Department of Defense
Fiscal Year (FY) 2021 Budget Estimates

February 2020

Defense Logistics Agency

Defense-Wide Justification Book Volume 5 of 5

Research, Development, Test & Evaluation, Defense-Wide

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Department of Defense
FY 2021President's Budget
Exhibit R-1 FY 2021 President's Budget
Total Obligational Authority
(Dollars in Thousands)

13 Feb 2020

Appropriation	FY 2019 (Base + OCO)	FY 2020 Base Enacted	FY 2020 Emergency	FY 2020 OCO Enacted	FY 2020 Total Enacted (Base+Emerg+ OCO)
Research, Development, Test & Eval, DW	332,136	315,202			315,202
Total Research, Development, Test & Evaluation	332,136	315,202			315,202

R-121PB: FY 2021 President's Budget (Published Version), as of February 13, 2020 at 10:59:44

Department of Defense
FY 2021President's Budget
Exhibit R-1 FY 2021 President's Budget
Total Obligational Authority
(Dollars in Thousands)

13 Feb 2020

Appropriation	FY 2021 Base	FY 2021 OCO for Base Requirements	FY 2021 OCO for Direct War and Enduring Costs	FY 2021 Total OCO	FY 2021 Total (Base + OCO)
Research, Development, Test & Eval, DW	206,947				206,947
Total Research, Development, Test & Evaluation	206,947				206,947

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Advanced Technology Development	273,449	268,152			268,152
System Development & Demonstration	40,674	31,773			31,773
Management Support	14,569	10,027			10,027
Operational Systems Development	3,444	5,250			5,250
Total Research, Development, Test & Evaluation	332,136	315,202			315,202
Summary Recap of FYDP Programs					
Research and Development	328,692	309,952			309,952
Central Supply and Maintenance	3,444	5,250			5,250
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System Development & Demonstration	23,552				23,552
Management Support					
Operational Systems Development	9,086				9,086
Total Research, Development, Test & Evaluation	206,947				206,947
Summary Recap of FYDP Programs					
Research and Development	197,861				197,861
Central Supply and Maintenance	9,086				9,086
Total Research, Development, Test & Evaluation	206,947				206,947

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Appropriation: 0400D Research, Development, Test & Eval, DW

Line No	Program Element Number	Item	Act	FY 2019 (Base + OCO)	FY 2020 Base Enacted	FY 2020 Emergency	FY 2020 OCO Enacted	FY 2020 Total Enacted (Base+Emerg+ OCO)	Sec
50	0603680S	Manufacturing Technology Program	03	62,396	51,002			51,002	U
52	0603712S	Generic Logistics R&D Technology Demonstrations	03	18,127	16,620			16,620	U
54	0603720S	Microelectronics Technology Development and Support	03	192,926	200,530			200,530	U
		Advanced Technology Development		273,449	268,152			268,152	
133	0605070S	DOD Enterprise Systems Development and Demonstration	05	3,057	2,291			2,291	U
135	0605080S	Defense Agency Initiatives (DAI) - Financial System	05	20,384	23,114			23,114	U
136	0605090S	Defense Retired and Annuitant Pay System (DRAS)	05	17,233	6,368			6,368	U
		System Development & Demonstration		40,674	31,773			31,773	
166	0605502S	Small Business Innovative Research	06	10,715	10,027			10,027	U
179	0606942S	Assessments and Evaluations Cyber Vulnerabilities	06	3,854					U
		Management Support		14,569	10,027			10,027	
253	0708012S	Pacific Disaster Centers	07	1,705	1,705			1,705	U
254	0708047S	Defense Property Accountability System	07	1,739	3,545			3,545	U
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52	0603712S	Generic Logistics R&D Technology Demonstrations	03	10,235				10,235	U
54	0603720S	Microelectronics Technology Development and Support	03	124,049				124,049	U
		Advanced Technology Development		174,309				174,309	
133	0605070S	DOD Enterprise Systems Development and Demonstration	05	1,377				1,377	U
135	0605080S	Defense Agency Initiatives (DAI) - Financial System	05	20,537				20,537	U
136	0605090S	Defense Retired and Annuitant Pay System (DRAS)	05	1,638				1,638	U
		System Development & Demonstration		23,552				23,552	
166	0605502S	Small Business Innovative Research	06						U
179	0606942S	Assessments and Evaluations Cyber Vulnerabilities	06						U
		Management Support							
253	0708012S	Pacific Disaster Centers	07	1,785				1,785	U
254	0708047S	Defense Property Accountability System	07	7,301				7,301	U
		Operational Systems Development		9,086				9,086	
Total Research, Development, Test & Eval, DW				206,947				206,947	

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Appropriation 0400: Research, Development, Test & Evaluation, Defense-Wide

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Exhibit R-2, RDT&E Budget Item Justification: PB 2021 Defense Logistics Agency	Date: February 2020
Appropriation/Budget Activity 0400: *Research, Development, Test & Evaluation, Defense-Wide I* BA 3: *Advanced Technology Development (ATD)*	**R-1 Program Element (Number/Name)** PE 0603680S *I Manufacturing Technology Program (ManTech)*

COST ($ in Millions)	Prior Years	FY 2019	FY 2020	FY 2021 Base	FY 2021 OCO	FY 2021 Total	FY 2022	FY 2023	FY 2024	FY 2025	Cost To Complete	Total Cost
Total Program Element	58.826	62.396	51.002	40.025	-	40.025	40.029	41.465	42.480	43.457	Continuing	Continuing
IBMP: *Improving Industrial Base Manufacturing Processes (formerly Material Availability)*	26.544	30.637	28.572	17.205	-	17.205	16.796	17.194	17.306	17.724	Continuing	Continuing
AAA: *Maintaining Viable Supply Sources (formerly High Quality Sources)*	22.076	26.296	17.229	17.854	-	17.854	18.192	19.151	19.232	19.677	Continuing	Continuing
OOO: *Improving Technical and Logistics Information (formerly Industry and Customer Collaboration)*	10.206	5.463	5.201	4.966	-	4.966	5.041	5.120	5.942	6.056	Continuing	Continuing

A. Mission Description and Budget Item Justification

The Defense Logistics Agency (DLA) Manufacturing Technology (ManTech) Program funds the advanced technology development needed to achieve a responsive, efficient domestic industrial base that meets the warfighters' needs in an affordable and timely manner. The ManTech program works with DLA's diverse supply chains to improve manufacturing capability throughout a product's life cycle. It provides the crucial link between invention and application by maturing, scaling up, and validating advanced manufacturing technology in "real world" environments. ManTech developments provide a path to low-risk technology implementation for many small businesses and defense unique suppliers as well as depots and shipyards that are critical to DLA. By anticipating and addressing production and sustainment problems before they occur, readiness levels increase and sustainment costs are lower.

DLA ManTech is aligned into three Strategic Focus Areas (SFA): 1) Improving Industrial Base Manufacturing Processes (IIBM); 2) Maintaining Viable Sources of Supply (MVSS); and 3) Improving Technical and Logistics Information (ITLI).

• The IIBM SFA includes efforts to reduce industrial base material costs and production lead-times, while improving the quality of DLA managed products. This SFA has supply chain focused execution portfolios for food (Subsistence Network), Castings (Procurement Readiness Optimization—Advanced Casting Technology), Forgings (Procurement Readiness Optimization—Forging Advance System Technology), Batteries (Battery Network) and Additive Manufacturing.

• MVSS includes efforts to assure the commercial industrial base can satisfy DLA materiel requirements without relying on foreign sources for microcircuits. This strategic focus area mitigates supply issues caused by the lack of a reliable domestic manufacturing capability to produce products or raw materials needed to build and maintain weapon systems. The major focus of the program is maintaining a reliable, trusted, domestic source for "non-procurable" linear and digital microcircuits. Microcircuit emulation allows the Services to save significant costs by using form, fit and functionally equivalent spare parts rather than redesigning the next-higher-assembly.

Exhibit R-2, RDT&E Budget Item Justification: PB 2021 Defense Logistics Agency	Date: February 2020
Appropriation/Budget Activity 0400: *Research, Development, Test & Evaluation, Defense-Wide I* BA 3: *Advanced Technology Development (ATD)*	**R-1 Program Element (Number/Name)** PE 0603680S *I Manufacturing Technology Program (ManTech)*

• The ITLI SFA includes efforts to improve and facilitate the exchange of engineering and logistics information among DLA, the Military Services, DLA industry partners and DLA customers. It includes the Military Unique Sustainment Technology (MUST) and the Defense Logistics Information Research (DLIR) programs. A primary focus of this SFA is to capitalize on the emerging "Model Based Enterprise" paradigm and the semantic web as an enabler to a logistics system that is smart and connected up and down the supply chain and across all DLA Customers and suppliers. A major focus is to transform DoD engineering data from two-dimensional paper-based products to three-dimensional computer based models, and to develop processes to move from "electronic paper" (i.e. PDF files) to technical data files that can interface directly with industries' engineering systems. The benefits include shorter product introduction cycles, lower set up-costs for parts production and more economical small batch production.

DLA's focus for this budget cycle highlights advanced capabilities in digital and technical data modernization, management and analytics to fulfill the DLA role in the DOD Digital Engineering Strategy and improve sharing of data with the industrial base and supported organizations. Investment explores technologies to lower the Agency's material acquisition and operations costs and improve weapons systems support. This effort spans across both DLA R&D Program Elements and multiple Strategic Focus Areas, impacting across the DOD Joint Defense Manufacturing Technology Panel and DLA Enterprise logistics processes.

B. Program Change Summary ($ in Millions)	FY 2019	FY 2020	FY 2021 Base	FY 2021 OCO	FY 2021 Total
Previous President's Budget	62.396	42.834	43.045	-	43.045
Current President's Budget	62.396	51.002	40.025	-	40.025
Total Adjustments	0.000	8.168	-3.020	-	-3.020
• Congressional General Reductions	-	-			
• Congressional Directed Reductions	-	-			
• Congressional Rescissions	-	-			
• Congressional Adds	-	10.000			
• Congressional Directed Transfers	-	-			
• Reprogrammings	-	-			
• SBIR/STTR Transfer	-	-1.832			
• Inflation for Civilian Pay	-	-	0.027	-	0.027
• Inflation for Non-Pay/Non-Fuel Purchases	-	-	-0.037	-	-0.037
• Defense Wide Review Reduction	-	-	-2.280	-	-2.280
• Internal Realignment	-	-	-0.730	-	-0.730

Congressional Add Details ($ in Millions, and Includes General Reductions)	FY 2019	FY 2020
Project: IBMP: *Improving Industrial Base Manufacturing Processes (formerly Material Availability)*		
Congressional Add: *Digital Innovation Design for Reliable Castings Performance*	5.000	-
Congressional Add: *Battery Network for All Solid-State Battery Development*	10.000	-
Congressional Add: *Congressional add to improve steel performance initiative in Castings.*	-	10.000

Exhibit R-2, RDT&E Budget Item Justification: PB 2021 Defense Logistics Agency	Date: February 2020
Appropriation/Budget Activity 0400: *Research, Development, Test & Evaluation, Defense-Wide I* BA 3: *Advanced Technology Development (ATD)*	**R-1 Program Element (Number/Name)** PE 0603680S *I Manufacturing Technology Program (ManTech)*

Congressional Add Details ($ in Millions, and Includes General Reductions)	FY 2019	FY 2020
Congressional Add Subtotals for Project: IBMP	15.000	10.000
Congressional Add Totals for all Projects	15.000	10.000

Change Summary Explanation

FY2020, increased baseline by $10.000 million for program increase steel performance initiative in Castings.
FY2020, Small Business Innovation Research and Small Technology Transfer Research tax amounted to $1.832 million.
FY2021, internal realignment decreased program baseline by $0.730 million for critical Defense Property Accountability System redesign and upgrade requirements.
The FY 2021 funding request was reduced by $2.280 million during the Defense-Wide Review to free up resources for higher priority Department needs.

Exhibit R-2A, RDT&E Project Justification: PB 2021 Defense Logistics Agency			Date: February 2020
Appropriation/Budget Activity 0400 / 3	R-1 Program Element (Number/Name) PE 0603680S / *Manufacturing Technology Program (ManTech)*	Project (Number/Name) IBMP / *Improving Industrial Base Manufacturing Processes (formerly Material Availability)*	

COST ($ in Millions)	Prior Years	FY 2019	FY 2020	FY 2021 Base	FY 2021 OCO	FY 2021 Total	FY 2022	FY 2023	FY 2024	FY 2025	Cost To Complete	Total Cost
IBMP: *Improving Industrial Base Manufacturing Processes (formerly Material Availability)*	26.544	30.637	28.572	17.205	-	17.205	16.796	17.194	17.306	17.724	Continuing	Continuing

A. Mission Description and Budget Item Justification

The Improving Industrial Base Manufacturing Processes Strategic Focus Area (SFA) is an R&D effort undertaken with DLA's suppliers to reduce material costs, reduce the length and variability of production lead-times, assure DLA managed products meet performance requirements, and continuously improve quality and reliability. Benefits of this SFA include lower material costs, lower inventory levels and more predictable customer wait times, fewer quality deficiencies, and lower customer support costs. This SFA includes within its scope the Subsistence Network, the Battery Network, the Castings/Forging programs and Additive Manufacturing programs.

The Subsistence Network (SUBNET) program is the successor to the Combat Rations Network R&D program. SUBNET focuses on solutions to develop and promote manufacturing improvements in the subsistence supply chain. The program's expanded areas of interest include: combat rations, food equipment, field feeding solutions, food footprint, food innovations, food safety and defense developments, garrison feeding, nutrition and health, storage and packing solutions, surge and sustainment support, and water security. SUBNET forms a community of practice with Military Services, U.S. Department of Agriculture, Natick Soldier Research Development, and Engineering Center; Academia, and Industry to research and promote manufacturing improvements in the Subsistence Supply Chain with the goals of maximizing capability and capacity to produce, and to encourage innovation and modernization needed to leverage the latest technologies. Desired outcomes include: reduced cost, increased efficiencies, improved processes, enhanced quality, and improved surge demand capabilities.

The Casting program works to ensure a stable, reliable, and competitive domestic casting industrial base supporting the weapon system needs of the Department of Defense (DoD) and the Defense Logistics Agency (DLA). The casting program works with industry, universities, and the Casting Industry Associations to identify projects that improve the materials, processes and business practices of the nation's foundry industry. The program aligns projects with strategic issues and identified focus areas within the DLA and DoD. Guidance for these projects comes from the DLA Strategic Plan and input from the casting industry. Weapon system spare parts managed by DLA that contain castings are responsible for a disproportionate share of DLA's backorders or unfilled orders (UFOs). Cast parts are ~2% of National Stock Numbered Class IX parts but represent ~5% of all backorders, and when only the oldest backorders are considered, up to 10% are castings. This program includes tasks that focus on developing new capabilities in the areas of inspection, materials, processes, modeling, and design. Once developed, these capabilities will support the foundry industry, where the technologies will be tested and implemented, most often in conjunction with the casting industry associations. These advancements improve the metal casting supply chains for the DoD and the DLA to better support the warfighter. We will invest in projects aimed at reducing lead-time, reducing cost, and improving quality of castings critical to DoD weapon systems.

The Forging program works to ensure a stable, reliable, and competitive domestic forging industrial base for the weapon system needs of the Department of Defense (DoD) and the Defense Logistics Agency (DLA). Working with industry, universities, and the Forging Industry Associations to identify projects that improve the materials, processes and business practices of the nation's forging industry. The program aligns its projects with strategic issues and focus areas identified within the DLA and

Exhibit R-2A, RDT&E Project Justification: PB 2021 Defense Logistics Agency		Date: February 2020
Appropriation/Budget Activity 0400 / 3	**R-1 Program Element (Number/Name)** PE 0603680S / *Manufacturing Technology Program (ManTech)*	**Project (Number/Name)** IBMP / *Improving Industrial Base Manufacturing Processes (formerly Material Availability)*

DoD. Guidance for these projects comes from the DLA Strategic Plan and input from the forging industry. Weapon system spare parts managed by DLA that contain Forgings are responsible for a disproportionate share of DLA's backorders or unfilled orders (UFOs). Forged parts are ~2% of National Stock Number (NSN) Class IX parts but represent ~5% of all backorders, and when only the oldest backorders are considered, up to 10% are forgings. This program includes tasks to develop new capabilities in the areas of inspection, materials, processes, modeling, and design. Once developed these capabilities will support the forging industry, where these technologies will be tested and implemented in conjunction with the forging industry associations. These advancements improve the forging supply chains for the DoD and the DLA to better support the warfighter. We will invest in projects aimed at reducing lead-time, reducing cost, and improving quality of forgings critical to DoD weapon systems.

The Battery Network (BATTNET) program objective is to develop the next generation of battery manufacturing technologies for cost and price efficiency, longer shelf life, and lighter batteries with higher energy. BATTNET conducts R&D initiatives to address sustainment gaps and bridge technical solutions into higher a Manufacturing Readiness Level (MRL) for specific groups of batteries. BATTNET also focuses on projects to develop the production capability for advanced lithium-based non-rechargeable and rechargeable batteries to ensure the prompt and sustained availability, quality, and affordability of Service approved batteries. Desired outcomes include: streamlined inventory and associated cost reductions through standardization and improved distribution practices; resolved obsolescence issues; addressed surge and sustainment issues; enhanced security of supply chain; increased competition and manufacturing base; reduced per unit battery cost; and leveraged Service-level (Army, Navy, Air Force) and other governmental (DOE, DOT, NASA) R&D efforts to insert new technology and practices into the existing DLA battery inventory.

The Additive Manufacturing (AM) program objective is to establish AM as an effective alternative to conventional manufacturing and document the process for AM benefits. DLA is pursing all AM technology as a lead-time and inventory reduction enabler. The AM effort pursues alternate means of supply for products that are otherwise non-procurable or susceptible to procurement issues due to an unresponsive manufacturing vendor base. The AM effort includes the identification of AM candidates among the population of products that are needed but hard to obtain, costly or have long manufacturing lead times. The AM effort requires management of 3D digital technical and manufacturing data. In addition, the AM effort includes the development of the processes that will tie the designers, engineers, maintainers, logisticians, procurement managers and the vendor base into a seamless AM procurement stream. Potential benefits include products that can address an unfulfilled Warfighter readiness need by reducing production lead times, production costs, storage costs, transportation costs and in some cases fuel consumption due to lighter design and material options. DLA R&D will leverage these efforts with Industry, Academia and ongoing Military Service-level agreements (Army, Navy, Marine Corps, Air Force), Oak Ridge National Laboratory (ORNL) and the Department of Energy.

B. Accomplishments/Planned Programs ($ in Millions)	FY 2019	FY 2020	FY 2021
Title: Improving Industrial Base Manufacturing Processes (formerly Material Availability)	15.637	18.572	17.205
FY 2020 Plans: The Subsistence Network (SUBNET) program plans to research and execute short-term innovative projects to improve the subsistence supply chain in FY2020 and beyond. SUBNET will attend subsistence trade and industry events to leverage technology innovations and promote manufacturing improvements, continuing to expand and revise its internal Strategic Program Roadmap based upon the latest food supply chain emerging and technological advancements. DLA R&D SUBNET is currently researching and testing areas utilizing drones technology, food irradiation and plasma technology for fresh fruits and vegetables			

Exhibit R-2A, RDT&E Project Justification: PB 2021 Defense Logistics Agency		Date: February 2020
Appropriation/Budget Activity 0400 / 3	**R-1 Program Element (Number/Name)** PE 0603680S / *Manufacturing Technology Program (ManTech)*	**Project (Number/Name)** IBMP / *Improving Industrial Base Manufacturing Processes (formerly Material Availability)*

B. Accomplishments/Planned Programs ($ in Millions)	FY 2019	FY 2020	FY 2021
shelf-life extension, and block chain use cases in the subsistence supply chain. SUBNET plans to research and execute projects in FY2020 regarding RFID sensors, cybersecurity, quality assurance processes, phytosanitary requirements, and food waste. The program will also continue to pursue Small Business Innovation Research (SBIR) topics in Subsistence. The SUBNET program will work with community partners to leverage the latest technologies, encourage innovation and modernization, and promote manufacturing improvements in the subsistence supply chain. The Casting program will complete work for the On-Demand Melting for Small Quantity Castings for die castings and the Digital Radiographic Reference Standards for Copper Alloys projects. We will continue to monitor the existing projects. These projects focus on improving manufacturing processes and technology that includes robotic and additive manufacturing methods and implementation, new test processes and procedures to evaluate cast materials, computer simulation and modeling to decrease lead-time and increase quality. The Casting program works with Academia, industry, and industry associations to continually identify future development and technical needs in alignment with the DoD and DLA. The Forging program will award contract(s) based on responses to the Broad Agency Announcement (BAA) that is planned for release in late FY19 or early FY20. The BAA will solicit projects from industry to improve the materials and processes used within the forging industry. Contract awards are anticipated during the fiscal year. The Battery Network (BATTNET) program will initiate new projects for improving the production readiness, transition, and standardization of soldier and system batteries within the DLA supply chain. Areas of focus will be for critical non-rechargeable soldier batteries, bipolar lead-acid battery capabilities, and lithium-ion formats for aviation batteries. The program will also continue addressing requirements for manufacturing and material improvements in the low power, vacuum electron tube supply base. The Additive Manufacturing (AM) program plans to finance collaborative technical efforts from the military departments, industry, and academic institutions that have the potential to accelerate the qualification, certification and fabrication methodologies for AM applications and create sources of AM supplies or services for DLA. DLA R&D will support DOD-wide efforts to baseline risk categorization of AM parts and acceptability criteria that will accelerate AM integration into the DOD Supply Chain. DLA R&D will fund efforts to identify the best methods for converting models and technical drawings that predate Computer-Aided Design and Drafting software into digital format in order to expedite creation of digital models and related design and testing information to help establish and expand the DoD digital library of AM parts to solve issues with obsolescence, low volume, long-lead, costly parts. These efforts seek to increase the number of AM parts qualified for procurement and achieve savings from the associated lead-time, storage costs, transportation costs, in some cases reduction of fuel consumption due to lighter design and material options. Desired outcomes include: exploration of improved reverse engineering processes for AM purposes, and optimization of			

Exhibit R-2A, RDT&E Project Justification: PB 2021 Defense Logistics Agency		Date: February 2020
Appropriation/Budget Activity 0400 / 3	**R-1 Program Element (Number/Name)** PE 0603680S / *Manufacturing Technology Program (ManTech)*	**Project (Number/Name)** IBMP / *Improving Industrial Base Manufacturing Processes (formerly Material Availability)*

B. Accomplishments/Planned Programs ($ in Millions)	FY 2019	FY 2020	FY 2021

polymer and metal AM production to obtain land, air and sea and expeditionary platform spare parts. Overall DLA Enterprise AM efforts will provide alternatives in product realization in order to address unfulfilled Warfighter readiness needs.

FY 2021 Plans:

The Subsistence Network (SUBNET) program will continue to research and execute short-term innovative projects to improve the subsistence supply chain. SUBNET will work with community partners (military services, industry, and academia) to leverage the latest innovations. SUBNET plans to research and execute projects in FY2021 regarding mobile distribution facilities around the battlefield, modernization of government subsistence warehouses, assessment of materiel handling capabilities, and integrating robotics into current processes. The program will also continue to pursue Small Business Innovation Research (SBIR) topics in Subsistence, and collaborate with the Defense Advanced Research Projects Agency on their future projects for synergy and as a potential transition partner.

The Casting program will on continue to monitor awarded contracts for projects that research, develop and deploy innovative and technical solutions to ensure a viable and competitive domestic industrial base. These projects focus on improving manufacturing processes and technology that includes robotic and additive manufacturing methods and implementation, new test processes and procedures to evaluate cast materials, computer simulation and modeling to decrease lead-time and increase quality. The Casting program works with Academia, industry, and industry associations to continually identify future development and technical needs in alignment with the DoD and DLA.

The Forging program will monitor contracts awarded under the Broad Agency Announcement (BAA) offered in FY20 and award any remaining proposed projects that could be funded. The projects included in the contracts will focus on exploring alternative forging manufacturing methods, materials to reduce production lead-time and costs, modeling and simulation software improvements and enhancements and improvements to post processing methods. These projects will be in alignment with the needs of the DoD and DLA aimed and supporting and fulfilling the needs of the warfighter. Forgings baseline was reduced by approximately $0.500 million resulting from overall MANTECH $3.020 million in directed reductions. Impact of the baseline reduction will cause project cancellation or delays in the Forgings program.

The Battery Network (BATTNET) program will continue new projects for improving the production readiness, transition, and standardization of soldier and system batteries within the DLA supply chain. The BATTNET program will also leverage new battery manufacturing technologies for the supply chain that have been developed by industry – advanced electrode production, low cost materials production or recycling, advanced performance cells, and deep-discharge lithium-ion capabilities. BATTNET baseline was reduced by approximately $0.500 million resulting from overall MANTECH $3.020 million in directed reductions.

Exhibit R-2A, RDT&E Project Justification: PB 2021 Defense Logistics Agency		Date: February 2020
Appropriation/Budget Activity 0400 / 3	**R-1 Program Element (Number/Name)** PE 0603680S / *Manufacturing Technology Program (ManTech)*	**Project (Number/Name)** IBMP / *Improving Industrial Base Manufacturing Processes (formerly Material Availability)*

B. Accomplishments/Planned Programs ($ in Millions)	FY 2019	FY 2020	FY 2021
Impact of the baseline reduction will cause project cancellation or delays for improvements to warfighter weapon system battery performance and cost. The Additive Manufacturing (AM) program, using market research, requests for information/proposals, Broad Agency Announcements (BAA), DLA R&D will fund analysis of alternatives for the best cognitive computing solutions to integrate information from several logistics, engineering, legal, and supplier data sources into an efficient AM decisional framework. These augmented analytics efforts will help identify unseen patterns in the utilization of AM resources such as machines, materials, manufacturing expertise, and manufacturing data to shape an efficient AM distributive manufacturing ecosystem. Desired outcomes include: optimization of polymer and metal AM production to obtain land, air and sea and expeditionary platform spare parts. The Additive Manufacturing (AM) program plans to finance collaborative technical efforts from the military departments, industry, and academic institutions that enhance the customer engagement with the AM product management workflows. Overall DLA Enterprise AM efforts will identify the best AM applications to achieve precise robustness-repeatability-reproducibility of part fabrication using an AM technical data package in a distributed manufacturing setting and prove the delivery of AM parts to warfighters deployed at the expeditionary sea, land or air bases. AM baseline was reduced by approximately $0.943 million resulting from overall MANTECH $3.020 million in directed reductions. Impact of the baseline reduction will cause project cancellation or delays to support one of the DLA Strategic Imperatives. ***FY 2020 to FY 2021 Increase/Decrease Statement:*** Adjustments of $2.130 million in reductions due to DLA Fiscal Guidance reduction, civilian pay inflation, inflation for non-pay/non-fuel purchases and internal realignment. Reduction impacts: $0.500 million to Forgings; $0.500 million to Battery Network; $0.943 million to Additive Manufacturing Programs.			
Accomplishments/Planned Programs Subtotals	15.637	18.572	17.205

	FY 2019	FY 2020
Congressional Add: Digital Innovation Design for Reliable Castings Performance	5.000	-
FY 2019 Accomplishments: This project developed a set of design tools to allow modern engineers to improve casting design. These design tools are based on modern property measurements and validated by testing, allowing engineers to create cast parts that are reliable, high performance and cost efficient for critical DOD applications.		
Congressional Add: Battery Network for All Solid-State Battery Development	10.000	-
FY 2019 Accomplishments: Focused on the production development and transition of solid-state electrolyte technology for military lithium-ion batteries that demonstrates a significant increase in available energy		

Exhibit R-2A, RDT&E Project Justification: PB 2021 Defense Logistics Agency		Date: February 2020
Appropriation/Budget Activity 0400 / 3	**R-1 Program Element (Number/Name)** PE 0603680S / *Manufacturing Technology Program (ManTech)*	**Project (Number/Name)** IBMP / *Improving Industrial Base Manufacturing Processes (formerly Material Availability)*

	FY 2019	FY 2020
density and safety, eliminates the need for toxic flammable electrolyte, and reduces the complexity of battery management systems. Projects enabled improvements to the dismounted warfighter's capability by reducing battery weight for combat operations, as well as significantly increasing operating time of equipment and weapons systems.		
Congressional Add: Congressional add to improve steel performance initiative in Castings. ***FY 2020 Plans:*** Conduct projects in Casting to improve steel performance.	-	10.000
Congressional Adds Subtotals	15.000	10.000

C. Other Program Funding Summary ($ in Millions)

N/A

Remarks

D. Acquisition Strategy

The DLA R&D program is executed through Delivery Orders placed on Indefinite Delivery/Indefinite Quantity Contracts that resulted from competitive Broad Agency Announcements and through interagency agreements with the Military Services when it is cost effective and/or provides some technical advantage, e.g. improves the probability of successful transition. DLA also has a continuously open Broad Agency Announcement for Emerging Technologies.

Exhibit R-2A, RDT&E Project Justification: PB 2021 Defense Logistics Agency			Date: February 2020
Appropriation/Budget Activity 0400 / 3	R-1 Program Element (Number/Name) PE 0603680S / *Manufacturing Technology Program (ManTech)*	Project (Number/Name) AAA / *Maintaining Viable Supply Sources (formerly High Quality Sources)*	

COST ($ in Millions)	Prior Years	FY 2019	FY 2020	FY 2021 Base	FY 2021 OCO	FY 2021 Total	FY 2022	FY 2023	FY 2024	FY 2025	Cost To Complete	Total Cost
AAA: *Maintaining Viable Supply Sources (formerly High Quality Sources)*	22.076	26.296	17.229	17.854	-	17.854	18.192	19.151	19.232	19.677	Continuing	Continuing

A. Mission Description and Budget Item Justification

The Maintaining Viable Supply Sources (MVSS) Strategic Focus Area (SFA) consists of projects undertaken to assure that the industrial base can respond to DLA requirements and DLA can fill military customers' material requirements reliably and consistently. Benefits include eliminating cancelled requisitions returned to customers as "non-procurable." This strategic focus area includes within its scope the Material Acquisition Electronics (MAE) program.

The Program Roadmap has two major thrusts areas: Digital Microcircuits and Linear/Analog Microcircuits. The program has several projects addressing specific classes of obsolescent microcircuit technologies. Over the past several years, obsolescence in this class of microcircuits has greatly increased and has become a significant concern. These are classes of microcircuits that are expected to become non-procurable in FY2020 and beyond. Without the technologies planned on the MAE Roadmap, DLA will not be able to support DoD's requirements for high quality spare parts for critical electronic systems and subsystems.

B. Accomplishments/Planned Programs ($ in Millions)	FY 2019	FY 2020	FY 2021
Title: Maintaining Viable Supply Sources (formerly High Quality Sources)	26.296	17.229	17.854
FY 2020 Plans: MAE will continue planning for the specific emulation technology implementations to support specific device family groups in consonance with Customer and Agency requirements. It will complete and transition TTL-compatible CMOS digital logic emulation into full scale production. It will expand process development at the 350 nanometer technology node into % Volt devices and continue process development for Linear/Analog Microcircuits. It will begin additional Linear/Analog emulation projects for types/groups of parts, prioritized based on customer requirements.			
FY 2021 Plans: MAE will continue planning for the specific emulation technology implementations to support specific device family groups in consonance with Customer and Agency requirements. It will complete and transition its first Linear/Analog technology, 20 Volt Operational Amplifier, into full scale production. It will continue development of Additive Manufacturing techniques to address Microcircuit Cases. It will begin additional Linear/Analog emulation projects for types/groups of parts, prioritized based on customer requirements.			
FY 2020 to FY 2021 Increase/Decrease Statement: No significant change.			
Accomplishments/Planned Programs Subtotals	26.296	17.229	17.854

Exhibit R-2A, RDT&E Project Justification: PB 2021 Defense Logistics Agency		Date: February 2020
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C. Other Program Funding Summary ($ in Millions)

N/A

Remarks

D. Acquisition Strategy

The DLA R&D program is executed through Delivery Orders placed on Indefinite Delivery/Indefinite Quantity Contracts that resulted from competitive Broad Agency Announcements and through interagency agreements with the Military Services when it is cost effective and/or provides some technical advantage, e.g. improves the probability of successful transition. DLA also has a continuously open Broad Agency Announcement for Emerging Technologies.

Exhibit R-2A, RDT&E Project Justification: PB 2021 Defense Logistics Agency			Date: February 2020
Appropriation/Budget Activity 0400 / 3	R-1 Program Element (Number/Name) PE 0603680S / *Manufacturing Technology Program (ManTech)*	Project (Number/Name) OOO / *Improving Technical and Logistics Information (formerly Industry and Customer Collaboration)*	

COST ($ in Millions)	Prior Years	FY 2019	FY 2020	FY 2021 Base	FY 2021 OCO	FY 2021 Total	FY 2022	FY 2023	FY 2024	FY 2025	Cost To Complete	Total Cost
OOO: *Improving Technical and Logistics Information (formerly Industry and Customer Collaboration)*	10.206	5.463	5.201	4.966	-	4.966	5.041	5.120	5.942	6.056	Continuing	Continuing

A. Mission Description and Budget Item Justification

The Improving Technical and Logistics Information (ITLI) SFA projects improve and facilitate the communication of technical and logistics information among industry, DLA's military customers and DLA. This SFA includes the Military Unique Sustainment Technology (MUST), the Defense Logistics Information Research (DLIR), and the Emergent Manufacturing Technology (EMT) portfolios within its scope.

The Military Unique Sustainment Technology (MUST) program's focus addresses GAO Report 12-707 recommendations for DoD to establish a "knowledge-based approach" to define, communicate, and collaborate on military unique combat uniforms and individual equipment (CUIE) requirements. DLA has the responsibility to manage the technical requirements among the Services and the Defense Industrial Base. Currently there is no common environment for collaborating on new requirements among the stakeholders. The strategic objective of the DLA MUST program is to identify, develop and adopt technologies that can significantly shorten the time needed to transition Combat Uniforms and Individual Equipment from development to operational use from years to months. The Program focuses on technologies that will transform the military CUIE supply chain from an "electronic paper" (i.e. PDF/MS Word) based manual environment, into a knowledge-based automated environment. The resulting approach will be a neutral platform that will seamlessly communicate military unique technical requirements throughout the end-to-end supply chain.

The Defense Logistics Information Research (DLIR) program researches core technology to improve the quality, security, and interoperability of logistics data acquisition and management to enable and streamline DLA operations. DLA enables transformation of business practices and methodologies as the data for weapons systems evolve from traditional formats and delivery methods (such as two-dimensional images and PDF formats) to newer, more innovative methods (such as three-dimensional solid models, object-oriented databases, service-oriented architecture (SOA) and Web 3C standards). This transformational shift for DLA is driven by the Model-Based Enterprise (MBE) approach, the way industry is delivering design and development data for weapon systems to the Military Services and the way the Military Services in turn manage and provide the data to DLA. DLA Logistics Operations, DLA Acquisition, DLA Tech/Quality, and DLA's Major Subordinate Commands (MSCs) are key stakeholders in the DLIR initiatives to modernize the representation and delivery of weapons systems data.

The EMT program addresses emerging and out of cycle requirements that always occur as DLA strives to maintain readiness of the aging weapon systems.

B. Accomplishments/Planned Programs ($ in Millions)	FY 2019	FY 2020	FY 2021
Title: Improving Technical and Logistics Information (formerly Industry and Customer Collaboration	5.463	5.201	4.966

Exhibit R-2A, RDT&E Project Justification: PB 2021 Defense Logistics Agency		Date: February 2020
Appropriation/Budget Activity 0400 / 3	**R-1 Program Element (Number/Name)** PE 0603680S / *Manufacturing Technology Program (ManTech)*	**Project (Number/Name)** OOO / *Improving Technical and Logistics Information (formerly Industry and Customer Collaboration)*

B. Accomplishments/Planned Programs ($ in Millions)	FY 2019	FY 2020	FY 2021
FY 2020 Plans: The Military Unique Sustainment Technology (MUST) program will finalize development for MUST I and begin transition of contract deliverables: Supply Request Package for introduction of new items into DLA sustainment; Product Test Center fabric and color inspection tools for improved quality reporting; and digital models of requirement documents (TexSpecs)for the MUST knowledge base. These tools are in validation testing with key DLA Troop Support Clothing and Textile(C&T)and Service Stakeholders. Validation will be completed in 2021 and test results will be documented in the Functional Requirements Document(FRD). The next phase of the program, MUST II, will build on MUST I results and continue technical data modernization with extended focus on integration of manufacturing and testing processes. It will enable combat uniform and individual equipment technical data to be seamlessly communicated and applied throughout the DLA C&T Supply Chain. For example, settings would be directly fed into the test equipment and results would be accurately communicated to quality assurance. A new broad agency announcement (BAA) will be released for an anticipated FY 2021 award. The Defense Logistics Information Research (DLIR) program will continue with the Connecting the Model-Based Enterprise (MBE) project which will operationally test different methods and processes to obtain technical data packages for selected Class IX weapon system parts directly from ESA/PMO's PLM system in lieu of the 339 process. The DLIR program will also initiate the 3D Technical Data Solutions and Digital Rights Management (DRM) projects. The 3D Technical Data Solutions project will identify one or more commercial viewers that provide the ability to view multiple data formats that may simplify DLA employees work processes, or give DLA additional capabilities to view data provided by the Military Services; and develop standard guidance or advice to Military Service organizations, ESAs and PMOs, to guide and influence their generation of 3D model based TDPs in order to ensure that they support the needs of DLA and its vendor base. The DRM project will benchmark the DRM technologies currently practiced in the private and public sectors, conduct analyses to determine the right solution for DLA, develop a prototype to validate the requirement, and develop a transition plan. Additionally, the DLIR program will continue to support DLA's Technical Data Management Transformation (TDMT) efforts. The EMT program continues to enable DLA's investigation of new disruptive technology advances that may be implemented in the nearer term, without degrading well established program efforts. This program enables the Agency to advance those technologies sooner in order to provide to the warfighter earlier. Small Business Innovation Research (SBIR) phase III efforts (which cannot be funded with SBIR funds) are a prime example of activities that will be funded with these funds, examples include emerging magnetic braking technologies, and addressing strategic materials shortage/risk. Efforts will continue in FY2020 to advance Digital Manufacturing by developing a comprehensive approach to take advantage of integrated, computer-based systems of			

Exhibit R-2A, RDT&E Project Justification: PB 2021 Defense Logistics Agency		Date: February 2020
Appropriation/Budget Activity 0400 / 3	**R-1 Program Element (Number/Name)** PE 0603680S / *Manufacturing Technology Program (ManTech)*	**Project (Number/Name)** OOO / *Improving Technical and Logistics Information (formerly Industry and Customer Collaboration)*

B. Accomplishments/Planned Programs ($ in Millions)	FY 2019	FY 2020	FY 2021

simulation, three-dimensional (3D) visualization, analytics and various collaboration tools to create and manufacture products to support the warfighter. Additionally, any emergent Strategic Materials requirements will be addressed through the EMT program.

FY 2021 Plans:

The Military Unique Sustainment Technology (MUST) program will award multiple MUST II contracts. The technical roadmap will be developed. Building on MUST I results, the MUST II objective is to complete tech data modernization for the MUST Knowledge base and to extend its impact across the C&T industrial base.

The Defense Logistics Information Research (DLIR) program will continue the Connecting the Model-Based Enterprise (MBE) project and begin efforts to improve the Federal Catalog in combination with 3D Scanning capabilities. This project would define the requirements and develop the prototype of the next generation of the federal catalog, including advanced search functions, geometric data representation, and autonomous data validation. An enhanced catalog would promote the digital twin, i.e., the digital representation of systems and their components, and the use of digital artifacts to design, test and sustain national defense systems. These capabilities could significantly improve DLA and DOD operations in acquisition, quality control, customer support, and other areas. Additionally, the DLIR program will continue efforts to collaborate and develop a cyber-physical model that will evaluate the resiliency of OT systems after a cyber-attack and continue to support DLA's Technical Data Management Transformation (TDMT) efforts.

The EMT program continues to enable DLA's investigation of new disruptive technology advances that may be implemented in the nearer term, without degrading well established program efforts. This program enables the Agency to advance those technologies sooner in order to provide to the warfighter earlier. Small Business Innovation Research (SBIR) phase III efforts (which cannot be funded with SBIR funds) are a prime example of activities that will be funded with these funds, examples include emerging magnetic braking technologies, and addressing strategic materials shortage/risk. Efforts will continue in FY2020 to advance Digital Manufacturing by developing a comprehensive approach to take advantage of integrated, computer-based systems of simulation, three-dimensional (3D) visualization, analytics and various collaboration tools to create and manufacture products to support the warfighter. Additionally, any emergent Strategic Materials requirements will be addressed through the EMT program. EMT baseline was reduced by approximately $0.353 million resulting from overall MANTECH $3.020 million in directed reductions. Impact of the baseline reduction will result in limited availability of funds for emergent technology requirements in execution years.

FY 2020 to FY 2021 Increase/Decrease Statement:

Exhibit R-2A, RDT&E Project Justification: PB 2021 Defense Logistics Agency		Date: February 2020
Appropriation/Budget Activity 0400 / 3	**R-1 Program Element (Number/Name)** PE 0603680S / *Manufacturing Technology Program (ManTech)*	**Project (Number/Name)** OOO / *Improving Technical and Logistics Information (formerly Industry and Customer Collaboration)*

B. Accomplishments/Planned Programs ($ in Millions)	FY 2019	FY 2020	FY 2021
Adjustments of $0.459 million in reductions due to DLA Fiscal Guidance reduction, civilian pay inflation, inflation for non-pay/non-fuel purchases and internal realignment. Most significant impact of reduction is $0.353 million decrease in EMT baseline.			
Accomplishments/Planned Programs Subtotals	5.463	5.201	4.966

C. Other Program Funding Summary ($ in Millions)

N/A

Remarks

D. Acquisition Strategy

The DLA R&D program is executed through Delivery Orders placed on Indefinite Delivery/Indefinite Quantity Contracts that resulted from competitive Broad Agency Announcements and through interagency agreements with the Military Services when it is cost effective and/or provides some technical advantage, e.g. improves the probability of successful transition. DLA also has a continuously open Broad Agency Announcement for Emerging Technologies.

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Exhibit R-2, RDT&E Budget Item Justification: PB 2021 Defense Logistics Agency	Date: February 2020
Appropriation/Budget Activity 0400: *Research, Development, Test & Evaluation, Defense-Wide I* BA 3: *Advanced Technology Development (ATD)*	**R-1 Program Element (Number/Name)** PE 0603712S *I Logistics Research and Development Technology (Log R&D)*

COST ($ in Millions)	Prior Years	FY 2019	FY 2020	FY 2021 Base	FY 2021 OCO	FY 2021 Total	FY 2022	FY 2023	FY 2024	FY 2025	Cost To Complete	Total Cost
Total Program Element	45.739	18.127	16.620	10.235	-	10.235	10.355	10.679	10.920	11.171	Continuing	Continuing
EMM: *Enhancing Analysis, Modeling, and Decision Support (formerly Analytic & Decision Support)*	8.754	3.758	2.075	2.729	-	2.729	2.775	2.886	2.900	2.970	Continuing	Continuing
GLTD: *Improving Logistics Processes (formerly Logistics Process)*	19.502	3.568	2.588	4.044	-	4.044	4.114	4.258	4.277	4.376	Continuing	Continuing
04: *Emergent Logistics R&D Requirements (formerly Innovative Products & Services for DLA Customers)*	17.483	10.801	11.957	3.462	-	3.462	3.466	3.535	3.743	3.825	Continuing	Continuing

A. Mission Description and Budget Item Justification

The Defense Logistics Agency (DLA) is responsible for providing to the Military Services, and other Federal Agencies, as well as combined and allied forces the full spectrum of logistics, acquisition and technical services. DLA sources and provides virtually 100 percent of the consumable items the military services need to operate – including food, uniforms, fuel and energy, medical supplies, construction and barrier materials and equipment, and more than 85 percent of the military's spare parts. DLA also provides logistics services including logistics information data, manages the reutilization of military equipment, and documents automation and production services. DLAs Logistics Research and Development (Log R&D) program helps ensure that advanced logistics concepts and business processes are used to accomplish the agency's mission with the leanest possible infrastructure. Log R&D identifies the best commercial business practices and tailors them, as necessary, into the most effective business processes for the agency. Log R&D develops and demonstrates high risk, high payoff technology that provides a significantly higher level of support at the lowest possible costs.

The DLA Log R&D program is organized into three Strategic Focus Areas (SFAs):
• Enhancing Analysis, Modeling, and Decision Support (EAMD): R&D efforts to develop decision support tools, such as modeling, simulation, and other analytics to improve operational strategy decision-making, forecasting, and procurement, which support more effective and efficient responses to emerging market and customer requirements.
• Improving Logistics Processes (ILP): R&D efforts to develop and implement advanced technology in logistics processes over and above current baseline systems.
• Emergent Logistics R&D Requirements (ELR): R&D efforts to support emergent Logistics R&D requirements that arise out of the budget cycle. These out of cycle requirements always occur. This SFA begins new projects in a timely manner without disrupting ongoing projects by funds reallocation. This SFA scope includes all DLA supply chains and logistics processes.

Exhibit R-2, RDT&E Budget Item Justification: PB 2021 Defense Logistics Agency	Date: February 2020
Appropriation/Budget Activity 0400: *Research, Development, Test & Evaluation, Defense-Wide I* BA 3: *Advanced Technology Development (ATD)*	**R-1 Program Element (Number/Name)** PE 0603712S *I Logistics Research and Development Technology (Log R&D)*

DLA's focus for this budget cycle highlights advanced capabilities in digital and technical data modernization, management and analytics to fulfill the DLA role in the DOD Digital Engineering Strategy and improve sharing of data with the industrial base and supported organizations. Investment explores technologies to lower the Agency's material acquisition and operations costs and improve weapons systems support. This effort spans across both DLA R&D Program Elements and multiple Strategic Focus Areas, impacting across the DOD Joint Defense Manufacturing Technology Panel and DLA Enterprise logistics processes.

B. Program Change Summary ($ in Millions)	FY 2019	FY 2020	FY 2021 Base	FY 2021 OCO	FY 2021 Total
Previous President's Budget	18.127	10.817	10.998	-	10.998
Current President's Budget	18.127	16.620	10.235	-	10.235
Total Adjustments	0.000	5.803	-0.763	-	-0.763
• Congressional General Reductions	-	-			
• Congressional Directed Reductions	-	-3.600			
• Congressional Rescissions	-	-			
• Congressional Adds	-	10.000			
• Congressional Directed Transfers	-	-			
• Reprogrammings	-	-			
• SBIR/STTR Transfer	-	-0.597			
• Defense Wide Review Reduction	-	-	-0.583	-	-0.583
• Inflation for Civilian Pay	-	-	0.017	-	0.017
• Inflation for Non-Pay/Non-Fuel Purchases	-	-	-0.010	-	-0.010
• Internal Realignment	-	-	-0.187	-	-0.187

Congressional Add Details ($ in Millions, and Includes General Reductions)	FY 2019	FY 2020
Project: 04: *Emergent Logistics R&D Requirements (formerly Innovative Products & Services for DLA Customers)*		
Congressional Add: *Energy Readiness Program for Liquid Hydrocarbon Fuels*	7.000	10.000
Congressional Add Subtotals for Project: 04	7.000	10.000
Congressional Add Totals for all Projects	7.000	10.000

Change Summary Explanation

FY2020, $3.600 million reduction OSD Enacted FY2020 adjustments due to prior year carryover.
FY2020, $10.000 million Congressional Addition for program increase steel performance initiative in Castings.
FY2020, the Small Business Innovation Research and Small Technology Transfer Research tax amounted to $0.597 million.
FY2021, internal realignment decreased program baseline by $0.186 million for critical Defense Property Accountability System redesign and upgrade requirements.
The FY 2021 funding request was reduced by $0.583 million during the Defense-Wide Review to free up resources for higher priority Department needs.

Exhibit R-2A, RDT&E Project Justification: PB 2021 Defense Logistics Agency			Date: February 2020
Appropriation/Budget Activity 0400 / 3	**R-1 Program Element (Number/Name)** PE 0603712S / *Logistics Research and Development Technology (Log R&D)*	**Project (Number/Name)** EMM / *Enhancing Analysis, Modeling, and Decision Support (formerly Analytic & Decision Support)*	

COST ($ in Millions)	Prior Years	FY 2019	FY 2020	FY 2021 Base	FY 2021 OCO	FY 2021 Total	FY 2022	FY 2023	FY 2024	FY 2025	Cost To Complete	Total Cost
EMM: *Enhancing Analysis, Modeling, and Decision Support (formerly Analytic & Decision Support)*	8.754	3.758	2.075	2.729	-	2.729	2.775	2.886	2.900	2.970	Continuing	Continuing

A. Mission Description and Budget Item Justification

This Strategic Focus Area (SFA) funds developments in advanced analytical tools, modeling, and simulation of logistics and supply chain processes. These tools will improve DLA forecasting and procurement strategy decisions and lead to faster and more flexible responsiveness to emerging market and customer requirements. This SFA consists of two programs:

The Medical Logistics Network (MLN) program supports the Medical Directorate's mission to develop and implement the logistics and medical supply chain business practices that ensure the cost-effective and efficient distribution of medical materiel to the full range of Military Health System operations.

The Strategic Distribution & Disposition (SDD) Program collaborates with DLA Distribution and Disposition Services to identify legacy capabilities that are inadequate for emerging worldwide distribution and disposition requirements. A key objective of the SDD Program is to anticipate, assess, and meet the current and future Warfighter requirements by leveraging R&D to infuse innovation into solutions. Long-term objectives include mitigating the DoD Supply Chain Management high risk issues identified by the Government Accountability Office (GAO), 2018 (Inventory Management, Material Distribution and Asset Visibility).

B. Accomplishments/Planned Programs ($ in Millions)	FY 2019	FY 2020	FY 2021
Title: Enhancing Analysis, Modeling, and Decision Support	3.758	2.075	2.729
FY 2020 Plans: The Medical Logistics Network (MLN) program continues to support the Medical Directorate's mission to develop and implement the logistics and medical supply chain business practices that ensure the cost-effective and efficient distribution of medical materiel to the full range of Military Health System operations. Assessments are currently being conducted for viable R&D projects for the budgeted amounts. MLN baseline was reduced by approximately $0.165 million resulting from overall LOG R&D $3.600 million reduction OSD Enacted FY2020 adjustments due to prior year carryover. No planned projects are impacted. The Strategic Distribution and Disposition (SDD) program continues to provide applied research, analytical and decision support to DLA Distribution and Disposition Services and provide support to the Distribution Modernization Program. Additionally, SDD will continue to engage with Industry, Department of Defense (DoD) sponsored Federally Funded Research and Development Centers (FFRDCs) and University-Affiliated Research Center Laboratories (UARCs) leveraging subject-matter expertise in key			

Exhibit R-2A, RDT&E Project Justification: PB 2021 Defense Logistics Agency		Date: February 2020
Appropriation/Budget Activity 0400 / 3	**R-1 Program Element (Number/Name)** PE 0603712S / *Logistics Research and Development Technology (Log R&D)*	**Project (Number/Name)** EMM / *Enhancing Analysis, Modeling, and Decision Support (formerly Analytic & Decision Support)*

B. Accomplishments/Planned Programs ($ in Millions)	FY 2019	FY 2020	FY 2021
areas of research such as Blockchain, Artificial Intelligence, Machine Learning, Internet of Things (IoT), Augmented Reality, and Autonomous/Robotics systems. SDD baseline was reduced by approximately $0.907 million resulting from overall LOG R&D $3.600 million reduction OSD Enacted FY2020 adjustments due to prior year carryover. Impact of the baseline reduction will cause project delays or cancellations in support of the DLA Distribution Modernization Program initiatives, one of DLA Strategic Imperatives. ***FY 2021 Plans:*** Due to directed fiscal reductions, the Medical Logistics Network (MLN) program baseline was reduced to zero. Currently, there are no planned projects that will be impacted by the reduction. The Strategic Distribution and Disposition (SDD) program will continue to provide applied research, analytical and decision support to DLA Distribution and Disposition Services and provide support to the Distribution Modernization Program (DMP). Additionally, SDD will continue to engage with Industry, Department of Defense (DoD) sponsored Federally Funded Research and Development Centers (FFRDCs) and University-Affiliated Research Center Laboratories (UARCs) leveraging subject-matter expertise in key areas of research such as Blockchain, Artificial Intelligence, Machine Learning, Internet of Things (IoT), Augmented Reality, and Autonomous/Robotics systems. SDD will continue to incorporate Integrate Project Teams (IPT) for project collaboration and Integrated System Engineering concepts (test and evaluation) into Distribution projects. ***FY 2020 to FY 2021 Increase/Decrease Statement:*** Adjustments of $0.566 million due to DLA Fiscal Guidance reduction, civilian pay inflation, inflation for non-pay/non-fuel purchases and internal realignment. Reduction zeroed-out the Medical Logistics Network Program baseline, no projects currently planned.			
Accomplishments/Planned Programs Subtotals	3.758	2.075	2.729

C. Other Program Funding Summary ($ in Millions)

N/A

Remarks

D. Acquisition Strategy

The DLA R&D program is executed through Delivery Orders placed on Indefinite Delivery/Indefinite Quantity Contracts that resulted from competitive Broad Agency Announcements and through interagency agreements with the Military Services when it is cost effective and/or provides some technical advantage, e.g. improves the probability of successful transition. DLA also has a continuously open Broad Agency Announcement for Emerging Technologies.

Exhibit R-2A, RDT&E Project Justification: PB 2021 Defense Logistics Agency			Date: February 2020
Appropriation/Budget Activity 0400 / 3	R-1 Program Element (Number/Name) PE 0603712S / *Logistics Research and Development Technology (Log R&D)*	Project (Number/Name) GLTD / *Improving Logistics Processes (formerly Logistics Process)*	

COST ($ in Millions)	Prior Years	FY 2019	FY 2020	FY 2021 Base	FY 2021 OCO	FY 2021 Total	FY 2022	FY 2023	FY 2024	FY 2025	Cost To Complete	Total Cost
GLTD: *Improving Logistics Processes (formerly Logistics Process)*	19.502	3.568	2.588	4.044	-	4.044	4.114	4.258	4.277	4.376	Continuing	Continuing

A. Mission Description and Budget Item Justification

The Improving Logistics Processes (ILP) Strategic Focus Area (SFA) encompasses R&D efforts within the Weapon System Sustainment (WSS) Program to support DLA business functional units through applied research and development of advanced technologies to improve business processes and operational methods, leverage the application of leading edge logistics “out-of-the box” concepts using disruptive technology business tools, and support DLA’s technological transformation effort. To qualify for R&D funding, the R&D effort must develop and apply technology and processes over and above current baseline IT systems and continuous improvements efforts.

Although all DLA processes are in scope, the strategic focus for this budget cycle is in Procurement, Planning, Technical Quality and the Major Subordinate Commands.

Innovative process changes and new technologies will be researched in these areas to drive improvements to internal costs, reduce award delays, and improve material availability, supply chain security, demand forecasting and logistical planning. This will be accomplished through the use of artificial intelligence/machine learning, blockchain technology, and research of emerging commercial best practices and technologies.

B. Accomplishments/Planned Programs ($ in Millions)	FY 2019	FY 2020	FY 2021
Title: Improving Logistics Processes (ILP)	3.568	2.588	4.044
FY 2020 Plans: The Weapon Systems Sustainment (WSS) program will continue to explore new use case studies for disruptive technologies. Additional areas of interest for the five year artificial intelligence roadmap include the ability to effectively manage metadata in DLA systems to enable enterprise-wide adoption of new capabilities, development of a predictive analytics capability for backorders, and using machine learning techniques to improve operation plan logistic estimates. Projects are planned to research incorporating internet-based purchases and a contract quality control program into DLA’s acquisition processes as well as expansion of capabilities to gather and utilize market intelligence. WSS baseline was reduced by approximately $1.335 million resulting from overall LOG R&D $3.600 million reduction OSD Enacted FY2020 adjustments due to prior year carryover. Impact of the baseline reduction will cause project delays or cancellations in support of the DLA Strategic Imperatives for exploring AI/ML technologies for Predictive Analytics as well as Market Intelligence and Supply Chain security projects.			
FY 2021 Plans: The Weapon System Sustainment (WSS) program will continue research of artificial intelligence / machine learning capabilities to identify readiness drivers for retail parts support and predict vendor / distributor vulnerabilities that will impact the supply chain.			

Exhibit R-2A, RDT&E Project Justification: PB 2021 Defense Logistics Agency		Date: February 2020
Appropriation/Budget Activity 0400 / 3	**R-1 Program Element (Number/Name)** PE 0603712S / *Logistics Research and Development Technology (Log R&D)*	**Project (Number/Name)** GLTD / *Improving Logistics Processes (formerly Logistics Process)*

B. Accomplishments/Planned Programs ($ in Millions)	FY 2019	FY 2020	FY 2021
Projects to leverage the Services' advances in predictive maintenance and condition based maintenance programs will continue to identify opportunities to improve DLA planning processes and retail operations. In addition, the program will collaborate with academia to research capabilities to improve the ability to acquire items with diminishing manufacturing sources or material shortages. ***FY 2020 to FY 2021 Increase/Decrease Statement:*** No significant change.			
Accomplishments/Planned Programs Subtotals	3.568	2.588	4.044

C. Other Program Funding Summary ($ in Millions)

N/A

Remarks

D. Acquisition Strategy

The DLA R&D program is executed through Delivery Orders placed on Indefinite Delivery/Indefinite Quantity Contracts that resulted from competitive Broad Agency Announcements and through interagency agreements with the Military Services when it is cost effective and/or provides some technical advantage, e.g. improves the probability of successful transition. DLA also has a continuously open Broad Agency Announcement for Emerging Technologies.

Exhibit R-2A, RDT&E Project Justification: PB 2021 Defense Logistics Agency			Date: February 2020
Appropriation/Budget Activity 0400 / 3	R-1 Program Element (Number/Name) PE 0603712S / *Logistics Research and Development Technology (Log R&D)*	Project (Number/Name) 04 / *Emergent Logistics R&D Requirements (formerly Innovative Products & Services for DLA Customers)*	

COST ($ in Millions)	Prior Years	FY 2019	FY 2020	FY 2021 Base	FY 2021 OCO	FY 2021 Total	FY 2022	FY 2023	FY 2024	FY 2025	Cost To Complete	Total Cost
04: *Emergent Logistics R&D Requirements (formerly Innovative Products & Services for DLA Customers)*	17.483	10.801	11.957	3.462	-	3.462	3.466	3.535	3.743	3.825	Continuing	Continuing

A. Mission Description and Budget Item Justification

Emergent Logistics R&D Strategic Focus Area (SFA) includes R&D efforts to develop new products and services for DLA customers in two programs:

The Energy Readiness Program (ERP) roadmap helps to achieve the operational energy strategy goals of increasing sources of supply, developing and implementing alternative fuels under the ERP.

The Supply Chain Management (SCM) program addresses emergent and out of budget cycle requirements and opportunities within DLA's supply chains. A key objective of the SCM Program is to collaborate with customers (DLA J-Codes and Major Subordinate Commands (MSCs)) to identify capability shortfalls that can be addressed through major research efforts. These R&D efforts strive to develop technology mitigation strategies that address current and anticipated problems within DLA's supply chains.

B. Accomplishments/Planned Programs ($ in Millions)	FY 2019	FY 2020	FY 2021
Title: Emergent Logistics R&D Requirements	3.801	1.957	3.462
FY 2020 Plans: The Energy Readiness Program (ERP) will continue to focus on providing additional alternatives for military unique fuels, working with the Service customers to improve specifications and standards for fuel quality, engage in modeling and simulation of the energy supply chain and identifying alternative energy sources for Military Customers. ERP will focus on determining R&D solutions for ongoing issues affecting fuel and fuel additive quality and operational requirements (e.g. thermal stability, storage stability, ignition capability). The program will continue to assist the military services in the qualification and certification of alternative fuels to meet military specification requirements; this will be parallel to the availability of military resources necessary to complete these efforts. The Supply Chain Management (SCM) program will continue to address the emerging capabilities shortfalls that occur in the supply chain through major research opportunities.			
FY 2021 Plans:			

Exhibit R-2A, RDT&E Project Justification: PB 2021 Defense Logistics Agency		Date: February 2020
Appropriation/Budget Activity 0400 / 3	**R-1 Program Element (Number/Name)** PE 0603712S / *Logistics Research and Development Technology (Log R&D)*	**Project (Number/Name)** 04 / *Emergent Logistics R&D Requirements (formerly Innovative Products & Services for DLA Customers)*

B. Accomplishments/Planned Programs ($ in Millions)	FY 2019	FY 2020	FY 2021
The Energy Readiness Program (ERP) will continue to focus on providing additional alternatives for military unique fuels, working with the Service customers to improve specifications and standards for fuel quality, engage in modeling and simulation of the energy supply chain and identifying alternative energy sources for Military Customers. ERP will focus on determining R&D solutions for ongoing issues affecting fuel and fuel additive quality and operational requirements (e.g. thermal stability, storage stability, ignition capability). The program will continue to assist the military services in the qualification and certification of alternative fuels to meet military specification requirements; this will be parallel to the availability of military resources necessary to complete these efforts. The Supply Chain Management (SCM) program will continue to address emergent and out of budget cycle requirements and opportunities within DLA's supply chains. The SCM program will expand blockchain projects across the Joint Deployment and Distribution Enterprise (JDDE). SCM baseline was reduced by approximately $0.477 million resulting from overall LOG R&D $3.600 million reduction OSD Enacted FY2020 adjustments due to prior year carryover. Impact of the baseline reduction will decrease the availability of funds for emergent technology solutions for the LOG R&D Program, to include blockchain technologies. ***FY 2020 to FY 2021 Increase/Decrease Statement:*** No significant change.			
Accomplishments/Planned Programs Subtotals	3.801	1.957	3.462

	FY 2019	FY 2020
Congressional Add: Energy Readiness Program for Liquid Hydrocarbon Fuels	7.000	10.000
FY 2019 Accomplishments: Developed innovative technologies to produce hydrocarbon biofuels from cellulosic (plant/vegetable) matter. This effort further developed the upscaling of woody biomass-to-fuel processes. ***FY 2020 Plans:*** $5.000 million program increase for fuel conversion and $5.000 million for liquid hydro-carbon fuel.		
Congressional Adds Subtotals	7.000	10.000

C. Other Program Funding Summary ($ in Millions)

N/A

Remarks

Exhibit R-2A, RDT&E Project Justification: PB 2021 Defense Logistics Agency		Date: February 2020
Appropriation/Budget Activity 0400 / 3	**R-1 Program Element (Number/Name)** PE 0603712S / *Logistics Research and Development Technology (Log R&D)*	**Project (Number/Name)** 04 / *Emergent Logistics R&D Requirements (formerly Innovative Products & Services for DLA Customers)*

D. Acquisition Strategy

The DLA R&D program is executed through Delivery Orders placed on Indefinite Delivery/Indefinite Quantity Contracts that resulted from competitive Broad Agency Announcements and through interagency agreements with the Military Services when it is cost effective and/or provides some technical advantage, e.g. improves the probability of successful transition. DLA also has a continuously open Broad Agency Announcement for Emerging Technologies.

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Exhibit R-2, RDT&E Budget Item Justification: PB 2021 Defense Logistics Agency	Date: February 2020
Appropriation/Budget Activity 0400: *Research, Development, Test & Evaluation, Defense-Wide I* BA 3: *Advanced Technology Development (ATD)*	**R-1 Program Element (Number/Name)** PE 0603720S *I Microelectronics Technology Development and Support (DMEA)*

COST ($ in Millions)	Prior Years	FY 2019	FY 2020	FY 2021 Base	FY 2021 OCO	FY 2021 Total	FY 2022	FY 2023	FY 2024	FY 2025	Cost To Complete	Total Cost
Total Program Element	722.502	192.926	200.530	124.049	-	124.049	126.051	138.442	142.730	146.709	Continuing	Continuing
001: *Technology Development*	374.198	71.819	110.657	45.429	-	45.429	46.503	48.229	49.857	50.808	Continuing	Continuing
003: *Trusted Foundry*	348.304	121.107	89.873	78.620	-	78.620	79.548	90.213	92.873	95.901	Continuing	Continuing

A. Mission Description and Budget Item Justification

DMEA's mission is to leverage advanced technologies to provide microelectronics solutions across the entire spectrum of technology development and system acquisition phases. It is critical to National Security for the Department to maintain technological superiority through microelectronics solutions even when industry is unable or unwilling to provide them. DMEA provides an in-house capability to quickly develop and deliver timely, cost-effective, technically appropriate solutions to sustain weapon systems, to modernize their capabilities, increase their lethality, address new threats, and meet operational demands. DMEA augments its in-house capability through extensive industry and government partnerships that enable streamlined access to a variety of microelectronics technologies and engineering services to enhance responsiveness, and that develop sources for Trusted microelectronics.

DMEA's capabilities are critical in an atmosphere of diminishing domestic semiconductor manufacturing capability and increasing worldwide supply chain risks. The Department has very little influence over the microelectronics industry; the defense market represents less than 0.1% share of the total global semiconductor market. Assured access to Legacy, State of the Practice (SOTP) and State of the Art (SOTA) technologies is therefore a major and growing challenge. Threats to defense microelectronics include counterfeiting, Trojan horses, specific reliability issues in military environments, consolidation and off-shoring of manufacturing, rapid obsolescence and diminishing technology availability coming from an unpredictable and unsecured supply chain. In addition, as the Department maintains its weapon systems longer than originally planned, extended use increases demand for sustainment and modernization, which further intensifies the need for DMEA's unique capabilities.

The Technology Development program (P001) provides the Department with DMEA engineering expertise and laboratories to address the myriad microelectronics issues and to meet military requirements across the entire spectrum of technology research and development, acquisition, and long-term support. DMEA applies its specialized capabilities to resolve microelectronics issues for hundreds of distinct Department programs across the acquisition lifecycle every year. In addition, DMEA assists the Combatant Commands (COCOMs) including Special Ops, Cyber, Intelligence, and the Radiation-Hard communities.

The Trusted Foundry program (P003) provides the Department with access to state-of-the-art microelectronics design and manufacturing capabilities with the added benefit of Trust, if necessary, to meet their confidentiality, integrity, availability, performance and delivery needs. The Trusted Foundry program also provides the Services and other agencies with a competitive cadre of accredited Trusted suppliers that can meet the needs of their mission critical/essential systems for Trusted integrated circuit components.

Exhibit R-2, RDT&E Budget Item Justification: PB 2021 Defense Logistics Agency	Date: February 2020
Appropriation/Budget Activity 0400: *Research, Development, Test & Evaluation, Defense-Wide I* BA 3: *Advanced Technology Development (ATD)*	**R-1 Program Element (Number/Name)** PE 0603720S *I Microelectronics Technology Development and Support (DMEA)*

B. Program Change Summary ($ in Millions)	FY 2019	FY 2020	FY 2021 Base	FY 2021 OCO	FY 2021 Total
Previous President's Budget	192.926	171.771	156.427	-	156.427
Current President's Budget	192.926	200.530	124.049	-	124.049
Total Adjustments	0.000	28.759	-32.378	-	-32.378
• Congressional General Reductions	-	-			
• Congressional Directed Reductions	-	-			
• Congressional Rescissions	-	-			
• Congressional Adds	-	35.000			
• Congressional Directed Transfers	-	-			
• Reprogrammings	-	-			
• SBIR/STTR Transfer	-	-6.241			
• Inflation for Civilian Pay	-	-	0.613	-	0.613
• Inflation for Non-Pay/Non-Fuel Purchases	-	-	-0.135	-	-0.135
• Internal Realignment	-	-	-32.653	-	-32.653
• Fourth Estate Network Optimization (4ENU)	-	-	-0.203	-	-0.203

Congressional Add Details ($ in Millions, and Includes General Reductions)	FY 2019	FY 2020
Project: 001: *Technology Development*		
Congressional Add: *Cyber Accelerator Increase*	-	30.000
Congressional Add: *GaN-on-Si-Based RF Front-end Increase*	-	5.000
Congressional Add Subtotals for Project: 001	-	35.000
Project: 003: *Trusted Foundry*		
Congressional Add: *Trusted Foundry*	30.000	-
Congressional Add Subtotals for Project: 003	30.000	-
Congressional Add Totals for all Projects	30.000	35.000

Change Summary Explanation

FY2020, program received Congressional Add of $30.000 million for cyber accelerator and a $5.000 million increase for GaN-on-Si-Based RF Front-end.
FY2020, the Small Business Innovation Research and Small Technology Transfer Research tax amounted to $6.241 million.
FY2021, internal realignment decreased baseline by $32.653 million. $30.000 million was realigned for Research & Engineering (R&E) prioritization and $2.653 million for critical Defense Property Accountability System redesign and upgrade requirements.

Exhibit R-2A, RDT&E Project Justification: PB 2021 Defense Logistics Agency			Date: February 2020
Appropriation/Budget Activity 0400 / 3	R-1 Program Element (Number/Name) PE 0603720S / *Microelectronics Technology Development and Support (DMEA)*	Project (Number/Name) 001 / *Technology Development*	

COST ($ in Millions)	Prior Years	FY 2019	FY 2020	FY 2021 Base	FY 2021 OCO	FY 2021 Total	FY 2022	FY 2023	FY 2024	FY 2025	Cost To Complete	Total Cost
001: *Technology Development*	374.198	71.819	110.657	45.429	-	45.429	46.503	48.229	49.857	50.808	Continuing	Continuing

A. Mission Description and Budget Item Justification

The Technology Development funds provide DMEA with the resources to maintain an in-house ability to quickly develop and deliver timely, cost-effective, technically appropriate solutions to sustain weapon systems, to modernize their capabilities, increase their lethality, address new threats, and meet operational demands. These funds also support DMEA's ability to partner with industry, other government agencies, and academia to enable streamlined access to a variety of microelectronics technologies and engineering services.

These funds enable DMEA to provide increasingly rare government microelectronics design, fabrication, and test expertise to DoD programs. DMEA's knowledge of varying military requirements across a broad and diverse range of combatant environments and missions—along with its unique technical perspective—allows it to develop, manage and deliver novel, decisive, quick turn microelectronics solutions for defense, intelligence, special operations, and cyber and combat missions.

These funds allow DMEA to maintain and enhance critical, Trusted microelectronics design, aggregation, fabrication, post-processing, assembly and analysis capabilities to ensure that the Department is provided with solutions that enable or maintain the warfighter's technological superiority over potential adversaries. These solutions use high mix, low volume, unique microelectronics that are endemic to military requirements but are not commercially available. In addition, funding provides for the research, development and support necessary to ensure availability of microelectronics technologies for weapon systems, particularly as the technologies advance and industry is increasingly unable or unwilling to provide them.

DMEA looks to industry to see if it can provide the required solutions. If industry cannot or will not, only then does DMEA provide the necessary solutions using its in-house capabilities. A critical element required to enable continued success is DMEA's protection of the industry partners' valuable Intellectual Property (IP) and processes. DMEA is a small, agile government-owned and operated organization, providing the structure and confidence necessary to assure them that commercial IP is protected from potential competitors. This strategic and cooperative industry partnership approach allows DMEA to use industry-developed IP and processes by acquiring, installing, and applying them toward meeting the immediate and long-term needs of the Department. This unique capability is essential to all major weapon systems, combat operations, and support needs. As such, DMEA serves the Department, other US Agencies, industry and Allied nations.

DMEA assists hundreds of Department programs every year. DMEA has provided its specialized engineering assistance and capabilities to older systems, current systems, and even to programs not yet in the production phase. Programs that DMEA has recently provided critical support to include Counter-Rocket, Artillery, and Mortar (C-RAM) System, C-5, V-22, F-15, F-35, RQ-4 Global Hawk, AEGIS Advanced Surface Missile System, Advanced Medium-Range Air-to-Air Missile (AMRAAM), HH-60G Pave Hawk Helicopter, OSD Joint Fuze Technology Program, among many others. DMEA assists the Combatant Commands (COCOMs) including Special Operations, Intelligence, and the Radiation-Hard communities.

B. Accomplishments/Planned Programs ($ in Millions)	FY 2019	FY 2020	FY 2021
Title: Technology Development Accomplishments/Plans	71.819	75.657	45.429

Exhibit R-2A, RDT&E Project Justification: PB 2021 Defense Logistics Agency		Date: February 2020
Appropriation/Budget Activity 0400 / 3	**R-1 Program Element (Number/Name)** PE 0603720S / *Microelectronics Technology Development and Support (DMEA)*	**Project (Number/Name)** 001 / *Technology Development*

B. Accomplishments/Planned Programs ($ in Millions)	FY 2019	FY 2020	FY 2021
FY 2020 Plans: DMEA will design, develop, and demonstrate microelectronics concepts, advanced technologies, and applications to solve operational problems. DMEA will apply advanced technologies to add performance enhancements in response to the newest asymmetric threats and to modernize aging weapon systems. The increased missions seen in the last several years by Combatant Commands (CCMDs), Special Operations, and the Intelligence Community have caused those organizations to dramatically increase their demands for DMEA's unique capability to provide quick technical solutions to immediate operational needs. To meet these increases, DMEA will add capacity and extend capability by recapitalizing and modernizing its aging laboratory infrastructure, developing advanced techniques to inspect and analyze circuits, and adapting tools and processes to detect increasingly sophisticated counterfeit microelectronics to ensure a secure supply chain, all to meet quick turn solutions on which CCMDs and Special Operations can rely. ***FY 2021 Plans:*** DMEA will design, develop, and demonstrate microelectronics concepts, advanced technologies, and applications to solve operational problems. DMEA will apply advanced technologies to add performance enhancements in response to the newest asymmetric threats and to modernize aging weapon systems. The increased missions seen in the last several years by Combatant Commands (CCMDs), Special Operations, and the Intelligence Community have caused those organizations to dramatically increase their demands for DMEA's unique capability to provide quick technical solutions to immediate operational needs. To meet these increases, DMEA will extend and refresh capability by recapitalizing and modernizing its aging laboratory infrastructure, developing advanced techniques to inspect and analyze circuits, and adapting tools and processes to detect increasingly sophisticated counterfeit microelectronics to ensure a secure supply chain, all to meet quick turn solutions on which CCMDs and Special Operations can rely. ***FY 2020 to FY 2021 Increase/Decrease Statement:*** The FY2020 to FY2021 decrease is due to reduction in funding of the top four FY2018 microelectronics initiatives, and also in association with the Fourth Estate IT optimization.			
Accomplishments/Planned Programs Subtotals	71.819	75.657	45.429

	FY 2019	FY 2020
Congressional Add: Cyber Accelerator Increase	-	30.000
FY 2020 Plans: $30M increase for cyber accelerator		
Congressional Add: GaN-on-Si-Based RF Front-end Increase	-	5.000

Exhibit R-2A, RDT&E Project Justification: PB 2021 Defense Logistics Agency		Date: February 2020
Appropriation/Budget Activity 0400 / 3	**R-1 Program Element (Number/Name)** PE 0603720S / *Microelectronics Technology Development and Support (DMEA)*	**Project (Number/Name)** 001 / *Technology Development*

	FY 2019	FY 2020
FY 2020 Plans: $5M increase for GaN-on-Si-Based RF Front-end		
Congressional Adds Subtotals	-	35.000

C. Other Program Funding Summary ($ in Millions)

N/A

Remarks

D. Acquisition Strategy

N/A

Exhibit R-2A, RDT&E Project Justification: PB 2021 Defense Logistics Agency			Date: February 2020
Appropriation/Budget Activity 0400 / 3	R-1 Program Element (Number/Name) PE 0603720S / *Microelectronics Technology Development and Support (DMEA)*	Project (Number/Name) 003 / *Trusted Foundry*	

COST ($ in Millions)	Prior Years	FY 2019	FY 2020	FY 2021 Base	FY 2021 OCO	FY 2021 Total	FY 2022	FY 2023	FY 2024	FY 2025	Cost To Complete	Total Cost
003: *Trusted Foundry*	348.304	121.107	89.873	78.620	-	78.620	79.548	90.213	92.873	95.901	Continuing	Continuing

A. Mission Description and Budget Item Justification

The Department, other agencies, and the intelligence community require uninterruptible access to state-of-the-art design and manufacturing processes to produce custom integrated circuits designed specifically for military purposes. Under DoDI 5200.44, Application Specific Integrated Circuits (ASICs) in critical/essential systems must be procured from Trusted sources in order to avoid altered or sabotaged parts. Worldwide competition from foreign, state-subsidized manufacturing facilities continues to greatly reduce the number of U.S. semiconductor fabrication facilities available to be Trusted sources. The prevalence of sophisticated offshore design and manufacturing facilities with economic incentives of state subsidies have resulted in the outsourcing of electronics component and integrated circuit services to these offshore facilities. This production capability is of increasing importance as domestic semiconductor manufacturing resources continue to decline, especially in the scarce domestic production capacity of high performance and state-of-the-art semiconductor technologies. Commercial sources of microelectronics remain inherently unpredictable and constitute a continued supply chain risk regardless of Government investment. This trend threatens the integrity and worldwide leadership of the U.S. semiconductor industry by eliminating many domestic suppliers and reducing access to Trusted fabrication sources for advanced technologies, and is of acute concern to the defense and intelligence communities. Secure communications and cryptographic applications, along with most other key defense technologies, depend heavily on high performance semiconductors where a generation of improvement often translates into significant force multipliers and capability advantages. Important defense technology investments and demonstrations carry size, weight, power, and performance goals that can only be met through the use of the most sophisticated semiconductors.

The Trusted Foundry program provides the Department with access to state-of-the-art microelectronics design and manufacturing capabilities with the added benefit of Trust, if necessary, to meet their confidentiality, integrity, availability, performance and delivery needs. The program also provides the Services and other agencies with a competitive cadre of accredited Trusted suppliers that can meet the needs of their mission critical/essential systems for Trusted integrated circuit components. The Trusted Access Program Office has contracted with commercial sources to satisfy state-of-the-art semiconductor requirements. DMEA will foster all viable alternatives to continue the vital supply of Trusted microelectronics, including the work of the DMEA Trusted Access Program Office with commercial state-of-the-art industry, as well as the extension and implementation of key process technologies for trust at DMEA. It is imperative for a wide range of technologies in ongoing and future Department systems that access to Trusted suppliers continues. Most importantly, access to Trusted Microelectronics is absolutely necessary to meet secure communication and cryptographic needs requiring state-of-the-art semiconductor technologies.

B. Accomplishments/Planned Programs ($ in Millions)	FY 2019	FY 2020	FY 2021
Title: Trusted Foundry	91.107	89.873	78.620
FY 2020 Plans: Facilitate the availability of Trusted and commercial state-of-the-art semiconductor technology to Department weapon system programs, research organizations, and other federal agencies through the DMEA Trusted Access Program Office (TAPO) contracts. Continue efforts to extend Trusted access to 14 nm technology for USG use through the TAPO contracts, and to			

Exhibit R-2A, RDT&E Project Justification: PB 2021 Defense Logistics Agency		Date: February 2020
Appropriation/Budget Activity 0400 / 3	**R-1 Program Element (Number/Name)** PE 0603720S / *Microelectronics Technology Development and Support (DMEA)*	**Project (Number/Name)** 003 / *Trusted Foundry*

B. Accomplishments/Planned Programs ($ in Millions)	FY 2019	FY 2020	FY 2021
provide the Department and other USG-sponsored programs with access to this and other leading edge technologies. Enhance the cadre of trusted suppliers for the critical trusted components and services needed for appropriate defense systems. Enhance Trusted microelectronics products to include newly available leading edge technologies and other key specialty processes required by Department programs. Expand a line of trusted catalog components that can be purchased by Defense contractors. Continue activities that ensure the Department has Trusted access to leading edge semiconductor technologies. Continue the development of new capabilities for the inspection and analysis of ASICs and continuously refine the utilized methods for efficiency, accuracy, and applicability to multiple processes. Implement a Trusted flow for new process technologies at DMEA. ***FY 2021 Plans:*** Facilitate the availability of Trusted and commercial state-of-the-art semiconductor technology to Department weapon system programs, research organizations, and other federal agencies through the DMEA Trusted Access Program Office (TAPO) contracts. Continue efforts to extend Trusted access to 14 nm technology for USG use through the TAPO contracts, and to provide the Department and other USG-sponsored programs with access to this and other leading edge technologies. Enhance the cadre of trusted suppliers for the critical trusted components and services needed for appropriate defense systems. Enhance Trusted microelectronics products to include newly available leading edge technologies and other key specialty processes required by Department programs. Expand a line of trusted catalog components that can be purchased by Defense contractors. Continue activities that ensure the Department has Trusted access to leading edge semiconductor technologies. Continue the development of new capabilities for the inspection and analysis of ASICs and continuously refine the utilized methods for efficiency, accuracy, and applicability to multiple processes. Implement a Trusted flow for new process technologies at DMEA. ***FY 2020 to FY 2021 Increase/Decrease Statement:*** FY2020 to FY2021 program reflects a continuation in funding for FY2019 microelectronics initiatives, including access to the GlobalFoundries 14 nm foundry.			
Accomplishments/Planned Programs Subtotals	91.107	89.873	78.620

	FY 2019	FY 2020
Congressional Add: Trusted Foundry	30.000	-
FY 2019 Accomplishments: DMEA funded GlobalFoundries US2 (GFUS2) in Burlington, VT, to accomplish Multi-Project Wafer (MPW) runs in 5G-capable processes and at the 14nm node. DMEA also funded GFUS2 to accomplish qualification of a domestic 14nm mask manufacturing capability. In addition, DMEA conducted an assessment of machine vision and counterfeit detection tools in accordance with section 843 of the 2019 National Defense Authorization Act.		
Congressional Adds Subtotals	30.000	-

Exhibit R-2A, RDT&E Project Justification: PB 2021 Defense Logistics Agency		Date: February 2020
Appropriation/Budget Activity 0400 / 3	**R-1 Program Element (Number/Name)** PE 0603720S / *Microelectronics Technology Development and Support (DMEA)*	**Project (Number/Name)** 003 / *Trusted Foundry*

C. Other Program Funding Summary ($ in Millions)

N/A

Remarks

D. Acquisition Strategy

N/A

Exhibit R-2, RDT&E Budget Item Justification: PB 2021 Defense Logistics Agency	Date: February 2020
Appropriation/Budget Activity 0400: *Research, Development, Test & Evaluation, Defense-Wide* / BA 5: *System Development & Demonstration (SDD)*	**R-1 Program Element (Number/Name)** PE 0605070S / *DoD Enterprise Systems Development and Demonstration*

COST ($ in Millions)	Prior Years	FY 2019	FY 2020	FY 2021 Base	FY 2021 OCO	FY 2021 Total	FY 2022	FY 2023	FY 2024	FY 2025	Cost To Complete	Total Cost
Total Program Element	27.058	3.057	2.291	1.377	-	1.377	0.687	0.712	0.728	0.745	Continuing	Continuing
09: *Enterprise Funds Distribution*	27.058	3.057	2.291	1.377	-	1.377	0.687	0.712	0.728	0.745	Continuing	Continuing

A. Mission Description and Budget Item Justification

The mission of the DoD Enterprise Business Systems (DEBS) is to coordinate and enable business transformation efforts across the Department of Defense (DoD). DoD's business enterprise must be closer to its warfighting customers than ever before, and Joint military requirements drive the need for greater commonality and integration of business and financial operations.

B. Program Change Summary ($ in Millions)	FY 2019	FY 2020	FY 2021 Base	FY 2021 OCO	FY 2021 Total
Previous President's Budget	3.057	2.378	1.481	-	1.481
Current President's Budget	3.057	2.291	1.377	-	1.377
Total Adjustments	0.000	-0.087	-0.104	-	-0.104
• Congressional General Reductions	-	-			
• Congressional Directed Reductions	-	-			
• Congressional Rescissions	-	-			
• Congressional Adds	-	-			
• Congressional Directed Transfers	-	-			
• Reprogrammings	-	-			
• SBIR/STTR Transfer	-	-0.087			
• Defense Wide Review Reduction	-	-	-0.078	-	-0.078
• Internal Realignment	-	-	-0.025	-	-0.025
• Inflation for Non-Pay/Non-Fuel Purchases	-	-	-0.001	-	-0.001

Change Summary Explanation

FY2020, the Small Business Innovation Research and Small Technology Transfer Research tax amounted to $0.087 million.
FY2021, internal realignment decreased program baseline by $0.025 million for critical Defense Property Accountability System redesign and upgrade requirements.
The FY 2021 funding request was reduced by $0.078 million during the Defense-Wide Review to free up resources for higher priority Department needs.

Exhibit R-2A, RDT&E Project Justification: PB 2021 Defense Logistics Agency			Date: February 2020
Appropriation/Budget Activity 0400 / 5	R-1 Program Element (Number/Name) PE 0605070S / *DoD Enterprise Systems Development and Demonstration*	Project (Number/Name) 09 / *Enterprise Funds Distribution*	

COST ($ in Millions)	Prior Years	FY 2019	FY 2020	FY 2021 Base	FY 2021 OCO	FY 2021 Total	FY 2022	FY 2023	FY 2024	FY 2025	Cost To Complete	Total Cost
09: *Enterprise Funds Distribution*	27.058	3.057	2.291	1.377	-	1.377	0.687	0.712	0.728	0.745	Continuing	Continuing
Quantity of RDT&E Articles	-	-	-	-	-	-	-	-	-	-		

A. Mission Description and Budget Item Justification

Enterprise Funds Distribution (EFD) is a multi-service/multi-agency process improvement and modernization solution, initiated to provide full visibility of the OUSD(C) funds distributed through echelon I and II for the Military Departments, and at all levels for the Defense Agencies. Funds distribution by its nature is a key enabler of financial visibility within DoD enterprise systems. The concept of a fully visible enterprise funds distribution process serves as a reference where planned and coordinated funds development and execution takes place.

Within the current DoD environment, progress has been made streamlining a diverse set of stove-piped budget execution and funds distribution processes and systems. Efforts continue to improve the visibility of funding information, eliminate manual efforts and undue complexities to the management of budget authority, and to eliminate impediments in the flow of funding documents. The current environment relies heavily on manual processing and on disconnected standalone systems for the processing of Funding Authorization Documents (FADs) and reprogramming actions. This environment made the implementation of internal controls difficult, negatively impacted the accuracy and timeliness of information while making the processes of integrating and obtaining management information arduous.

The envisioned operational environment solves these problems by enabling lifecycle program value management in a web-based application utilizing an authoritative database with single-source data entry and automated workflow. Capabilities within this integrated environment will enable the automation of all funds distribution and funds control processes within OUSD(C) using authoritative and highly visible data. Specifically, capabilities include managing apportionments, distributing budget authority to the Military Departments and Defense Agencies, managing rescissions and continuing resolutions, creating and tracking reprogramming actions, and establishing program baselines and budget authority needed to support changes in funding priorities throughout the year.

The operational environment includes organizational elements down to the echelon II level responsible for managing DoD and Component appropriations operating in an unclassified environment. The web-based application provides pre-planning, apportionment, reprogramming, rescission, continuing resolution, reporting of enterprise-level funds control and distribution of appropriated funding.

B. Accomplishments/Planned Programs ($ in Millions)	FY 2019	FY 2020	FY 2021
Title: Enterprise Funds Distribution (EFD)	3.057	2.291	1.377
Description: EFD will distribute funds to the Military Departments and the Defense Agencies.			
FY 2020 Plans:			

Exhibit R-2A, RDT&E Project Justification: PB 2021 Defense Logistics Agency		Date: February 2020
Appropriation/Budget Activity 0400 / 5	**R-1 Program Element (Number/Name)** PE 0605070S / *DoD Enterprise Systems Development and Demonstration*	**Project (Number/Name)** 09 / *Enterprise Funds Distribution*

B. Accomplishments/Planned Programs ($ in Millions)	FY 2019	FY 2020	FY 2021
The program will continue the development and deployment of EFD post Wave 2 requirements based on user group migration strategy. The program will also deploy additional accounts and development activities related to Momentum Software Baseline upgrade and deploy System Change Requests (SCR's) to support post deployment requirements. ***FY 2021 Plans:*** The program will continue the development and deployment of EFD post Wave 3 requirements based on user group migration strategy. The program will also deploy additional accounts and development activities related to Momentum Software Baseline upgrade and deploy System Change Requests (SCR's) to support post deployment requirements. ***FY 2020 to FY 2021 Increase/Decrease Statement:*** FY2021 is lower due to the majority of EFD's development to be completed in FY2020.			
Accomplishments/Planned Programs Subtotals	3.057	2.291	1.377

C. Other Program Funding Summary ($ in Millions)

N/A

Remarks

D. Acquisition Strategy

The EFD strategy is to use a “single acquisition to full capability,” commercial-off-the-shelf (COTS) solution (Momentum software). The effort is needed to ensure EFD is fully implemented for all appropriation funding data for the Military Services and Defense Organizations.

Exhibit R-3, RDT&E Project Cost Analysis: PB 2021 Defense Logistics Agency		Date: February 2020
Appropriation/Budget Activity 0400 / 5	**R-1 Program Element (Number/Name)** PE 0605070S / *DoD Enterprise Systems Development and Demonstration*	**Project (Number/Name)** 09 / *Enterprise Funds Distribution*

Product Development ($ in Millions)

Cost Category Item	Contract Method & Type	Performing Activity & Location	Prior Years	FY 2019 Cost	FY 2019 Award Date	FY 2020 Cost	FY 2020 Award Date	FY 2021 Base Cost	FY 2021 Base Award Date	FY 2021 OCO Cost	FY 2021 OCO Award Date	FY 2021 Total Cost	Cost To Complete	Total Cost	Target Value of Contract
Savantage Solutions	Option/ FP	Savantage Solutions : Rockville, MD	14.158	0.000		-		-		-		-	0.000	14.158	14.158
TeraThink Corporation	C/FFP	TeraThink Corporation : Reston, VA	11.408	3.057	Dec 2018	2.291	Dec 2019	1.377	Dec 2020	-		1.377	Continuing	Continuing	Continuing
TBD	C/FFP	TBD : TBD	1.492	0.000		-		-		-		-	0.000	1.492	1.492
Prior Year Contracts	Option/ Various	Multiple : Multiple	-	-		-		-		-		-	Continuing	Continuing	-
		Subtotal	27.058	3.057		2.291		1.377		-		1.377	Continuing	Continuing	N/A

Remarks

Prior year contracts line include Savantage Solutions Option/FP Rockville, MD $14.158 million and TeraThink Corporation FFP Reston, VA $1.492 million.

	Prior Years	FY 2019		FY 2020		FY 2021 Base		FY 2021 OCO		FY 2021 Total	Cost To Complete	Total Cost	Target Value of Contract
Project Cost Totals	27.058	3.057		2.291		1.377		-		1.377	Continuing	Continuing	N/A

Remarks

Exhibit R-4, RDT&E Schedule Profile: PB 2021 Defense Logistics Agency		Date: February 2020
Appropriation/Budget Activity 0400 / 5	**R-1 Program Element (Number/Name)** PE 0605070S / *DoD Enterprise Systems Development and Demonstration*	**Project (Number/Name)** 09 / *Enterprise Funds Distribution*

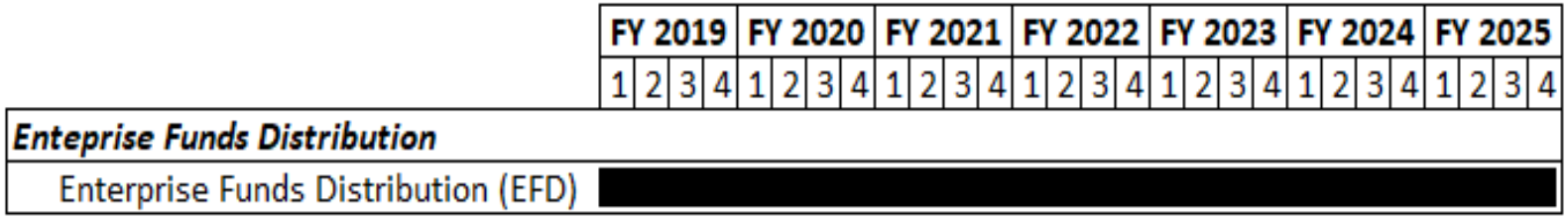


Exhibit R-4A, RDT&E Schedule Details: PB 2021 Defense Logistics Agency		Date: February 2020
Appropriation/Budget Activity 0400 / 5	**R-1 Program Element (Number/Name)** PE 0605070S / *DoD Enterprise Systems Development and Demonstration*	**Project (Number/Name)** 09 / *Enterprise Funds Distribution*

Schedule Details

	Start		End	
Events by Sub Project	**Quarter**	**Year**	**Quarter**	**Year**
Wave 1 Deployment				
Development Activities using Momentum Financials ERP	1	2017	4	2018
Wave 2 Deployment				
The program will continue the development and deployment of EFD post Wave 2 requirements based on user group migration strategy. Also deploy additional accounts and dev activities.	1	2019	4	2019
Wave 3 Deployment				
The program will continue the development and deployment of EFD post Wave 3 requirements based on user group migration strategy. Also deploy additional accounts and dev activities.	1	2020	4	2020
Post Waves 1, 2 and 3 Development				
SCRs, Momentum Upgrade Development, Break-Fix Development	4	2020	4	2025

Exhibit R-2, RDT&E Budget Item Justification: PB 2021 Defense Logistics Agency	Date: February 2020
Appropriation/Budget Activity 0400: *Research, Development, Test & Evaluation, Defense-Wide I* BA 5: *System Development & Demonstration (SDD)*	**R-1 Program Element (Number/Name)** PE 0605080S *I Defense Agencies Initiative (DAI) - Financial System*

COST ($ in Millions)	Prior Years	FY 2019	FY 2020	FY 2021 Base	FY 2021 OCO	FY 2021 Total	FY 2022	FY 2023	FY 2024	FY 2025	Cost To Complete	Total Cost
Total Program Element	161.063	20.384	23.114	20.537	-	20.537	23.390	24.242	24.844	24.919	Continuing	Continuing
01: *Defense Agencies Initiative - Financial System*	161.063	20.384	23.114	20.537	0.000	20.537	23.390	24.242	24.844	24.919	Continuing	Continuing

Program MDAP/MAIS Code:
Project MDAP/MAIS Code(s): 0491

A. Mission Description and Budget Item Justification

Defense Agencies Initiative (DAI) provides capability to produce timely, auditable reports. This program supports continued development and fielding of Increment 3, a Category I Defense Business System. Previous funding for DAI Increments 1 and 2 was documented in the Defense Enterprise Business Systems program element 50605070S00. Increment 3 will deliver new capabilities: Defense Working Capital Fund (DWCF) and Re-Sale accounting; and an application upgrade.

B. Program Change Summary ($ in Millions)	FY 2019	FY 2020	FY 2021 Base	FY 2021 OCO	FY 2021 Total
Previous President's Budget	20.384	27.944	22.102	-	22.102
Current President's Budget	20.384	23.114	20.537	-	20.537
Total Adjustments	0.000	-4.830	-1.565	-	-1.565
• Congressional General Reductions	-	-			
• Congressional Directed Reductions	-	-4.000			
• Congressional Rescissions	-	-			
• Congressional Adds	-	-			
• Congressional Directed Transfers	-	-			
• Reprogrammings	-	-			
• SBIR/STTR Transfer	-	-0.830			
• Defense Wide Review Reduction	-	-	-1.171	-	-1.171
• Inflation for Non-Pay/Non-Fuel Purchases	-	-	-0.019	-	-0.019
• Internal Realignment	-	-	-0.375	-	-0.375

Change Summary Explanation

FY2020, $4.000 million reduction due to prior year carryover. The $4.000 million reduction will delay the planned implementation of DAI to the Defense Finance & Accounting Service (DFAS) and will critically hinder the development maturation of Budget Formulation and access control along with major delay in answering audit findings across the Enterprise.
FY2020, the Small Business Innovation Research and Small Technology Transfer Research tax amounted to $0.830 million.
FY2021, internal realignment decreased baseline by $0.375 million for critical Defense Property Accountability System redesign and upgrade requirements.
The FY 2021 funding request was reduced by $1.171 million during the Defense-Wide Review to free up resources for higher priority Department needs.

Exhibit R-2A, RDT&E Project Justification: PB 2021 Defense Logistics Agency			Date: February 2020
Appropriation/Budget Activity 0400 / 5	R-1 Program Element (Number/Name) PE 0605080S / *Defense Agencies Initiative (DAI) - Financial System*	Project (Number/Name) 01 / *Defense Agencies Initiative - Financial System*	

COST ($ in Millions)	Prior Years	FY 2019	FY 2020	FY 2021 Base	FY 2021 OCO	FY 2021 Total	FY 2022	FY 2023	FY 2024	FY 2025	Cost To Complete	Total Cost
01: *Defense Agencies Initiative - Financial System*	161.063	20.384	23.114	20.537	0.000	20.537	23.390	24.242	24.844	24.919	Continuing	Continuing
Quantity of RDT&E Articles	-	-	-	-	-	-	-	-	-	-		

Project MDAP/MAIS Code: 0491

A. Mission Description and Budget Item Justification

The DAI mission is to deliver auditable Chief Financial Officer (CFO) Act compliant business environments for Defense Agencies providing accurate, timely, authoritative financial data supporting the DoD goal of standardizing financial management practices improving financial decision support, and supporting audit readiness. DAI has replaced several different non-compliant financial management systems supporting diverse operational functions and the warfighter in decision-making and financial reporting. DAI currently provides the capability to produce timely, auditable reports as noted in three consecutive annual unmodified Statement on Standards for Attestation Engagements No. 18 (SSAE 18) engagements.

The DAI program modernizes the Defense Agencies' financial management processes by streamlining financial management capabilities, addressing financial reporting material weaknesses, and supporting financial statement auditability for the majority of agencies, field activities and non-Service organizations across the DoD. DAI supports a transformation of budget, finance, and accounting processes across participating defense agencies to help improve the quality of financial information, supporting financial auditability and decision-making. The DAI business solution, once fully implemented, will provide a near real-time, web-based system from a ".mil" environment of integrated business processes that will enable in excess of 84,000 Defense Agency financial managers, program managers, auditors, and Defense Finance and Accounting Service (DFAS) representatives to make sound financial business decisions.

The DAI implementation approach deploys a standardized system solution that is consistent with requirements in the Federal Financial Management Improvement Act (FFMIA) and the DoD Business Enterprise Architecture (BEA), while leveraging the out-of-the-box capabilities of the selected Commercial-Off-the-Shelf (COTS) product, Oracle e-Business Suite (EBS), Release 12.2.6 (R12). DAI implemented an Oracle Office of Management and Budget Financial Systems Integration Office (FSIO) qualified COTS financial management business solution with common business processes and data standards. The Program Management Office (PMO) will not develop any objects that are included in core COTS software or services (i.e. vendor data from Federal authoritative sources).

DAI supports the 2018 National Defense Strategy (NDS) Strategic Goal 3, "Reform the Department's Business Practices for Greater Performance and Affordability as well as Strategic Objectives (SO) 3.1 "Improve and Strengthen business operations through a move to DoD-Enterprise or shared services; reduce administrative and regulatory burden" as well as SO 3.3 Undergo an audit, and improve the quality of budgetary and financial information that is most valuable in managing the DoD.

The primary goal is to deploy a standardized system solution to improve overall financial management and comply with BEA, Standard Financial Information Structure (SFIS)/Standard Line of Accounting (SLOA), and Office of Federal Financial Management (OFFM) requirements. Common business functions within budget execution include the Department's BEA End to End (E2E) business processes: Cost Management; Budget to Report (B2R); Procure to Pay (P2P) with enhancements facilitating

Exhibit R-2A, RDT&E Project Justification: PB 2021 Defense Logistics Agency		Date: February 2020
Appropriation/Budget Activity 0400 / 5	**R-1 Program Element (Number/Name)** PE 0605080S / *Defense Agencies Initiative (DAI) - Financial System*	**Project (Number/Name)** 01 / *Defense Agencies Initiative - Financial System*

SFIS/SLOA and DoD procurement data standards and direct Treasury disbursing; Acquire to Retire (A2R) (real property lifecycle accounting only); Hire to Retire (H2R) (Time and Labor reporting and absence management only); Order to Cash (O2C); Proposal to Reward (P2R) (Grants financial management and accounting only; and a phased implementation of Governance, Risk, and Compliance (GCR) capabilities supporting audit readiness. Future Defense Working Capital Fund accounting, and Re-Sale Accounting (for Defense Commissary Agency (DeCA).

DAI is currently implemented at 23 Defense Agencies and the Office of the Under Secretary of Defense, Comptroller (OUSD(C)). DAI supports over 62,000 personnel including, 45,600 users. The program office is also responsible for operational sustainment of the system. Funds are required for additional government and contractor support, licenses, maintenance, and hardware to accomplish the remaining capability developments and organizational deployments, and initiate the annual SSAE 18 assertion packages. In 2017, 2018, and 2019, the system received an unmodified SAE 18 report with no comments.

The benefits of DAI are:
• Labor efficiencies (entering data once) and shared across all business processes (modules), workflows and lifecycle in a modern system;
• Reduction in contractor support;
• Financial visibility (Access to real-time financial data transactions);
• Enabling agility and resilience in execution (No silos – anyone/anywhere can backfill and work continues);
• Retiring legacy systems;
• Shared common business processes and employment of Federal/DoD Enterprise data standards (i.e., SFIS, SLOA, Procurement Data Standard (PDS) and Procurement Request Data Standard (PRDS)); and
United States Standard General Ledger (USSGL) Chart of Accounts to resolve DoD material weaknesses and deficiencies.
• Reducing reliance on custom Reports, Interfaces, Conversions, Extensions, Forms and Workflows by leveraging application upgrades
• Enhanced Internal controls to ensure accurate data, regulatory compliance and ensuring segregation of duties
• Significantly reduced data reconciliation requirements; and
• Enhanced analysis and decision support capabilities.

The DAI PMO also provides system integration services that include: acquisition/financial management, project management; blueprinting; design, build, and unit test; developing required Reports, Interfaces, Conversions, Extensions, Forms and Workflows (RICE-FW) objects; testing (cyber security/information assurance, integration, functional, performance, conversion, user acceptance, operational); end-user training (train the trainer/change management preparing the users for the cross functional skills and awareness needed to perform well with an integrated enterprise resource planning system); system deployment; conversion; information assurance; sustainment; data service; help desk support; as well as studies and analysis support.

DLA provides the Milestone Decision Authority (DLA Acquisition), and DLA Information Operations provides the Program Executive Officer, program manager, and PMO staff. The DAI PMO relies on DLA Acquisition for most contracting. Defense Information Systems Agency (DISA) data centers provide application, development and test as well as Continuity of Operations (COOP) hosting, Technical Contracting Office for development task orders, and the Joint Interoperability Test Command for Interoperability testing. The DAI PMO serves as systems integrator. Contracted subject matter experts configure COTS to provide compliant business processes.

Exhibit R-2A, RDT&E Project Justification: PB 2021 Defense Logistics Agency		Date: February 2020
Appropriation/Budget Activity 0400 / 5	**R-1 Program Element (Number/Name)** PE 0605080S / *Defense Agencies Initiative (DAI) - Financial System*	**Project (Number/Name)** 01 / *Defense Agencies Initiative - Financial System*

B. Accomplishments/Planned Programs ($ in Millions)	FY 2019	FY 2020	FY 2021
Title: Defense Agencies Initiative (DAI) - Financial System	20.384	23.114	20.537
FY 2020 Plans: In FY 2020, the DAI PMO will: • Field DAI Increment 3 Rel 2 DWCF accounting to users at a large agency and two smaller ones (over 19,000 users). • Development/Testing for DWCF and agency unique requirements and complete the study of 4th Estate common/core capabilities. • Work instructions and training materials. • Mature the Financial Management (FM) & time/labor operations for over 45,000 users at over 23 Agencies, Field Activities and organizations. • Support the DoD Risk Management Framework (RMF) process to support actions included in the Designated Authorizing Authority required Plan of Actions and Milestones including an independent FISCAM Test of Design/Test of Effectiveness to result in a Designated Approving Authority (DAA) decision to award an Authority to Operate. • Continue to implement the GRC capabilities by expanding Enterprise controls: Configuration, Access, Prevention & Transactions supporting audit findings, recommendations & CAPs. • Mature the technical operation including: application of DISA Security Technical Implementation Guides, hardware & software currency for servers operating systems, middleware & applications including patches; overseeing internal processes within the Defense Enterprise Computing Center (DECC) enclaves; & the daily operation of several interfaces with external systems leveraging DLA Defense Automated Addressing System (DAAS), as well as established Federal Enterprise system web services. • Conduct regular adversarial assessments, RMF continuous monitoring including code scans, an independent Cyber Economic Vulnerability Assessment and a Cooperative Vulnerability and Penetration Assessment. • Obtain or maintain an interim Interoperability Certification or an Authority to Connect to the DoD Global Information Grid. • The Program will also perform developmental, operational and Cyber security testing with independent third parties under Office of the Secretary of Defense oversight. The Defense Logistics Agency will contract for an independent public accounting firm to conduct the annual FFMIA and SSAE 18 assessments and conduct Cyber security assessments on the system.			
FY 2021 Plans: In FY2021, the DAI PMO will: • Field DAI Increment 3 Rel 3 DWCF accounting maturation to users at existing agencies DCSA, DISA and Defense Finance Accounting Service (DFAS) (over 19k users). • Development/Testing for DWCF and agency unique requirements and complete the study of 4th Estate common/core capabilities. • Work instructions and training materials. • Mature the Financial Management (FM) & time/labor operations for over 65k users at over 26 Agencies, Field Activities and organizations.			

Exhibit R-2A, RDT&E Project Justification: PB 2021 Defense Logistics Agency		Date: February 2020
Appropriation/Budget Activity 0400 / 5	**R-1 Program Element (Number/Name)** PE 0605080S / *Defense Agencies Initiative (DAI) - Financial System*	**Project (Number/Name)** 01 / *Defense Agencies Initiative - Financial System*

B. Accomplishments/Planned Programs ($ in Millions)	FY 2019	FY 2020	FY 2021
Work instructions and training materials. • Support the DoD RMF process to support actions included in the Designated Authorizing Authority required Plan of Actions and Milestones including an independent FISCAM Test of Design/Test of Effectiveness to result in a DAA decision to award an Authority to Operate. • Continue to implement the GRC capabilities by expanding Enterprise controls: Configuration, Access, Prevention as well as Transactions supporting audit findings, recommendations & CAPs. • Mature the technical operation including: application of DISA Security Technical Implementation Guides, hardware & software currency for servers operating systems, middleware & applications including patches; overseeing internal processes within the DECC enclaves; & the daily operation of several interfaces with external systems leveraging DLA Defense Automated Addressing System (DAAS), as well as established Federal Enterprise system web services. ***FY 2020 to FY 2021 Increase/Decrease Statement:*** FY 2021 development will complete developing DWCF accounting requirements, necessary to serve as core and meet DeCA requirements, Joint Chiefs of Staff (JCS) and National Defense University (NDU) integrations or objects. In FY 2020, DAI will also deploy to DeCA, JCS and NDU.			
Accomplishments/Planned Programs Subtotals	20.384	23.114	20.537

C. Other Program Funding Summary ($ in Millions)

N/A

Remarks

D. Acquisition Strategy

DAI is developed and implemented using an evolutionary/incremental strategy including major annual software releases to accommodate upgrades as required by changes to the Department's BEA including new laws, regulations and policies as governed by its Functional Sponsor.

DAI Increments 1 and 2 are in sustainment. When Increment 3, Rel 1 went live in October 2018, it subsumed Increment 2; therefore, only one DAI production baseline exists at any point in time.

Exhibit R-3, RDT&E Project Cost Analysis: PB 2021 Defense Logistics Agency		Date: February 2020
Appropriation/Budget Activity 0400 / 5	**R-1 Program Element (Number/Name)** PE 0605080S / *Defense Agencies Initiative (DAI) - Financial System*	**Project (Number/Name)** 01 / *Defense Agencies Initiative - Financial System*

Product Development ($ in Millions)

Cost Category Item	Contract Method & Type	Performing Activity & Location	Prior Years	FY 2019 Cost	FY 2019 Award Date	FY 2020 Cost	FY 2020 Award Date	FY 2021 Base Cost	FY 2021 Base Award Date	FY 2021 OCO Cost	FY 2021 OCO Award Date	FY 2021 Total Cost	Cost To Complete	Total Cost	Target Value of Contract
DAI Compliance Support	Option/ CPFF	CACI Inc Federal : Chantilly, VA	31.280	0.000		5.854	Jun 2020	5.000	Jun 2021	0.000		5.000	Continuing	Continuing	0.000
DAI Compliance Support Follow-on	C/TBD	TBD : TBD	0.000	5.911	Jun 2019	0.000		0.000		0.000		0.000	Continuing	Continuing	Continuing
DAI Implementation Support	Option/ CPAF	CACI Inc Federal : Chantilly, VA	28.402	0.000		5.496	Mar 2020	4.970	Mar 2021	0.000		4.970	Continuing	Continuing	0.000
DAI Implementation Support Follow-on	C/TBD	TBD : TBD	0.000	6.336	Mar 2019	0.000		0.000		0.000		0.000	Continuing	Continuing	Continuing
DAI Infrastructure Support	Option/ FFP	CACI ISS Inc : Fairfax, VA	14.476	0.000		4.000	May 2020	2.118	May 2021	0.000		2.118	Continuing	Continuing	0.000
DAI Infrastructure Support Follow-on	C/TBD	TBD : TBD	0.000	1.985	May 2019	0.000		0.000		0.000		0.000	Continuing	Continuing	Continuing
Global Model P2P Follow-on	C/TBD	TBD : TBD	3.418	0.000		2.408	Aug 2020	2.542	Aug 2021	0.000		2.542	Continuing	Continuing	Continuing
Global Model A2R Follow-on	C/TBD	TBD : TBD	2.333	2.403	Apr 2019	1.342	Apr 2020	2.336	Apr 2021	0.000		2.336	Continuing	Continuing	Continuing
Requirements Management (RM) Support	MIPR	DISA : Fort Meade, MD	1.113	0.159	Oct 2019	0.262	Oct 2020	0.256	Oct 2021	0.000		0.256	Continuing	Continuing	Continuing
DCPDS/DAI Interface File Changes	MIPR	DLA Finance : Fort Belvoir, VA	0.027	0.010	Feb 2019	0.008	Feb 2020	0.008	Feb 2021	0.000		0.008	Continuing	Continuing	Continuing
Prior Year Contracts	Option/ Various	MULTI : MULTI	54.057	-		-		-		-		-	0.000	54.057	54.057
		Subtotal	135.106	16.804		19.370		17.230		0.000		17.230	Continuing	Continuing	N/A

Remarks

Prior Year Contracts include: Global Model P2P C/FFP IBM: Bethesda, MD $21.927 million; Global Model A2R C/CPFF CACI Inc Federal: Chantily, VA $10.146 million; DAI Data Conversion Support Option/FFP Terathink: Reston, VA $2.857 million; Oracle Time & Labor Software License and Maintenance C/FP Mythics, Inc: Virginia Beach, VA $1.020 million; Global Model CAD C/CPFF CSC: Falls Church, VA $3.205 million; Jaws Professional Licenses C/FFP Immix: McLean, VA $0.017 million; Oracle Advanced Compression Licenses $1.622 million; Oracle Contract Lifecycle Management Licenses C/FFP Mythics Inc: Virginia Beach, VA $7.408 million; Oracle Licenses MIPR DISA: Pensacola, FL $5.446 million; Kurzweil 5000 508 Assistive Tech Licenses C/FFP Envision Technology Inc: Bethesda, MD $0.008 million; Dragon Naturally Speaking 508 C/FFP Red River Computer Co: Claremont, NH $0.007 million; DISA/DITCO Delinquent Balance MIPR DISA DITCO: Scott AFB, IL $0.017 million; and DBTA Section 1553 MIPR DFAS:Columbus, OH $0.377 million.

Exhibit R-3, RDT&E Project Cost Analysis: PB 2021 Defense Logistics Agency			Date: February 2020
Appropriation/Budget Activity 0400 / 5	R-1 Program Element (Number/Name) PE 0605080S / *Defense Agencies Initiative (DAI) - Financial System*	Project (Number/Name) 01 / *Defense Agencies Initiative - Financial System*	

Support ($ in Millions)

Cost Category Item	Contract Method & Type	Performing Activity & Location	Prior Years	FY 2019 Cost	FY 2019 Award Date	FY 2020 Cost	FY 2020 Award Date	FY 2021 Base Cost	FY 2021 Base Award Date	FY 2021 OCO Cost	FY 2021 OCO Award Date	FY 2021 Total Cost	Cost To Complete	Total Cost	Target Value of Contract
Estimated SBIR/STTR:	TBD	TBD : TBD	2.004	0.785	Jun 2019	0.864	Jun 2020	0.807	Jun 2021	0.000		0.807	Continuing	Continuing	Continuing
		Subtotal	2.004	0.785		0.864		0.807		0.000		0.807	Continuing	Continuing	N/A

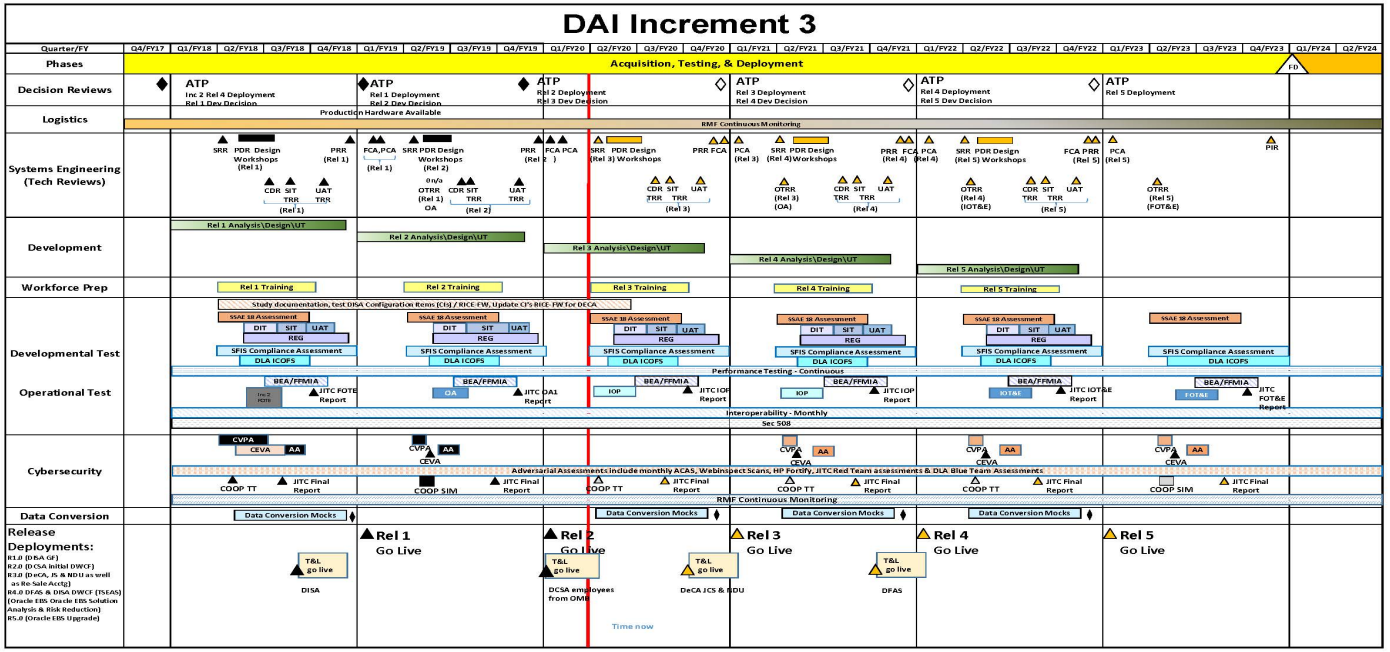
Test and Evaluation ($ in Millions)

Cost Category Item	Contract Method & Type	Performing Activity & Location	Prior Years	FY 2019 Cost	FY 2019 Award Date	FY 2020 Cost	FY 2020 Award Date	FY 2021 Base Cost	FY 2021 Base Award Date	FY 2021 OCO Cost	FY 2021 OCO Award Date	FY 2021 Total Cost	Cost To Complete	Total Cost	Target Value of Contract
DISA Hosting: Test and Development	MIPR	DISA : Pensacola, FL	12.938	0.894	Oct 2018	2.245	Oct 2019	2.000	Oct 2021	0.000		2.000	Continuing	Continuing	Continuing
Interoperability	MIPR	JITC : Fort Meade, MD	3.688	0.290	May 2019	0.222	May 2020	0.200	May 2021	0.000		0.200	Continuing	Continuing	Continuing
Performance and Regression Testing	MIPR	JITC : Fort Huachuca, AZ	3.367	0.600	Oct 2018	0.313	Oct 2019	0.300	Oct 2021	0.000		0.300	Continuing	Continuing	Continuing
Operational Test and Evaluation	MIPR	JITC : Fort Huachuca, AZ	3.731	1.011	Dec 2018	0.000	Dec 2019	0.000	Dec 2021	0.000		0.000	Continuing	Continuing	Continuing
DCPS Testing	MIPR	DFAS : Indianapolis, IN	0.229	0.000	Oct 2018	0.100	Oct 2019	0.000		0.000		0.000	Continuing	Continuing	Continuing
		Subtotal	23.953	2.795		2.880		2.500		0.000		2.500	Continuing	Continuing	N/A

	Prior Years	FY 2019		FY 2020		FY 2021 Base		FY 2021 OCO		FY 2021 Total	Cost To Complete	Total Cost	Target Value of Contract
Project Cost Totals	161.063	20.384		23.114		20.537		0.000		20.537	Continuing	Continuing	N/A

Remarks

Exhibit R-4, RDT&E Schedule Profile: PB 2021 Defense Logistics Agency		Date: February 2020
Appropriation/Budget Activity 0400 / 5	**R-1 Program Element (Number/Name)** PE 0605080S / *Defense Agencies Initiative (DAI) - Financial System*	**Project (Number/Name)** 01 / *Defense Agencies Initiative - Financial System*



508: Section 508/Disability Test
AA: Adversarial Assessment
ACAS: Assured Compliance Assessment Solution
ATO: Authority to Operate (Includes Production & COOP)
ATP: Authority to Proceed Decision Review
BEA: Business Enterprise Architecture
CCM: Center for Countermeasures
CDR: Critical Design Review
CEVA: Cyber Economic Vulnerability Assessment
COOP: Continuity of Operations Testing
CVPA: Cooperative Vulnerability & Penetration Assessment
DAU: Defense Acquisition University

DCAA: Defense Contract Audit Agency
DCFO: Deputy Chief Financial Officer
DCMA: Defense Contract Management Agency
DHRA: Defense Human Resources Activity
DMEA: Defense Microelectronics Activity
DODEA: DoD Education Activity
DODIG: DoD Inspector General
DOT&E: Director Operational Test & Development
DSCA: Defense Security Cooperation Agency
DSS/DCSA: Defense Security Service/Defense Counter Intelligence Agency
DT: Development Test

DIT: Developmental Integration Test
DWCF: Defense Working Capital Fund
FCA: Functional Configuration Audit
FD: Full Deployment
FF: Full Financials
FFFMIA: Federal Financial Management Information Act
FOT&E: Follow on Operational Test & Evaluation
GRC: Governance, Risk and Compliance
IA: Information Assurance
ICOFS: Internal Controls over Financial Systems
IOT&E: Initial Operational Test & Evaluation

JITC: Joint Interoperability Test Command
MS: Milestone
OA: Operational Assessment
OTA: Operational Test Authority
OTRR: Operational TRR
P2P: Procure to Pay
PCA: Physical Configuration Audit
PDR: Preliminary Design Review
PERF: Performance Test
PIR: Post Implementation Review
PROD: Production
R: Release
R12: Oracle E-Business Suite, Release 12
REG: Regression Test

RMF: Risk Management Framework
SFIS-CA: Standard Financial Information Structure - Compliance Assessment
SIM: Simulation
SIT: Systems Integration Test
SOD: Segregation of Duties
SRR: Software Requirements Review
SSAE 18: Statement of Standards for an Attestation Engagement
Stds: Standards
T&D: Test and Development
T&L: Time & Labor
TRR: Test Readiness Review

TT: Tabletop
UAT: User Acceptance Testing
USSGL: United States Standard General Ledger
UT: Unit Test
WHS: Washington Headquarters Service

Updated January 7, 2020

*Note: WHS deployment includes OSD Secretariat offices, Pentagon Force Protection Agency, Defense Test Resources Management Center (DTRMC), Defense Legal Services Agency (DLSA) & US Court of Appeals For Armed Services.

Exhibit R-4A, RDT&E Schedule Details: PB 2021 Defense Logistics Agency		Date: February 2020
Appropriation/Budget Activity 0400 / 5	**R-1 Program Element (Number/Name)** PE 0605080S / *Defense Agencies Initiative (DAI) - Financial System*	**Project (Number/Name)** 01 / *Defense Agencies Initiative - Financial System*

Schedule Details

	Start		End	
Events by Sub Project	**Quarter**	**Year**	**Quarter**	**Year**
Defense Agencies Initiative (DAI)				
DAI - - See schedule exhibit for more details	1	2018	4	2025

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Exhibit R-2, RDT&E Budget Item Justification: PB 2021 Defense Logistics Agency	Date: February 2020
Appropriation/Budget Activity 0400: *Research, Development, Test & Evaluation, Defense-Wide I* BA 5: *System Development & Demonstration (SDD)*	**R-1 Program Element (Number/Name)** PE 0605090S *I Defense Retired and Annuitant Pay System 2 (DRAS2)*

COST ($ in Millions)	Prior Years	FY 2019	FY 2020	FY 2021 Base	FY 2021 OCO	FY 2021 Total	FY 2022	FY 2023	FY 2024	FY 2025	Cost To Complete	Total Cost
Total Program Element	45.566	10.339	6.368	1.638	-	1.638	1.664	1.726	1.770	1.775	Continuing	Continuing
01: *Defense Retired and Annuitant Pay System 2 (DRAS2)*	45.566	10.339	6.368	1.638	-	1.638	1.664	1.726	1.770	1.775	Continuing	Continuing

A. Mission Description and Budget Item Justification

DRAS2 will streamline processes and provide auditable, sustainable and flexible retiree and annuitant pay capability to meet user's needs.

B. Program Change Summary ($ in Millions)	FY 2019	FY 2020	FY 2021 Base	FY 2021 OCO	FY 2021 Total
Previous President's Budget	10.339	6.609	1.763	-	1.763
Current President's Budget	10.339	6.368	1.638	-	1.638
Total Adjustments	0.000	-0.241	-0.125	-	-0.125
• Congressional General Reductions	-	-			
• Congressional Directed Reductions	-	-			
• Congressional Rescissions	-	-			
• Congressional Adds	-	-			
• Congressional Directed Transfers	-	-			
• Reprogrammings	-	-			
• SBIR/STTR Transfer	-	-0.241			
• Internal Realignment	-	-	-0.030	-	-0.030
• Defense Wide Review Reduction	-	-	-0.093	-	-0.093
• Inflation for Non-Pay/Non-Fuel Purchases	-	-	-0.002	-	-0.002

Change Summary Explanation

FY2020, the Small Business Innovation Research and Small Technology Transfer Research tax amounted to $0.241 million.
FY2021, internal realignment decreased baseline by $0.029 million for critical Defense Property Accountability System redesign and upgrade requirements.
The FY 2021 funding request was reduced by $0.093 million during the Defense-Wide Review to free up resources for higher priority Department needs.

Exhibit R-2A, RDT&E Project Justification: PB 2021 Defense Logistics Agency			Date: February 2020
Appropriation/Budget Activity 0400 / 5	R-1 Program Element (Number/Name) PE 0605090S / *Defense Retired and Annuitant Pay System 2 (DRAS2)*	Project (Number/Name) 01 / *Defense Retired and Annuitant Pay System 2 (DRAS2)*	

COST ($ in Millions)	Prior Years	FY 2019	FY 2020	FY 2021 Base	FY 2021 OCO	FY 2021 Total	FY 2022	FY 2023	FY 2024	FY 2025	Cost To Complete	Total Cost
01: *Defense Retired and Annuitant Pay System 2 (DRAS2)*	45.566	10.339	6.368	1.638	-	1.638	1.664	1.726	1.770	1.775	Continuing	Continuing
Quantity of RDT&E Articles	-	-	-	-	-	-	-	-	-	-		

A. Mission Description and Budget Item Justification

DRAS2 will streamline processes and provide auditable, sustainable and flexible retiree and annuitant pay capability to meet user's needs.This modernization will allow for the consolidation of disparate DRAS systems and business processes, the reduction of system redundancies and inefficiencies, and increased customer satisfaction.

B. Accomplishments/Planned Programs ($ in Millions)	FY 2019	FY 2020	FY 2021
Title: Defense Retired and Annuitant Pay System 2 (DRAS2)	10.339	6.368	1.638
FY 2020 Plans: Data migration from the legacy DRAS to the new DRAS2 will begin in FY2020. It is anticipated the data migration may extend the schedule. FY2019 funding delays resulted in an 80% staffing reduction which compounded the schedule delay.			
FY 2021 Plans: DRAS2 formal testing will begin in early FY2021 and is scheduled to conclude in early FY2022. The current FY2021 budget will support development through October 2020.			
FY 2020 to FY 2021 Increase/Decrease Statement: Current FY2020 to FY2021 exhibit was based on the expectation that DRAS2 would be in sustainment in FY2021.			
Accomplishments/Planned Programs Subtotals	10.339	6.368	1.638

C. Other Program Funding Summary ($ in Millions)

N/A

Remarks

D. Acquisition Strategy

DRAS2 achieved Milestone B in August 2016 and entered into the Engineering, Development, and Production Phase of the Acquisition Lifecycle. DRAS2 achieved a successful Critical Design Review in December 2017 and is now in System Development. DRAS2 has been Accepted for the Agile Pilot sec. 873 program by OSD and has successfully begun Agile development.

Exhibit R-3, RDT&E Project Cost Analysis: PB 2021 Defense Logistics Agency			Date: February 2020
Appropriation/Budget Activity 0400 / 5	**R-1 Program Element (Number/Name)** PE 0605090S / *Defense Retired and Annuitant Pay System 2 (DRAS2)*	**Project (Number/Name)** 01 / *Defense Retired and Annuitant Pay System 2 (DRAS2)*	

Product Development ($ in Millions)

Cost Category Item	Contract Method & Type	Performing Activity & Location	Prior Years	FY 2019 Cost	FY 2019 Award Date	FY 2020 Cost	FY 2020 Award Date	FY 2021 Base Cost	FY 2021 Base Award Date	FY 2021 OCO Cost	FY 2021 OCO Award Date	FY 2021 Total Cost	Cost To Complete	Total Cost	Target Value of Contract
DRAS2 System Development and Integration	Option/ IDIQ	CSRA : Chantilly, VA	23.410	4.505	Oct 2018	5.568	Oct 2019	1.638	Oct 2020	-		1.638	Continuing	Continuing	Continuing
DRAS2 COTS License Purchase	Option/ IDIQ	CSRA/Oracle : To be Determined	14.029	0.000		0.000		0.000		-		0.000	Continuing	Continuing	14.110
DISA Hosting	MIPR	Virtual Operating Environment : Mechanicsburg, PA	1.769	0.000	Jan 2019	0.000		0.000		-		0.000	Continuing	Continuing	2.590
Transaction Services Interface Design	Option/ IDIQ	Northrop Grumman DLA Transaction Services : Chambersburg, PA	4.202	0.000		0.000		0.000		-		0.000	Continuing	Continuing	4.162
Transaction Services Interface Development & Testing	Option/ IDDQ	Northrop Grumman DLA Transaction Services : Chambersburg, PA	1.354	0.720	Jul 2019	0.800	Jul 2020	0.000		-		0.000	Continuing	Continuing	Continuing
DRAS2 System Development & Integration	Option/ IDIQ	CSRA : Chantilly, VA	0.802	2.162	Feb 2019	0.000	Feb 2020	0.000		-		0.000	Continuing	Continuing	6.643
Interoperability Testing	MIPR	Joint Interoperability Test Command (JITC) : Fort Meade, MD	0.000	1.542	Oct 2018	0.000	Oct 2019	0.000		-		0.000	Continuing	Continuing	Continuing
Training Effort	C/TBD	To be determined : To be determined	0.000	1.410	Jun 2019	0.000	Jun 2020	0.000		-		0.000	Continuing	Continuing	2.196
		Subtotal	45.566	10.339		6.368		1.638		-		1.638	Continuing	Continuing	N/A

	Prior Years	FY 2019		FY 2020		FY 2021 Base		FY 2021 OCO		FY 2021 Total	Cost To Complete	Total Cost	Target Value of Contract
Project Cost Totals	45.566	10.339		6.368		1.638		-		1.638	Continuing	Continuing	N/A

Remarks

Exhibit R-4, RDT&E Schedule Profile: PB 2021 Defense Logistics Agency		Date: February 2020
Appropriation/Budget Activity 0400 / 5	**R-1 Program Element (Number/Name)** PE 0605090S / *Defense Retired and Annuitant Pay System 2 (DRAS2)*	**Project (Number/Name)** 01 / *Defense Retired and Annuitant Pay System 2 (DRAS2)*

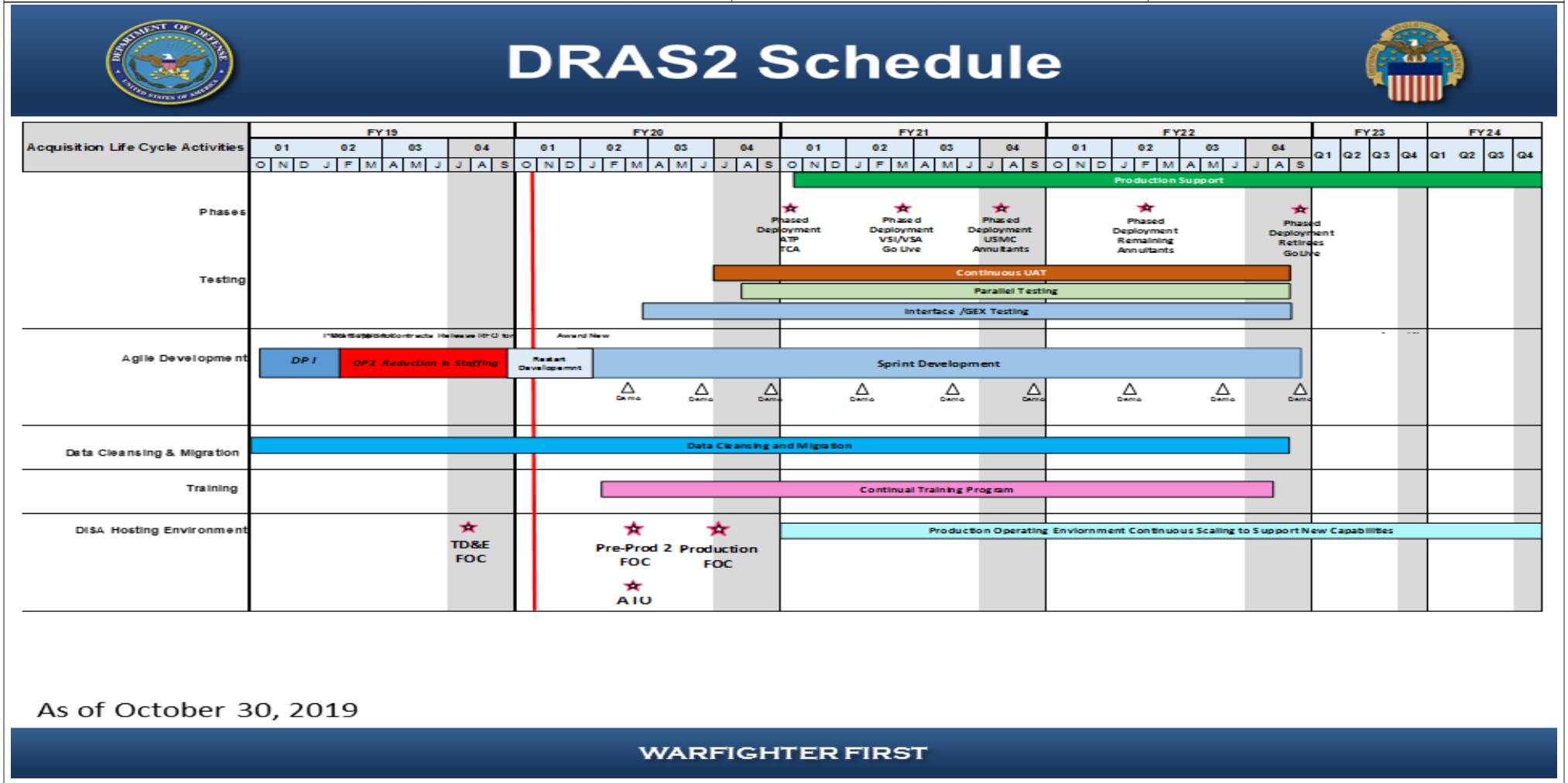

Exhibit R-2, RDT&E Budget Item Justification: PB 2021 Defense Logistics Agency	Date: February 2020
Appropriation/Budget Activity 0400: *Research, Development, Test & Evaluation, Defense-Wide* / BA 6: *RDT&E Management Support*	**R-1 Program Element (Number/Name)** PE 0605502S / *Small Business Innovative Research (SBIR)*

COST ($ in Millions)	Prior Years	FY 2019	FY 2020	FY 2021 Base	FY 2021 OCO	FY 2021 Total	FY 2022	FY 2023	FY 2024	FY 2025	Cost To Complete	Total Cost
Total Program Element	39.228	10.454	10.027	0.000	-	0.000	0.000	0.000	0.000	0.000	Continuing	Continuing
SBIR: *Small Business Innovative Research*	39.228	10.454	10.027	0.000	-	0.000	0.000	0.000	0.000	0.000	Continuing	Continuing

A. Mission Description and Budget Item Justification

Defense Logistics Agency's (DLA's) ability to deliver Americans the right logistics solution in every transaction requires more than successful management of the Agency's wholesale supplies and suppliers. It requires supply chain excellence. Our military's ability to generate and sustain combat readiness indefinitely, anywhere on the globe requires that DLA-managed materiel flow seamlessly and as needed from the nation's industrial base to where it is ultimately used.

DLA's Small Business Innovative Research (SBIR) program seeks to solicit innovative research and development proposals from the small business community to address DLA's strategic and operational requirements. All selections shall demonstrate and involve some technical risk with yet to be determined technical feasibility. Phase I proposals should demonstrate the feasibility of the proposed technology and provide a strong business case for Phase II investment for a prototype or at least a proof-of-concept demonstration. A favorable return on investment and commercialization potential have a strong influence on Phase II selections.

B. Program Change Summary ($ in Millions)	FY 2019	FY 2020	FY 2021 Base	FY 2021 OCO	FY 2021 Total
Previous President's Budget	10.454	0.000	0.000	-	0.000
Current President's Budget	10.454	10.027	0.000	-	0.000
Total Adjustments	0.000	10.027	0.000	-	0.000
• Congressional General Reductions	-	-			
• Congressional Directed Reductions	-	-			
• Congressional Rescissions	-	-			
• Congressional Adds	-	-			
• Congressional Directed Transfers	-	-			
• Reprogrammings	-	-			
• SBIR/STTR Transfer	-	10.027			

Change Summary Explanation

FY2020 Small Business Innovation Research (SBIR) and Small Technology Transfer (STTR) taxes for DLA programs establish the baseline for this program element. DLA SBIR/STTR taxes include $3.787 million.
FY2020, in addition to the DLA portion, Defense Microelectronics Agency (DMEA) funds $6.241 million.

Exhibit R-2A, RDT&E Project Justification: PB 2021 Defense Logistics Agency			Date: February 2020
Appropriation/Budget Activity 0400 / 6	R-1 Program Element (Number/Name) PE 0605502S / *Small Business Innovative Research (SBIR)*	Project (Number/Name) SBIR / *Small Business Innovative Research*	

COST ($ in Millions)	Prior Years	FY 2019	FY 2020	FY 2021 Base	FY 2021 OCO	FY 2021 Total	FY 2022	FY 2023	FY 2024	FY 2025	Cost To Complete	Total Cost
SBIR: *Small Business Innovative Research*	39.228	10.454	10.027	0.000	-	0.000	0.000	0.000	0.000	0.000	Continuing	Continuing
Quantity of RDT&E Articles	-	-	-	-	-	-	-	-	-	-		

A. Mission Description and Budget Item Justification

This program explores innovative concepts pursuant to Public Law 106-554 (Small Business Reauthorization Act of 2000) and Public Law 107-50 (Small Business Technology Transfer Program Reauthorization Act of 2001), which mandates a two-phase competition for small businesses with innovative technologies with a defense application as well as a commercial value. The SBIR and Small Business Technology Transfer (STTR) programs will develop new dual-use technologies for possible future DLA operational and sustainment requirements. Dual-use means the technologies will be judged on their potential for future private sector investment both as a vehicle for reducing development time and cost, unit costs of new DLA technologies, and as a route to national economic growth through new commercial products. DLA will conduct the competition as well as award and manage the contracts.

The DLA's SBIR/STTR investments are divided into multiple Research Areas identified from within several DLA Elements:

J6 R&D
- Nuclear Enterprise Support Office (NESO) Alternative Sources of Supply
- Additive Manufacturing Technologies, Process Controls, and Supply Chain
- Seamless Self Sealing Fuel Bladders and Inflatables
- Advanced Battery Manufacturing
- Advanced Aircraft Braking Systems
- Anti-Counterfeiting Technologies
- Strategic Materials Rare Earth Element Source Development
- Warehouse Modernization Technologies
- Subsistence Supply Chain Solutions

DMEA
- Advanced microelectronics concepts, technologies, and applications

B. Accomplishments/Planned Programs ($ in Millions)	FY 2019	FY 2020	FY 2021
Title: SBIR Accomplishments/Plans	10.454	10.027	0.000
FY 2020 Plans: DLA SBIR/STTR:			

Exhibit R-2A, RDT&E Project Justification: PB 2021 Defense Logistics Agency		Date: February 2020
Appropriation/Budget Activity 0400 / 6	**R-1 Program Element (Number/Name)** PE 0605502S / *Small Business Innovative Research (SBIR)*	**Project (Number/Name)** SBIR / *Small Business Innovative Research*

B. Accomplishments/Planned Programs ($ in Millions)	FY 2019	FY 2020	FY 2021
Continue execution of all active Phase I and Phase II SBIR/STTR Projects. Work with other R&D Programs and other divisions with DLA to identify requirements that meet DLA's long and short term Strategic Objectives. Provide adequate guidance and mentorship to Phase II to projects to increase the likelihood of transition into government programs of record or commercial ventures. DMEA SBIR/STTR: DMEA will continue to seek innovative technical solutions to DoD microelectronics research and development needs and increase private-sector commercialization of these innovations. ***FY 2021 Plans:*** DLA SBIR/STTR: Continue execution of all active Phase I and Phase II SBIR/STTR Projects. Work with other R&D Programs and other divisions with DLA to identify requirements that meet DLA's long and short term Strategic Objectives. Provide adequate guidance and mentorship to Phase II to projects to increase the likelihood of transition into government programs of record or commercial ventures. DMEA SBIR/STTR: Continue to seek innovative technical solutions to DoD microelectronics research and development needs and increase private-sector commercialization of these innovations. ***FY 2020 to FY 2021 Increase/Decrease Statement:*** SBIR and STTR tax amounts are based on enacted budgets so FY2020 amounts have not been established.			
Accomplishments/Planned Programs Subtotals	10.454	10.027	0.000

C. Other Program Funding Summary ($ in Millions)

N/A

Remarks

N/A

D. Acquisition Strategy

The SBIR acquisition process seeks to match projects with DLA's Strategic Focus Areas. The goal is to align SBIR/STTR developed technology with current and future DLA requirements. DLA solicits all new project execution work through the DoD SBIR Broad Agency Announcement (BAA). There are three separate solicitation periods throughout each year. (Jan-Feb, May-Jun, and Sep-Oct)

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Exhibit R-2, RDT&E Budget Item Justification: PB 2021 Defense Logistics Agency	Date: February 2020
Appropriation/Budget Activity 0400: *Research, Development, Test & Evaluation, Defense-Wide* / BA 6: *RDT&E Management Support*	**R-1 Program Element (Number/Name)** PE 0606942S / *Cyber Vulnerability Assessment and Mitigation*

COST ($ in Millions)	Prior Years	FY 2019	FY 2020	FY 2021 Base	FY 2021 OCO	FY 2021 Total	FY 2022	FY 2023	FY 2024	FY 2025	Cost To Complete	Total Cost
Total Program Element	0.000	3.854	0.000	0.000	-	0.000	0.000	0.000	0.000	0.000	0.000	3.854
CVAM: *Cyber Vulnerability Assessment and Mitigation*	0.000	3.854	0.000	0.000	-	0.000	0.000	0.000	0.000	0.000	0.000	3.854

A. Mission Description and Budget Item Justification

In section 1650 of Public Law 114-328, the National Defense Authorization Act (NDAA) for FY2017, the Congress mandated that the Department of Defense (DoD) conduct cyber vulnerability evaluations of critical military installations by December 31, 2019. The funding provided is for critical infrastructure assessments and mitigations. The Cyber Vulnerability Assessment and Mitigation program continues the cyber hardening of critical infrastructure for the Defense Logistics Agency (DLA) Fuel Distribution Network by conducting cyber vulnerability assessments.

B. Program Change Summary ($ in Millions)	FY 2019	FY 2020	FY 2021 Base	FY 2021 OCO	FY 2021 Total
Previous President's Budget	3.854	0.000	0.000	-	0.000
Current President's Budget	3.854	0.000	0.000	-	0.000
Total Adjustments	0.000	0.000	0.000	-	0.000
• Congressional General Reductions	-	-			
• Congressional Directed Reductions	-	-			
• Congressional Rescissions	-	-			
• Congressional Adds	-	-			
• Congressional Directed Transfers	-	-			
• Reprogrammings	-	-			
• SBIR/STTR Transfer	-	-			

Change Summary Explanation

This DLA PE was created in FY 2019 and was utilized for only that year. DLA has not funded this initiative since 2019, and currently the follow-on efforts for this program are funded utilizing the OUSD(C) PE 0604942D8Z, titled "Assessments and Evaluation."

Exhibit R-2A, RDT&E Project Justification: PB 2021 Defense Logistics Agency			Date: February 2020
Appropriation/Budget Activity 0400 / 6	R-1 Program Element (Number/Name) PE 0606942S / *Cyber Vulnerability Assessment and Mitigation*	Project (Number/Name) CVAM / *Cyber Vulnerability Assessment and Mitigation*	

COST ($ in Millions)	Prior Years	FY 2019	FY 2020	FY 2021 Base	FY 2021 OCO	FY 2021 Total	FY 2022	FY 2023	FY 2024	FY 2025	Cost To Complete	Total Cost
CVAM: *Cyber Vulnerability Assessment and Mitigation*	0.000	3.854	0.000	0.000	-	0.000	0.000	0.000	0.000	0.000	0.000	3.854
Quantity of RDT&E Articles	-	-	-	-	-	-	-	-	-	-		

A. Mission Description and Budget Item Justification

In section 1650 of Public Law 114-328, the National Defense Authorization Act (NDAA) for FY2017, the Congress mandated that the Department of Defense (DoD) conduct cyber vulnerability evaluations of critical military installations by December 31, 2019. The funding provided is for critical infrastructure assessments and mitigations. The Cyber Vulnerability Assessment and Mitigation program continues the cyber hardening of critical infrastructure for the Defense Logistics Agency (DLA) Fuel Distribution Network by conducting cyber vulnerability assessments.

B. Accomplishments/Planned Programs ($ in Millions)	FY 2019	FY 2020	FY 2021
Title: Cyber Vulnerability Assessment and Mitigation	3.854	-	-
Accomplishments/Planned Programs Subtotals	3.854	-	-

C. Other Program Funding Summary ($ in Millions)

N/A

Remarks

D. Acquisition Strategy

N/A

Exhibit R-2, RDT&E Budget Item Justification: PB 2021 Defense Logistics Agency	Date: February 2020
Appropriation/Budget Activity 0400: *Research, Development, Test & Evaluation, Defense-Wide I* BA 7: *Operational Systems Development*	**R-1 Program Element (Number/Name)** PE 0708047S *I Defense Property Accountability System (DPAS)*

COST ($ in Millions)	Prior Years	FY 2019	FY 2020	FY 2021 Base	FY 2021 OCO	FY 2021 Total	FY 2022	FY 2023	FY 2024	FY 2025	Cost To Complete	Total Cost
Total Program Element	4.892	1.739	3.545	7.301	-	7.301	6.914	2.967	3.043	3.052	Continuing	Continuing
ABC: *DPAS*	4.892	1.739	3.545	7.301	-	7.301	6.914	2.967	3.043	3.052	Continuing	Continuing

A. Mission Description and Budget Item Justification

The Defense Property Accountability System (DPAS) provides the Department an asset accountability system which is fully compliant with financial reporting regulations and has a clean audit history. With an integrated accountability, utilization, maintenance, and warehouse capability, it is able to provide the Department an enterprise solution for asset management.

B. Program Change Summary ($ in Millions)	FY 2019	FY 2020	FY 2021 Base	FY 2021 OCO	FY 2021 Total
Previous President's Budget	1.739	3.679	3.489	-	3.489
Current President's Budget	1.739	3.545	7.301	-	7.301
Total Adjustments	0.000	-0.134	3.812	-	3.812
• Congressional General Reductions	-	-			
• Congressional Directed Reductions	-	-			
• Congressional Rescissions	-	-			
• Congressional Adds	-	-			
• Congressional Directed Transfers	-	-			
• Reprogrammings	-	-			
• SBIR/STTR Transfer	-	-0.134			
• Internal Realignment	-	-	4.000	-	4.000
• Defense Wide Review Reduction	-	-	-0.185	-	-0.185
• Inflation for Non-Pay/Non-Fuel Purchases	-	-	-0.003	-	-0.003

Change Summary Explanation

FY2020, the Small Business Innovation Research and Small Technology Transfer Research tax amounted to $0.134 million.
FY2021, internal realignment increased DPAS baseline by $4.000 million for critical program redesign and upgrade requirements.
The FY 2021 funding request was reduced by $0.185 million during the Defense-Wide Review to free up resources for higher priority Department needs.

Exhibit R-2A, RDT&E Project Justification: PB 2021 Defense Logistics Agency			Date: February 2020
Appropriation/Budget Activity 0400 / 7	R-1 Program Element (Number/Name) PE 0708047S / *Defense Property Accountability System (DPAS)*	Project (Number/Name) ABC / *DPAS*	

COST ($ in Millions)	Prior Years	FY 2019	FY 2020	FY 2021 Base	FY 2021 OCO	FY 2021 Total	FY 2022	FY 2023	FY 2024	FY 2025	Cost To Complete	Total Cost
ABC: *DPAS*	4.892	1.739	3.545	7.301	-	7.301	6.914	2.967	3.043	3.052	Continuing	Continuing
Quantity of RDT&E Articles	-	-	-	-	-	-	-	-	-	-		

A. Mission Description and Budget Item Justification

The DPAS system provides accountability and management functionality of General Equipment, Real Property and Internal Use Software, to the Department. The budgeted projects will provide enhancements to the existing capability, ensure efficient operation, and provide solutions for process gaps as they are discovered. The greater enhancements to DPAS allow the DoD to sunset legacy systems as DPAS assimilates the legacy functionality into the overall operations.

B. Accomplishments/Planned Programs ($ in Millions)	FY 2019	FY 2020	FY 2021
Title: Release DPAS v 7 ***Description:*** DPAS will create processes to permit the creation of Allowance Standards and compute Unit Requisition lists based on Allowances versus On Hand Balances and improve the identification of Assets Due In by creating an interface with Electronic Document Access to retrieve Contract CLINS, Quantities and Costs.	1.739	-	-
Title: DPAS v 8 Development ***Description:*** Version 8 will contain the processes to produce accounting transactions for equipment assets from the warehouse portion of the system, to mirror the processes in the current Property Accountability. The processes to support the Army to field assets from the Program Executive Offices to their field units will also be in this version. ***FY 2020 Plans:*** The creation of interfaces for additional Army systems to report all Maintenance Actions, request of new National Stock Numbers and the Logistics Product Data Store. DPAS will continue to provide support for the Financial Audit. DPAS will work with each Service or Agency to determine the areas where DPAS can assist with capabilities to close audit identified deficiencies. ***FY 2021 Plans:*** DPAS will transform it's base architecture to facilitate sharing of asset and financial data elements across the three major DPAS modules improving system efficiency and streamlining its use. ***FY 2020 to FY 2021 Increase/Decrease Statement:*** No significant change.	-	3.545	7.301
Accomplishments/Planned Programs Subtotals	1.739	3.545	7.301

Exhibit R-2A, RDT&E Project Justification: PB 2021 Defense Logistics Agency		Date: February 2020
Appropriation/Budget Activity 0400 / 7	**R-1 Program Element (Number/Name)** PE 0708047S / *Defense Property Accountability System (DPAS)*	**Project (Number/Name)** ABC / *DPAS*

C. Other Program Funding Summary ($ in Millions)

N/A

Remarks

D. Acquisition Strategy

N/A

Exhibit R-3, RDT&E Project Cost Analysis: PB 2021 Defense Logistics Agency		Date: February 2020
Appropriation/Budget Activity 0400 / 7	**R-1 Program Element (Number/Name)** PE 0708047S / *Defense Property Accountability System (DPAS)*	**Project (Number/Name)** ABC / *DPAS*

Product Development ($ in Millions)

Cost Category Item	Contract Method & Type	Performing Activity & Location	Prior Years	FY 2019 Cost	FY 2019 Award Date	FY 2020 Cost	FY 2020 Award Date	FY 2021 Base Cost	FY 2021 Base Award Date	FY 2021 OCO Cost	FY 2021 OCO Award Date	FY 2021 Total Cost	Cost To Complete	Total Cost	Target Value of Contract
DPAS Version 7 Development	C/CPIF	Leidos Inc : Camp Hill PA	4.892	1.739	Jun 2019	0.000		0.000		-		0.000	0.000	6.631	6.631
DPAS Version 8 Development	C/FFP	Leidos Inc : Camp Hill PA	0.000	0.000		3.545	Jun 2020	0.000		0.000		0.000	0.000	3.545	3.545
DPAS Development Version 2021.1	SS/FFP	Leidos, Inc. : Camp Hill Pa	0.000	0.000		0.000		7.301	Apr 2021	0.000		7.301	Continuing	Continuing	-
		Subtotal	4.892	1.739		3.545		7.301		0.000		7.301	Continuing	Continuing	N/A

Remarks

Funding was reduced by $1.142 million in FY2019 and increased by half the amount of the decrease in FY2020.

	Prior Years	FY 2019		FY 2020		FY 2021 Base		FY 2021 OCO		FY 2021 Total	Cost To Complete	Total Cost	Target Value of Contract
Project Cost Totals	4.892	1.739		3.545		7.301		0.000		7.301	Continuing	Continuing	N/A

Remarks

Exhibit R-4, RDT&E Schedule Profile: PB 2021 Defense Logistics Agency		Date: February 2020
Appropriation/Budget Activity 0400 / 7	**R-1 Program Element (Number/Name)** PE 0708047S / *Defense Property Accountability System (DPAS)*	**Project (Number/Name)** ABC / *DPAS*

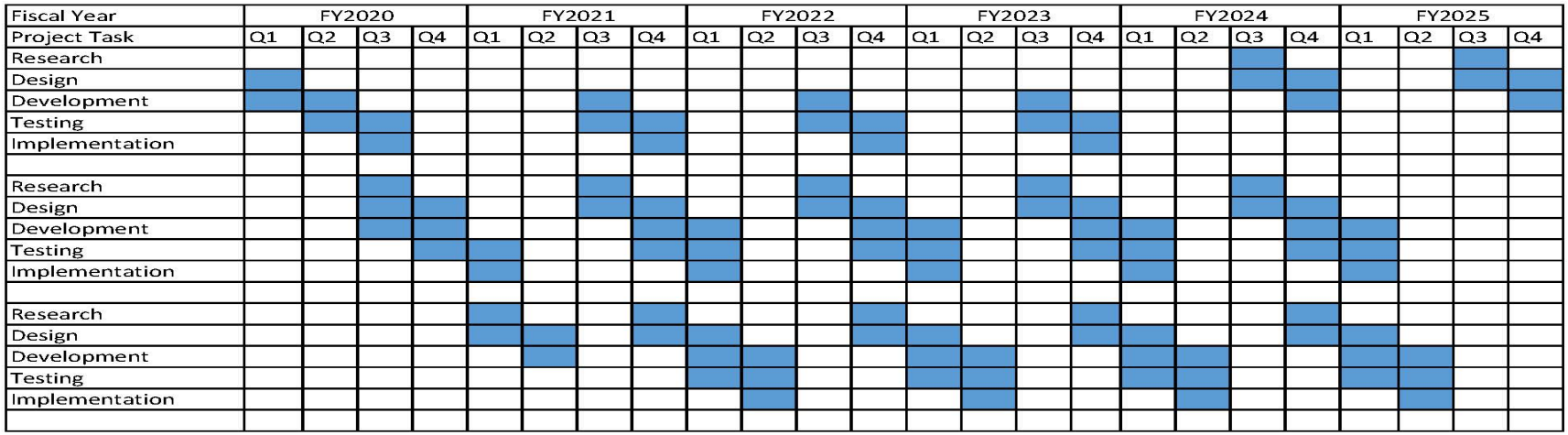

Exhibit R-4A, RDT&E Schedule Details: PB 2021 Defense Logistics Agency		Date: February 2020
Appropriation/Budget Activity 0400 / 7	**R-1 Program Element (Number/Name)** PE 0708047S / *Defense Property Accountability System (DPAS)*	**Project (Number/Name)** ABC / *DPAS*

Schedule Details

	Start		End	
Events by Sub Project	**Quarter**	**Year**	**Quarter**	**Year**
Defense Property Accountability System (DPAS)				
Defense Property Accountability System (DPAS)	4	2020	3	2022

Exhibit R-2, RDT&E Budget Item Justification: PB 2021 Defense Logistics Agency	Date: February 2020
Appropriation/Budget Activity 0400: *Research, Development, Test & Evaluation, Defense-Wide* / BA 7: *Operational Systems Development*	**R-1 Program Element (Number/Name)** PE 0708012S / *Pacific Disaster Center*

COST ($ in Millions)	Prior Years	FY 2019	FY 2020	FY 2021 Base	FY 2021 OCO	FY 2021 Total	FY 2022	FY 2023	FY 2024	FY 2025	Cost To Complete	Total Cost
Total Program Element	9.198	1.705	1.705	1.785	-	1.785	1.821	1.856	1.889	1.889	Continuing	Continuing
03: *Pacific Disaster Center*	9.198	1.705	1.705	1.785	-	1.785	1.821	1.856	1.889	1.889	Continuing	Continuing

A. Mission Description and Budget Item Justification

The Pacific Disaster Center (PDC) has been in operation since February 1996. The PDC is a public/private partnership managed by the University of Hawaii (UH) under a cooperative agreement with the Department of Defense. It is functionally within the organization of the Office of the Under Secretary of Defense (Acquisition and Sustainment) (OUSD(A&S)) and the Defense Logistics Agency (DLA). The PDC is a world-recognized authority and leader in science and information technology applications relating to humanitarian assistance and disaster relief (HA/DR). PDC develops new and innovative technologies to operate an (unclassified) integrated multi-hazard monitoring, early warning and decision support system, called RAPIDS, for the Department.

B. Program Change Summary ($ in Millions)	FY 2019	FY 2020	FY 2021 Base	FY 2021 OCO	FY 2021 Total
Previous President's Budget	1.705	1.770	1.785	-	1.785
Current President's Budget	1.705	1.705	1.785	-	1.785
Total Adjustments	0.000	-0.065	0.000	-	0.000
• Congressional General Reductions	-	-			
• Congressional Directed Reductions	-	-			
• Congressional Rescissions	-	-			
• Congressional Adds	-	-			
• Congressional Directed Transfers	-	-			
• Reprogrammings	-	-			
• SBIR/STTR Transfer	-	-0.065			

Change Summary Explanation

FY2020, the Small Business Innovation Research and Small Technology Transfer Research tax amounted to $0.065 million

Exhibit R-2A, RDT&E Project Justification: PB 2021 Defense Logistics Agency			Date: February 2020
Appropriation/Budget Activity 0400 / 7	R-1 Program Element (Number/Name) PE 0708012S / *Pacific Disaster Center*	Project (Number/Name) 03 / *Pacific Disaster Center*	

COST ($ in Millions)	Prior Years	FY 2019	FY 2020	FY 2021 Base	FY 2021 OCO	FY 2021 Total	FY 2022	FY 2023	FY 2024	FY 2025	Cost To Complete	Total Cost
03: *Pacific Disaster Center*	9.198	1.705	1.705	1.785	-	1.785	1.821	1.856	1.889	1.889	Continuing	Continuing
Quantity of RDT&E Articles	-	-	-	-	-	-	-	-	-	-		

A. Mission Description and Budget Item Justification

The Pacific Disaster Center (PDC) has been in operation since February 1996. The PDC is a public/private partnership managed by the University of Hawaii (UH) under a cooperative agreement with the Department of Defense. It is functionally within the organization of the OUSD(AT&L) and the DLA. The PDC is a world-recognized authority and leader in science and information technology applications relating to Humanitarian Assistance and Disaster Relief (HA/DR). It has developed innovative technologies, and has provided operational support for an (unclassified) integrated multi-hazard hazard monitoring, early warning and decision support system, called RAPIDS, for the department since 2007. The system, covering global hazard is frequently used by COCOMS, particularly PACOM and SOUTHCOM, for HA/DR missions and exercises, and was recently selected as one of the most effective systems in a position paper by the department, reviewing all unclassified information sharing systems. “Expanded use of RAPIDS across the DoD at the Combatant Commands, Joint Task Force, and by deployed units from the services” was identified as ”a primary Joint Staff objective” in a memorandum dated July 6, 2017.

B. Accomplishments/Planned Programs ($ in Millions)	FY 2019	FY 2020	FY 2021
Title: Pacific Disaster Center (PDC)	1.705	1.705	1.785

Description: The USD(P) will continue to be the Operational Sponsor and functional OSD Principal Staff Assistant (PSA) for the program. USD(A&S) will provide acquisition oversight authority for the program.

The PDC has been in operation since February 1996. The PDC is a public/private partnership managed by the University of Hawaii (UH) under a cooperative agreement with the Department of Defense. The Pacific Disaster Center (PDC) function, manpower, and budget resources transferred to the Office of the Under Secretary of Defense (Acquisition and Sustainment) (OUSD(A&S)) and the Defense Logistics Agency (DLA) in October 2011.

The USD(P) will continue to be the Operational Sponsor and functional OSD Principal Staff Assistant (PSA) for the program. The PDC is a world-recognized authority and leader in science and information technology applications relating to humanitarian assistance and disaster relief (HA/DR). PDC’s applications and information products enhance preparedness, situational awareness, and civil-military communications for humanitarian missions worldwide, while its national-level socio-economic Risk and Vulnerability Assessments help inform strategies by measuring indicators for national resiliency using scientific methods.

The PDC Program Office’s (USD(P),ASD(HD&GS), and DASD(DC&MA)) primary responsibility is for management and stewardship of governmental funds provided in Defense Department appropriations for DoD missions associated with DoD CrM, HA/DR, Theater Security Cooperation, and Defense Support to Civil Authorities (DSCA). In doing this, the Program Office develops and provides policy, oversight and guidance, and jointly develops strategic guidelines, programmatic content and

Exhibit R-2A, RDT&E Project Justification: PB 2021 Defense Logistics Agency		Date: February 2020
Appropriation/Budget Activity 0400 / 7	**R-1 Program Element (Number/Name)** PE 0708012S / *Pacific Disaster Center*	**Project (Number/Name)** 03 / *Pacific Disaster Center*

B. Accomplishments/Planned Programs ($ in Millions)	FY 2019	FY 2020	FY 2021
priorities with the UH and PDC. The PDC Program Office also serves as a support element of the Hawaii-based organization especially in the area of gaining Federal agency support and resources, as well as business opportunities. ***FY 2020 Plans:*** The following 2020 projects and activities are designed to enhance the Center's applications and applied research enhancing operational readiness and analytical capabilities for the DoD and Stakeholders. - Situational Awareness & Decision Support Applications and Tools. Develop and enhance DisasterAWARE platform, and related applications, and tools that directly support operational readiness for effective multi-hazard early warning, monitoring, and evidence-based decision support functions. - Automation and Modeling for Disaster Monitoring, Warning, Exposure & Impact. Enhance automation and modeling services supporting comprehensive and integrated multi-hazard monitoring, situational awareness, notification/warning, exposure estimation, and impact modeling and assessments. - Analytics and Anticipatory Sciences. Advance analytical capabilities to better understand and project (or estimate) severity of impacts to population by characterizing the socio-economic, political, health, cultural, and environmental factors that are influencing risk and resilience to support more effective decision-making. - Disaster Response, Exercise Plan and Training Services. Provide direct 24/7 operational support to DoD, the interagency and other stakeholders before, during, and after disasters. - Data Management Services. Manage and maintain the most robust global data sets and related services to directly support DoD in meeting their interagency support requirements. - Partner Engagement and Liaison Services. Improve operational efficacy and efficiency of key DoD stakeholders DoD stakeholders by assisting in utilization and institutionalization of PDC's risk reduction expertise into their operations. - Cybersecurity and IT Infrastructure Services. Manage, administer, and maintain PDCs internal and external cyber infrastructure (including all computers, networks, systems, and applications) and provide a highly-available and secure computing and communication systems required for delivering reliable services and products to the stakeholders and the clients. ***FY 2021 Plans:*** Continue FY2020 operations. ***FY 2020 to FY 2021 Increase/Decrease Statement:*** No significant change.			
Accomplishments/Planned Programs Subtotals	1.705	1.705	1.785

C. Other Program Funding Summary ($ in Millions)

N/A

Remarks

Exhibit R-2A, RDT&E Project Justification: PB 2021 Defense Logistics Agency		Date: February 2020
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D. Acquisition Strategy

PDC projects beyond the baseline Situational Awareness & Decision Support Applications/Tools architecture (Atlas/EMOPS/RAPIDS) undertaken in support of the DoD Cooperative Agreement (CA) with the University of Hawaii (UH) are from PDC customers (e.g., DoD, NGOs, other nations, academia, and industry). The PDC prepares the public, disaster managers, governments, and others to mitigate the effects of disasters. The goal is to have people and technology work together to preserve life, safeguard livelihoods, protect property to foster disaster-resilient communicates. Projects obtained and funded from this customer base serve as a means to determine PDC product and services relevancy.

Exhibit R-3, RDT&E Project Cost Analysis: PB 2021 Defense Logistics Agency			Date: February 2020
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Test and Evaluation ($ in Millions)

Cost Category Item	Contract Method & Type	Performing Activity & Location	Prior Years	FY 2019 Cost	FY 2019 Award Date	FY 2020 Cost	FY 2020 Award Date	FY 2021 Base Cost	FY 2021 Base Award Date	FY 2021 OCO Cost	FY 2021 OCO Award Date	FY 2021 Total Cost	Cost To Complete	Total Cost	Target Value of Contract
PDC Disaster AWARE: Early Warning and Decision Support Applications	MIPR	University of Hawaii Systems : Honolulu, HI	9.198	1.705	Mar 2019	1.705	Dec 2019	1.785	Dec 2020	-		1.785	Continuing	Continuing	Continuing
		Subtotal	9.198	1.705		1.705		1.785		-		1.785	Continuing	Continuing	N/A

	Prior Years	FY 2019		FY 2020		FY 2021 Base		FY 2021 OCO		FY 2021 Total	Cost To Complete	Total Cost	Target Value of Contract
Project Cost Totals	9.198	1.705		1.705		1.785		-		1.785	Continuing	Continuing	N/A

Remarks

Exhibit R-4, RDT&E Schedule Profile: PB 2021 Defense Logistics Agency		Date: February 2020
Appropriation/Budget Activity 0400 / 7	**R-1 Program Element (Number/Name)** PE 0708012S / *Pacific Disaster Center*	**Project (Number/Name)** 03 / *Pacific Disaster Center*