Exhibit R-2, RDT&E Budget Item Justification: PB 2023 Office of the Secretary Of Defense	Date: April 2022
Appropriation/Budget Activity 0400: *Research, Development, Test & Evaluation, Defense-Wide* / BA 6: *RDT&E Management Support*	**R-1 Program Element (Number/Name)** PE 0605142D8Z / *Systems Engineering*

COST ($ in Millions)	Prior Years	FY 2021	FY 2022	FY 2023 Base	FY 2023 OCO	FY 2023 Total	FY 2024	FY 2025	FY 2026	FY 2027	Cost To Complete	Total Cost
Total Program Element	293.135	44.168	39.904	39.009	0.000	39.009	50.381	48.834	47.134	48.079	Continuing	Continuing
142: *Systems Engineering*	289.135	37.814	16.931	16.820	0.000	16.820	21.553	21.076	20.654	21.250	Continuing	Continuing
842: *Mission Engineering*	4.000	4.371	13.055	12.804	0.000	12.804	15.811	15.669	15.520	15.755	Continuing	Continuing
144: *Program Engagement and Independent Assessments*	0.000	0.000	9.918	9.385	0.000	9.385	13.017	12.089	10.960	11.074	Continuing	Continuing
078: *Integration Technology and Tools*	0.000	1.983	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	1.983

Note

New Start (Y/N): No

In FY 2022, funding was realigned from Project Code 078 (Integration Technology and Tools) and Project Code 142 (Systems Engineering) to fund Project Code 842 (Mission Engineering)(ME) and Project Code 144 (Program Engagement and Independent Assessments).

These changes reflect the new organizational structure within the Deputy Directorate, Engineering, including an increased focus on ME activities as key enablers for technology development investment decisions and a refinement of focus that limits Program Technical Assessments (including Independent Technical Risk Assessments (ITRAs)) to Major Defense Acquisition Programs (MDAPs).

A. Mission Description and Budget Item Justification

This program supports the Department's initiatives to Build a Sustainable and Long-Term Advantage, and Build a Resilient Joint Force and Defense Ecosystem.

This program funds advancement of the engineering practice across the Department of Defense (DoD), conduct of mission engineering/mission integration activities to support the joint warfighting concepts, and program engagements/independent assessments for major defense acquisition programs in accordance with the National Defense Strategy and in support of the critical technology areas advanced by the Under Secretary of Defense for Research and Engineering. Specific activities include:
1. Systems Engineering (P142): Advance engineering practice by developing the DoD-wide policy, guidance, and standards for engineering and test & evaluation; cultivating workforce talent and providing advocacy and oversight for the Department’s engineering and test & evaluation workforce; and establishing and maintaining active engineering communities of practice to solve cross-cutting engineering challenges and share best practices.
2. Mission Engineering (P842): Analysis of approaches to realizing mission capabilities vs. anticipated adversary capabilities in relevant operational contexts. This analysis leads to the development of government reference architectures for achieving mission capability, identification of opportunities to align technology investments to accelerate capability delivery or modify existing systems, and recommendations for adjustments to joint warfighting concepts.

Exhibit R-2, RDT&E Budget Item Justification: PB 2023 Office of the Secretary Of Defense	Date: April 2022
Appropriation/Budget Activity 0400: *Research, Development, Test & Evaluation, Defense-Wide I* BA 6: *RDT&E Management Support*	**R-1 Program Element (Number/Name)** PE 0605142D8Z *I Systems Engineering*

3. Program Engagement and Independent Assessments (P144): Conduct of independent technical risk assessments (ITRAs) and other program assessments to advise the DoD leadership (including Milestone Decision Authorities) on progress towards achieving key performance parameters, technology maturation, interoperability, and cyber security posture.

B. Program Change Summary ($ in Millions)	FY 2021	FY 2022	FY 2023 Base	FY 2023 OCO	FY 2023 Total
Previous President's Budget	45.626	40.030	0.000	0.000	0.000
Current President's Budget	44.168	39.904	39.009	0.000	39.009
Total Adjustments	-1.458	-0.126	39.009	0.000	39.009
• Congressional General Reductions	-	-			
• Congressional Directed Reductions	-	-			
• Congressional Rescissions	-	-			
• Congressional Adds	-	-			
• Congressional Directed Transfers	-	-			
• Reprogrammings	-	-			
• SBIR/STTR Transfer	-1.449	-			
• Adjustments to Budget Year	-	-	44.119	0.000	44.119
• Other Program Adjustments	-0.009	-	-5.110	-	-5.110
• FFRDC Reduction	-	-0.126	-	-	-

Change Summary Explanation

FY 2023 funding increase reflects the fact that the FY 2022 President’s Budget request did not include out-year funding.

Exhibit R-2A, RDT&E Project Justification: PB 2023 Office of the Secretary Of Defense			Date: April 2022
Appropriation/Budget Activity 0400 / 6	R-1 Program Element (Number/Name) PE 0605142D8Z / *Systems Engineering*	Project (Number/Name) 142 / *Systems Engineering*	

COST ($ in Millions)	Prior Years	FY 2021	FY 2022	FY 2023 Base	FY 2023 OCO	FY 2023 Total	FY 2024	FY 2025	FY 2026	FY 2027	Cost To Complete	Total Cost
142: *Systems Engineering*	289.135	37.814	16.931	16.820	0.000	16.820	21.553	21.076	20.654	21.250	Continuing	Continuing
Quantity of RDT&E Articles	-	-	-	-	-	-	-	-	-	-		

A. Mission Description and Budget Item Justification

Project Code 142 activities include the following functions:

• Support acceleration of USD(R&E)'s modernization initiatives/critical technology areas and Principal Directors' Science and Technology (S&T) roadmap investments.

• Develop and establish the DoD-level policy, guidance, and workforce development efforts ensuring systems engineering rigor in acquisition to drive the development of fully capable and supportable weapons systems.

• Advance the principles of interoperability, integration, modularity, and open systems to improve requirements, architecture, design, development and overall acquisition and sustainment of weapon systems.

• Develop education and training materials for instructing, maintaining, and enhancing the defense acquisition workforce. Activities include: (1) developing guidance to enhance Engineering and Technical Management (ETM) and Test and Evaluation (T&E) acquisition career planning and progression; and (2) monitoring and facilitating Defense Acquisition University (DAU) updates to the systems engineering, quality and specialty engineering courses, to ensure the curriculum represents the education and training requirements necessary to be a viable team member in the acquisition process.

• Improve the DoD's capabilities in specialty engineering and software engineering through policy, program oversight, fostering practice and technology improvements, initiating long-term strategic improvements, and collaborating with industry and academia.

• Develop improved and enhanced software Science and Technology strategies consistent with National Defense Authorization Act for 2020, Section 255 to accelerate modernization of software development tools, techniques and capabilities.

• Advance the DoD engineering practices through the development and use of methods, processes, and tools, such as digital engineering, modeling and simulation, and model-based systems engineering, for engineering on weapon systems.

• Serve as the Defense Standardization Executive and oversee the Defense Standardization Program.

B. Accomplishments/Planned Programs ($ in Millions)	FY 2021	FY 2022	FY 2023 Base	FY 2023 OCO	FY 2023 Total
Title: Systems Engineering (Project Code 142)	30.010	15.985	16.820	0.000	16.820
FY 2022 Plans: FY 2022 Plans: Strategic Thrust 1: Workforce Development • Streamline the current Engineering (ENG), Production, Quality, and Manufacturing (PQM), and Science & Technology (S&TM) career fields into a single (ETM) Career Field and serve as the Functional Lead for ETM and the (T&E) Career Fields. • Pursue workforce development initiatives including leadership development, specialized training, and improved instructional methods.					

Exhibit R-2A, RDT&E Project Justification: PB 2023 Office of the Secretary Of Defense		Date: April 2022
Appropriation/Budget Activity 0400 / 6	**R-1 Program Element (Number/Name)** PE 0605142D8Z / *Systems Engineering*	**Project (Number/Name)** 142 / *Systems Engineering*

B. Accomplishments/Planned Programs ($ in Millions)	FY 2021	FY 2022	FY 2023 Base	FY 2023 OCO	FY 2023 Total
• Assess ETM and T&E workforce capability and capacity, and, working with Services and other components organizations, develop strategies to address identified gaps. Strategic Thrust 2: Engineering Policy and Guidance • Develop and update core Engineering and T&E policy, guidance and standards; review all acquisition policy for Engineering and T&E implications, including requirements for use in alternate acquisition pathways. • Develop policy and guidance on System of Systems (SoS) architecture analysis, system architecture verification, interoperability analysis, architecture development plans, and SoS-level capability gaps. • Assess challenges and impacts and develop new guidance, best practices, methods, processes and tools to more effectively implement Engineering for product lines and SoS. Strategic Thrust 3: Specialty Engineering • Develop engineering guidance and policies for the integration of specialty engineering functions as part of the SE responsibility in the acquisition process including, but not limited to: manufacturing engineering; reliability and maintainability engineering; human systems integration; and value engineering. • Conduct activities to develop and implement plans to enhance the specialty engineering workforce. Strategic Thrust 4: Software Engineering and Modernization • Develop software engineering guidance and policies for the integration of modern software practices as part of the SE responsibility in the acquisition process including, but not limited to: agile software development; DevSecOps; model based systems and software engineering; and the implementation of industry best practices. • Conduct studies and analyses to identify challenges and opportunities for the development and promulgation of software engineering best practices and guidance for defense acquisition programs. Strategic Thrust 5: Systems Engineering Modernization Strategy • Develop Framework, Pain Points and Roadmaps to support Systems Engineering Modernization efforts. • Recommend new Systems Engineering Policies & Processes. • Update Systems Engineering Workforce Development Strategy. Strategic Thrust 6: Engineering Tools and Environments • Develop and sustain the Digital Engineering Community of Practice (CoP) that concentrates on sharing best practices, developing solutions to common concerns, and establishing a body of knowledge repository that is flexible to serve varying users' viewpoints across the DoD.					

Exhibit R-2A, RDT&E Project Justification: PB 2023 Office of the Secretary Of Defense		Date: April 2022
Appropriation/Budget Activity 0400 / 6	**R-1 Program Element (Number/Name)** PE 0605142D8Z / *Systems Engineering*	**Project (Number/Name)** 142 / *Systems Engineering*

B. Accomplishments/Planned Programs ($ in Millions)	FY 2021	FY 2022	FY 2023 Base	FY 2023 OCO	FY 2023 Total
• Apply digital engineering practices and body-of-knowledge information, to include using model-based processes, products, training, data/model management, to support analysis of prototype development efforts, ease integration of emerging technologies, and gauge impacts on overall mission performance. • Provide digital engineering implementation inputs to policy, guidance, and engineering workforce competency efforts. Strategic Thrust 7: Connect the Engineering Community • Identify the current needs and specific implementations of engineering users of digital tools and environments, leading to unified effort to establish a connected engineering community, sharing tools, methods and data in order to provide engineering quality data to support decision makers. • Experiment with new computational capabilities (e.g. cloud) to discover the benefits and challenges for the engineering community. • Identify Knowledge Management techniques to provide systematic approaches for information and knowledge flow to and between the stakeholders at the right time for the right use. Strategic Thrust 8: Modeling and Simulation (M&S) • Transform the Defense Modeling and Simulation Coordination Office into the Model and Simulation Enterprise with a focus on re-establishing and leading the Defense Model and Simulation Enterprise CoP to increase effective and efficient development and use of methods, processes, and tools for the model and simulation community. • Plan the transformation of the model and simulation suite of knowledge management tools to enable discoverability and reuse of joint and cross-cutting capabilities. • Evaluate model/simulation issuances for currency and suitability, and evolve the relevant model and simulation policies and guidance, using the CoP challenges as a guide in prioritization. ***FY 2023 Base Plans:*** Continued execution of the Strategic Thrusts identified within the FY 2022 Plans above, with planned expansion of scope of these activities. ***FY 2023 OCO Plans:*** N/A. ***FY 2022 to FY 2023 Increase/Decrease Statement:*** There is no significant change between FY 2022 and FY 2023.					
Title: Positioning, Navigation, and Timing (PNT) Open Architecture	7.804	0.946	0.000	0.000	0.000

Exhibit R-2A, RDT&E Project Justification: PB 2023 Office of the Secretary Of Defense		Date: April 2022
Appropriation/Budget Activity 0400 / 6	**R-1 Program Element (Number/Name)** PE 0605142D8Z / *Systems Engineering*	**Project (Number/Name)** 142 / *Systems Engineering*

B. Accomplishments/Planned Programs ($ in Millions)	FY 2021	FY 2022	FY 2023 Base	FY 2023 OCO	FY 2023 Total
Description: Build and validate the common DoD open reference architecture standard for PNT systems: • Common messaging/interface standards increases PNT system and element interoperability across the services and reduces future PNT system development/integration costs. • Common reference architecture guides development of service and platform specific PNT solutions. • Streamlines integration of new complementary sensor technology into existing and future DoD systems. ***FY 2022 Plans:*** Continue development of a modular open system architecture for positioning, navigation, and timing systems. Continue development of PNT interface standards based on previous work from the DARPA All-Source Positioning and Navigation program. ***FY 2023 Base Plans:*** Completion and close-out of the remaining efforts under this task. ***FY 2023 OCO Plans:*** N/A. ***FY 2022 to FY 2023 Increase/Decrease Statement:*** The decrease is attributable to the full completion of the efforts in the Positioning, Navigation and Timing Open Architecture task.					
Accomplishments/Planned Programs Subtotals	37.814	16.931	16.820	0.000	16.820

C. Other Program Funding Summary ($ in Millions)

N/A

Remarks

D. Acquisition Strategy

N/A

Exhibit R-2A, RDT&E Project Justification: PB 2023 Office of the Secretary Of Defense			Date: April 2022
Appropriation/Budget Activity 0400 / 6	R-1 Program Element (Number/Name) PE 0605142D8Z / *Systems Engineering*	Project (Number/Name) 842 / *Mission Engineering*	

COST ($ in Millions)	Prior Years	FY 2021	FY 2022	FY 2023 Base	FY 2023 OCO	FY 2023 Total	FY 2024	FY 2025	FY 2026	FY 2027	Cost To Complete	Total Cost
842: *Mission Engineering*	4.000	4.371	13.055	12.804	0.000	12.804	15.811	15.669	15.520	15.755	Continuing	Continuing
Quantity of RDT&E Articles	-	-	-	-	-	-	-	-	-	-		

A. Mission Description and Budget Item Justification

Project Code 842 activities include the following functions:

• Carry out responsibilities described in the National Defense Authorization Act for FY 2017, Section 855 titled Mission Integration Management (MIM) and supports the National Defense Strategy goals of developing new joint warfighting concepts and modernization of emerging capabilities to achieve a more lethal force.

• Achieve full operational capability of the mission engineering framework that is being built in FY 2021 to instantiate the technical element of MIM and identify and promulgate best practices for mission-focused analyses and studies.

• Ensure the DoD applies engineering rigor to both operational and technical analysis of future capabilities to enable the DoD leaders to make informed investment decisions and deliver technologies and capabilities to close mission gaps in response to new threats.

• Execute multiple mission engineering studies in support of the National Defense Strategy modernization areas to identify technology solutions, advise on development of requirements, and develop Government Reference Architectures (GRA) for new joint warfighting capabilities, which are a key enterprise document that will be used to guide development of capabilities that are required for warfighters to carry out operational and tactical missions against our adversaries.

• In coordination with the Joint Staff, OSD(CAPE), USD(A&S), Combatant Commands, Services, and other stakeholders, provide engineering analysis and studies at the campaign, mission, and engagement levels to support the prioritization and development of the Department's technology modernization and prototyping roadmaps.

• Continue the development of the technical infrastructure and analysis tools for engineering studies and data mining as well as modeling and simulation analytic tools to support this effort.

• Support the analysis of as is operational and technical architectures of current joint capabilities and further support the development of to be GRAs of future required capabilities to align investment opportunities with emerging technological developments.

B. Accomplishments/Planned Programs ($ in Millions)	FY 2021	FY 2022	FY 2023 Base	FY 2023 OCO	FY 2023 Total
Title: Mission Integration	4.371	13.055	12.804	0.000	12.804
FY 2022 Plans: Strategic Thrust 1: Develop GRAs • Develop methods for governing changes and managing technical data for GRAs. • Develop and conduct training in use of reference architectures. • Establish enduring mission engineering analytic capability; instantiate a digital ecosystem to share knowledge amongst Mission Integration Management stakeholders. • Participate in mission engineering activities by providing functional and program specific engineering expertise to support joint mission level analysis.					

Exhibit R-2A, RDT&E Project Justification: PB 2023 Office of the Secretary Of Defense		Date: April 2022
Appropriation/Budget Activity 0400 / 6	**R-1 Program Element (Number/Name)** PE 0605142D8Z / *Systems Engineering*	**Project (Number/Name)** 842 / *Mission Engineering*

B. Accomplishments/Planned Programs ($ in Millions)	FY 2021	FY 2022	FY 2023 Base	FY 2023 OCO	FY 2023 Total
• Perform high-level executable system of system architecture trades and analyses for product line and technology to address mission capability gap derived from new joint warfighting concepts, strategic portfolio reviews, and national defense guidance. • Develop and update government reference architectures for selected programs within the USD(R&E) critical technology areas, in particular Future Networked C3 (FNC3), directed energy, hypersonics, and cyber. • Maintain the architecture guidance and the publication of a Mission Engineering Guide and support associated training material across DoD and industry partners. Strategic Thrust 2: Integrate Models with Advanced Analytic and Computational Tools • Enable rapid design and analysis of current and future weapon systems. • Fully implement the Mission Engineering analytical framework as the technical component of MIM and expand its use across government and industry. • Perform architecture tradeoff analyses to enable effective mission engineering and manage integration of emerging technologies with systems in development and / or in operation. Leverage this information to assist the Department of Defense Under Secretary for Acquisition and Sustainment (USD(A&S)) with its Capability Portfolio Management process to ensure current systems maintain relevancy in the future warfare environment. • Perform architecture assessments to verify compliance of major systems interfaces through use of standards. Provide recommendations to improve joint and allied interoperability. • Execute system architecture verification, interoperability analysis, architecture development plans, and SoS-level capability gaps analysis. Strategic Thrust 3: Support Joint Mission Level Analysis • Provide functional and program specific mission engineering expertise in the areas of contested logistics, hypersonics, electromagnetic spectrum, joint C2, NC3, directed energy, autonomy, missile defense, and others as directed. • Expand mission engineering support for up to six high priority mission sets as determined by USD(R&E) and support decisions for identification of joint mission-based prototyping projects. • Further mature and maintain processes and tools required to establish data relationships to enable discovery, standardization, and usability of the mission engineering data across the DoD. Strategic Thrust 4: Create Opportunities to Maintain a Tactical Edge • Enable innovative and timely application of new warfighting concepts, insertion of advanced capabilities on shorter timelines, improving interoperability, and formulating long-term strategies to retain or improve our technical overmatch against our adversaries.					

Exhibit R-2A, RDT&E Project Justification: PB 2023 Office of the Secretary Of Defense		Date: April 2022
Appropriation/Budget Activity 0400 / 6	**R-1 Program Element (Number/Name)** PE 0605142D8Z / *Systems Engineering*	**Project (Number/Name)** 842 / *Mission Engineering*

B. Accomplishments/Planned Programs ($ in Millions)	FY 2021	FY 2022	FY 2023 Base	FY 2023 OCO	FY 2023 Total
• Continue the support for NC3 governance activities; conduct NC3 mission engineering studies to support development of GRAs and provide recommendations for research and development efforts; and support the development of the NC3 Modernization Alignment White Paper and Annual R&D Plan. • Expand USD(R&E) participation in the Joint Capabilities Integration and Development System (JCIDS) and Joint Force Integration Cell (JFIC) efforts to support development and maturation of new joint warfighting concepts; enhance capability and development of systems requirements through mission engineering insights. • Support: (1) Services and COCOMs in pre-MS A formulation; (2) requirements analyses and analysis of alternatives; (3) architectures to guide development of prototyping and experimentation roadmaps; and (4) inform initial capabilities document definition and development. ***FY 2023 Base Plans:*** Continued execution of the Strategic Thrusts identified within the FY 2022 Plans above with planned expansion of scope of Mission Integration Management activities that both implement the National Defense Authorization Act for FY 2017 Section 855 and support the National Defense goals of developing new joint warfighting concepts and modernizing capabilities to achieve a more lethal force. ***FY 2023 OCO Plans:*** N/A. ***FY 2022 to FY 2023 Increase/Decrease Statement:*** There is no significant change between FY 2022 and FY 2023.					
Accomplishments/Planned Programs Subtotals	4.371	13.055	12.804	0.000	12.804

C. Other Program Funding Summary ($ in Millions)

N/A

Remarks

D. Acquisition Strategy

N/A

Exhibit R-2A, RDT&E Project Justification: PB 2023 Office of the Secretary Of Defense			Date: April 2022
Appropriation/Budget Activity 0400 / 6	R-1 Program Element (Number/Name) PE 0605142D8Z / *Systems Engineering*	Project (Number/Name) 144 / *Program Engagement and Independent Assessments*	

COST ($ in Millions)	Prior Years	FY 2021	FY 2022	FY 2023 Base	FY 2023 OCO	FY 2023 Total	FY 2024	FY 2025	FY 2026	FY 2027	Cost To Complete	Total Cost
144: *Program Engagement and Independent Assessments*	0.000	0.000	9.918	9.385	0.000	9.385	13.017	12.089	10.960	11.074	Continuing	Continuing
Quantity of RDT&E Articles	-	-	-	-	-	-	-	-	-	-		

A. Mission Description and Budget Item Justification

Project Code 144 activities include the following functions:

• Conducts and approves Independent Technical Risk Assessments (ITRAs) on Acquisition Category (ACAT)-1D Major Defense Acquisition Programs (MDAPs). Reviews and approves ITRAs on select high priority ACAT 1B/1C MDAPs.

• Conceive plans and conducts Preliminary and Critical Design Review Assessments of MDAPs under the Office of the Secretary of Defense (OSD) purview.

• Pursuant to U.S.C. 10 Sec 2366 requirements, provides basis for critical technology and manufacturing process determinations and certifications of MDAPs under OSD purview.

• Satisfies U.S.C. 10 Sec 2448a requirements by providing risk assessments to support the development of cost, schedule, and performance targets.

• Support acceleration of USD(R&E)'s critical technology initiatives in accordance with the National Defense Strategy.

• Conduct other technical reviews as requested, such as Nunn-McCurdy certification reviews, Non-Advocate Reviews, focused technical assessments, and software readiness reviews to identify and mitigate program risk.

• Oversee Service and other Component organizations' implementation of engineering initiatives and approve or conduct independent assessments.

• Guide Service and other component organizations in the development planning process to ensure proposed MDAP programs are executable within acceptable levels of risk.

• Provide Systems Engineering support to MDAPs. Review the systems engineering plans (SEPs) and activities for MDAPs.

• Monitor and advise USD(R&E) and USD(A&S) on technical and engineering aspects of MDAPs and select alternate acquisition pathway programs to ensure they are adequate to support fielding and the achievement of cost, schedule and performance goals to include readiness, i.e. producibility, reliability, maintainability, sustainment, and other considerations.

B. Accomplishments/Planned Programs ($ in Millions)	FY 2021	FY 2022	FY 2023 Base	FY 2023 OCO	FY 2023 Total
Title: Development Test Evaluation and Assessments	0.000	9.918	9.385	0.000	9.385
FY 2022 Plans: Strategic Thrust: Program Support/Technical Risk Assessments • Enhance and continue to conduct or approve independent technical risk assessments of MDAPs. • Monitor and advise USD(R&E) and USD(A&S) on technical and engineering aspects of MDAPS and select alternate acquisition pathway programs.					

Exhibit R-2A, RDT&E Project Justification: PB 2023 Office of the Secretary Of Defense		Date: April 2022
Appropriation/Budget Activity 0400 / 6	**R-1 Program Element (Number/Name)** PE 0605142D8Z / *Systems Engineering*	**Project (Number/Name)** 144 / *Program Engagement and Independent Assessments*

B. Accomplishments/Planned Programs ($ in Millions)	FY 2021	FY 2022	FY 2023 Base	FY 2023 OCO	FY 2023 Total
• Conceive plans and conducts Preliminary and Critical Design Review Assessments of MDAP under OSD purview. • Provide basis for critical technology and manufacturing process determinations and certifications of MDAP under OSD purview in support of U.S.C. 10 Sec 2366 requirements. • Provide risk assessments to support cost, schedule, and performance targets required by U.S.C. 10 Sec 2448a. • Support acceleration of USD(R&E)'s modernization initiatives in accordance with the National Defense Strategy. • Provide engineers and technical leaders to develop and integrate technologies and modernization priorities. • Continued support to acquisition program managers in developing and documenting viable technical management approach. • Conduct technical reviews of acquisition to confirm program execution in accordance with systems engineering plans. • Provides Specialty Engineering support to ITRAs and other assessments. • Perform early acquisition risk assessment including pre-Milestone A engagement with Joint Requirements Oversight Council processes. ***FY 2023 Base Plans:*** Continued execution of the Strategic Thrusts identified within the FY 2022 Plans. ***FY 2023 OCO Plans:*** N/A. ***FY 2022 to FY 2023 Increase/Decrease Statement:*** There is no significant change between FY 2022 and FY 2023.					
Accomplishments/Planned Programs Subtotals	0.000	9.918	9.385	0.000	9.385

C. Other Program Funding Summary ($ in Millions)

N/A

Remarks

D. Acquisition Strategy

N/A

Exhibit R-2A, RDT&E Project Justification: PB 2023 Office of the Secretary Of Defense			Date: April 2022
Appropriation/Budget Activity 0400 / 6	R-1 Program Element (Number/Name) PE 0605142D8Z / *Systems Engineering*	Project (Number/Name) 078 / *Integration Technology and Tools*	

COST ($ in Millions)	Prior Years	FY 2021	FY 2022	FY 2023 Base	FY 2023 OCO	FY 2023 Total	FY 2024	FY 2025	FY 2026	FY 2027	Cost To Complete	Total Cost
078: *Integration Technology and Tools*	0.000	1.983	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	1.983
Quantity of RDT&E Articles	-	-	-	-	-	-	-	-	-	-		

Note

In FY 2022, $2.008 million of funding from this Project Code is re-aligned to Project Code 142 ($1.119 million), Project Code 144 ($0.252), and Project Code 842 ($0.637) to better align with organizational and functional structure.

A. Mission Description and Budget Item Justification

Project Code 078 supported the National Defense Strategy goals of developing a more lethal force by instituting enterprise-wide research, methods, practices and tools to: improve systems engineering practices; support modular, rapid fielding of mature warfighting capabilities; and use common, reusable hardware and software components that can be more readily adapted and refreshed, allowing the DoD to deploy and support the latest technologies. The project also sustained the ability to identify and/or create innovative methods and tools in systems engineering practice to improve the Department's ability to develop and deploy complex weapon systems.

B. Accomplishments/Planned Programs ($ in Millions)	FY 2021	FY 2022	FY 2023 Base	FY 2023 OCO	FY 2023 Total
Title: Integration Technology and Tools	1.983	0.000	0.000	0.000	0.000
Description: Supported the National Defense Strategy goals of developing a more lethal force by instituting enterprise-wide research, methods, practices and tools to: improve systems engineering practices; support modular, rapid fielding of mature warfighting capabilities; and use common, reusable hardware and software components that can be more readily adapted and refreshed, allowing the DoD to deploy and support the latest technologies. The project also sustained the ability to identify and/or create innovative methods and tools in systems engineering practice to improve the Department's ability to develop and deploy complex weapon systems.					
FY 2022 Plans: Funding in FY 2022 and out-year re-aligned to other Project Codes within the Systems Engineering Program Element (PE).					
FY 2023 Base Plans: N/A					
FY 2023 OCO Plans:					

Exhibit R-2A, RDT&E Project Justification: PB 2023 Office of the Secretary Of Defense		Date: April 2022
Appropriation/Budget Activity 0400 / 6	**R-1 Program Element (Number/Name)** PE 0605142D8Z / *Systems Engineering*	**Project (Number/Name)** 078 / *Integration Technology and Tools*

B. Accomplishments/Planned Programs ($ in Millions)	FY 2021	FY 2022	FY 2023 Base	FY 2023 OCO	FY 2023 Total
N/A ***FY 2022 to FY 2023 Increase/Decrease Statement:*** N/A					
Accomplishments/Planned Programs Subtotals	1.983	0.000	0.000	0.000	0.000

C. Other Program Funding Summary ($ in Millions)

N/A

Remarks

D. Acquisition Strategy

N/A