award Date	FY 2022 OCO Cost	FY 2022 OCO Award Date	FY 2022 Total Cost	Cost To Complete	Total Cost	Target Value of Contract
ATEC Test and Evaluation Support	MIPR	ATEC : Various	22.317	-		-		-		-		-	Continuing	Continuing	Continuing
Lab Based Risk Reduction (LBRR)	MIPR	CERDEC : APG, MD	5.300	-		-		-		-		-	Continuing	Continuing	Continuing
Satellite Region Hub Node (RHN) Technical Support	MIPR	Cyber Battle Lab : Ft. Gordon, GA	2.139	-		-		-		-		-	Continuing	Continuing	Continuing
Satellite Transponder Bandwidth	MIPR	DISA : Various	2.500	-		-		-		-		-	Continuing	Continuing	Continuing
Cyber Vulnerability/Risk Assessments	MIPR	Army Research Laboratory : Various	0.975	-		-		-		-		-	Continuing	Continuing	Continuing
Systems Under Evaluation (SUEs)	C/Various	TBD : Various	1.229	-		-		-		-		-	Continuing	Continuing	Continuing
		Subtotal	34.460	-		-		-		-		-	Continuing	Continuing	N/A

Remarks

- Program Test support through ATEC, Lab Based Risk Reduction through CERDEC, and Cyber Vulnerability/Risk Assessments through Army Research Laboratory (ARL).

Exhibit R-3, RDT&E Project Cost Analysis: PB 2022 Army		Date: May 2021
Appropriation/Budget Activity 2040 / 5	**R-1 Program Element (Number/Name)** PE 0604798A / *Brigade Analysis, Integration and Evaluation*	**Project (Number/Name)** DY3 / *NIE Test & Evaluation*

Test and Evaluation ($ in Millions)

Cost Category Item	Contract Method & Type	Performing Activity & Location	Prior Years	FY 2020 Cost	FY 2020 Award Date	FY 2021 Cost	FY 2021 Award Date	FY 2022 Base Cost	FY 2022 Base Award Date	FY 2022 OCO Cost	FY 2022 OCO Award Date	FY 2022 Total Cost	Cost To Complete	Total Cost	Target Value of Contract
- Satellite RHN Technical Support provided by the Cyber Battle Lab at Fort Gordon, GA and Satellite Transponder Bandwidth contracted through DISA. - Program Activities performed at Aberdeen Proving Grounds (MD), FT Bliss (TX), White Sands Missile Range (NM) and the selected NIE/JWA unit's home station.															

	Prior Years	FY 2020		FY 2021		FY 2022 Base		FY 2022 OCO		FY 2022 Total	Cost To Complete	Total Cost	Target Value of Contract
Project Cost Totals	123.129	6.390		0.000		-		-		-	Continuing	Continuing	N/A

Remarks

Exhibit R-4, RDT&E Schedule Profile: PB 2022 Army		Date: May 2021
Appropriation/Budget Activity 2040 / 5	**R-1 Program Element (Number/Name)** PE 0604798A / *Brigade Analysis, Integration and Evaluation*	**Project (Number/Name)** DY3 / *NIE Test & Evaluation*

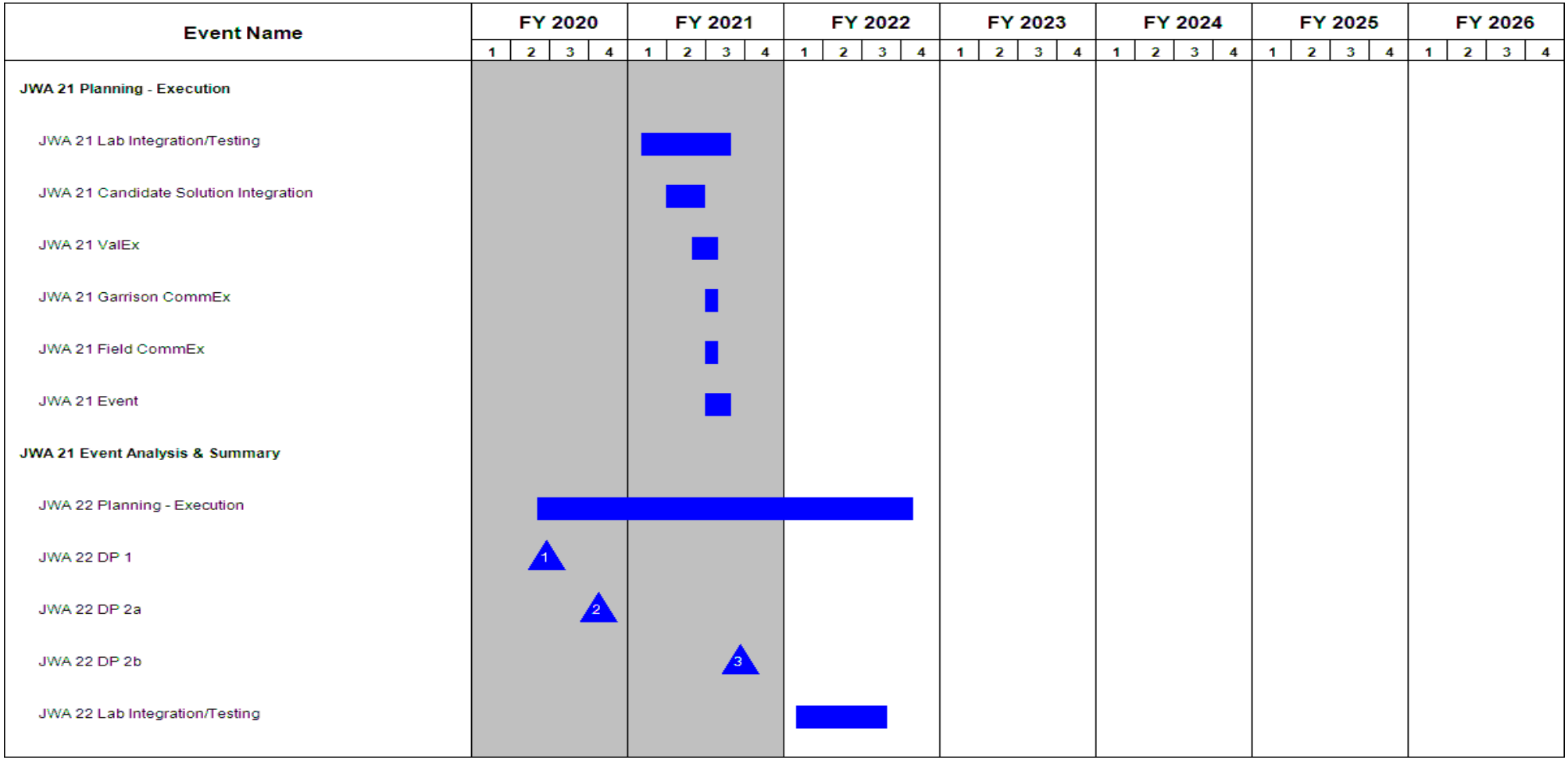

Exhibit R-4, RDT&E Schedule Profile: PB 2022 Army		Date: May 2021
Appropriation/Budget Activity 2040 / 5	**R-1 Program Element (Number/Name)** PE 0604798A / *Brigade Analysis, Integration and Evaluation*	**Project (Number/Name)** DY3 / *NIE Test & Evaluation*

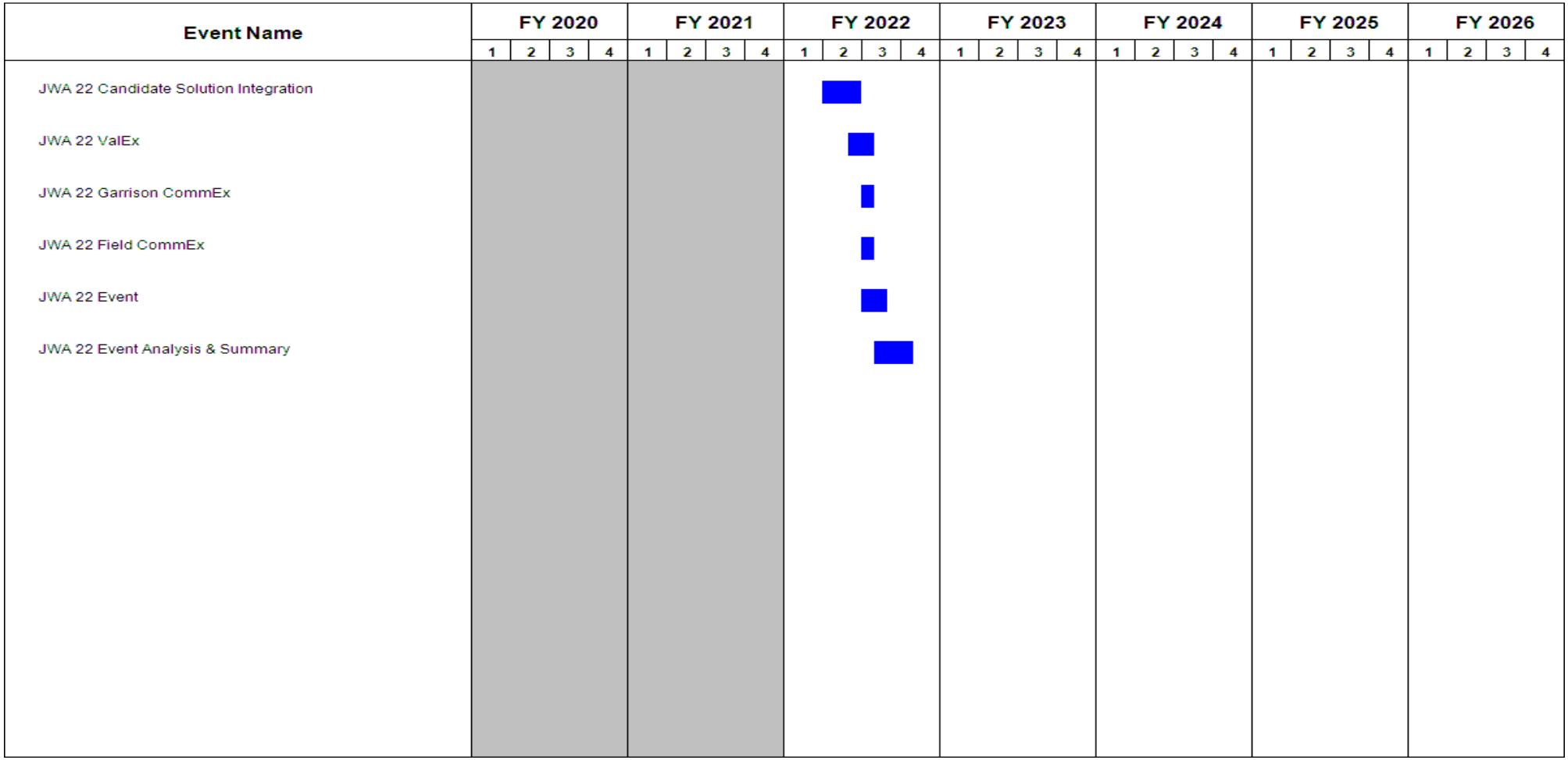

Exhibit R-4A, RDT&E Schedule Details: PB 2022 Army		Date: May 2021
Appropriation/Budget Activity 2040 / 5	**R-1 Program Element (Number/Name)** PE 0604798A / *Brigade Analysis, Integration and Evaluation*	**Project (Number/Name)** DY3 / *NIE Test & Evaluation*

Schedule Details

	Start		End	
Events	**Quarter**	**Year**	**Quarter**	**Year**
JWA 21 Planning - Execution	2	2019	4	2021
JWA 21 Lab Integration/Testing	1	2021	3	2021
JWA 21 Candidate Solution Integration	2	2021	2	2021
JWA 21 ValEx	2	2021	3	2021
JWA 21 Garrison CommEx	3	2021	3	2021
JWA 21 Field CommEx	3	2021	3	2021
JWA 21 Event	3	2021	3	2021
JWA 21 Event Analysis & Summary	3	2021	4	2021
JWA 22 Planning - Execution	2	2020	4	2022
JWA 22 DP 1	2	2020	2	2020
JWA 22 DP 2a	4	2020	4	2020
JWA 22 DP 2b	3	2021	3	2021
JWA 22 Lab Integration/Testing	1	2022	3	2022
JWA 22 Candidate Solution Integration	2	2022	2	2022
JWA 22 ValEx	2	2022	3	2022
JWA 22 Garrison CommEx	3	2022	3	2022
JWA 22 Field CommEx	3	2022	3	2022
JWA 22 Event	3	2022	3	2022
JWA 22 Event Analysis & Summary	3	2022	4	2022

Note

-With the loss of a dedicated unit (2/1 Armored Division) after AWA 17.1, NIE/JWA event planning and a unit requirements determination has to be made earlier than in previous FYs to allow Forces Command (FORSCOM) time to select the unit participating in the test events.
-NIEs eliminated after NIE 18.2

Exhibit R-2A, RDT&E Project Justification: PB 2022 Army			Date: May 2021
Appropriation/Budget Activity 2040 / 5	R-1 Program Element (Number/Name) PE 0604798A / *Brigade Analysis, Integration and Evaluation*	Project (Number/Name) DY5 / *Production/Field Coordination for Capability Sets*	

COST ($ in Millions)	Prior Years	FY 2020	FY 2021	FY 2022 Base	FY 2022 OCO	FY 2022 Total	FY 2023	FY 2024	FY 2025	FY 2026	Cost To Complete	Total Cost
DY5: *Production/Field Coordination for Capability Sets*	-	0.929	1.035	-	-	-	-	-	-	-	-	-
Quantity of RDT&E Articles	-	-	-	-	-	-	-	-	-	-		

Note

The remaining funding in Project DY5 / Production/Field Coordination for Capability Sets is tied to OCSE core manpower authorizations which are realigned to Project DY7 / Army Systems Engineering, Architecture & Analysis in Fiscal Year (FY) 2022.

A. Mission Description and Budget Item Justification

This project provides for the development of a synchronized Brigade/Division level plan for the Production equipment delivery and Fielding (hand-off logistics and new equipment training) of Capability Set (CS) components (both hardware/software in A and/or B Kits) upon completion of design, Type Classification and Material Release, Army Interoperability Certification (AIC) and Army CS fielding decision. It provides for the synchronized plan for production equipment delivery and fielding for the Integrated Tactical Network and the Security Force Advisory Brigades.

This project includes the following efforts: Synchronization and direct coordination between participating Program Executive Offices (PEOs), Program Managers (PMs), Research, Development and Engineering Commands (RDECOMs) and the Army's Brigade Combat Teams (BCT) throughout the CS Vehicle Integration and Synchronized Fielding process to ensure that a CS package is received, integrated, trained, and handed-off to the unit in a synchronized and efficient manner. Identification and assessment of available capabilities for inclusion into a CS, ITN and SFAB network modernization package. Alignment of the CS, ITN and SFAB requirement with the appropriate Programs of Record (PoR) and the recipient unit to define the unit's Network Basis of Issue (NBOI)/ Architecture by type of BCT. Coordination with PEOs, PMs, Army G-staff to ensure CS products are Materiel Released/Type Classified, fully resourced and synchronized by a single Integrated Master Schedule for design integration, testing, production, kitting, platform integration, training and fielding. Direct support during each of the unit's "New Equipment Training" and "New Equipment Fielding", along with the preparation for the BCT's rotation through one of the Army's Combat Training Centers, (Joint Readiness Training Center (JRTC) or National Training Center (NTC)). Ensuring that all training assets are reset and moved to the follow-on BCT. Manage all After Action activities.

This project does not fund the actual production, integration, nor fielding costs associated with the CS, ITN nor SFAB.

B. Accomplishments/Planned Programs ($ in Millions)	FY 2020	FY 2021	FY 2022
Title: Production/Fielding Coordination for Capability Sets (CS)	0.929	1.035	-
Description: This project provides for the development of a synchronized Brigade/Division level plan for the Production equipment delivery and Fielding (hand-off logistics and new equipment training) of Capability Set (CS) components (both hardware/software in A and/or B Kits) upon completion of design, Type Classification and Material Release, Army Interoperability			

Exhibit R-2A, RDT&E Project Justification: PB 2022 Army		Date: May 2021
Appropriation/Budget Activity 2040 / 5	**R-1 Program Element (Number/Name)** PE 0604798A / *Brigade Analysis, Integration and Evaluation*	**Project (Number/Name)** DY5 / *Production/Field Coordination for Capability Sets*

B. Accomplishments/Planned Programs ($ in Millions)	FY 2020	FY 2021	FY 2022
Certification (AIC) and Army CS fielding decision. It provides for the synchronized plan for production equipment delivery and fielding for the Integrated Tactical Network and the Security Force Advisory Brigades. This project includes the following efforts: Synchronization and direct coordination between participating Program Executive Offices (PEOs), Program Managers (PMs), Research, Development and Engineering Commands (RDECOMs) and the Army's Brigade Combat Teams (BCT) throughout the CS Vehicle Integration and Synchronized Fielding process to ensure that a CS package is received, integrated, trained, and handed-off to the unit in a synchronized and efficient manner. Identification and assessment of available capabilities for inclusion into a CS, ITN and SFAB network modernization package. Alignment of the CS, ITN and SFAB requirement with the appropriate Programs of Record (PoR) and the recipient unit to define the unit's Network Basis of Issue (NBOI)/ Architecture by type of BCT. Coordination with PEOs, PMs, Army G-staff to ensure CS products are Materiel Released/Type Classified, fully resourced and synchronized by a single Integrated Master Schedule for design integration, testing, production, kitting, platform integration, training and fielding. Direct support during each of the unit's "New Equipment Training" and "New Equipment Fielding", along with the preparation for the BCT's rotation through one of the Army's Combat Training Centers, (Joint Readiness Training Center (JRTC) or National Training Center (NTC)). Ensuring that all training assets are reset and moved to the follow-on BCT. Manage all After Action activities. This project does not fund the actual production, integration, nor fielding costs associated with the CS, ITN nor SFAB. ***FY 2021 Plans:*** Conduct initial planning for Fielding and Integration Coordination CS21, FY 2021 ITN Support and FY 2021 SFAB Vehicle Integration/CS21 Event Fielding Support: Synchronize and coordinate the execution of CS fieldings for the following CS 20 Units: Two (2) SBCTs with CS equipment. This effort includes conducting Synchronization Conference, NMIBs, IPRs and developing a consolidating schedule of all NET/ NEF and Integration events for the supported BCTs. Synchronize and coordinate the execution of integration of automotive upgrades, mission command and tactical radios into tactical vehicles for one (1) Security Force Advisory Brigades during FY21. This effort includes developing a consolidated integration schedule, inventorying tactical vehicles, developing integration trackers, conducting IPRs through the execution of the integration, providing on-site management and providing integration status and feedback from the integration sites. Synchronize and coordinate the execution of four (4) Integrated Tactical Network (ITN) Experimental IBCT during FY 2021. This effort includes developing a consolidated integration schedule, inventorying tactical vehicles, developing integration trackers, conducting IPRs through the execution of the integration, providing on-site status and feedback and managing operations at the integration site. Conduct planning and scheduling of CS Fielding for the following CS22 Units: two (2) SBCTs with CS equipment. Conduct Synchronization Conference, NMIBs and IPRs for each SBCT leading up to the execution of the CS NET/NEF effort. Develop a synchronized New Equipment Training /New Equipment Fielding (NET/NEF) Integrated Master Schedule (IMS) for fielding of			

Exhibit R-2A, RDT&E Project Justification: PB 2022 Army		Date: May 2021
Appropriation/Budget Activity 2040 / 5	**R-1 Program Element (Number/Name)** PE 0604798A / *Brigade Analysis, Integration and Evaluation*	**Project (Number/Name)** DY5 / *Production/Field Coordination for Capability Sets*

B. Accomplishments/Planned Programs ($ in Millions)	FY 2020	FY 2021	FY 2022
CS22 to all gaining units. Begin CS22 NET/NEF requirements definition finalization and development of the NET/NEF integrated master schedule. Conduct planning and scheduling of automotive upgrades, mission command and tactical radios into tactical vehicles for full MTOE FY 2022 Security Force Advisory Brigades. This effort includes planning and developing an initial consolidated integration schedule, conducting Synchronization Conference and follow-on IPRs. Conduct planning and scheduling of automotive upgrades, mission command and tactical radios into tactical vehicles for of five (5) Integrated Tactical Network (ITN) Experimental IBCTs. This effort includes developing a consolidated integration schedule, conducting IPRs through the execution of the integration, providing on-site status and feedback and managing operations at the integration site. This includes scheduling Program of Record unique NET, System of Systems NET (Capability Set holistic classes), and property accountability handoffs as an integrated process to enhance efficiency of the brigade modernization events. Engineering and Integration coordination/planning efforts to develop and maintain CS unit-specific Network Basis of Issue (NBOI) architecture and Integrated Master Schedule (IMS): Develop and maintain unit-specific NBOI and IMS for the FY 2021 Capability Set, SFAB and ITN units. Post integration, update the unit-specific NBOI to an "as-built" NBOI. This effort includes four (4) ITN and one (1) SFAB units. Update the final IMS for units fielded during FY 2020, maintained unit-specific NBOI and IMS for units designated to undergo CS integration in FY 2021, and develop initial (draft-level) NBOI and IMS for planned units in FY 2022 thru FY 2023. There are currently five (5) ITN BCTs planned for FY 2022. Organize, prepare, and conduct incremental technical reviews to examine and assess key/crucial planning activities and associated data product development supporting CS, ITN and SFAB integration at specific fielded locations. Collect and analyzed sub-schedule performance against the baseline IMS to identify schedule risks for the CS, ITN and SFAB integration efforts. Validate that established incremental integration points were achievable and, if not, identified the risk to schedule. Analyze schedule and cost performance against schedule established baselines, identify variances and their causes, and identify risks and/or impacts to critical path. Perform "what if" schedule and cost analyses of alternative program courses of action to determine impact on schedule critical path and mission requirements. Update and poste schedules on SharePoint for visibility and increased collaboration across the CS, LTI and SFAB communities. Lead or participate in other key technical reviews to include: After Action Reviews, Lessons Learned, Network Modernization and Fielding Synchronization Meetings (formerly known as Synchronized Fielding Technical Exchange Meetings (TEMs) and mini-TEMs). Provide reports and briefings to key stakeholders to support mutual programmatic goals and objectives and to help resolve issues and concerns affecting the affected			

Exhibit R-2A, RDT&E Project Justification: PB 2022 Army		Date: May 2021
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B. Accomplishments/Planned Programs ($ in Millions)	FY 2020	FY 2021	FY 2022
communities. Identify key program risks as well as specific risk mitigation plans. Coordinate, prepare, and publish a synchronized New Equipment Training / New Equipment Fielding (NET/NEF) Integrated Master Schedule (IMS) for CS, ITN and SFAB units. ***FY 2021 to FY 2022 Increase/Decrease Statement:*** The decrease reflects the funding for the remaining authorized OCSE core positions, previously aligned to this project, that are now realigned to project DY7 in FY 2022.			
Accomplishments/Planned Programs Subtotals	0.929	1.035	-

C. Other Program Funding Summary ($ in Millions)

Line Item	FY 2020	FY 2021	FY 2022 Base	FY 2022 OCO	FY 2022 Total	FY 2023	FY 2024	FY 2025	FY 2026	Cost To Complete	Total Cost
• DY3: *NIE Test & Evaluation*	6.390	-	-	-	-	-	-	-	-	-	-
• DY7: *Army Systems Engineering, Architecture & Analysis*	16.740	17.702	21.534	-	21.534	-	-	-	-	-	-
• DZ6: *Army Integration Management & Coordination*	5.793	-	-	-	-	-	-	-	-	-	-

Remarks

D. Acquisition Strategy

This project does not have any requirement for direct procurement of hardware or software.

Exhibit R-3, RDT&E Project Cost Analysis: PB 2022 Army			Date: May 2021
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Management Services ($ in Millions)

Cost Category Item	Contract Method & Type	Performing Activity & Location	Prior Years	FY 2020 Cost	FY 2020 Award Date	FY 2021 Cost	FY 2021 Award Date	FY 2022 Base Cost	FY 2022 Base Award Date	FY 2022 OCO Cost	FY 2022 OCO Award Date	FY 2022 Total Cost	Cost To Complete	Total Cost	Target Value of Contract
FY 2020 SBIR/STTR Transfer	TBD	Various : Various	-	0.019		-		-		-		-	0.000	0.019	-
		Subtotal	-	0.019		-		-		-		-	0.000	0.019	N/A

Product Development ($ in Millions)

Cost Category Item	Contract Method & Type	Performing Activity & Location	Prior Years	FY 2020 Cost	FY 2020 Award Date	FY 2021 Cost	FY 2021 Award Date	FY 2022 Base Cost	FY 2022 Base Award Date	FY 2022 OCO Cost	FY 2022 OCO Award Date	FY 2022 Total Cost	Cost To Complete	Total Cost	Target Value of Contract
Production/Fielding Coordination for Capability Sets	TBD	Various Note: 1 : TBD	20.825	0.910	Nov 2019	1.035	Nov 2019	-		-		-	Continuing	Continuing	Continuing
		Subtotal	20.825	0.910		1.035		-		-		-	Continuing	Continuing	N/A

Remarks

Note: 1
- Program Activities performed at TACOM (Warren MI) and CS units location receiving fielding.
- Program Integration support through various PMs, PEOs, RDECOM.

Support ($ in Millions)

Cost Category Item	Contract Method & Type	Performing Activity & Location	Prior Years	FY 2020 Cost	FY 2020 Award Date	FY 2021 Cost	FY 2021 Award Date	FY 2022 Base Cost	FY 2022 Base Award Date	FY 2022 OCO Cost	FY 2022 OCO Award Date	FY 2022 Total Cost	Cost To Complete	Total Cost	Target Value of Contract
Facilities and IT Support	TBD	Various Note:1 : TBD	0.694	-		-		-		-		-	0.000	0.694	-
		Subtotal	0.694	-		-		-		-		-	0.000	0.694	N/A

Remarks

Note: 1
- Program Activities performed at TACOM (Warren MI) and CS units location receiving fielding.

	Prior Years	FY 2020		FY 2021		FY 2022 Base		FY 2022 OCO		FY 2022 Total	Cost To Complete	Total Cost	Target Value of Contract
Project Cost Totals	21.519	0.929		1.035		-		-		-	Continuing	Continuing	N/A

Exhibit R-3, RDT&E Project Cost Analysis: PB 2022 Army			Date: May 2021
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	Prior Years	FY 2020	FY 2021	FY 2022 Base	FY 2022 OCO	FY 2022 Total	Cost To Complete	Total Cost	Target Value of Contract

Remarks

Exhibit R-4, RDT&E Schedule Profile: PB 2022 Army		Date: May 2021
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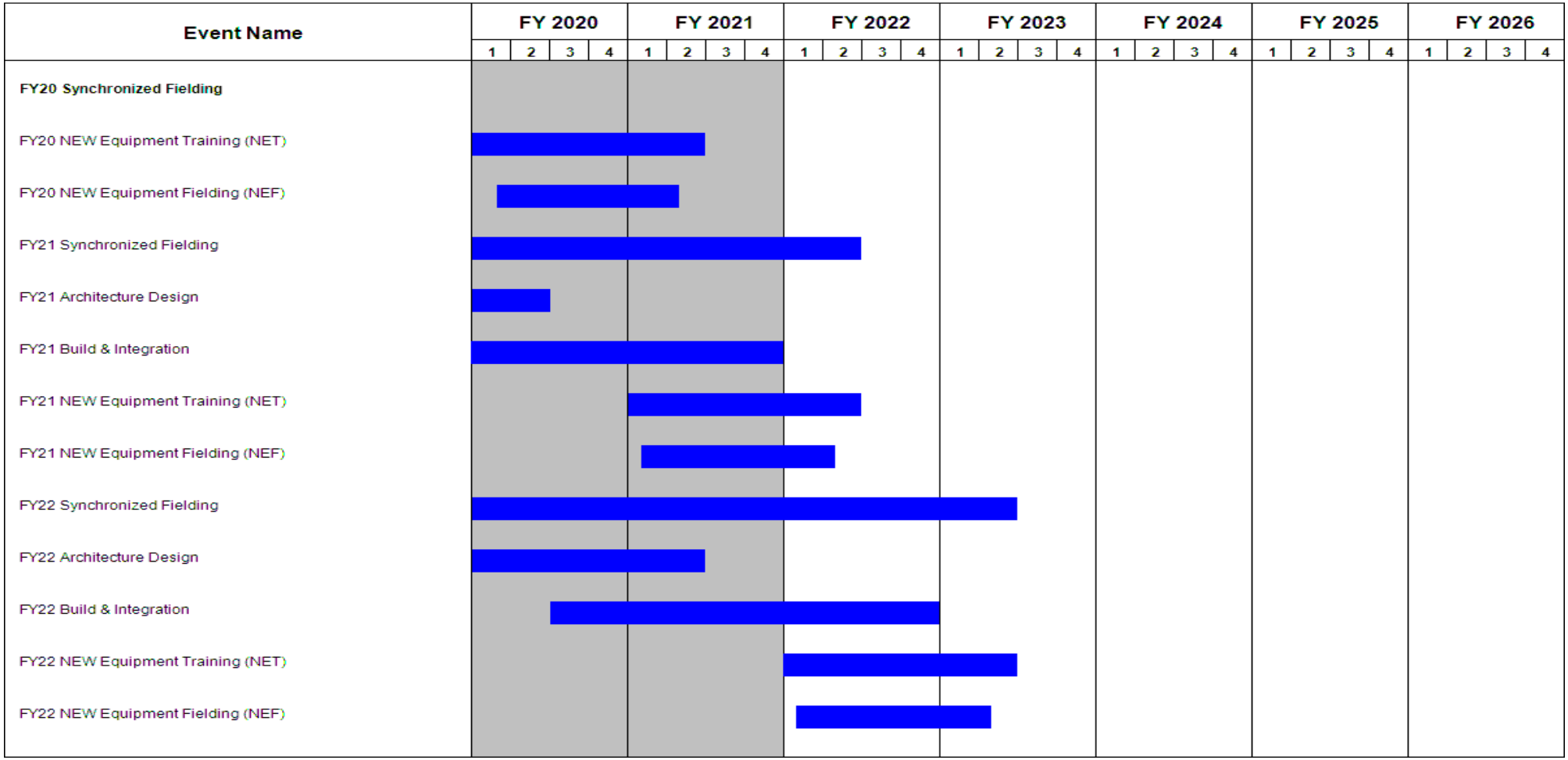

Exhibit R-4, RDT&E Schedule Profile: PB 2022 Army		Date: May 2021
Appropriation/Budget Activity 2040 / 5	**R-1 Program Element (Number/Name)** PE 0604798A / *Brigade Analysis, Integration and Evaluation*	**Project (Number/Name)** DY5 / *Production/Field Coordination for Capability Sets*

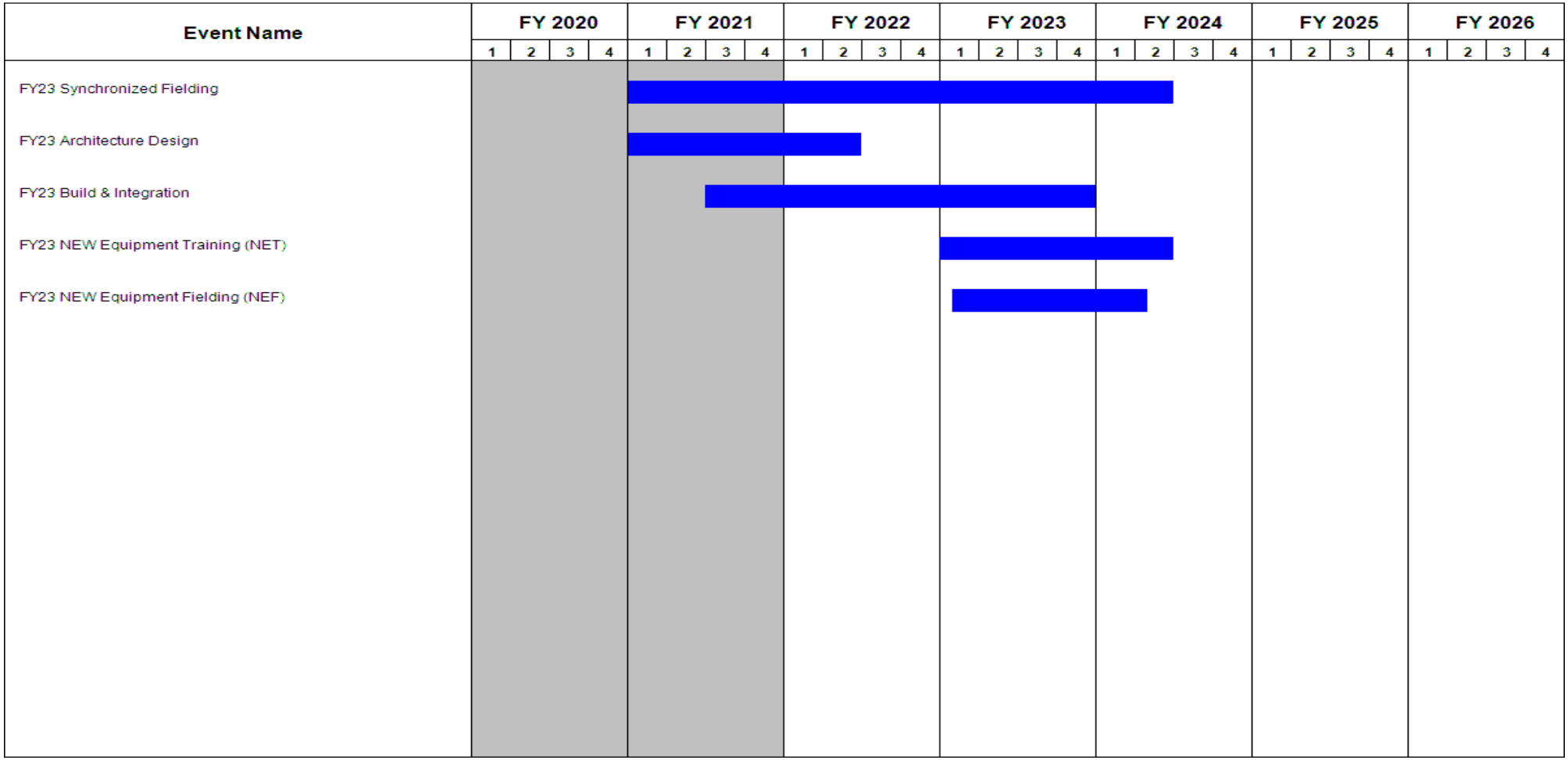

Exhibit R-4A, RDT&E Schedule Details: PB 2022 Army		Date: May 2021
Appropriation/Budget Activity 2040 / 5	**R-1 Program Element (Number/Name)** PE 0604798A / *Brigade Analysis, Integration and Evaluation*	**Project (Number/Name)** DY5 / *Production/Field Coordination for Capability Sets*

Schedule Details

	Start		End	
Events	**Quarter**	**Year**	**Quarter**	**Year**
FY20 Synchronized Fielding	1	2018	2	2021
FY20 NEW Equipment Training (NET)	1	2020	2	2021
FY20 NEW Equipment Fielding (NEF)	1	2020	2	2021
FY21 Synchronized Fielding	1	2019	2	2022
FY21 Architecture Design	1	2019	2	2020
FY21 Build & Integration	3	2019	4	2021
FY21 NEW Equipment Training (NET)	1	2021	2	2022
FY21 NEW Equipment Fielding (NEF)	1	2021	2	2022
FY22 Synchronized Fielding	1	2020	2	2023
FY22 Architecture Design	1	2020	2	2021
FY22 Build & Integration	3	2020	4	2022
FY22 NEW Equipment Training (NET)	1	2022	2	2023
FY22 NEW Equipment Fielding (NEF)	1	2022	2	2023
FY23 Synchronized Fielding	1	2021	2	2024
FY23 Architecture Design	1	2021	2	2022
FY23 Build & Integration	3	2021	4	2023
FY23 NEW Equipment Training (NET)	1	2023	2	2024
FY23 NEW Equipment Fielding (NEF)	1	2023	2	2024

Exhibit R-2A, RDT&E Project Justification: PB 2022 Army												Date: May 2021
Appropriation/Budget Activity 2040 / 5					R-1 Program Element (Number/Name) PE 0604798A / *Brigade Analysis, Integration and Evaluation*				Project (Number/Name) DY7 / *Army Systems Engineering, Architecture & Analysis*			
COST ($ in Millions)	**Prior Years**	**FY 2020**	**FY 2021**	**FY 2022 Base**	**FY 2022 OCO**	**FY 2022 Total**	**FY 2023**	**FY 2024**	**FY 2025**	**FY 2026**	**Cost To Complete**	**Total Cost**
DY7: *Army Systems Engineering, Architecture & Analysis*	-	16.740	17.702	21.534	-	21.534	-	-	-	-	-	-
Quantity of RDT&E Articles	-	-	-	-	-	-	-	-	-	-		

Note

The remaining funding in Project DY5 / Production/Field Coordination for Capability Sets is tied to OCSE core manpower authorizations which are realigned to Project DY7 / Army Systems Engineering, Architecture & Analysis in Fiscal Year (FY) 2022.

A. Mission Description and Budget Item Justification

Synthesizing Systems Engineering Governance across the PEOs in support of the Assistant Secretary of the Army (Acquisition, Logistics and Technology)'s Mission.

This project provides the Army's leadership and materiel developers with the necessary modernization planning, System of Systems (SoS) engineering and analysis, technical risk analysis, architectural products, critical path analysis, cybersecurity and interoperability risk analysis and the associated mitigation planning for the Army's materiel portfolio. This project develops process, products, and policies that ensure a solid Army Systems Engineering construct across Army Program Executive and Management Offices.

This includes efforts in support of Common Operating Environment (COE) governance, the Army Futures Command's emerging development of concepts, requirements generation, resource allocation, experimentation, acquisition, logistics, and technology components of the Army Future Force Modernization Enterprise (FFME). Focus areas includes the integration of key elements of a system into one overall system engineering construct and managing it through major system engineering activities to ensure the fielding of integrated capabilities meet the mission needs of the force against any potential adversaries. Key system engineering functions include, engineering and technical analysis, integrated System of Systems (SoS) architecture products, SoS risk analysis and mitigation planning to influence the Army's materiel portfolio. This project also includes the establishment of Army systems engineering policy and implementation standards, requirements decomposition and alignment, and resource and acquisition synchronization to address cross-portfolio issues. Key tasks are the development of integrated Architecture products; Engineering Analysis and Design; Portfolio Analysis; Systems Security Engineering process, interoperability assessments, independent technical risk assessments, Cybersecurity requirements analysis, compliance, Cyber policy assessments, and coordinates the ASA(ALT) community's Data activities including Data Steward and Functional Data Manager in Army Data Governance Forums.

The effort includes costs for labor (Government and contractor), support services, travel, training, supplies, facilities, and Information Technology (IT) support for Office of Chief Systems Engineer (OCSE). This project also includes support to other Department of Defense (DOD) and international agencies for joint programs and collaboration effort.
Under this Project we have four efforts: Army System of Systems Engineering and Analysis, Cyber, Data Initiatives.

Exhibit R-2A, RDT&E Project Justification: PB 2022 Army		Date: May 2021
Appropriation/Budget Activity 2040 / 5	**R-1 Program Element (Number/Name)** PE 0604798A / *Brigade Analysis, Integration and Evaluation*	**Project (Number/Name)** DY7 / *Army Systems Engineering, Architecture & Analysis*

B. Accomplishments/Planned Programs ($ in Millions)	FY 2020	FY 2021	FY 2022
Title: Army System of Systems Engineering and Analysis	13.051	13.875	15.663

Description: Provided coordinated SoS engineering, architectures, and analysis products for integrating new technologies with existing capabilities to stakeholders (e.g. materiel developers, TRADOC Capability Manager (TCM), Army Capabilities Integration Center (ARCIC), etc.) to deliver integrated solutions to Army formations.

FY 2021 Plans:
Architecture and Analysis:
Develop reference architecture products to support Capability Set (CS) 23 Integrated Tactical Network fielding, the CS 25 Integrated Tactical Network engineering design, and other fielding and integration planning as required. CS fielding activities occur every year, with biannual baseline updates, and provide network modernization upgrades to entire brigades in a single fielding event. These supporting architecture products enabled the ASA (ALT) community to determine integrated Basis of Issue planning, subnet design, spectrum allocation, network initialization, logistics planning for fielding activity, and non-recurring engineering planning and design as part of the overall ASA(ALT) engineering design, integration and fielding of the Army Capability Sets.
Using a Model Based Systems Engineering (MBSE) data-driven approach to Digital Engineering (DE) inside the Architecture Development Kit (ADK) Environment, architects capture system data in the system of systems integrated architecture to include systems? unique requirements, capabilities, performance, interfaces, standards, dependences, and data flows, within the context of their operational employment and provide visual representation of key system from an operational, functional and network perspective. This modeling allows for requirements traceability, reporting, analysis, and visualization. The ADK will be expanded to include the breadth of architecture being developed by ASA (ALT). The expanded toolsets will provide a standardized virtual interface for improved usability and increased commonality so that all users will have the same access to libraries, lexicon, nomenclature and style guides. User will be able to develop architecture products useful for their own acquisition process while being able to access other system data to improve their understanding of interoperability. Data from all systems will be easily aggregated to develop and analyze system of systems architecture. The resultant fully integrated systems of systems model, maintained with up-to-date system data, will allow leadership to quickly answer ?what if? system of systems architecture questions and improve the efficiency of the Request For Information (RFI) processes.
Develop a Critical Criteria Checklist (C3L) tool designed to enhance system of systems engineering rigor for Multi Domain Operations (MDO) designated capabilities. The C3L provides a set of criteria categories when provided with some basic inputs on system type, intended purpose, and intended environment. These considerations need to be considered to more accurately determine if a system meets the overmatch, OE2040, and procurement outcomes outlined in the VCSA. The tool is designed to be tailorable, flexible, reusable, and intuitive for a user to navigate with the possibility for automated aspects.
Provide continued Mission Engineering, JADC2, and MDO analysis as it pertains to system development and ASA (ALT) equities. Continue to analyze JADC2 impact on Army modernization strategy and the Army?s role in MDO supporting ASA (ALT) with

Exhibit R-2A, RDT&E Project Justification: PB 2022 Army		Date: May 2021
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B. Accomplishments/Planned Programs ($ in Millions)	FY 2020	FY 2021	FY 2022
quick turn, independent, first-order engineering analysis to support leadership decision making to enable the Army Modernization Enterprise (AME). Develop a reference network architecture supporting several priorities (i.e. Sensor to Shooter (S2S), Joint interoperability, Manned-Unmanned Teaming) efforts across Army. This reference architecture lays out a plan, through identifying common, relevant, and well used standards and protocols, in new and existing systems for how the Army can achieve these goals. All solutions will be virtually modeled on a software testbed for verification. Continued updates to the network architecture includes support as new challenges arise. Lead for Army Systems Engineering Program Support: Leads the Army?s development of policy and best practices to ensure systems engineering rigor in Army Acquisition. Primary advisor to the Chief Systems Engineer Army Acquisition Executive regarding the sufficiency of systems engineering rigor in programs. Collaborates with the Army?s systems engineering community to identify systemic systems engineering challenges and issues and their solutions, as well as identifying and sharing best practices. OCSE leads the immediate Army response to NDAA statutory requirements that involve systems engineering, as well as identifying and facilitating the best means to institutionalize those requirements. Additionally, OCSE will collaborate with OSD, Industry and the Joint community in developing synchronized approaches to NDAA Systems Engineering related statutes. As the National Defense Strategy and Army Senior Leadership have emphasized increased speed of delivery of capabilities to the Warfighter, OCSE will work with PEOs/PMs, along with the Army Futures Command (AFC) on enabling processes and tools in order to accelerate the Army?s acquisition process, from requirements development through delivery of capability to the field and rapid technology insertion or upgrades. OCSE will continue to implement the modular open system approaches by refining and developing implementation guidance and supporting PM development of MOSA architectures. Elements will include identifying and prioritizing key system attributes into functional, modular components that provide the greatest operational effects on the battlefield, and support the fielding of an MDO-capable force by 2028 and an MDO-ready force by 2035. These efforts will encompass the development planning process to rapidly identify and refine requirements and speed development from concept to solution. OCSE will also work to assist the Army in assessing what emerging capabilities should be transitioned into programs of record, and facilitate the rapid integration of the technology through modular open systems approaches. A key element of this will be advancing the state of practice of Digital Engineering (DE) across the Army Modernization Enterprise. This work will also seek to streamline communications between Government and Industry by identification of technical data and emphasis of appropriate implementation of technical data rights. Through the implementation of Digital Engineering, OCSE will work with the PMs to institutionalize modern engineering processes and integrate those processes through the engineering			

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B. Accomplishments/Planned Programs ($ in Millions)	FY 2020	FY 2021	FY 2022
data they produce in order to establish and maintain traceability from the activities that drive system concept development through system acquisition, fielding, and sustainment to the decision to divest. The Army?s Digital Engineering implementation will establish a workforce equipped with the necessary skills and infrastructure to achieve this goal. To further the Army?s modernization efforts, OCSE synchronizes the Army's Modeling and Simulation Strategy with OSD's Digital Engineering Strategy to focus current and emerging efforts on the efficient development and use of M&S and Model Based Systems Engineering capabilities in order to advance the Army's system development efforts. In order to promote program success, OCSE will continue to assist programs in the identification and mitigation of risk (i.e. Independent Technical Risk Assessments (ITRA), PDR/CDR sufficiency assessments, SEP, LCSP, and SVR reviews, etc.) and develop processes to support the necessary rigor and consistency across the Army, in support of any/all key milestone events. For ACAT 1C programs the Army will lead these efforts, and support USD(R&E) for ACAT 1D. Provides guidance and support to programs for development of systems engineering documentation required for milestone decisions and certification. Serves as the Army level concurrence authority on System Engineering Plans (SEPs) and provides systems engineering expertise for Program Protection Plans (PPPs) for all Army Major Defense Acquisition Programs. OCSE will also provide the AAE with an assessment of the MOSA implementation for ACAT 1C programs and will review and recommend approval for the PEO?s approach to implementing MOSA across their responsible portfolio. OCSE will serve as the Army focal point for matters of hardware and software assurance, microelectronics, planning and countermeasures, and systems engineering focal point for program protection, anti-tamper, and program protection plans. Army Representative for the FY 2014 NDAA Section 937 Congressional requirement to stand up a Joint Federated Assurance Center (JFAC) to develop work plans, manage funding, track progress and report regular status to Army Leadership and OSD Leadership. In addition, also maintains direct collaboration and communication with Combat Capabilities Development Commands (CCDCs), Army Research Labs, and specifically the Software, Hardware and Cyber Subject Matter Experts and Communities of Practice, to define, federate, maintain and evolve, Army Cyber, System Security Engineering, and allow access to available Hardware/Software Assurance capabilities to meet today's threats and emerging threats. Provide systems engineering expertise, oversight, review, and development assistance for PPPs to determine/review risks/identify vulnerabilities associated with Security. Provide advice and experience to influence system design considerations in support of developing effective and resilient program protection strategies. Conduct client advocacy and education forums (Road Show presentations/Army Systems Engineering Forums) amongst Army PEOs/Chief Systems Engineers, DASD(SE), other agencies and joint service stakeholders, to promulgate best practices to the acquisition community. Interface as an executive agent on matters of Anti-Tamper with program personnel, systems security engineers and service providers. OCSE serves as the primary responsibility for Software Assurance and Anti-Tamper. Provide alternate assurance options for critical DoD unique parts as part of the US Microelectronic Strategy. Advance the Army's capability to perform hardware analysis of critical components and transition to a new microelectronics trust model that leverages commercial state of the art practices. Provide systems engineering advice on Critical Intelligence Parameter Breach recommendations through emerging Acquisition, Intelligence, Requirements (AIR) policy directives. IAW FY 2017 NDAA Sec			

Exhibit R-2A, RDT&E Project Justification: PB 2022 Army		Date: May 2021
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B. Accomplishments/Planned Programs ($ in Millions)	FY 2020	FY 2021	FY 2022
807 Responsible for the conduct and execution of Post-Preliminary and Critical Design Review (PDR/CDR) and Independent Technical Risk Assessments (ITRA) for all Army ACAT I and II programs where the Army Acquisition Executive serves as the Milestone Decision Authority. The reviews will provide recommendations on Technical Risk and PDR/CDR sufficiency will be included in the Milestone Decision Authority (MDA) package for the Milestone Review, approval, and certification. OCSE will continue in the development of Modular Open Systems Approach (MOSA) policy and implementation guidance, in accordance with NDAA FY 2017 2466a/b/c/, that leads to the certification of MOSA in MDAPS. Other responsibilities include confirming that Army programs proceeding to Milestone B have incorporated clearly defined major subsystem interfaces between the major system platform and major system components, between major system components, and between major system platforms, and that these major system interfaces are consistent with the widely supported and consensus-based standards. Leads the assessment of Reliability, Availability, and Maintainability (RAM) efforts of Army programs of record through a cross functional IPT that emphasizes lessons learned and best practices for RAM. Assist programs in the research for root causes of reliability issues and provide detailed assessment along with recommendation to senior leadership. As the Army implements the Army?s People Strategy, OCSE supports the functional lead for Engineering by identifying skills gaps and recommending the needed training. OCSE will also promotes workforce development efforts to improve the level of systems engineering competency through credentials that provide focused enhanced skills in Digital Engineering, Cyber, Data engineering. This will include engineering support to OSD and the Army to oversee the growth of civilian talent to support Assistant Secretary of the Army (Acquisition, Logistics and Technology) Systems Engineering requirements. This includes recommending improvements in Training, Education, Rotational Assignments, and Mentoring for a Systems Engineering (SE) work force across the Army. SEPS will support ASA(ALT) in the development of the Human Capital Strategic Plan (HCSP) and refinement of the System Engineering Functions with OSD. Standards & Interoperability: OCSE will support Common Operating Environment Systems Engineering Governance by continuing to host ASA(ALT) monthly governance forums to promote convergence of legacy combat systems towards a common software and hardware infrastructure, effective migration of Army sensing capabilities towards common data sharing interface standards, and alignment of enterprise capabilities with tactical level services. This includes continuing to host a bi-weekly ASA(ALT) Configuration Control Board to optimize System of Systems risk reduction and preparatory actions prior to execution of HQDA G-6 independent Title 40 Army Interoperability Certification (AIC) test events. Secondly, OCSE will continue hosting the Standards IPT, Digital Engineering (DE) IPT, Software Baseline IPT, and the Technical Advisory Board (TAB) to create, modify, or maintain a system of system engineering approach for Army interoperability. This includes configuration management of ASA(ALT) System of Systems technical bassline artifacts in support of achieving Full Operational Capability (FOC) of the Common Operating Environment (COE) in 2025, as well as, continue maintenance of the enterprise level Fielded Software Tracker Database via data curation, user requested functionality enhancements, systems administration, and user help desk support.			

Exhibit R-2A, RDT&E Project Justification: PB 2022 Army		Date: May 2021
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B. Accomplishments/Planned Programs ($ in Millions)	FY 2020	FY 2021	FY 2022
OCSE will serve as the ASA(ALT) staff lead for Joint All Domain Command & Control (JADC2) / Multi Partner Environment (MPE) Technical Standards by providing ASA(ALT) technical representation on Joint Staff J6 and Army Joint All-Doman Command & Control (JADC2) technical governance forums. Additionally, OCSE will continue ASA(ALT) technical representation on the DoD CIO Information Technology Standards Steering Group (ITSSG) and review of Interoperability Standards Technical Packages (ITSP) in support of pre-coordination, review, and staffing of Communities of Practice (CoP) and Change Requests (CRs) to the DoD Information Technology Standards Repository (DISR) baseline IAW DoDI 8310.01. Lastly, OCSE will continue to provide ASA(ALT) technical representation for Army pre-ratification review and staffing of American, British, Canadian, Australian, and New Zealand (ABACANZ) Technical Statement of Requirements (TSOR) in support of the Army Interoperability Campaign Plan and Mission Partner Environment (MPE) Concept of Operations (CONOPS). OCSE will serve as the Army Acquisition Executive (AAE) designated ASA(ALT) Standardization Executive to lead policy development and exercise independent technical review authority intended to optimize Army compliance with statutory guidance focused on increasing the use of commercial and non-governmental standards and specifications in Army acquisition programs. Additionally, the effort includes publishing a common desktop reference for ASA(ALT) Program Managers and Chief Engineers detailing statutory and regulatory mandates, best practices, tools, and training. Mission Engineering, Integration, Requirements and Feasibility Analysis: Perform pre-Materiel Development Decision (MDD) activities, to include risk assessments to address program uncertainty and influence decision making to promote development of a mature capability and successful delivery of a program within cost, schedule, and performance criteria. Develop and execute a process to ensure that appropriate systems of systems integrations, design for supportability, cyber resilience, and other important design characteristics are addressed in new system designs. Continue prioritization of AME modernization efforts and ensure that appropriate metrics are developed and used to confirm that materiel developed meets warfighter needs. Support AME modernization efforts in order to achieve persistent modernization. ***FY 2022 Plans:*** Architecture and Analysis: Develop reference architecture products to support Capability Set (CS) 23 Integrated Tactical Network fielding, the CS 25 Integrated Tactical Network engineering design, and other fielding and integration planning as required. CS fielding activities occur every year, with biannual baseline updates, and provide network modernization upgrades to entire brigades in a single fielding event. These supporting architecture products enabled the ASA (ALT) community to determine integrated Basis of Issue planning, subnet design, spectrum allocation, network initialization, logistics planning for fielding activity, and non-recurring engineering planning and design as part of the overall ASA(ALT) engineering design, integration and fielding of the Army Capability Sets.			

Exhibit R-2A, RDT&E Project Justification: PB 2022 Army		Date: May 2021
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B. Accomplishments/Planned Programs ($ in Millions)	FY 2020	FY 2021	FY 2022
Using a Model Based Systems Engineering (MBSE) data-driven approach to Digital Engineering (DE) inside the Architecture Development Kit (ADK) Environment, architects capture system data in the system of systems integrated architecture to include systems? unique requirements, capabilities, performance, interfaces, standards, dependences, and data flows, within the context of their operational employment and provide visual representation of key system from an operational, functional and network perspective. This modeling allows for requirements traceability, reporting, analysis, and visualization. The ADK will be expanded to include the breadth of architecture being developed by ASA (ALT). The expanded toolsets will provide a standardized virtual interface for improved usability and increased commonality so that all users will have the same access to libraries, lexicon, nomenclature and style guides. User will be able to develop architecture products useful for their own acquisition process while being able to access other system data to improve their understanding of interoperability. Data from all systems will be easily aggregated to develop and analyze system of systems architecture. The resultant fully integrated systems of systems model, maintained with up-to-date system data, will allow leadership to quickly answer ?what if? system of systems architecture questions and improve the efficiency of the Request For Information (RFI) processes. Develop a Critical Criteria Checklist (C3L) tool designed to enhance system of systems engineering rigor for Multi Domain Operations (MDO) designated capabilities. The C3L provides a set of criteria categories when provided with some basic inputs on system type, intended purpose, and intended environment. These considerations need to be considered to more accurately determine if a system meets the overmatch, OE2040, and procurement outcomes outlined in the VCSA. The tool is designed to be tailorable, flexible, reusable, and intuitive for a user to navigate with the possibility for automated aspects. Provide continued Mission Engineering, JADC2, and MDO analysis as it pertains to system development and ASA (ALT) equities. Continue to analyze JADC2 impact on Army modernization strategy and the Army?s role in MDO supporting ASA (ALT) with quick turn, independent, first-order engineering analysis to support leadership decision making to enable the Army Modernization Enterprise (AME). Develop a reference network architecture supporting several priorities (i.e. Sensor to Shooter (S2S), Joint interoperability, Manned-Unmanned Teaming) efforts across Army. This reference architecture lays out a plan, through identifying common, relevant, and well used standards and protocols, in new and existing systems for how the Army can achieve these goals. All solutions will be virtually modeled on a software testbed for verification. Continued updates to the network architecture includes support as new challenges arise. Lead for Army Systems Engineering Program Support: Leads the Army?s development of policy and best practices to ensure systems engineering rigor in Army Acquisition. Primary advisor to the Chief Systems Engineer Army Acquisition Executive regarding the sufficiency of systems engineering rigor in programs. Collaborates with the Army?s systems engineering community to identify systemic systems engineering challenges and			

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issues and their solutions, as well as identifying and sharing best practices. OCSE leads the immediate Army response to NDAA statutory requirements that involve systems engineering, as well as identifying and facilitating the best means to institutionalize those requirements. Additionally, OCSE will collaborate with OSD, Industry and the Joint community in developing synchronized approaches to NDAA Systems Engineering related statutes. As the National Defense Strategy and Army Senior Leadership have emphasized increased speed of delivery of capabilities to the Warfighter, OCSE will work with PEOs/PMs, along with the Army Futures Command (AFC) on enabling processes and tools in order to accelerate the Army?s acquisition process, from requirements development through delivery of capability to the field and rapid technology insertion or upgrades. OCSE will continue to implement the modular open system approaches by refining and developing implementation guidance and supporting PM development of MOSA architectures. Elements will include identifying and prioritizing key system attributes into functional, modular components that provide the greatest operational effects on the battlefield, and support the fielding of an MDO-capable force by 2028 and an MDO-ready force by 2035. These efforts will encompass the development planning process to rapidly identify and refine requirements and speed development from concept to solution. OCSE will also work to assist the Army in assessing what emerging capabilities should be transitioned into programs of record, and facilitate the rapid integration of the technology through modular open systems approaches. A key element of this will be advancing the state of practice of Digital Engineering (DE) across the Army Modernization Enterprise. This work will also seek to streamline communications between Government and Industry by identification of technical data and emphasis of appropriate implementation of technical data rights. Through the implementation of Digital Engineering, OCSE will work with the PMs to institutionalize modern engineering processes and integrate those processes through the engineering data they produce in order to establish and maintain traceability from the activities that drive system concept development through system acquisition, fielding, and sustainment to the decision to divest. The Army?s Digital Engineering implementation will establish a workforce equipped with the necessary skills and infrastructure to achieve this goal. To further the Army?s modernization efforts, OCSE synchronizes the Army's Modeling and Simulation Strategy with OSD's Digital Engineering Strategy to focus current and emerging efforts on the efficient development and use of M&S and Model Based Systems Engineering capabilities in order to advance the Army's system development efforts. In order to promote program success, OCSE will continue to assist programs in the identification and mitigation of risk (i.e. Independent Technical Risk Assessments (ITRA), PDR/CDR sufficiency assessments, SEP, LCSP, and SVR reviews, etc.) and develop processes to support the necessary rigor and consistency across the Army, in support of any/all key milestone events. For ACAT 1C programs the Army will lead these efforts, and support USD(R&E) for ACAT 1D. Provides guidance and support to programs for development of systems engineering documentation required for milestone decisions and certification. Serves as the Army level concurrence authority on System Engineering Plans (SEPs) and provides systems engineering expertise for Program Protection Plans (PPPs) for all Army Major Defense Acquisition Programs. OCSE will			

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also provide the AAE with an assessment of the MOSA implementation for ACAT 1C programs and will review and recommend approval for the PEO?s approach to implementing MOSA across their responsible portfolio. OCSE will serve as the Army focal point for matters of hardware and software assurance, microelectronics, planning and countermeasures, and systems engineering focal point for program protection, anti-tamper, and program protection plans. Army Representative for the FY 2014 NDAA Section 937 Congressional requirement to stand up a Joint Federated Assurance Center (JFAC) to develop work plans, manage funding, track progress and report regular status to Army Leadership and OSD Leadership. In addition, also maintains direct collaboration and communication with Combat Capabilities Development Commands (CCDCs), Army Research Labs, and specifically the Software, Hardware and Cyber Subject Matter Experts and Communities of Practice, to define, federate, maintain and evolve, Army Cyber, System Security Engineering, and allow access to available Hardware/Software Assurance capabilities to meet today's threats and emerging threats. Provide systems engineering expertise, oversight, review, and development assistance for PPPs to determine/review risks/identify vulnerabilities associated with Security. Provide advice and experience to influence system design considerations in support of developing effective and resilient program protection strategies. Conduct client advocacy and education forums (Road Show presentations/Army Systems Engineering Forums) amongst Army PEOs/Chief Systems Engineers, DASD(SE), other agencies and joint service stakeholders, to promulgate best practices to the acquisition community. Interface as an executive agent on matters of Anti-Tamper with program personnel, systems security engineers and service providers. OCSE serves as the primary responsibility for Software Assurance and Anti-Tamper. Provide alternate assurance options for critical DoD unique parts as part of the US Microelectronic Strategy. Advance the Army's capability to perform hardware analysis of critical components and transition to a new microelectronics trust model that leverages commercial state of the art practices. Provide systems engineering advice on Critical Intelligence Parameter Breach recommendations through emerging Acquisition, Intelligence, Requirements (AIR) policy directives. IAW FY 2017 NDAA Sec 807 Responsible for the conduct and execution of Post-Preliminary and Critical Design Review (PDR/CDR) and Independent Technical Risk Assessments (ITRA) for all Army ACAT I and II programs where the Army Acquisition Executive serves as the Milestone Decision Authority. The reviews will provide recommendations on Technical Risk and PDR/CDR sufficiency will be included in the Milestone Decision Authority (MDA) package for the Milestone Review, approval, and certification. OCSE will continue in the development of Modular Open Systems Approach (MOSA) policy and implementation guidance, in accordance with NDAA FY 2017 2466a/b/c/, that leads to the certification of MOSA in MDAPS. Other responsibilities include confirming that Army programs proceeding to Milestone B have incorporated clearly defined major subsystem interfaces between the major system platform and major system components, between major system components, and between major system platforms, and that these major system interfaces are consistent with the widely supported and consensus-based standards.			

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Leads the assessment of Reliability, Availability, and Maintainability (RAM) efforts of Army programs of record through a cross functional IPT that emphasizes lessons learned and best practices for RAM. Assist programs in the research for root causes of reliability issues and provide detailed assessment along with recommendation to senior leadership. As the Army implements the Army?s People Strategy, OCSE supports the functional lead for Engineering by identifying skills gaps and recommending the needed training. OCSE will also promotes workforce development efforts to improve the level of systems engineering competency through credentials that provide focused enhanced skills in Digital Engineering, Cyber, Data engineering. This will include engineering support to OSD and the Army to oversee the growth of civilian talent to support Assistant Secretary of the Army (Acquisition, Logistics and Technology) Systems Engineering requirements. This includes recommending improvements in Training, Education, Rotational Assignments, and Mentoring for a Systems Engineering (SE) work force across the Army. SEPS will support ASA(ALT) in the development of the Human Capital Strategic Plan (HCSP) and refinement of the System Engineering Functions with OSD. Standards & Interoperability: OCSE will support Common Operating Environment Systems Engineering Governance by continuing to host ASA(ALT) monthly governance forums to promote convergence of legacy combat systems towards a common software and hardware infrastructure, effective migration of Army sensing capabilities towards common data sharing interface standards, and alignment of enterprise capabilities with tactical level services. This includes continuing to host a bi-weekly ASA(ALT) Configuration Control Board to optimize System of Systems risk reduction and preparatory actions prior to execution of HQDA G-6 independent Title 40 Army Interoperability Certification (AIC) test events. Secondly, OCSE will continue hosting the Standards IPT, Digital Engineering (DE) IPT, Software Baseline IPT, and the Technical Advisory Board (TAB) to create, modify, or maintain a system of system engineering approach for Army interoperability. This includes configuration management of ASA(ALT) System of Systems technical bassline artifacts in support of achieving Full Operational Capability (FOC) of the Common Operating Environment (COE) in 2025, as well as, continue maintenance of the enterprise level Fielded Software Tracker Database via data curation, user requested functionality enhancements, systems administration, and user help desk support. OCSE will serve as the ASA(ALT) staff lead for Joint All Domain Command & Control (JADC2) / Multi Partner Environment (MPE) Technical Standards by providing ASA(ALT) technical representation on Joint Staff J6 and Army Joint All-Doman Command & Control (JADC2) technical governance forums. Additionally, OCSE will continue ASA(ALT) technical representation on the DoD CIO Information Technology Standards Steering Group (ITSSG) and review of Interoperability Standards Technical Packages (ITSP) in support of pre-coordination, review, and staffing of Communities of Practice (CoP) and Change Requests (CRs) to the DoD Information Technology Standards Repository (DISR) baseline IAW DoDI 8310.01. Lastly, OCSE will continue to provide ASA(ALT) technical representation for Army pre-ratification review and staffing of American, British, Canadian, Australian, and New Zealand (ABACANZ) Technical Statement of Requirements (TSOR) in support of the Army Interoperability Campaign Plan and Mission Partner Environment (MPE) Concept of Operations (CONOPS).			

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OCSE will serve as the Army Acquisition Executive (AAE) designated ASA(ALT) Standardization Executive to lead policy development and exercise independent technical review authority intended to optimize Army compliance with statutory guidance focused on increasing the use of commercial and non-governmental standards and specifications in Army acquisition programs. Additionally, the effort includes publishing a common desktop reference for ASA(ALT) Program Managers and Chief Engineers detailing statutory and regulatory mandates, best practices, tools, and training. Mission Engineering, Integration, Requirements and Feasibility Analysis: Perform pre-Materiel Development Decision (MDD) activities, to include risk assessments to address program uncertainty and influence decision making to promote development of a mature capability and successful delivery of a program within cost, schedule, and performance criteria. Develop and execute a process to ensure that appropriate systems of systems integrations, design for supportability, cyber resilience, and other important design characteristics are addressed in new system designs. Continue prioritization of AME modernization efforts and ensure that appropriate metrics are developed and used to confirm that materiel developed meets warfighter needs. Support AME modernization efforts in order to achieve persistent modernization. ***FY 2021 to FY 2022 Increase/Decrease Statement:*** The increase reflects the remaining funding in Project DY5 / Production/Field Coordination for Capability Sets is tied to OCSE core manpower authorizations which are realigned to Project DY7 / Army Systems Engineering, Architecture & Analysis in Fiscal Year (FY) 2022.			
Title: Cyber ***Description:*** This project funds cyber support to PEOs/PMs to include cybersecurity support to risk management framework, cyber engineering and architecture development, industry cybersecurity engagement, and cyber program oversight and governance, which ensures the secure, affordable, and effective delivery of Army materiel solutions that address critical Army modernization objectives, as well as the delivery of agile and advanced cyber solutions to equip the Army?s offensive and defensive forces in the cyberspace domain. These funds support synchronization, analysis and integration of Cyber functions and products. ***FY 2021 Plans:*** Summary: Perform the functions of the Principal Cyber Adviser (PCA) to the AAE, ASA(ALT) Chief Information Security Officer (CISO), ASA(ALT) Engineering Governance for Cyberspace, and ASA(ALT) lead for Cyber Resilience. Lead a coordinated, comprehensive acquisition approach to enhance cyber resiliency and survivability across ASA(ALT) communities and the materiel enterprise. Optimize cybersecurity as a critical enabler of capability delivery. Facilitate and ensure execution of cyber-related	3.592	3.594	3.677

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B. Accomplishments/Planned Programs ($ in Millions)	FY 2020	FY 2021	FY 2022
tasks and efforts by appropriate ASA(ALT) organizations. Represent and advocate for ASA(ALT) cyberspace equities in external governance bodies, senior leader forums, and partner engagements. Shape cyberspace policy, directives and orders that may impact acquisition. Deliver systemic and crosscutting value to PMs executing cyber-related missions. Army Futures Command (AFC). Engage AFC to institutionalize support for ASA(ALT) Cyber Discipline in order to begin system survivability and cyber resilience efforts early in the acquisition lifecycle. Principal Cyber Adviser (PCA) to the AAE: Provide the AAE with subject matter expertise on acquisition interests related to cyberspace. Topics include the development of decisive cyberspace systems, the survivability/resilience of cyber-dependent systems, the evolution of pre-acquisition cyberspace requirements / capability development, and the continued use of systems throughout Operations & Support. Advise emerging developments and policies in cyberspace from joint, interagency, and coalition partners. Monitor and advise relevant threats to Army systems, and develop mitigation roadmaps as required. Principal ASA(ALT) cyber representative for coordination across government agencies, industry, and academia. ASA(ALT) Chief Information Security Officer (CISO). Lead, plan, integrate and synchronize cybersecurity efforts across ASA(ALT) including PEOs and headquarters. Lead the ASA(ALT) CIO/CISO Council in order to identify crosscutting issues and opportunities from across the PEOs requiring ASA(ALT) senior leader attention. Represent ASA(ALT) cybersecurity equities in external stakeholder forums (e.g. Army Cyberspace Council, Army Enterprise Network Council, CIO Executive Board). Review and shape all cyberspace related strategies, policies, and orders affecting ASA(ALT) from OSD, HQDA, and ARCYBER; and elevate issues to the ASA/PDEP/MDEP as needed. Synchronize architectures between enterprise and acquisition systems. Support critical modernization of unsupported software for secure operations. Assist and respond with data call requests, synchronization efforts, and IPRs with DoD CIO, HQDA CIO/G-6, Army Cyber Command (ARCYBER), and the Vice Chief of Staff of the Army (VCSA). Examples: Federal Information Security Modernization Act (FISMA), DoD Cybersecurity Scorecard, Windows / unsupported software migrations, HQDA Execution Orders (EXORD), Army Cyber Command (ARCYBER) Operations Orders (OPORD). Leverage cybersecurity policy as a technology enabler. Fulfill cybersecurity functions mandated by public law, federal directives, and DoD/Army policy. Coordinate, optimize, and monitor RMF execution among PEOs, assist with common issues requiring senior leader attention, and liaise with HQDA CIO/G-6. Ensure appropriate transfer of Enterprise Mission Assurance Support Service (eMASS) records for systems that transitioned to sustainment. Review and approve requirements for Communications Security (COMSEC) materiel. Serve as approval authority for ASA(ALT) HQ eMASS accounts and Army Training & Certification Tracking System (ATCTS) records, as well as for reviewing and approving system transfers to sustainment in the Army Program Management System (APMS). ASA(ALT) Engineering Governance for Cyberspace. Provide engineering governance for emerging cyberspace-related capabilities and advances to include artificial intelligence, cloud-computing governance, DevSecOps, supply chain risk management, etc. Ensure ASA(ALT)?s cyber-related roadmaps align with Army/DoD CIO regarding data, cloud migration, data			

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centers, etc. Analyze requirements and opportunities, and publish ASA(ALT) internal Technical Bulletins and other information papers to inform PMs. Drive definition and implementation of Information Security Architectures from a system-of-systems perspective. As needed, conduct engineering assessments of crosscutting cyber focused architectures, solutions, and capabilities proposed by PORs, CFTs, and RCCTO. ASA(ALT) lead for Cyber Resilience: Coordinate updates to the ASA(ALT) Cyber Discipline Policy and Implementation Guidebook and transition to Army policy. Synchronize ASA(ALT) cyber resilience strategy with DoD CIO, OUSD(A&S), and HQDA CIO/G-6. Coordinate with Army Futures Command to accelerate the delivery of survivable systems by integrating resilience requirements early in capability development. Review Cyber Discipline related artifacts before submission to the MDA in support of milestone decision reviews. Coordinate support with stakeholders from across Army to implement effectively across system lifecycles. Coordinate revisions and adapt to regulation as needed. The ASA(ALT) Cyber Discipline positions the Army to fight and win with agility in a congested and contested cyberspace domain by maximizing survivability and resiliency of Army systems. This policy mandates the need for PMs to integrate threat-driven systems security engineering, to include cyber assessments and mitigations, both early and continuously across system lifecycles. This policy builds upon of the Risk Management Framework (RMF) and can inform compliance decisions. This implementation guide describes the roles and responsibilities for Milestone Decision Authorities (MDA), PEOs, and PMs. This discipline empowers the PM to expend resources and consider cyber resiliency within trade space decisions along with cost, schedule, and performance. Cyber Vulnerability Assessments & Mitigations ? ASA(ALT) Enduring Program: Lead ASA(ALT) effort to institutionalize cyber vulnerability assessments and mitigations over system lifecycles. Plan funding over the Future Year Defense Program and manage distributed execution by the supporting organizations. Coordinate with system owners to integrate funding as part of organic acquisition strategies. Define Terms of Reference with stakeholders across Army. Coordinate all assessment/mitigation reporting to Army, joint and DoD forums. Support prioritization of weapon systems for assessments based on COCOM prioritization. Establish repository of Army lessons learned for mitigations. Synchronize legacy-focused efforts with current efforts to expand cyber assessment and mitigation planning / implementation earlier in the development lifecycle for all acquisition systems, i.e. ASA(ALT) Cyber Discipline. In parallel, lead Cyberspace Operational Resiliency Assessment - Platform (CORA-P) as the Army-supported organization and oversee planning, execution and reporting of overall CORA-P activities. This effort will support weapon system prioritization and assessment by understanding which weapon systems are critical to combatant commanders, and then assessing those systems in an operational environment. Integrate into planning cycle for a currently-schedule COCOM exercise. Conduct multiple CTTX throughout event planning cycle, with iterative feedback to event planners and system owners. Deliver final vulnerability assessment report (VAR) to COCOM			

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and system owners. Integrate CORA-P / CTTX lessons learned into program planning and execution. After baselining this process, conduct multiple assessments throughout the fiscal year. This effort will 1. identify weapon systems (including relevant networks) that are critical to combatant commanders in an operational environment; 2. identify cyberspace vulnerabilities within prioritized weapon systems; 3. identify system-based risk to mission for combatant commanders; and 4. coordinate the mitigation of vulnerabilities with system and network owners. Ultimately, this effort will accelerate the delivery of critical mitigations to the weapon systems designated as critical assets / key terrain in cyberspace by Combatant Commanders. ASA(ALT) lead for System Security Engineering (SSE): Army requires a professional and effective systems security engineering (SSE) workforce, which is separate from information system security management (ISSM) or network defense functions. SSE contributes to a broad-based, holistic security perspective and focus within the systems engineering (SE) discipline. SSE ensures stakeholder protection needs and security concerns are properly identified and addressed in all engineering stages of the system life cycle. Coordinate with OUSD to define the DoD body of knowledge for SSE. Ensure duties align with prescribed training, experience, and certification. Coordinate appointment and implementation, and facilitate collaboration across PEOs through meetings and publications. ASA(ALT) Enterprise Systems: Support the CSE as Authorizing Official (AO) for ASA(ALT) headquarters. Perform the duties of Program Information System Security Management (P-ISSM) to include guiding HQ system owners in achieving Authorizations To Operate (ATO) and then continuously monitoring systems throughout operations. Major Incident Response (as needed): As needed, coordinate ASA(ALT) strategic response for major malware / computer incidents and Command Cyber Operational Readiness Inspections (CCORI). Engage 7th Signal Command as the PEO liaison. Report to HQDA CIO/G-6 and ARCYBER for cybersecurity related requirements and issues. Monitor and coordinate response to the various cybersecurity inspection programs and audit findings related to DoD Inspector General and Army Audit Agency. ***FY 2022 Plans:*** Perform the functions of the Chief Cyber Acquisition Officer (CCAO), ASA(ALT) Chief Information Security Officer (CISO), ASA(ALT) Engineering Governance for Cyberspace (Policy and System-of-Systems Engineering), Army lead for Cyber Operational Resilience Assessments ? Platform (CORA-P), and the Cybersecurity Program lead for ASA(ALT) Headquarters. Lead a coordinated, comprehensive acquisition approach to enhance cyber resiliency and survivability across ASA(ALT)			

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communities and the materiel enterprise. Optimize cybersecurity as a critical enabler of capability delivery. Facilitate and ensure execution of cyber-related tasks and efforts by appropriate ASA(ALT) organizations. Represent and advocate for ASA(ALT) cyberspace equities in external governance bodies, senior leader forums, and partner engagements. Shape cyberspace policy, directives and orders that may impact acquisition. Deliver systemic and crosscutting value to PMs executing cyber-related missions. Army Futures Command (AFC). Engage AFC to institutionalize support for ASA(ALT) Cyber Discipline in order to begin system survivability and cyber resilience efforts early in the acquisition lifecycle. Chief Cyber Acquisition Officer (CCAO): Serve as primary ASA(ALT) staff point of contact for acquisition concerns related to cyberspace. Lead ASA(ALT) response to major cyberspace incidents requiring ASA(ALT) Principal leader awareness. This includes but is not limited to coordinating with PEO staffs at all levels in order to analyze requirements/orders, facilitate guidance, present findings/status, and interface with Army Cyber Command (ARCYBER) and/or other Headquarters, Department of the Army (HQDA) organizations. In accordance with AR 70-75, coordinate Army survivability policy and guidance in Army acquisition efforts related to cyberspace. Represent HQDA on boards and committees concerning materiel survivability matters related to cyberspace. Coordinate and lead an assessment of the ASA(ALT) portfolio to apply a rigorous, systems engineering approach to consider cyber resilience within the Acquisition trade-space (e.g. performance attribute). Identify systemic vulnerabilities and coordinate the development and implementation of enterprise solutions to mitigate those vulnerabilities. Develop and implement a risk-based process to assess the impact of vulnerabilities and assist with prioritization of funding for corrective actions for high-risk vulnerabilities. Coordinate with PEO STRI regarding the certification and implementation of cyber acquisition assessment teams in order to facilitate the reduction of risk across the ASA(ALT) portfolio. Coordinate with PEO staffs on the integration of traditional cybersecurity (risk management framework) and cyber resilience survivability. Coordinate the Cyber Acquisition Task Force to unify strategy and execution of cyber resilience efforts across Army. Synchronize ASA(ALT) cyber resilience strategies with OSD, USCYBERCOM, and joint Service counterparts. Engineering Governance for Cyberspace (Policy): Establish and oversee systems engineering governance that positions the Army to fight and win in a contested cyberspace domain by maximizing survivability and operational resilience of delivered Army acquisition systems. Increase engineering rigor though policies, processes, tools, and technical oversight across systems and systems-of-systems in order to maximize the cyberspace survivability of the Army Acquisition portfolio. Define, publish and revise as needed a standardized Cyber Acquisition Discipline Implementation Assessment for PMs to demonstrate the repeatable implementation of cyber survivability attributes during decision point reviews. Develop and maintain an Implementation Guidebook to improve awareness and consistency of related planning and execution. Support the AAE in reviewing the Cyber Acquisition Discipline Implementation Assessment during decision reviews for all Acquisition Category 1 and 2 programs, as well as MDAs/DAs for other systems as requested. IAW AR-70-75, represent HQDA on boards and committees concerning materiel survivability matters related to cyberspace resilience.			

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Serve as HQDA lead responsible for tracking and monitoring cyberspace remediations (find-fix-verify) as recommended by DODIG. Provide engineering governance for emerging cyberspace-related capabilities and advances to include artificial intelligence, cloud-computing governance, DevSecOps, supply chain risk management, etc. Ensure ASA(ALT)?s cyber-related roadmaps align with Army/DoD CIO regarding data, cloud migration, data centers, etc. Analyze requirements and opportunities, and publish ASA(ALT) internal Technical Bulletins and other information papers to inform PMs. Coordinate with Army Futures Command to establish systems engineering criteria in order to ensure new requirements documents address cyber resilience. Coordinate with Army Materiel Command to establish policy and processes that shall maintain cybersecurity and survivability for programs transitioning to sustainment. Coordinate with HQDA G-3/5/7 to establish the materiel component of the cyber readiness framework as an interface between systems and operations, which requires authoritative and accessible data from the acquisition and sustainment communities to reduce operational risk. Engineering Governance for Cyberspace (SoS Engineering): Establish engineering governance by developing and overseeing the implementation of technical processes and tools. Army is working on an authoritative acquisition lifecycle data and a standardized and automated continuous monitoring (CM) process for Army acquisition vulnerability management that enables timely data-informed decisions for the operation and defense of the DoDIN-A. Develop objective architecture (e.g. data structures, warehouses, interactions, products) and drive implementation of Information Security Architectures from a system-of-systems perspective. As needed, coordinate engineering change request to federate existing Army business processes and systems. Synchronize with Army policy/strategy and with mission system owners. As needed, conduct engineering-assessments of crosscutting cyber focused architectures, solutions, and capabilities proposed by PORs, CFTs, and RCCTO. Army lead for Cyberspace Operational Resiliency Assessment - Platform (CORA-P): Lead CORA-P as the supported organization to oversee the planning, execution, and reporting of all key tasks, in accordance with HQDA EXORD 123-20. CORA-P is an enduring effort to maintain the readiness, survivability, and cyber resilience of Army and Joint Forces, capabilities, and systems by identifying and mitigation cyberspace vulnerabilities in critical systems including relevant portions of the DOD Information Network. Present overall status to the Army Cyberspace Council GOSC. Plan/program funding over the Future Year Defense Program and oversee distributed execution by stakeholders. Develop and distribute Terms of Reference to all stakeholders. Coordinate all reporting to Army, Joint, and DOD forums. Ensure the on-time completion of Cyber Vulnerability Assessment Reports. Pilot emerging cyber resilience efforts (e.g. Cyber Readiness Framework, mitigation mapping techniques, resilience metrics) in future assessments and extrapolate findings and best practices across ASA(ALT) portfolio. ASA(ALT) Chief Information Security Officer (CISO):			

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B. Accomplishments/Planned Programs ($ in Millions)	FY 2020	FY 2021	FY 2022
Lead, plan, integrate and synchronize cybersecurity efforts across ASA(ALT) including PEOs and headquarters. Identify crosscutting issues and opportunities from across the PEOs requiring ASA(ALT) senior leader attention. Represent ASA(ALT) cybersecurity equities in external stakeholder forums (e.g. Army Cyberspace Council, CIO Executive Board). Review and shape all cyberspace related strategies, policies, and orders affecting ASA(ALT) from OSD, HQDA, and ARCYBER; and elevate issues to the Chief Systems Engineer as needed. Synchronize architectures between enterprise and acquisition systems. Support critical modernization of unsupported software for secure operations. Assist and respond with data call requests, synchronization efforts, and IPRs with DoD Chief Information Officer and the HQ G6, ARCYBER, and the Vice Chief of Staff of the Army (VCSA). Examples: Federal Information Security Modernization Act (FISMA), DoD Cybersecurity Scorecard, Windows / unsupported software migrations, HQDA Execution Orders (EXORD), Army Cyber Command (ARCYBER) Operations Orders (OPORD). Leverage cybersecurity policy as a technology enabler. Fulfill cybersecurity functions mandated by public law, federal directives, and DoD/Army policy. Coordinate, optimize, and monitor RMF execution among PEOs, assist with common issues requiring senior leader attention, and liaise with Chief Information Officer and the HQ G6. Ensure appropriate transfer of Enterprise Mission Assurance Support Service (eMASS) records for systems that transitioned to sustainment. Serve as approval authority for ASA(ALT) HQ eMASS accounts and Army Training & Certification Tracking System (ATCTS) records, as well as for reviewing and approving system transfers to sustainment in the Army Program Management System (APMS). OCSE serves as the ASA(ALT) lead for System Security Engineering (SSE). Army requires a professional and effective systems security engineering (SSE) workforce, which is separate from information system security management (ISSM) or network defense functions. SSE contributes to a broad-based, holistic security perspective and focus within the systems engineering (SE) discipline. SSE ensures stakeholder protection needs and security concerns are properly identified and addressed in all engineering stages of the system life cycle. Coordinate with OUSD to define the DoD body of knowledge for SSE. Ensure duties align with prescribed training, experience, and certification. Coordinate appointment and implementation, and facilitate collaboration across PEOs through meetings and publications. Cybersecurity Program for ASA(ALT) HQ: OCSE serves as Program Information System Security Manager (ISSM) for ASA(ALT) HQ, establish and monitor the HQ cybersecurity program that includes cybersecurity objectives and policies, cybersecurity personnel, and cybersecurity processes and procedures. Support the CSE as Authorizing Official (AO) for ASA(ALT) HQ. Function as the primary cybersecurity technical advisor to the AO and managerial lead for RMF throughout the command. Ensure cybersecurity-related events or configuration changes that may impact authorizations or security postures are formally reported to the AO and other stakeholders such as information owners and AOs of interconnected systems. Monitor compliance with cybersecurity policies, as appropriate, and review the results of such monitoring.			
FY 2021 to FY 2022 Increase/Decrease Statement:			

Exhibit R-2A, RDT&E Project Justification: PB 2022 Army		Date: May 2021
Appropriation/Budget Activity 2040 / 5	**R-1 Program Element (Number/Name)** PE 0604798A / *Brigade Analysis, Integration and Evaluation*	**Project (Number/Name)** DY7 / *Army Systems Engineering, Architecture & Analysis*

B. Accomplishments/Planned Programs ($ in Millions)	FY 2020	FY 2021	FY 2022
SETA labor cost increase.			
Title: Facilities and IT Support ***Description:*** Provides funding for infrastructure/facilities and IT support. ***FY 2021 Plans:*** Provide funding for infrastructure/facilities. It includes the costs for purchasing/leasing hardware, software, computers, communications equipment and services. ***FY 2022 Plans:*** Provide funding for infrastructure/facilities. It includes the costs for purchasing/leasing hardware, software, computers, communications equipment and services.	0.097	0.233	0.233
Title: Data ***FY 2022 Plans:*** OCSE represents and coordinates the ASA(ALT) community?s data activities across the Army Modernization Enterprise (AME). OSCE supports the ASA(ALT) Data Steward and performs the duties as the Functional Data Manager in Army Data Governance Forums including the Army Data Board (ADB), Army Analytics Board (AAB) and Joint All Domain Command and Control (JADC2) Working Groups. In addition to representing the ASA(ALT) in Army data forums the OCSE is actively improving the ASA(ALT) data environment through the establishment of governance forums, standards, policies and implementation guides in order to facilitate rapid and relevant acquisition decisions. Continuous maturation of the Acquisition Data Domain (ADD) ensures that technical data is available for successful integration and support of product and program life-cycle requirements, additive and advanced manufacturing, digital engineering, product/technical data, intellectual property management, modular open systems approach and other AME initiatives. OCSE has developed a roadmap for the digital transformation of the ASA(ALT) and has begun executing against that plan through the execution of data analytic use cases which provide minimum viable products (MVP) and delivers incremental value to the AME. OCSE will continue to deliver MVPs for data analytic use cases and as appropriate scale these MVPs across the enterprise in order to transform the ASA(ALT)?s business processes in support of its digital and data centric transformation. OCSE hosts the Product Data and Engineering Working Group (PEWG) which provides a collaboration forum focused on product and technical data with representatives from the ASA(ALT), Army Futures Command (AFC), and Army Materiel Command (AMC). This group includes a collection of product and technical data SMEs that collaborate and synchronize responses to questions related to the technical and product data needs that support modernization requirements across these organizations. PEWG members collaborate to work through details of strategic Army initiatives, and facilitate the transition of technical data throughout the product development lifecycle.	-	-	1.961

Exhibit R-2A, RDT&E Project Justification: PB 2022 Army		Date: May 2021
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B. Accomplishments/Planned Programs ($ in Millions)	FY 2020	FY 2021	FY 2022
The OCSE is the Army?s lead for the implementation of Digital Engineering. OCSE has developed a Vision for Digital Engineering and initiated the development of a Digital Engineering Policy. The OCSE will complete the approval and publication of the Digital Engineering Policy in FY21. Follow-on efforts will include the approval and publication of a Digital Engineering Implementation Guidance aligned with the DoD Digital Engineering Strategy. The OCSE represents the Army in OSD Digital Engineering forums and is the point of contact within the Army for the governance and processes required for the execution of NDAA, DoD, and Army mandates that involve systems and digital engineering. OCSE leads Army interaction with OSD for systems and digital engineering issues, and identifies and advocates for Army equities during the establishment and implementation of DoD policy involving systems engineering. OCSE has been given the responsibility for leading a Digital Thread Operational Integrated Product Team (OIPT) in order to define and develop the requirement for the Digital Thread in support of the Army Modernization Enterprise. This cross-organization team includes representatives from (ASA)ALT HQ, PEOs, AMC, HQDA G4, and AFC. The Digital Thread will provide a means to integrate digital artifacts which link cross organizational efforts in a manner that facilitates traceability from initial concept through a fielded and supported piece of equipment. OCSE is the lead for the Acquisition Community at the Army Modeling and Simulation (M&S) general officer steering committee (GOSC), council of colonels (CoC), and other M&S forums. OCSE provides guidance to PEOs and PMs to plan for the integrated use of M&S throughout the acquisition lifecycle and coordinates M&S activities within the Army Acquisition Community. Additionally, efforts continue to formally establish governance, policies and standards that support systems engineering efforts across the Army Modernization Enterprise. OCSE continues as the primary action office for the duration of the ASA(ALT) migration to Office 365 (O365), as designated by the HQDA G-6. Continue to provide notifications and updates to the ASA(ALT) DASAs and PEO CIOs points of contact to alert them of the proposed requirements and migration schedule to the Microsoft (MS) Teams Impact Level 5 (IL5) environment. The OCSE will continue to update the ASA(ALT) O365 Migration Hub in the MS Teams CVR environment to better coordinate the required migration tasks. ***FY 2021 to FY 2022 Increase/Decrease Statement:*** Emerging OCSE Mission, previous FY 2021/2022 requirements and funding for future early planning effort were embedded in the Army System of Systems Engineering and Analysis line of DY7. The increase reflects the funding for authorized OCSE core positions in Program Element (PE) 0604798A projects, being realigned to support all OCSE requirements in project DY7 moving forward.			
Accomplishments/Planned Programs Subtotals	16.740	17.702	21.534

Exhibit R-2A, RDT&E Project Justification: PB 2022 Army		Date: May 2021
Appropriation/Budget Activity 2040 / 5	**R-1 Program Element (Number/Name)** PE 0604798A / *Brigade Analysis, Integration and Evaluation*	**Project (Number/Name)** DY7 / *Army Systems Engineering, Architecture & Analysis*

C. Other Program Funding Summary ($ in Millions)

Line Item	FY 2020	FY 2021	FY 2022 Base	FY 2022 OCO	FY 2022 Total	FY 2023	FY 2024	FY 2025	FY 2026	Cost To Complete	Total Cost
• DY3: *NIE Test & Evaluation*	6.390	-	-	-	-	-	-	-	-	-	-
• 432612: *Logistic Automation Systems Sustainment*	-	-	-	-	-	-	-	-	-		
• DY5: *Production/Field Coordination for Capability Sets*	0.929	1.035	-	-	-	-	-	-	-	-	-
• 435212: *Other Service Support*	-	-	-	-	-	-	-	-	-		
• DZ6: *Army Integration Management & Coordination*	5.793	-	-	-	-	-	-	-	-	-	-
• B88801: *BCT Emerging Technologies*	19.312	8.491	13.835	-	13.835	-	-	-	-	-	-

Remarks

D. Acquisition Strategy

This project does not have any requirement for direct procurement of hardware or software.

Exhibit R-3, RDT&E Project Cost Analysis: PB 2022 Army			Date: May 2021
Appropriation/Budget Activity 2040 / 5	R-1 Program Element (Number/Name) PE 0604798A / *Brigade Analysis, Integration and Evaluation*	Project (Number/Name) DY7 / *Army Systems Engineering, Architecture & Analysis*	

Management Services ($ in Millions)

Cost Category Item	Contract Method & Type	Performing Activity & Location	Prior Years	FY 2020 Cost	FY 2020 Award Date	FY 2021 Cost	FY 2021 Award Date	FY 2022 Base Cost	FY 2022 Base Award Date	FY 2022 OCO Cost	FY 2022 OCO Award Date	FY 2022 Total Cost	Cost To Complete	Total Cost	Target Value of Contract
FY 2020 SBIR/STTR Transfer	TBD	Various : Various	-	0.330		-		-		-		-	0.000	0.330	-
		Subtotal	-	0.330		-		-		-		-	0.000	0.330	N/A

Product Development ($ in Millions)

Cost Category Item	Contract Method & Type	Performing Activity & Location	Prior Years	FY 2020 Cost	FY 2020 Award Date	FY 2021 Cost	FY 2021 Award Date	FY 2022 Base Cost	FY 2022 Base Award Date	FY 2022 OCO Cost	FY 2022 OCO Award Date	FY 2022 Total Cost	Cost To Complete	Total Cost	Target Value of Contract
Army System of Systems Engineering and Analysis	TBD	TBD : Various	44.603	-		-		-		-		-	0.000	44.603	-
Common Operating Environment (COE)	TBD	TBD : Various	12.969	-		-		-		-		-	0.000	12.969	-
Cyber	TBD	TBD : Various	4.764	-		-		-		-		-	0.000	4.764	-
Army System of System Engineering and Analysis Core Labor	Allot	SoSE&I : Various	11.001	4.746	Nov 2019	5.456	Nov 2019	7.268	Nov 2019	-		7.268	Continuing	Continuing	-
Army System of System Engineering and Analysis Matrix Labor	MIPR	CERDEC : Various	2.395	0.851	Nov 2019	1.742	Nov 2019	2.033	Nov 2019	-		2.033	Continuing	Continuing	-
Army System of System Engineering and Analysis SETA Labor	C/CPFF	TBD : Various	4.116	4.213	Nov 2019	4.825	Nov 2019	5.214	Nov 2019	-		5.214	Continuing	Continuing	-
Army System of System Engineering and Analysis FFRDC Labor	FFRDC	MITRE : Various	7.698	2.738	Nov 2019	2.146	Nov 2019	2.800	Nov 2019	-		2.800	Continuing	Continuing	-
Common Operating Environment (COE) Core Labor	Allot	SoSE&I : Various	1.311	0.117	Nov 2019	0.175	Nov 2019	0.161	Nov 2019	-		0.161	Continuing	Continuing	-
Cyber Core Labor	Allot	SoSE&I : Various	3.053	1.728	Nov 2019	1.718	Nov 2019	2.038	Nov 2019	-		2.038	Continuing	Continuing	-
Cyber Matrix Labor	MIPR	CERDEC : Various	0.691	0.536	Nov 2019	0.418	Nov 2019	0.584	Nov 2019	-		0.584	Continuing	Continuing	-
Cyber SETA Labor	C/CPFF	TBD : Various	0.454	0.391	Nov 2019	0.358	Nov 2019	0.727	Nov 2019	-		0.727	Continuing	Continuing	-
Cyber FFRDC Labor	FFRDC	MITRE : Various	1.136	0.937	Nov 2019	0.704	Nov 2019	0.709	Nov 2019	-		0.709	Continuing	Continuing	-

Exhibit R-3, RDT&E Project Cost Analysis: PB 2022 Army		Date: May 2021
Appropriation/Budget Activity 2040 / 5	**R-1 Program Element (Number/Name)** PE 0604798A / *Brigade Analysis, Integration and Evaluation*	**Project (Number/Name)** DY7 / *Army Systems Engineering, Architecture & Analysis*

Product Development ($ in Millions)

Cost Category Item	Contract Method & Type	Performing Activity & Location	Prior Years	FY 2020 Cost	FY 2020 Award Date	FY 2021 Cost	FY 2021 Award Date	FY 2022 Base Cost	FY 2022 Base Award Date	FY 2022 OCO Cost	FY 2022 OCO Award Date	FY 2022 Total Cost	Cost To Complete	Total Cost	Target Value of Contract
FY 2019 SBIR / STTR Transfer	TBD	Various : None	0.339	-		-		-		-		-	0.000	0.339	-
		Subtotal	94.530	16.257		17.542		21.534		-		21.534	Continuing	Continuing	N/A

Remarks

Note: 1
- Program Activities performed at Aberdeen Proving Ground (MD), Taylor Bldg, (Crystal City, VA), Pentagon, (Washington DC), TACOM (Warren, MI)

Support ($ in Millions)

Cost Category Item	Contract Method & Type	Performing Activity & Location	Prior Years	FY 2020 Cost	FY 2020 Award Date	FY 2021 Cost	FY 2021 Award Date	FY 2022 Base Cost	FY 2022 Base Award Date	FY 2022 OCO Cost	FY 2022 OCO Award Date	FY 2022 Total Cost	Cost To Complete	Total Cost	Target Value of Contract
Facilities and IT Support	TBD	Various: Note: 1 : TBD	4.389	0.153	Nov 2019	0.160	Nov 2019	-		-		-	0.000	4.702	-
		Subtotal	4.389	0.153		0.160		-		-		-	0.000	4.702	N/A

Remarks

Note:1
- Program Activities performed at Aberdeen Proving Ground (MD), Taylor Bldg, (Crystal City, VA), Pentagon, (Washington DC), TACOM (Warren, MI)

	Prior Years	FY 2020		FY 2021		FY 2022 Base		FY 2022 OCO		FY 2022 Total	Cost To Complete	Total Cost	Target Value of Contract
Project Cost Totals	98.919	16.740		17.702		21.534		-		21.534	Continuing	Continuing	N/A

Remarks

Exhibit R-4, RDT&E Schedule Profile: PB 2022 Army		Date: May 2021
Appropriation/Budget Activity 2040 / 5	**R-1 Program Element (Number/Name)** PE 0604798A / *Brigade Analysis, Integration and Evaluation*	**Project (Number/Name)** DY7 / *Army Systems Engineering, Architecture & Analysis*

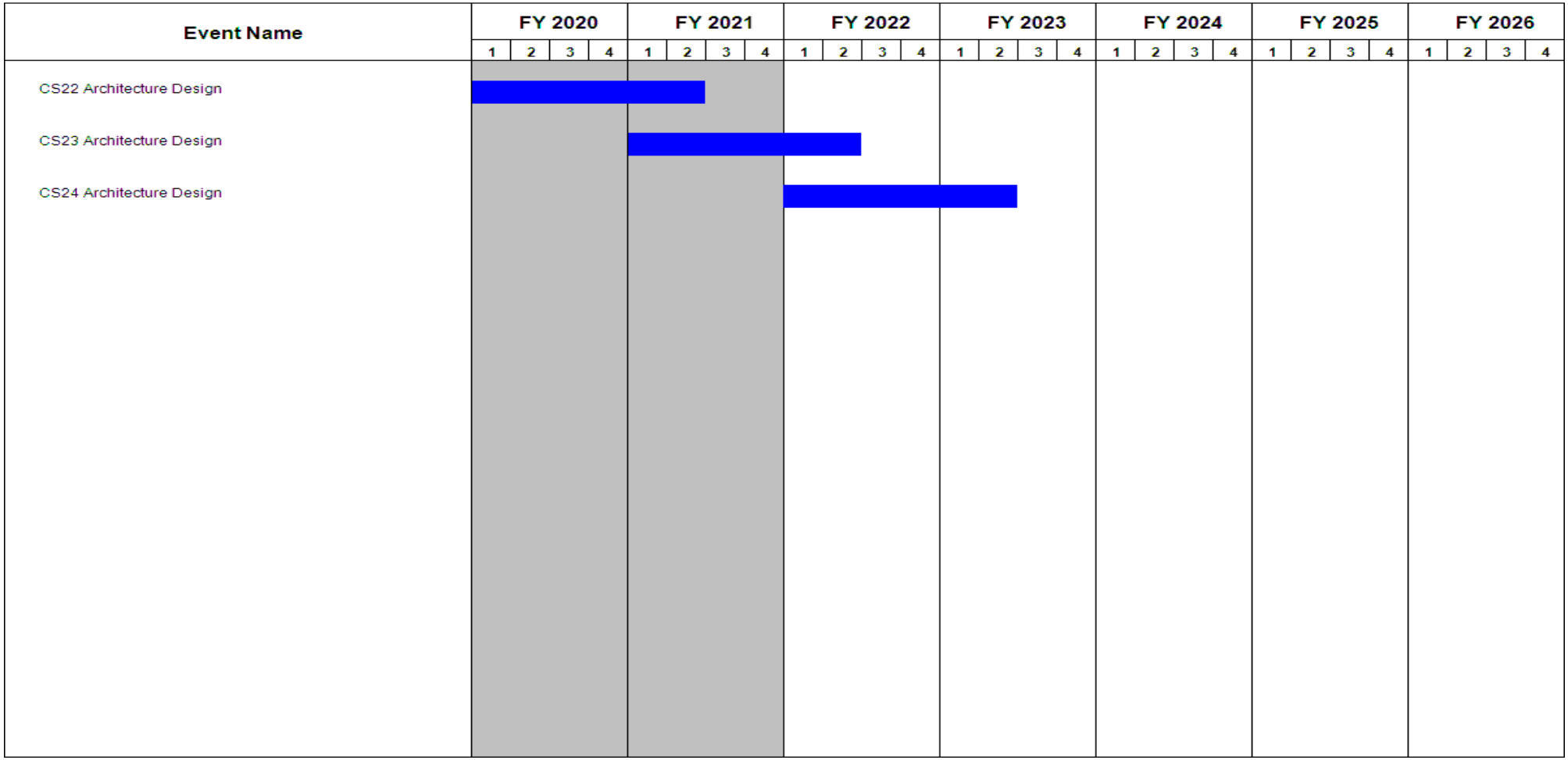

Exhibit R-4A, RDT&E Schedule Details: PB 2022 Army		Date: May 2021
Appropriation/Budget Activity 2040 / 5	**R-1 Program Element (Number/Name)** PE 0604798A / *Brigade Analysis, Integration and Evaluation*	**Project (Number/Name)** DY7 / *Army Systems Engineering, Architecture & Analysis*

Schedule Details

	Start		End	
Events	**Quarter**	**Year**	**Quarter**	**Year**
CS22 Architecture Design	1	2020	2	2021
CS23 Architecture Design	1	2021	2	2022
CS24 Architecture Design	1	2022	2	2023
COE V3.0 CPCE/MCE CDR	1	2018	1	2018

Note

Capability Set (CS)

Common Operating Environment (COE):
Army Interoperability Certification (AIC), Command Post Computing Environment (CPCE), Critical Design Review (CDR), Mounted Computing Environment (MCE), Network Integration Evaluation (NIE), Operational Test (OT)

Exhibit R-2A, RDT&E Project Justification: PB 2022 Army			Date: May 2021
Appropriation/Budget Activity 2040 / 5	R-1 Program Element (Number/Name) PE 0604798A / *Brigade Analysis, Integration and Evaluation*	Project (Number/Name) DZ6 / *Army Integration Management & Coordination*	

COST ($ in Millions)	Prior Years	FY 2020	FY 2021	FY 2022 Base	FY 2022 OCO	FY 2022 Total	FY 2023	FY 2024	FY 2025	FY 2026	Cost To Complete	Total Cost
DZ6: *Army Integration Management & Coordination*	-	5.793	-	-	-	-	-	-	-	-	-	-
Quantity of RDT&E Articles	-	-	-	-	-	-	-	-	-	-		

A. Mission Description and Budget Item Justification

This project funds resources that support the technical and management (i.e. headquarters, resource management, acquisition, human resources, and operations) aspects of the Army Rapid Capabilities and Critical Technologies Office (RCCTO). Effectively utilizing these resources reduces overall cost to the program. All core RCCTO personnel costs will be funded out of this project.

This project was realigned to PE 0605054A (Emerging Technologies Initiatives) in FY 2021.

B. Accomplishments/Planned Programs ($ in Millions)	FY 2020	FY 2021	FY 2022
Title: Program Management and Integration	5.793	-	-
Description: This effort funds resources that support the Army Rapid Capabilities and Critical Technologies Office (RCCTO).			
Accomplishments/Planned Programs Subtotals	5.793	-	-

C. Other Program Funding Summary ($ in Millions)

Line Item	FY 2020	FY 2021	FY 2022 Base	FY 2022 OCO	FY 2022 Total	FY 2023	FY 2024	FY 2025	FY 2026	Cost To Complete	Total Cost
• DY3: *NIE Test & Evaluation*	6.390	-	-	-	-	-	-	-	-	-	-
• DY5: *Production/Field Coordination for Capability Sets*	0.929	1.035	-	-	-	-	-	-	-	-	-
• DY7: *Army Systems Engineering, Architecture & Analysis*	16.740	17.702	21.534	-	21.534	-	-	-	-	-	-

Remarks

D. Acquisition Strategy

This project does not have any requirement for direct procurement of hardware or software.

Exhibit R-3, RDT&E Project Cost Analysis: PB 2022 Army			Date: May 2021
Appropriation/Budget Activity 2040 / 5	R-1 Program Element (Number/Name) PE 0604798A / *Brigade Analysis, Integration and Evaluation*	Project (Number/Name) DZ6 / *Army Integration Management & Coordination*	

Management Services ($ in Millions)

Cost Category Item	Contract Method & Type	Performing Activity & Location	Prior Years	FY 2020 Cost	FY 2020 Award Date	FY 2021 Cost	FY 2021 Award Date	FY 2022 Base Cost	FY 2022 Base Award Date	FY 2022 OCO Cost	FY 2022 OCO Award Date	FY 2022 Total Cost	Cost To Complete	Total Cost	Target Value of Contract
FY 2020 SBIR/STTR Transfer	TBD	Various : Various	-	0.026		-		-		-		-	0.000	0.026	-
		Subtotal	-	0.026		-		-		-		-	0.000	0.026	N/A

Product Development ($ in Millions)

Cost Category Item	Contract Method & Type	Performing Activity & Location	Prior Years	FY 2020 Cost	FY 2020 Award Date	FY 2021 Cost	FY 2021 Award Date	FY 2022 Base Cost	FY 2022 Base Award Date	FY 2022 OCO Cost	FY 2022 OCO Award Date	FY 2022 Total Cost	Cost To Complete	Total Cost	Target Value of Contract
SoSE&I Program Management and Integration	TBD	Various Note: 1 : TBD	54.276	5.767	Nov 2019	-		-		-		-	Continuing	Continuing	Continuing
FY 2019 SBIR / STTR Transfer	TBD	Various : None	0.078	-		-		-		-		-	0.000	0.078	-
		Subtotal	54.354	5.767		-		-		-		-	Continuing	Continuing	N/A

Remarks

Note: 1
- Program Activities performed at Aberdeen Proving Ground (MD), TACOM (Warren MI), Taylor Bldg, (Crystal City, VA), Pentagon, (Washington DC).

Support ($ in Millions)

Cost Category Item	Contract Method & Type	Performing Activity & Location	Prior Years	FY 2020 Cost	FY 2020 Award Date	FY 2021 Cost	FY 2021 Award Date	FY 2022 Base Cost	FY 2022 Base Award Date	FY 2022 OCO Cost	FY 2022 OCO Award Date	FY 2022 Total Cost	Cost To Complete	Total Cost	Target Value of Contract
Facilities and IT Support	TBD	Various Note: 1 : TBD	5.298	-		-		-		-		-	Continuing	Continuing	Continuing
		Subtotal	5.298	-		-		-		-		-	Continuing	Continuing	N/A

Remarks

Note:1
- Program Activities performed at Aberdeen Proving Ground (MD), TACOM (Warren MI), Taylor Bldg, (Crystal City, VA), Pentagon, (Washington DC), FT Bliss (TX), White Sands Missile Range (NM).

Exhibit R-3, RDT&E Project Cost Analysis: PB 2022 Army			Date: May 2021
Appropriation/Budget Activity 2040 / 5	R-1 Program Element (Number/Name) PE 0604798A / *Brigade Analysis, Integration and Evaluation*	Project (Number/Name) DZ6 / *Army Integration Management & Coordination*	

	Prior Years	FY 2020		FY 2021		FY 2022 Base		FY 2022 OCO		FY 2022 Total	Cost To Complete	Total Cost	Target Value of Contract
Project Cost Totals	59.652	5.793		0.000		-		-		-	Continuing	Continuing	N/A

Remarks

Exhibit R-4, RDT&E Schedule Profile: PB 2022 Army		Date: May 2021
Appropriation/Budget Activity 2040 / 5	**R-1 Program Element (Number/Name)** PE 0604798A / *Brigade Analysis, Integration and Evaluation*	**Project (Number/Name)** DZ6 / *Army Integration Management & Coordination*

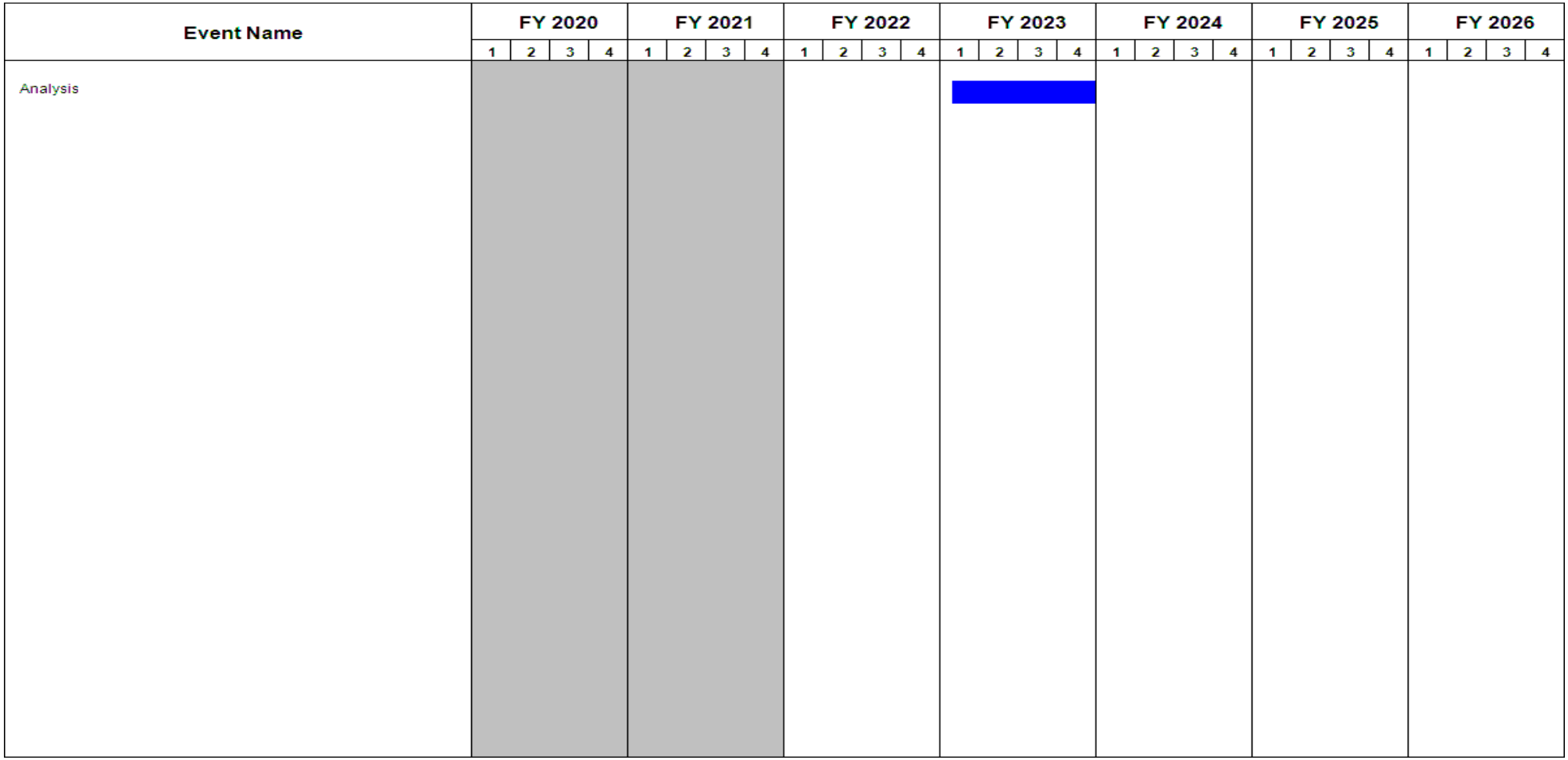

Exhibit R-4A, RDT&E Schedule Details: PB 2022 Army		Date: May 2021
Appropriation/Budget Activity 2040 / 5	**R-1 Program Element (Number/Name)** PE 0604798A / *Brigade Analysis, Integration and Evaluation*	**Project (Number/Name)** DZ6 / *Army Integration Management & Coordination*

Schedule Details

	Start		End	
Events	**Quarter**	**Year**	**Quarter**	**Year**
Analysis	1	2023	4	2023