Exhibit R-2, RDT&E Budget Item Justification: PB 2025 Defense Information Systems Agency	Date: March 2024
Appropriation/Budget Activity 0400: *Research, Development, Test & Evaluation, Defense-Wide* / BA 7: *Operational Systems Development*	**R-1 Program Element (Number/Name)** PE 0302019K / *Defense Info. Infrastructure Engineering and Integration*

COST ($ in Millions)	Prior Years	FY 2023	FY 2024	FY 2025 Base	FY 2025 OCO	FY 2025 Total	FY 2026	FY 2027	FY 2028	FY 2029	Cost To Complete	Total Cost
Total Program Element	224.734	18.652	19.299	12.843	-	12.843	16.686	13.689	13.908	14.186	Continuing	Continuing
E65: *Modeling and Simulation and Enterprise Architecture*	123.894	3.812	4.190	4.298	-	4.298	4.402	4.495	4.584	4.676	Continuing	Continuing
T62: *DoD Information Network (DODIN) Systems Engineering and Support*	100.840	14.840	15.109	8.545	-	8.545	12.284	9.194	9.324	9.510	Continuing	Continuing

A. Mission Description and Budget Item Justification

The Defense Information Infrastructure Engineering and Integration effort encompasses two projects, the DoD Information Network (DoDIN) Systems Engineering Support and Modeling and Simulation End-to-End (E2E) Architecture.

• Modeling and Simulation and End-to-End (E2E) Architecture:
Within the Modeling and Simulation End-to-End Architecture project, there are two major activities: Modeling and Simulation and Enterprise Architecture.

• Modeling and Simulation
The Modeling and Simulation activity provides systems engineering and E2E analytical functions for DISA and its customers, ensuring integrated capabilities fulfill warfighter mission requirements. Ongoing beneficiaries of these network modeling, simulation, and analysis capabilities include:

Services and Regional Combatant Commands (COCOMs): Receive modeling analyses and recommendations for architecture changes such as circuit rerouting due to Military Construction and planning for additional sites and the increased capacity for the Pacific theater.
DoD CIO and Services: Receive modeling projections for the utilization of new classified desktop and mobility services to be migrated to cloud environments.
DoD agencies: Receive training and support on the Joint Communications Simulation System, which is the system used to model network and applications.

Additional activity resolves near term (one to three years) high-priority technical issues, as defined by DoD CIO and DISA, that impact operational capabilities, affecting DoDIN E2E interoperability and performance. For example, resolution of poor M365 Teams performance or planning for new high bandwidth routers. Additional activities include development and testing of models to simulate planned changes to enterprise services, to include migrating DISA enterprise services to cloud architectures, adding capacity to support new Fourth Estate customers, and completing network changes to support enhanced security.

• End-to-End (E2E) Architecture
The E2E Architecture effort establishes Enterprise Architecture (EA) development standards, documents and generates needed IT architecture artifacts to provide E2E interoperability and performance analysis, and systems engineering support for architecture evolution across DISA. DISA works with its customers to ensure integrated

capabilities can fulfill warfighter mission requirements and continuously revise these Enterprise Architectures to meets the needs of the department. Some of the ongoing EA activities and projects include the follow areas:

- Develop EA development framework, EA taxonomy and associated templates to support agency-wide DoD Architecture Framework (DoDAF)-based architecture development and model-based systems engineering (MBSE) requirements in a standardized, effective way to meet the program and agency mission needs.
- Help agency develop enterprise level architectures to support the agency's mission critical and high priority projects. Examples of work include the development of the DISA Zero Trust Reference Design (ZTRD) architecture; DISA enterprise Privileged Access Management (PAM) solution architecture development and AoA analysis; DOD 5G architecture documentation, DISA Robotics Process Automation (RPA) architecture; DISA DISN Out-of-band (OOB) Management Network architecture and AoA, and other emerging requirements from the agency senior leaders.
- Develop capabilities and automated tools to support E2E architecture assessment and analysis in support of data-driven decisions. Examples of activities include developing automated cybersecurity assessments, architecture assessments for future architectures (e.g. SIPR 2.0), and DISA Common Enterprise Service (CES) analysis and recommendations study.

• DoD Information Network Systems Engineering Support:

The DoDIN Systems Engineering and Support project performs research, development, and experimentation of emerging technologies to fill capability shortfalls and technology gaps. Through conducting Technical Exchange Meetings (TEM) with other DoD components, Program Management Offices, and Technical Directors, DISA identifies gaps and shortfalls, pursues innovative solutions, and engages industry for commercial best practices. The DoDIN Systems Engineering and Support project supports technical system engineering reviews for enterprise products and services and resolves gaps related to Machine Learning/Artificial Intelligence (AI), Classified and Unclassified mobile access, Quantum Resistant Cryptography (the cryptography used to authenticate and secure data-in-transit that is susceptible to attacks), Enterprise Architecture development, Cyber Defense, and other technologies.

B. Program Change Summary ($ in Millions)	FY 2023	FY 2024	FY 2025 Base	FY 2025 OCO	FY 2025 Total
Previous President's Budget	19.145	19.299	19.698	-	19.698
Current President's Budget	18.652	19.299	12.843	-	12.843
Total Adjustments	-0.493	0.000	-6.855	-	-6.855
• Congressional General Reductions	-	-			
• Congressional Directed Reductions	-	-			
• Congressional Rescissions	-	-			
• Congressional Adds	-	-			
• Congressional Directed Transfers	-	-			
• Reprogrammings	-	-			
• SBIR/STTR Transfer	-0.493	-			
• Adjustment	0.000	-	-6.855	-	-6.855

Change Summary Explanation

The decrease of -$0.493 in FY 2023 is due to the Small Business Innovation Research (SBIR) / Small Business Technology Transfer (STTR)

Exhibit R-2, RDT&E Budget Item Justification: PB 2025 Defense Information Systems Agency	Date: March 2024
Appropriation/Budget Activity 0400: *Research, Development, Test & Evaluation, Defense-Wide I* BA 7: *Operational Systems Development*	**R-1 Program Element (Number/Name)** PE 0302019K *I Defense Info. Infrastructure Engineering and Integration*

The decrease of -$6.855 in FY 2025 is primarily due to the conversion of 33 RDT&E positions to O&M positions. The converted positions include computer scientists, interdisciplinary and electrical engineers, and IT specialists, whose primary focus is on architectures, technical standards, and concept and requirements evaluation support for the Emerging Technology. Additionally, savings realized in the commercial solution for Quantum Resistant Cryptography Crypto Discovery in the Emerging and Commercial Technologies program contributed to the decrease.

Exhibit R-2A, RDT&E Project Justification: PB 2025 Defense Information Systems Agency			Date: March 2024
Appropriation/Budget Activity 0400 / 7	R-1 Program Element (Number/Name) PE 0302019K / *Defense Info. Infrastructure Engineering and Integration*	Project (Number/Name) E65 / *Modeling and Simulation and Enterprise Architecture*	

COST ($ in Millions)	Prior Years	FY 2023	FY 2024	FY 2025 Base	FY 2025 OCO	FY 2025 Total	FY 2026	FY 2027	FY 2028	FY 2029	Cost To Complete	Total Cost
E65: *Modeling and Simulation and Enterprise Architecture*	123.894	3.812	4.190	4.298	-	4.298	4.402	4.495	4.584	4.676	Continuing	Continuing
Quantity of RDT&E Articles	-	-	-	-	-	-	-	-	-	-		

A. Mission Description and Budget Item Justification

The Modeling and Simulation activity provides architecture, systems engineering, and E2E analytical functions for DISA and its customers, ensuring integrated capabilities fulfill warfighter mission requirements. Modeling and Simulation activities support the DoD communications planning and investment strategy, to include application performance assessments, contingency planning, network capacity planning and diagnostics, and systems-level modeling and simulation.

Efforts provide information awareness for Combatant Commands through application solutions for integrated networks, including DoD's missions and the Defense Information Systems Network (DISN), by:
1. Supporting the development and implementation of DoDIN EWSE processes essential to evolving the DoDIN, enabling interoperability, and improving E2E performance for critical DoDIN programs.
2. Developing standardized systems analyses and integration processes to improve integration across DISA for all DISA-developed communication systems and services to avoid interoperability issues.
3. Providing underlying modeling, simulation, and analytical support for E2E systems engineering and assessment.

The Architecture effort provides interoperability, performance analysis, and systems engineering support for architecture evolution across DISA. DISA works with its customers to ensure integrated capabilities can fulfill warfighter mission requirements and continuously revise these Enterprise Architectures to meet the needs of the department.

B. Accomplishments/Planned Programs ($ in Millions)	FY 2023	FY 2024	FY 2025
Title: Modeling and Simulation - Capability Development, Test, and Evaluation	2.269	1.785	1.929
Description: This effort is to update modeling and simulation tools to support evaluation of combined Internet Protocol (IP) and optical infrastructure, multiple software defined wide area network interconnectivity, and Next Generation Networking. The Next Generation Networking includes zero-trust architectures and encrypted Gray networks, which provide users access to the classified networks without having the full classified kit based on National Security Agency (NSA) capabilities.			
FY 2024 Plans: Conduct development and implementation of modeling and simulation suites and optimize for supporting Next Generation architectures and applications. • Conduct modeling analyses and recommendations for architecture changes			

Exhibit R-2A, RDT&E Project Justification: PB 2025 Defense Information Systems Agency		Date: March 2024
Appropriation/Budget Activity 0400 / 7	**R-1 Program Element (Number/Name)** PE 0302019K / *Defense Info. Infrastructure Engineering and Integration*	**Project (Number/Name)** E65 / *Modeling and Simulation and Enterprise Architecture*

B. Accomplishments/Planned Programs ($ in Millions)	FY 2023	FY 2024	FY 2025
• Conduct modeling projections for the utilization of new classified desktop and mobility services to be migrated to cloud environments • Conduct modeling projections for integration impacts of zero trust technologies within the existing infrastructure • Conduct training and support on the Joint Communications Simulation System ***FY 2025 Plans:*** Continue development and implementation of modeling and simulation suites and optimize for supporting Next Generation architectures and applications. • Continue modeling analyses and recommendations for architecture changes. • Continue modeling projections for the utilization of new classified desktop and mobility services to be migrated to cloud environments. • Continue modeling projections for integration impacts of zero trust technologies within the existing infrastructure • Conduct training and support on the Joint Communications Simulation System • Conduct Test and evaluation of network performance monitoring and data collection tools for IPV6 capabilities to support modeling of future network architectures. • Support combined IP and optical infrastructure, multiple software defined wide area network interconnectivity, Next Generation Networking including encrypted Gray networks, and zero trust architectures. ***FY 2024 to FY 2025 Increase/Decrease Statement:*** The increase of +$0.144 from FY 2024 to FY 2025 supports augmented modeling and simulation effort for the combined IP and optical infrastructure, multiple software defined wide area network interconnectivity, Next Generation Networking including encrypted Gray networks, and zero trust architectures.			
Title: Modeling and Simulation - Model Development for Entire Network Path ***Description:*** Develop scenario-based models to support new systems and applications. ***FY 2024 Plans:*** Key activities in FY 2024 include: • Developing capabilities for analysis of software defined networking (SDN), which is an approach to networking that uses software-based controllers to communicate with underlying hardware infrastructure to direct network traffic. • Performing test and evaluation of DISN Internet Access Point security solutions, which provide wireless area networks to extend coverage and increase the number of users that can connect. • Researching technologies and solutions that can be transitioned to operations and demonstrate feasibility through solutions analysis and proof-of-concept development and testing. • Developing application performance monitoring to support reliable operation of enterprise services and applications. This	0.000	0.724	0.651

Exhibit R-2A, RDT&E Project Justification: PB 2025 Defense Information Systems Agency		Date: March 2024
Appropriation/Budget Activity 0400 / 7	**R-1 Program Element (Number/Name)** PE 0302019K / *Defense Info. Infrastructure Engineering and Integration*	**Project (Number/Name)** E65 / *Modeling and Simulation and Enterprise Architecture*

B. Accomplishments/Planned Programs ($ in Millions)	FY 2023	FY 2024	FY 2025
will include expanding monitoring of enterprise applications to improve modeling results and end user performance. ***FY 2025 Plans:*** • Developing and applying application and services performance monitoring approaches of end-to-end operations as the Agency expands the use of impact level 5 and level 6 (IL5 and IL6) cloud services offerings. • Leveraging knowledge gained in performance monitoring to improve modeling outcomes to better assess impact potential capability delivery or change on end user performance experience. • Researching capabilities to provide multi-level network modeling and simulation across optical, satellite, network backbone, and multi-cloud services. • Continuing to develop capabilities for modeling, simulation and analysis of software defined networking (SDN), which is an approach to networking that uses software-based controllers to communication with underlying hardware infrastructure to direct network traffic. • Researching technology and solutions to better model, simulate and assess the integration impact of insertion of Zero Trust technologies across the DISN and DISA service offerings. ***FY 2024 to FY 2025 Increase/Decrease Statement:*** The decrease of $-0.073 from FY 2024 to FY 2025 is due to a reduction in the development activities for the scenario based network modeling.			
Title: End-to-End (E2E) Architecture	1.543	1.681	1.718
Description: The E2E Architecture effort establishes Enterprise Architecture (EA) development standards, documents and generates needed IT architecture artifacts to provide E2E interoperability and performance analysis, and systems engineering support for architecture evolution across DISA. DISA works with its customers to ensure integrated capabilities can fulfill warfighter mission requirements and continuously revise these Enterprise Architectures to meets the needs of the department. Some of the ongoing EA activities and projects include the follow areas: - Develop EA development framework, EA taxonomy and associated templates to support agency-wide DoDAF-based architecture development and model-based systems engineering (MBSE) requirements in a standardized, effective way to meet the program and agency mission needs. - Help agency develop enterprise level architectures to support the agency's mission critical and high priority projects. Examples of work include the development of the DISA Zero Trust Reference Design (ZTRD) architecture; DISA enterprise Privileged Access Management (PAM) solution architecture development and AoA analysis; DOD 5G architecture documentation, DISA RPA architecture; DISA DISN Out-of-band (OOB) Management Network architecture and AoA, and other emerging requirements from the agency senior leaders.			

Exhibit R-2A, RDT&E Project Justification: PB 2025 Defense Information Systems Agency		Date: March 2024
Appropriation/Budget Activity 0400 / 7	**R-1 Program Element (Number/Name)** PE 0302019K / *Defense Info. Infrastructure Engineering and Integration*	**Project (Number/Name)** E65 / *Modeling and Simulation and Enterprise Architecture*

B. Accomplishments/Planned Programs ($ in Millions)	FY 2023	FY 2024	FY 2025
- Develop capabilities and automated tools to support E2E architecture assessment and analysis in support of data-driven decisions. Examples of activities include developing automated cybersecurity assessments, architecture assessments for future architectures (e.g. SIPR 2.0), and DISA Common Enterprise Service (CES) analysis and recommendations study. ***FY 2024 Plans:*** Key activities in FY 2024 include: • Continuing architecture development for DISA innovation and digital transformation projects such as Zero-Trust Architecture (ZTA). In FY 2024 a detailed design of the ZTA will be developed, building on the initial design completed in FY 2023. • Continuing development and maintenance of DODAF-based E2E IT engineering architectures and artifacts for emerging DISA enterprise solution architectures. Specific solution architectures targeted for FY 2024 are the DISA Management Network (DMN) architecture and the DISA Privileged Access (PAM) architecture. ***FY 2025 Plans:*** Key activities in FY 2025 include: • Developing the 5G Reference Architecture that will include topics such as the integration/interface of 5G technologies with Thunderdome/Zero-Trust • Providing enterprise architectural support for SIPR Modernization in order to help define and focus investment choices for critical IA requirements. ***FY 2024 to FY 2025 Increase/Decrease Statement:*** The increase of +$0.037 from FY 2024 to FY 2025 is due to inflationary adjustment/price growth.			
Accomplishments/Planned Programs Subtotals	3.812	4.190	4.298

C. Other Program Funding Summary ($ in Millions)

Line Item	FY 2023	FY 2024	FY 2025 Base	FY 2025 OCO	FY 2025 Total	FY 2026	FY 2027	FY 2028	FY 2029	Cost To Complete	Total Cost
• PE 0302019K: *Operation & Maintenance, Defense-Wide*	-	-	-	-	-	-	-	-	-		

Remarks

D. Acquisition Strategy

Enterprise Wide Systems Engineering (EWSE) uses contractors to assist/supplement the Government lead/team for technical activities. Subject matter experts in both large and small businesses are sought for the engineering support. Firm fixed price contracts with one option year are typically used in open competition. Furthermore, technical work with Federally Funded Research and Development Centers (FFRDCs) such as MITRE and MIT Lincoln Lab are established and coordinated when the Government can leverage their expertise and R&D in the key technology.

Exhibit R-2A, RDT&E Project Justification: PB 2025 Defense Information Systems Agency		Date: March 2024
Appropriation/Budget Activity 0400 / 7	**R-1 Program Element (Number/Name)** PE 0302019K / *Defense Info. Infrastructure Engineering and Integration*	**Project (Number/Name)** E65 / *Modeling and Simulation and Enterprise Architecture*

Modeling and Simulation uses a range of contractors for modeling support to the various projects. Contractors range from small to large business, predominantly using open competition methods and Firm Fixed Price (FFP) tasks and utilizing multi-year (base plus option years) contracts where possible. Support includes network modeling tool and processes development to adapt to ever-evolving DoD programs and projects, analyses, capacity planning, and network redesign using the models. Some specific support (e.g., integration with proprietary software) will require contracting with OPNET (e.g., sole source). Federally Funded Research and Development Centers (FFRDCs) are also considered depending upon the task.

Exhibit R-3, RDT&E Project Cost Analysis: PB 2025 Defense Information Systems Agency			Date: March 2024
Appropriation/Budget Activity 0400 / 7	**R-1 Program Element (Number/Name)** PE 0302019K / *Defense Info. Infrastructure Engineering and Integration*	**Project (Number/Name)** E65 / *Modeling and Simulation and Enterprise Architecture*	

Product Development ($ in Millions)

Cost Category Item	Contract Method & Type	Performing Activity & Location	Prior Years	FY 2023 Cost	FY 2023 Award Date	FY 2024 Cost	FY 2024 Award Date	FY 2025 Base Cost	FY 2025 Base Award Date	FY 2025 OCO Cost	FY 2025 OCO Award Date	FY 2025 Total Cost	Cost To Complete	Total Cost	Target Value of Contract
Product Development 1	SS/FFP	OPNET Tech, Inc : Bethesda, MD	11.949	0.276	Feb 2023	0.276	Jun 2024	0.276	Jun 2025	-		0.276	Continuing	Continuing	Continuing
Product Development 2	C/CPFF	APPTIS : Chantilly, VA	5.246	0.187	Feb 2023	-		-		-		-	Continuing	Continuing	Continuing
Product Development 3	SS/FFP	Falls Church, VA : Falls Church, VA	1.312	-		-		-		-		-	0.000	1.312	-
Product Development 4	C/FFP	Booz Allen, Hamilton : McLean, VA	6.797	0.250	Feb 2023	0.698	Jun 2024	0.698	Jun 2025	-		0.698	Continuing	Continuing	Continuing
Product Development 5	C/FFP	NRL : Washington, DC	0.100	-		-		-		-		-	0.000	0.100	-
Product Development 6	C/CPFF	Soliel, LLC : Reston, VA	3.862	-		-		-		-		-	0.000	3.862	-
Product Development 7	C/FFP	COMPTEL : Arlington, VA	2.805	-		-		-		-		-	0.000	2.805	-
Product Development 8	C/CPFF	COMPTEL : Arlington, VA	0.926	-		-		-		-		-	0.000	0.926	-
Product Development 9	C/CPFF	MIT Lincoln Labs : Cambridge, MA	13.299	-		-		-		-		-	0.000	13.299	-
Product Development 10	MIPR	Various : Various	11.144	-		-		-		-		-	0.000	11.144	-
Enterprise Wide Systems Engineering 11	C/FFP	Northrop Grumman : Fairfax, VA	1.784	-		-		-		-		-	0.000	1.784	-
Clear Sky Pilot	C/CPFF	AFRL Terremark : Various	24.083	-		-		-		-		-	0.000	24.083	-
Narus	C/CPFF	AFRL : Rome, NY	1.450	-		-		-		-		-	0.000	1.450	-
Cyber Accelerator	C/CPFF	DTIC : Alexandria, VA	7.516	-		-		-		-		-	0.000	7.516	-
Commercial Integration Demonstration	C/CPFF	DTIC : Alexandria, VA	2.750	-		-		-		-		-	0.000	2.750	-
Web Content Filtering: Perimeter Defense Integration	C/FFP	Oberon Associates : Ft. Meade, MD	1.854	-		-		-		-		-	0.000	1.854	-

Exhibit R-3, RDT&E Project Cost Analysis: PB 2025 Defense Information Systems Agency			Date: March 2024
Appropriation/Budget Activity 0400 / 7	**R-1 Program Element (Number/Name)** PE 0302019K / *Defense Info. Infrastructure Engineering and Integration*	**Project (Number/Name)** E65 / *Modeling and Simulation and Enterprise Architecture*	

Product Development ($ in Millions)

Cost Category Item	Contract Method & Type	Performing Activity & Location	Prior Years	FY 2023 Cost	FY 2023 Award Date	FY 2024 Cost	FY 2024 Award Date	FY 2025 Base Cost	FY 2025 Base Award Date	FY 2025 OCO Cost	FY 2025 OCO Award Date	FY 2025 Total Cost	Cost To Complete	Total Cost	Target Value of Contract
Host Based Security Ops Assessment	C/FFP	Summit Technologies, Inc : Ft Meade, MD	0.700	-		-		-		-		-	0.000	0.700	-
Secure Configuration Management Ops Assessment	C/FFP	Cyber Security research and Solutions Corp : Ft Meade	0.964	-		-		-		-		-	0.000	0.964	-
Product Development 11	C/CPFF	Johns Hopkins University Applied Physics : Laurel, MD	0.861	-		-		-		-		-	0.000	0.861	-
Engineering Technical Services	MIPR	Axom Technologies : Fort Meade	1.150	-		-		-		-		-	0.000	1.150	-
Requirements Analysis/ Program Management: Civilian Pay	MIPR	Various : Various	2.057	-		-		-		-		-	Continuing	Continuing	Continuing
Cloud Hosted Shared Services	C/FFP	Nisga's Data Systems LLC : Herndon, VA	1.350	-		-		-		-		-	0.000	1.350	-
Cloud/ Gateway Pilot	C/FFP	Alvarez and Associates : Tysons Corner, VA	0.304	-		-		-		-		-	0.000	0.304	-
Cloud/ Gateway Pilot	C/FFP	BY Light Professional IT Services : : Arlington, VA	0.413	-		-		-		-		-	0.000	0.413	-
DoDCAR	C/FFP	TBD : TBD	-	-		-		-		-		-	Continuing	Continuing	-
JINTACCs SW	C/FFP	Riverside : Riverside	-	-		0.197	Jul 2024	0.203	Jul 2025	-		0.203	Continuing	Continuing	-
Eng Tech and Arch Support	C/FFP	Soliell LLC : Reston, Va	-	-		1.484	Jul 2024	1.513	Jul 2025	-		1.513	Continuing	Continuing	-
		Subtotal	104.676	0.713		2.655		2.690		-		2.690	Continuing	Continuing	N/A

Exhibit R-3, RDT&E Project Cost Analysis: PB 2025 Defense Information Systems Agency			Date: March 2024
Appropriation/Budget Activity 0400 / 7	**R-1 Program Element (Number/Name)** PE 0302019K / *Defense Info. Infrastructure Engineering and Integration*	**Project (Number/Name)** E65 / *Modeling and Simulation and Enterprise Architecture*	

Support ($ in Millions)

Cost Category Item	Contract Method & Type	Performing Activity & Location	Prior Years	FY 2023 Cost	FY 2023 Award Date	FY 2024 Cost	FY 2024 Award Date	FY 2025 Base Cost	FY 2025 Base Award Date	FY 2025 OCO Cost	FY 2025 OCO Award Date	FY 2025 Total Cost	Cost To Complete	Total Cost	Target Value of Contract
IP Network Modeling	SS/FFP	Riverbed : Bethesda, MD	7.135	1.747	Sep 2023	0.943	Jul 2024	1.002	Jul 2025	-		1.002	Continuing	Continuing	-
JCSS/JRSS Modeling	C/FFP	Booz Allen, Hamilton : McLean, VA	5.982	1.210	May 2023	0.389	May 2024	0.398	May 2025	-		0.398	Continuing	Continuing	-
JRSS Modeling	C/FFP	IPKEYS : Annapolis Junction, MD	0.373	-		-		-		-		-	0.000	0.373	-
E2E Performance	C/FFP	Booze Allen : Hamilton	1.808	-		0.124	Jul 2024	0.126	Jul 2025	-		0.126	Continuing	Continuing	-
E2E Performance	C/FFP	Various : Various	1.848	0.142	Nov 2022	0.079	Nov 2023	0.082	Nov 2024	-		0.082	Continuing	Continuing	-
		Subtotal	17.146	3.099		1.535		1.608		-		1.608	Continuing	Continuing	N/A

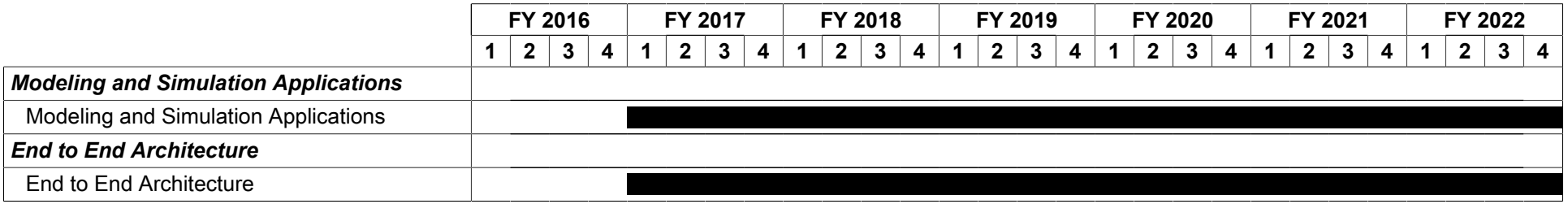
Test and Evaluation ($ in Millions)

Cost Category Item	Contract Method & Type	Performing Activity & Location	Prior Years	FY 2023 Cost	FY 2023 Award Date	FY 2024 Cost	FY 2024 Award Date	FY 2025 Base Cost	FY 2025 Base Award Date	FY 2025 OCO Cost	FY 2025 OCO Award Date	FY 2025 Total Cost	Cost To Complete	Total Cost	Target Value of Contract
Test and Evaluation	SS/CPFF	Comptel : Arlington, VA	2.072	-		-		-		-		-	0.000	2.072	-
		Subtotal	2.072	-		-		-		-		-	0.000	2.072	N/A

	Prior Years	FY 2023		FY 2024		FY 2025 Base		FY 2025 OCO		FY 2025 Total	Cost To Complete	Total Cost	Target Value of Contract
Project Cost Totals	123.894	3.812		4.190		4.298		-		4.298	Continuing	Continuing	N/A

Remarks

Exhibit R-4, RDT&E Schedule Profile: PB 2025 Defense Information Systems Agency		Date: March 2024
Appropriation/Budget Activity 0400 / 7	**R-1 Program Element (Number/Name)** PE 0302019K / *Defense Info. Infrastructure Engineering and Integration*	**Project (Number/Name)** E65 / *Modeling and Simulation and Enterprise Architecture*



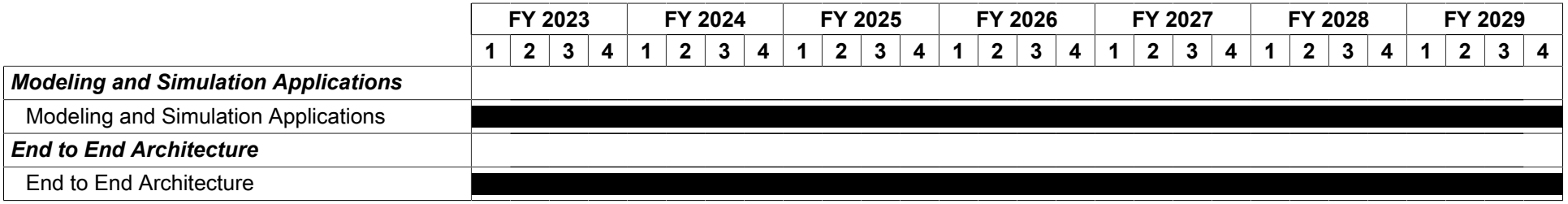


Exhibit R-4A, RDT&E Schedule Details: PB 2025 Defense Information Systems Agency		Date: March 2024
Appropriation/Budget Activity 0400 / 7	**R-1 Program Element (Number/Name)** PE 0302019K / *Defense Info. Infrastructure Engineering and Integration*	**Project (Number/Name)** E65 / *Modeling and Simulation and Enterprise Architecture*

Schedule Details

	Start		End	
Events by Sub Project	**Quarter**	**Year**	**Quarter**	**Year**
Modeling and Simulation Applications				
Modeling and Simulation Applications	1	2017	4	2029
End to End Architecture				
End to End Architecture	1	2017	4	2029

Exhibit R-2A, RDT&E Project Justification: PB 2025 Defense Information Systems Agency											Date: March 2024	
Appropriation/Budget Activity 0400 / 7					R-1 Program Element (Number/Name) PE 0302019K / *Defense Info. Infrastructure Engineering and Integration*				Project (Number/Name) T62 / *DoD Information Network (DODIN) Systems Engineering and Support*			
COST ($ in Millions)	**Prior Years**	**FY 2023**	**FY 2024**	**FY 2025 Base**	**FY 2025 OCO**	**FY 2025 Total**	**FY 2026**	**FY 2027**	**FY 2028**	**FY 2029**	**Cost To Complete**	**Total Cost**
T62: *DoD Information Network (DODIN) Systems Engineering and Support*	100.840	14.840	15.109	8.545	-	8.545	12.284	9.194	9.324	9.510	Continuing	Continuing
Quantity of RDT&E Articles	-	-	-	-	-	-	-	-	-	-		

A. Mission Description and Budget Item Justification

The DoD Information Network (DODIN) Systems Engineering and Support project identifies key technology areas that are essential to DISA including Machine Learning/ Artificial Intelligence (AI), Mobility, Assured Identity, Rapid Transition, Cyber Defense, among other technologies. It ensures DISA's technical strategies align with the DoD IT Efficiency Strategy and the latest Department of Defense Chief Information Office (DoD CIO) Capabilities Planning Guidance (CPG). These strategies establish the foundation for DISA's technology investments and technical development. DISA leverages emerging technology to drive efficiencies and cost savings to the DoD, the Warfighter, and other Federal Agencies. DISA also provides decision-oriented information to the Secretary of Defense, Joint Staff, Military Services, Combatant Commands, and other mission partners.

Key support areas include:

Cyber Security and Cloud Computing: Cyber security and cloud computing present critical near-term challenges, especially the ability to securely leverage commercial cloud service offerings. DISA's partnership with Defense Advanced Research Projects Agency (DARPA) will assess and transition relevant and mature solutions. Solutions included are applications that detect and mitigate cyberattacks, routing capabilities, embedded system defense capabilities, and resilient network capabilities. A major ongoing effort is Quantum Resistant Cryptography (QRC), which uses encryption algorithms to authenticate and secure data-in-transit and at rest that are susceptible to attacks from a computer. QRC is necessary to improve encryption on existing DoD systems, services and applications. DISA is working to measure the impacts of the National Institute of Standards and Technology (NIST) selected QRC algorithms on widely used applications and protocols.

Technology Assessments: Through partnerships with industry, academia, and the Federal sectors, DISA produces requisite cyber measures and ensures optimal use of commercial cloud services. DISA will conduct technology assessments, process improvements, and analysis of potential technology to ensure consistency with DoDIN architecture and standards. Enabled by the Technology Assessment Framework (TAF) and the DISA Technology Information Repository (DTIR), DISA can perform "quick looks" and deeper evaluations of specific technologies to include:

- Advanced cloud management capabilities
- Physical containers (a stand-alone, executable unit of software) to enable mobile data
- Emerging open-source and/or global standards for storage services
- Analytic platform performance baselines of emerging commercial analytic platform products
- Advanced approaches to Continuity of Operations (COOP) in a hybrid cloud environment
- Next generation software defined networks for automating and virtualizing the DoDIN

Exhibit R-2A, RDT&E Project Justification: PB 2025 Defense Information Systems Agency		Date: March 2024
Appropriation/Budget Activity 0400 / 7	**R-1 Program Element (Number/Name)** PE 0302019K / *Defense Info. Infrastructure Engineering and Integration*	**Project (Number/Name)** T62 / *DoD Information Network (DODIN) Systems Engineering and Support*

B. Accomplishments/Planned Programs ($ in Millions)	FY 2023	FY 2024	FY 2025
Title: Department of Defense Information Network (DODIN) Systems Engineering and Support	14.840	15.109	8.545

Description: The DoDIN System Engineering and Support project conducts critical research, test, and evaluation of operationally enabling IT capabilities. DISA identifies and evaluates leading government and industry technologies, products, and methodologies to address mission critical requirements across DISA and the DoD. Additionally, DISA conducts technology assessments and integrations to provide scalable and cost-effective solutions to meet the unique operational and security requirements of the department.

Aligned to the DISA Strategic Plan Line of Effort #2: Drive Force Readiness through Innovation, DoDIN System Engineering and Support facilitates collaboration among industry and government partners through technical exchange sessions, proof of concepts, operational pilot initiatives, and limited production deployments to validate the potential operational and financial benefits of solutions and capabilities. Additionally, the DoDIN Systems Engineering and Support project includes the Chief Technology Officer's Outlook and a Technology Watchlist. This Watchlist identifies key technology areas that are essential to DISA including Process/Automation, Cloud, Cyber Security, End-User Devices, and Communication (DoDIN, Mobile/End-User Devices).

FY 2024 Plans:
Key FY 2024 efforts include:

Quantum Resistant Cryptography (QRC):
o Explore Quantum Random Number generators that generate pre-shared encryption keys. This technology could assist with sharing of symmetric encryption keys used for communication across the network ensuring secure transport and resilience from quantum computer-based attacks.

Operationalizing Artificial Intelligence (AI) for Defensive Cyber Ops (DCO):
o Optimize, scale, and institutionalize AI-based cyber defense capabilities for defending the DoDIN.
o Extend capabilities to normalize cyber data and implement capabilities for continuously updating AI models with the latest cyber threat data.
o Extend the AI models to simultaneously look across cyber data which will allow for the improvement of cyber threat detection and remediation.
o Begin training the cyber defense workforce through the development of Concept of Operations (CONOPs), Tactics, Techniques, and Procedures (TTPs), and Standard Operation procedures (SOPs) on how to use AI driven solutions for cyber defense.

Next Generation Windows Data at Rest – Secret (NextGen WINDAR-S):

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B. Accomplishments/Planned Programs ($ in Millions)	FY 2023	FY 2024	FY 2025
o Roll out the complete NextGEN WINDAR-S solution into production for a limited operational proof of concept (POC). The success of the POC will inform the strategy for the complete upgrade of all legacy WINDAR-S systems to the new solution platform. o Application Programming Interface ***FY 2025 Plans:*** Key FY 2025 efforts include: Quantum Resistant Cryptography (QRC): o Continue prototyping activities to test the performance and operational impacts of QRC encryption on systems, services, and networks. Test the functionality of Quantum Random Number generators that are used to generate pre-shared encryption keys. Quantum Random Number generators create random number pairings using quantum computers and are more secure than traditional methods. o Deploy the crypto discovery solution in a production environment to identify all current versions of encryption. This understanding will inform the migration strategy away from legacy encryption to QRC standards. Operationalizing Artificial Intelligence (AI) for Defensive Cyber Ops (DCO): o Optimize, scale, and institutionalize AI-based cyber defense capabilities for defending the DoDIN. o Extend the AI models to simultaneously look across cyber data which will allow for the improvement of cyber threat detection and remediation. o Finalize the operational deployment of AI prediction and interference models in support of DCO. Next Generation Windows Data at Rest – Secret (NextGen WINDAR-S): o Complete the full deployment of the NextGEN WINDAR-S solution replacing all current legacy WINDAR-S system with the new solution. ***FY 2024 to FY 2025 Increase/Decrease Statement:*** The decrease of -$6.564 from FY 2024 to FY 2025 is primarily due to the conversion of 33 RDT&E positions to O&M positions. The converted positions include computer scientists, interdisciplinary and electrical engineers, and IT specialists, whose primary focus is on architectures, technical standards, and concept and requirements evaluation support for the Emerging Technology.			
Accomplishments/Planned Programs Subtotals	14.840	15.109	8.545

Exhibit R-2A, RDT&E Project Justification: PB 2025 Defense Information Systems Agency		Date: March 2024
Appropriation/Budget Activity 0400 / 7	**R-1 Program Element (Number/Name)** PE 0302019K / *Defense Info. Infrastructure Engineering and Integration*	**Project (Number/Name)** T62 / *DoD Information Network (DODIN) Systems Engineering and Support*

C. Other Program Funding Summary ($ in Millions)

Line Item	FY 2023	FY 2024	FY 2025 Base	FY 2025 OCO	FY 2025 Total	FY 2026	FY 2027	FY 2028	FY 2029	Cost To Complete	Total Cost
• O&M, DW/PE 0302019K: *Operation & Maintenance, Defense-Wide*	72.095	83.689	95.990	-	95.990	85.895	76.169	77.155	78.613	Continuing	Continuing

Remarks

D. Acquisition Strategy

Market research during the acquisition process includes a review of DISA contracts, other DoD contract vehicles, and other Federal Government agency contracts which are advertised for Government-wide usage. This market research also includes consideration of small businesses including minority/women owned (8A) businesses, Historically Black Colleges and Universities, mentor/protégé and other specialized contract vehicles and processes. Market research evaluates all contractors available from DISA sources for their ability to deliver the products specifically required for the unique program efforts. The program works collaboratively with vendors to obtain generic cost data for planning and analysis purposes. Past and current contract prices for similar work and other government-wide agency contracts provide additional sources of information. Quotes from multiple sources help provide averages for more realistic cost estimates. DISA makes a concerted effort to award many of its contracts to small businesses. Additionally, many of the DISA contracts are awarded with multiple option periods. These have the benefit of fixing labor costs over an extended period and minimizing the administrative costs associated with re-issuing short-term contracts.

Exhibit R-3, RDT&E Project Cost Analysis: PB 2025 Defense Information Systems Agency			Date: March 2024
Appropriation/Budget Activity 0400 / 7	**R-1 Program Element (Number/Name)** PE 0302019K / *Defense Info. Infrastructure Engineering and Integration*	**Project (Number/Name)** T62 / *DoD Information Network (DODIN) Systems Engineering and Support*	

Product Development ($ in Millions)

Cost Category Item	Contract Method & Type	Performing Activity & Location	Prior Years	FY 2023 Cost	FY 2023 Award Date	FY 2024 Cost	FY 2024 Award Date	FY 2025 Base Cost	FY 2025 Base Award Date	FY 2025 OCO Cost	FY 2025 OCO Award Date	FY 2025 Total Cost	Cost To Complete	Total Cost	Target Value of Contract
Engineering and Technical Services	FFRDC	MITRE : McLean, VA	16.120	-		-		-		-		-	Continuing	Continuing	Continuing
Industry Tech Res	C/FFP	Gartner : Various	0.249	-		-		-		-		-	0.000	0.249	-
GIG Technical Insertion Engineering	C/FFP	SRA, Inc. : Fairfax, VA	1.211	-		-		-		-		-	0.000	1.211	-
Product Development	C/Various	Raytheon : Various	1.601	-		-		-		-		-	0.000	1.601	-
DAMA-C	MIPR	Defense Micro-electronics Activity : Various	11.794	-		-		-		-		-	0.000	11.794	-
Thin Engineering Support	MIPR	MIT Lincoln Labs : Lexington, MA	4.260	-		-		-		-		-	0.000	4.260	-
Engineering and Technical Support	C/FFP	Moya Technologies, Inc. : Various	1.212	-		-		-		-		-	0.000	1.212	-
Engineering Technical Services	MIPR	Various : Chambersburg, PA	7.366	-		-		-		-		-	Continuing	Continuing	Continuing
Product Development	C/FFP	Science and Technology Associates, Inc : Arlington, VA	2.091	-		-		-		-		-	0.000	2.091	-
Product Development	MIPR	SPAWAR : Charleston, SC	1.882	1.300	Mar 2023	1.300	Mar 2024	1.300	Mar 2025	-		1.300	Continuing	Continuing	Continuing
Product Development	MIPR	NSA : Ft. Meade, MD	0.691	-		-		-		-		-	0.000	0.691	-
Engineering Technical Services	C/FFP	TWM : Falls Church, VA	0.202	-		-		-		-		-	0.000	0.202	-
Product Development	C/FFP	SOLERS : Arlington, VA	3.023	-		-		-		-		-	0.000	3.023	-
Product Development	C/FFP	Booz Allen Hamilton : McLean, VA	1.062	-		-		-		-		-	0.000	1.062	-
Product Development	MIPR	JITC : Ft. Meade, MD	0.351	-		-		-		-		-	0.000	0.351	-

Exhibit R-3, RDT&E Project Cost Analysis: PB 2025 Defense Information Systems Agency			Date: March 2024
Appropriation/Budget Activity 0400 / 7	**R-1 Program Element (Number/Name)** PE 0302019K / *Defense Info. Infrastructure Engineering and Integration*	**Project (Number/Name)** T62 / *DoD Information Network (DODIN) Systems Engineering and Support*	

Product Development ($ in Millions)

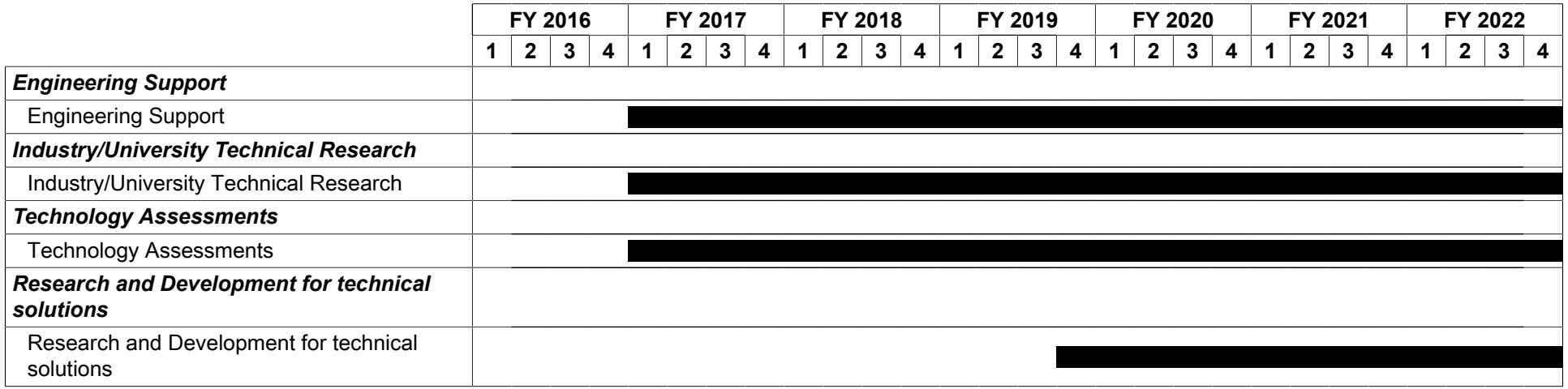
Cost Category Item	Contract Method & Type	Performing Activity & Location	Prior Years	FY 2023 Cost	FY 2023 Award Date	FY 2024 Cost	FY 2024 Award Date	FY 2025 Base Cost	FY 2025 Base Award Date	FY 2025 OCO Cost	FY 2025 OCO Award Date	FY 2025 Total Cost	Cost To Complete	Total Cost	Target Value of Contract
Engineering Technical Services	MIPR	Various : Ft. Meade, MD	4.481	-		-		-		-		-	0.000	4.481	-
Engineering Technical Services	C/Various	IV2: IT Consulting Services, LLC : Jackson, WY	1.674	-		-		-		-		-	0.000	1.674	-
Engineering Technical Services	C/FFP	Information Assurance TWM Follow On : Various	0.741	-		-		-		-		-	0.000	0.741	-
Engineering Technical Services	C/CPFF	TIE NEMS: B&D Consulting : Various	0.564	-		-		-		-		-	0.000	0.564	-
Engineering Technical Services	C/Various	Tapestry Technologies, INC : Various	3.173	-		-		-		-		-	0.000	3.173	-
Management Services - Civilian Pay	Various	Various : Ft. Meade, MD	6.428	-		-		-		-		-	0.000	6.428	-
Engineering Technical Services	C/FFP	PMPC-Itility LLC : Ft. Meade, MD	0.807	-		-		-		-		-	Continuing	Continuing	Continuing
Information Assurance	C/CPFF	Tapestry Tech : Chambersburg, PA	3.050	1.245	Jan 2023	1.245	Jan 2024	1.245	Jan 2025	-		1.245	Continuing	Continuing	Continuing
Sys Engineering	C/CPFF	Various : Ft. Meade, MD	13.292	4.566	Nov 2022	4.926	Nov 2023	4.846	Nov 2024	-		4.846	Continuing	Continuing	Continuing
Management Services - Civilian Pay	C/CPFF	Various : Ft. Meade	8.245	5.651	Oct 2022	5.560	Oct 2023	-		-		-	0.000	19.456	-
Program Management and Knowledge Management	C/FFP	Various : Various	1.659	1.129	Jan 2023	1.129	Jan 2024	1.154	Jan 2025	-		1.154	Continuing	Continuing	Continuing
(DODIN) Systems Engineering and Support	C/FFP	Various : Various	1.476	0.949	Mar 2023	-		-		-		-	Continuing	Continuing	Continuing
(DODIN) Systems	C/FFP	Various : Various	-	-		0.949	Mar 2024	-		-		-	0.000	0.949	-
Engineering Technical Services	C/FFP	TBD : TBD	2.135	-		-		-		-		-	Continuing	Continuing	-
		Subtotal	100.840	14.840		15.109		8.545		-		8.545	Continuing	Continuing	N/A

Exhibit R-3, RDT&E Project Cost Analysis: PB 2025 Defense Information Systems Agency			Date: March 2024
Appropriation/Budget Activity 0400 / 7	R-1 Program Element (Number/Name) PE 0302019K / *Defense Info. Infrastructure Engineering and Integration*	Project (Number/Name) T62 / *DoD Information Network (DODIN) Systems Engineering and Support*	

	Prior Years	FY 2023		FY 2024		FY 2025 Base		FY 2025 OCO		FY 2025 Total	Cost To Complete	Total Cost	Target Value of Contract
Project Cost Totals	100.840	14.840		15.109		8.545		-		8.545	Continuing	Continuing	N/A

Remarks

Exhibit R-4, RDT&E Schedule Profile: PB 2025 Defense Information Systems Agency		Date: March 2024
Appropriation/Budget Activity 0400 / 7	**R-1 Program Element (Number/Name)** PE 0302019K / *Defense Info. Infrastructure Engineering and Integration*	**Project (Number/Name)** T62 / *DoD Information Network (DODIN) Systems Engineering and Support*



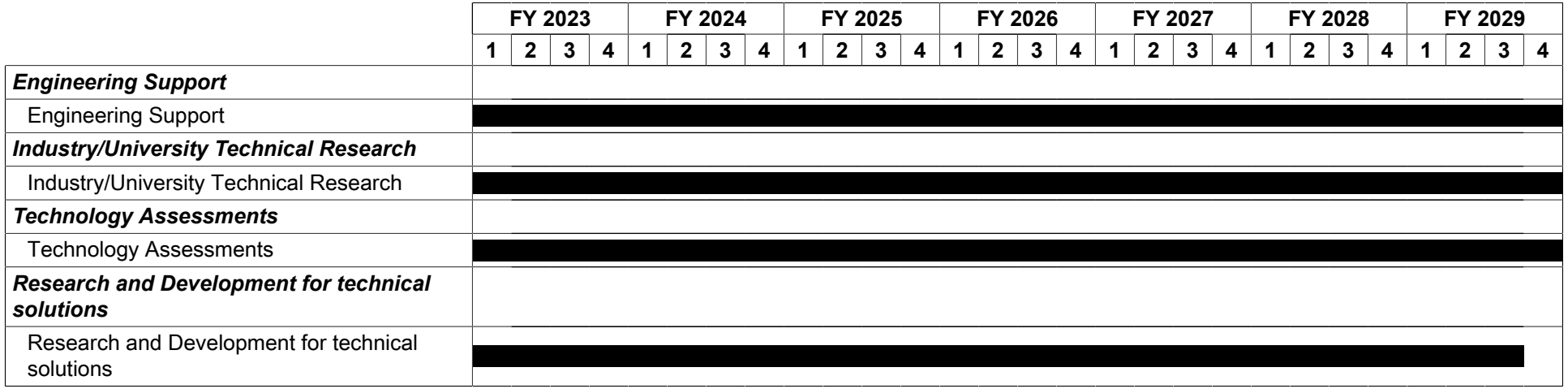


Exhibit R-4A, RDT&E Schedule Details: PB 2025 Defense Information Systems Agency		Date: March 2024
Appropriation/Budget Activity 0400 / 7	**R-1 Program Element (Number/Name)** PE 0302019K / *Defense Info. Infrastructure Engineering and Integration*	**Project (Number/Name)** T62 / *DoD Information Network (DODIN) Systems Engineering and Support*

Schedule Details

	Start		End	
Events by Sub Project	**Quarter**	**Year**	**Quarter**	**Year**
Engineering Support				
Engineering Support	1	2017	4	2029
Industry/University Technical Research				
Industry/University Technical Research	1	2017	4	2029
Technology Assessments				
Technology Assessments	1	2017	4	2029
Research and Development for technical solutions				
Research and Development for technical solutions	4	2019	3	2029