Department of Defense
Fiscal Year (FY) 2022 Budget Estimates

May 2021

Defense Logistics Agency

Defense-Wide Justification Book Volume 5 of 5

Research, Development, Test & Evaluation, Defense-Wide

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Defense Counterintelligence and Security Agency.....Volume 5

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Footnotes

FY 2020 Actuals

Includes Division A, Title IX and X of the Consolidated Appropriations Act, 2020 (P.L. 116-93), Division F, Title IV and V from the Further Consolidated Appropriations Act, 2020 (P.L. 116-94) and the Coronavirus Aid, Relief, and Economic Security Act (P.L. 116-136).

FY 2021 Enacted

Includes Division C, Title IX and Division J, Title IV of the Consolidated Appropriations Act, 2021 (P.L. 116-260).

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Department of Defense
FY 2022 President's Budget
Exhibit R-1 FY 2022 President's Budget
Total Obligational Authority
(Dollars in Thousands)

06 May 2021

Appropriation	FY 2020 Actual*	FY 2021 Enacted**	FY 2022 Request
Research, Development, Test & Eval, DW	316,218	247,947	251,904
Total Research, Development, Test & Evaluation	316,218	247,947	251,904

R-122BAS: FY 2022 President's Budget (Total Base Published Version), as of May 6, 2021 at 08:44:56

Department of Defense
FY 2022 President's Budget
Exhibit R-1 FY 2022 President's Budget
Total Obligational Authority
(Dollars in Thousands)

06 May 2021

Summary Recap of Budget Activities	FY 2020 Actual*	FY 2021 Enacted**	FY 2022 Request
Advanced Technology Development	269,130	215,309	210,782
System Development & Demonstration	31,773	23,552	32,933
Management Support	10,065		
Operational Systems Development	5,250	9,086	8,189
Total Research, Development, Test & Evaluation	316,218	247,947	251,904

Summary Recap of FYDP Programs			
Research and Development	310,968	238,861	243,715
Central Supply and Maintenance	5,250	9,086	8,189
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Defense-Wide
FY 2022 President's Budget
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Defense-Wide
FY 2022 President's Budget
Exhibit R-1 FY 2022 President's Budget
Total Obligational Authority
(Dollars in Thousands)

06 May 2021

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

Line No	Program Element Number	Item	Act	FY 2020 Actual*	FY 2021 Enacted**	FY 2022 Request	Sec
51	0603680S	Manufacturing Technology Program	03	50,184	69,025	37,543	U
53	0603712S	Generic Logistics R&D Technology Demonstrations	03	17,402	10,235	12,418	U
55	0603720S	Microelectronics Technology Development and Support	03	201,544	136,049	160,821	U
		Advanced Technology Development		269,130	215,309	210,782	
136	0605070S	DOD Enterprise Systems Development and Demonstration	05	2,291	1,377	679	U
138	0605080S	Defense Agency Initiatives (DAI) - Financial System	05	23,114	20,537	32,254	U
139	0605090S	Defense Retired and Annuitant Pay System (DRAS)	05	6,368	1,638		U
		System Development & Demonstration		31,773	23,552	32,933	
169	0605502S	Small Business Innovative Research	06	10,065			U
		Management Support		10,065			
254	0708012S	Pacific Disaster Centers	07	1,705	1,785	1,799	U
255	0708047S	Defense Property Accountability System	07	3,545	7,301	6,390	U
		Operational Systems Development		5,250	9,086	8,189	
Total Research, Development, Test & Eval, DW				316,218	247,947	251,904	

R-122BAS: FY 2022 President's Budget (Total Base Published Version), as of May 6, 2021 at 08:44:56

Defense Logistics Agency
FY 2022 President's Budget
Exhibit R-1 FY 2022 President's Budget
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255	0708047S	Defense Property Accountability System	07	3,545	7,301	6,390	U
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Program Element Table of Contents (by Budget Activity then Line Item Number)

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

Line #	Budget Activity	Program Element Number	Program Element Title	Page
51	03	0603680S	Manufacturing Technology Program (ManTech)	Volume 5 - 1
53	03	0603712S	Logistics Research and Development Technology (Log R&D)	Volume 5 - 17
55	03	0603720S	Microelectronics Technology Development and Support (DMEA)	Volume 5 - 27

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

Line #	Budget Activity	Program Element Number	Program Element Title	Page
136	05	0605070S	DoD Enterprise Systems Development and Demonstration	Volume 5 - 41
138	05	0605080S	Defense Agencies Initiative (DAI) - Financial System	Volume 5 - 47
139	05	0605090S	Defense Retired and Annuitant Pay System 2 (DRAS2)	Volume 5 - 59

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

Line #	Budget Activity	Program Element Number	Program Element Title	Page
169	06	0605502S	Small Business Innovative Research (SBIR)	Volume 5 - 65

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

Line #	Budget Activity	Program Element Number	Program Element Title	Page
254	07	0708012S	Pacific Disaster Center	Volume 5 - 69
255	07	0708047S	Defense Property Accountability System (DPAS)	Volume 5 - 75

Program Element Table of Contents (Alphabetically by Program Element Title)

Program Element Title	Program Element Number	Line #	BA	Page
Defense Agencies Initiative (DAI) - Financial System	0605080S	138	05	Volume 5 - 47
Defense Property Accountability System (DPAS)	0708047S	255	07	Volume 5 - 75
Defense Retired and Annuitant Pay System 2 (DRAS2)	0605090S	139	05	Volume 5 - 59
DoD Enterprise Systems Development and Demonstration	0605070S	136	05	Volume 5 - 41
Logistics Research and Development Technology (Log R&D)	0603712S	53	03	Volume 5 - 17
Manufacturing Technology Program (ManTech)	0603680S	51	03	Volume 5 - 1
Microelectronics Technology Development and Support (DMEA)	0603720S	55	03	Volume 5 - 27
Pacific Disaster Center	0708012S	254	07	Volume 5 - 69
Small Business Innovative Research (SBIR)	0605502S	169	06	Volume 5 - 65

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Exhibit R-2, RDT&E Budget Item Justification: PB 2022 Defense Logistics Agency	Date: May 2021
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 2020	FY 2021	FY 2022 Base	FY 2022 OCO	FY 2022 Total	FY 2023	FY 2024	FY 2025	FY 2026	Cost To Complete	Total Cost
Total Program Element	121.222	50.184	69.025	37.543	-	37.543	-	-	-	-	Continuing	Continuing
IBMP: *Improving Industrial Base Manufacturing Processes (formerly Material Availability)*	57.181	27.724	42.205	13.809	-	13.809	-	-	-	-	Continuing	Continuing
AAA: *Maintaining Viable Supply Sources (formerly High Quality Sources)*	48.372	16.481	17.854	17.695	-	17.695	-	-	-	-	Continuing	Continuing
OOO: *Improving Technical and Logistics Information (formerly Industry and Customer Collaboration)*	15.669	5.979	8.966	6.039	-	6.039	-	-	-	-	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 2022 Defense Logistics Agency	Date: May 2021
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 2020	FY 2021	FY 2022 Base	FY 2022 OCO	FY 2022 Total
Previous President's Budget	50.184	40.025	40.029	-	40.029
Current President's Budget	50.184	69.025	37.543	-	37.543
Total Adjustments	0.000	29.000	-2.486	-	-2.486
• Congressional General Reductions	-	-			
• Congressional Directed Reductions	-	-			
• Congressional Rescissions	-	-			
• Congressional Adds	-	29.000			
• Congressional Directed Transfers	-	-			
• Reprogrammings	-	-			
• SBIR/STTR Transfer	-	-			
• Inflation for Civilian Pay	-	-	0.016	-	0.016
• Inflation for Non-Pay/Non-Fuel Purchases	-	-	-0.950	-	-0.950
• Decrease for Travel	-	-	-0.062	-	-0.062
• Internal Realignment to LOG PE 0603712S	-	-	-1.500	-	-1.500
• Retired Pay Accrual	-	-	0.010	-	0.010

Congressional Add Details ($ in Millions, and Includes General Reductions)	FY 2020	FY 2021
Project: IBMP: *Improving Industrial Base Manufacturing Processes (formerly Material Availability)*		
Congressional Add: *Improve Steel Performance Initiative in Castings*	10.000	10.000
Congressional Add: *Supply Chain adoption of additive manufacturing, automation, and robotics in Castings*	-	10.000

Exhibit R-2, RDT&E Budget Item Justification: PB 2022 Defense Logistics Agency	Date: May 2021
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 2020	FY 2021
Congressional Add: *Additive Manufacturing Castings Model*	-	5.000
Congressional Add Subtotals for Project: IBMP	10.000	25.000
Project: OOO: *Improving Technical and Logistics Information (formerly Industry and Customer Collaboration)*		
Congressional Add: *Rare Earth Magnets*	-	4.000
Congressional Add Subtotals for Project: OOO	-	4.000
Congressional Add Totals for all Projects	10.000	29.000

Change Summary Explanation

FY 2021:
-SBIR/STTR Transfer: Due to an error while coding FY 2021 Enactment, the SBIR/STTR transfer is not reflected in the exhibit totals. Programs were indeed taxed and the funding was transferred to the SBIR PE 0605502S. For ManTech, the SBIR/STTR transfer is $2.393M.

FY 2022:
-Inflation for Non-Pay/Non-Fuel Purchases: $0.725 million of the $0.950 million reduction was incorrectly coded to Manufacturing Technology and was intended for the Defense Microelectronics Activity for non-pay/non-fuel inflation. The funding will be adjusted correctly upon enactment of FY 2022 funding.
-Decrease for Travel: Defense-Wide activities are directed to maximize their travel funding through the use of technology, such as video teleconference, and cost-efficient transportation options.
-Internal Realignment to LOG PE 0603712S: Funding moved to LOG for requirements.
-Retired Pay Accrual: Agency Contribution Assumption FY 22 rate was increased by 1.1%.

Exhibit R-2A, RDT&E Project Justification: PB 2022 Defense Logistics Agency			Date: May 2021
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 2020	FY 2021	FY 2022 Base	FY 2022 OCO	FY 2022 Total	FY 2023	FY 2024	FY 2025	FY 2026	Cost To Complete	Total Cost
IBMP: *Improving Industrial Base Manufacturing Processes (formerly Material Availability)*	57.181	27.724	42.205	13.809	-	13.809	-	-	-	-	Continuing	Continuing
Quantity of RDT&E Articles	-	-	-	-	-	-	-	-	-	-		

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,

Exhibit R-2A, RDT&E Project Justification: PB 2022 Defense Logistics Agency		Date: May 2021
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)*

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 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 2020	FY 2021	FY 2022
Title: Improving Industrial Base Manufacturing Processes (formerly Material Availability)	17.724	17.205	13.809
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 FY 2021 regarding modernization and readiness analysis of a Joint Food Management System, Subsistence readiness and innovation assessment of the supply chain, Pre and Polyfluroalkyl			

Exhibit R-2A, RDT&E Project Justification: PB 2022 Defense Logistics Agency		Date: May 2021
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 2020	FY 2021	FY 2022
(PFAS) in MRE Packing materials, Identification of critical performance properties for barrier materials in hot sauce packaging for MRE rations and Blockchain application for the Outside of Continental U.S. (OCONUS) Subsistence Prime Vendor supply chain. The program will also continue to work Small Business Innovation Research (SBIR) topics in Subsistence, for example, using cold plasma fog mist to disinfect personnel protective equipment, cold plasma technology to extend the shelf life of fresh fruits and vegetables, and collaborate with the Defense Advanced Research Projects Agency on future projects for synergy and as a potential transition partner. The Casting program will 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 execute projects focused 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. 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 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			

Exhibit R-2A, RDT&E Project Justification: PB 2022 Defense Logistics Agency		Date: May 2021
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 2020	FY 2021	FY 2022

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.

FY 2022 Plans:

The Subsistence Network (SUBNET) program plans to continue to research and execute short-term innovative projects to improve the subsistence supply chain in FY 2022. SUBNET will continue to incorporate emerging technologies to address stakeholder's requirements as well as leverage supply chain innovations, best practices and trends. SUBNET will continue to research and conduct pilot test in the areas of modernization and readiness analysis of Joint Food Management System and improving subsistence visibility enhancing receipting and barcoding at an OCONUS location. SUBNET plans to conduct research in FY 2022 regarding data analytics, wire mesh sensor technology, and automation in Military Dining Faculties. The program will also continue to pursue Small Business Innovation Research topics in Subsistence. The SUBNET program will continue to work with community partners (military, academia and industry) to promote initiatives in the subsistence supply chain.

The Casting program will 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 continue to monitor 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 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 align with the needs of the DoD and DLA aimed and supporting and fulfilling the needs of the warfighter.

The Battery Network (BATTNET) program will continue to execute projects for improving the production readiness, transition, and standardization of soldier and system batteries within the DLA supply chain. These projects will 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.

The DLA R&D Additive Manufacturing (AM) program will continue to collaborate with the Military Services, DLA's Process Owners and Major Subordinate Commands (MSC) to identify technologies that assist with AM enterprise-wide processes that align DLA's

Exhibit R-2A, RDT&E Project Justification: PB 2022 Defense Logistics Agency		Date: May 2021
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 2020	FY 2021	FY 2022
identification of hard-to-source parts requirements with MILSVC cognizant engineer authorities and AM manufacturing capabilities in order to obtain qualified AM parts that support a DLA customer. The convergence of authoritative data in the DLA Joint AM Model Exchange (JAMMEX) platform will improve DLA's position to exercise quality assurance of AM parts flowing into the DoD supply chains. The DLA R&D AM projects will explore innovative remote inspection capabilities that enable interoperable quality control inspections among DLA, the Military Service cognizant engineers and the manufacturing base. The convergence of automated requirements' tools based on DoD consensus of AM risk categorization criteria, JAMMEX authoritative data, and remote inspection technologies can render repeatable and accelerated qualifications processes. ***FY 2021 to FY 2022 Increase/Decrease Statement:*** Reduction of $3.000 million for internal realignment: $2.000 million is realigned within the ManTech Program Element from Additive Manufacturing (AM) to Defense Logistics Information Research (DLIR) and Military Unique Sustainment Technology (MUST) for increased investment priorities for Digital Data Modernization. These investments will continue to benefit the AM program through improvement to sharing technical data and requirements with the industrial base, a critical component to AM. $0.500 million from Battery Network and $0.500 million from Forgings is realigned from the ManTech Program Element to the Log R&D Program Element for increased investments in Data Management and Predictive Analytics. The additional $0.400 million decrease was previously taken.			
Accomplishments/Planned Programs Subtotals	17.724	17.205	13.809

	FY 2020	FY 2021
Congressional Add: Improve Steel Performance Initiative in Castings	10.000	10.000
FY 2020 Accomplishments: Began work to develop a government-industry network to develop automated design processes to allow small lot size, low rate production without requiring custom programming for each part. Steel alloy development and manufacturing technology processes improvements will extract higher performance from steel components through utilizing modeling, design and process optimization, and development of performance-based Non-Destructive Testing (NDT) standards for component qualification. ***FY 2021 Plans:*** Conduct projects under the Steel Performance Initiative that includes: Steel Alloy Development and Manufacturing Technology; Integrated Process and Performance Modeling; Advanced Testing & Qualification; Improved Steel Casting Tooling; and Optimized Processing of Steel Materials		
Congressional Add: Supply Chain adoption of additive manufacturing, automation, and robotics in Castings	-	10.000

Exhibit R-2A, RDT&E Project Justification: PB 2022 Defense Logistics Agency		Date: May 2021
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 2020	FY 2021
FY 2021 Plans: Continue projects to improve the Casting supply chain through use of modeling and simulations for process analysis and improvements and design optimization; additive manufacturing technologies, and robotics in castings processes to improve quality and production lead times.		
Congressional Add: Additive Manufacturing Castings Model	-	5.000
FY 2021 Plans: Explore additive manufacturing technology application to Digital Tooling, to include a benchmark study of the Casting industry for additive manufacturing technology, research binder jet printing method for investment casting molds, and improve surface finish of casting produced from printed sand.		
Congressional Adds Subtotals	10.000	25.000

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 2022 Defense Logistics Agency			Date: May 2021
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 2020	FY 2021	FY 2022 Base	FY 2022 OCO	FY 2022 Total	FY 2023	FY 2024	FY 2025	FY 2026	Cost To Complete	Total Cost
AAA: *Maintaining Viable Supply Sources (formerly High Quality Sources)*	48.372	16.481	17.854	17.695	-	17.695	-	-	-	-	Continuing	Continuing
Quantity of RDT&E Articles	-	-	-	-	-	-	-	-	-	-		

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 Advanced Microcircuit Emulation (AME) 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 FY 2020 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 2020	FY 2021	FY 2022
Title: Maintaining Viable Supply Sources (formerly High Quality Sources)	16.481	17.854	17.695
FY 2021 Plans: AME will complete and transition its first Linear/Analog technology project, 20 Volt Operational Amplifier, into full scale production. It will also complete and transition additional digital technology projects into full scale production. The first will address TTL compatible CMOS microcircuits and the second will address Dual-Port Memory microcircuits. MAE 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 2022 Plans: AME will continue planning for the specific emulation technology implementations to support specific device family groups in consonance with Customer and Agency requirements. It will begin developing dual-voltage digital microcircuit technology to support re-hosting Field-Programmable Gate Array (FPGA) microcircuits. It will begin additional Linear/Analog and Digital emulation projects for types/groups of parts, prioritized based on customer requirements.			
FY 2021 to FY 2022 Increase/Decrease Statement: No significant changes.			
Accomplishments/Planned Programs Subtotals	16.481	17.854	17.695

Exhibit R-2A, RDT&E Project Justification: PB 2022 Defense Logistics Agency		Date: May 2021
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)*

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 2022 Defense Logistics Agency			Date: May 2021
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 2020	FY 2021	FY 2022 Base	FY 2022 OCO	FY 2022 Total	FY 2023	FY 2024	FY 2025	FY 2026	Cost To Complete	Total Cost
OOO: *Improving Technical and Logistics Information (formerly Industry and Customer Collaboration)*	15.669	5.979	8.966	6.039	-	6.039	-	-	-	-	Continuing	Continuing
Quantity of RDT&E Articles	-	-	-	-	-	-	-	-	-	-		

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 2020	FY 2021	FY 2022
Title: Improving Technical and Logistics Information (formerly Industry and Customer Collaboration	5.979	4.966	6.039

Exhibit R-2A, RDT&E Project Justification: PB 2022 Defense Logistics Agency		Date: May 2021
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 2020	FY 2021	FY 2022
FY 2021 Plans: The Military Unique Sustainment Technology (MUST) program is developing a knowledge based approach for the Combat Uniform and Individual Equipment (CUIE) item development and sustainment by streamlining joint processes and developing integrated prototype tools. MUST I will transition three prototype capabilities and begin work on MUST II objectives which . emphasize the interface with the Military Services and the integration with DLA Industrial Base. The MUST-II development advances DLA Troop Support C&T and their supporting Industrial Base toward a Model Based Enterprise / Industry 4.0 capability. The Defense Logistics Information Research (DLIR) program will continue the Connecting the Model-Based Enterprise (MBE) project to modernize the process to obtain current Technical Data Packages (TDPs) directly from the Product Lifecycle Management (PLM) systems of the Military Services' ESAs and PMOs. DLIR will also develop standard guidance for Military Service organizations, including the ESAs and PMOs, to guide and influence generation of 3D model-based TDPs that will support DLA and its supplier needs. Additionally, DLIR will explore the ability of commercial Digital Rights Management (DRM) tools and techniques to improve the security of TDPs and support the eventual development of functional requirements for the "Catalog of the Future" (COTF) by identifying and prototyping new cleansing tools and methods while simultaneously cleansing data. Finally, DLIR will continue to support DLA's Technical Data Management Transformation (TDMT) efforts to determine the future state IT architecture design and continue to collaborate with USACE to develop a cyber-physical model that will evaluate the resiliency of Operational Technology systems after a cyber-attack. 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 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. ***FY 2022 Plans:*** Military Unique Sustainment Technology (MUST) II will continue to combat problems that plague DLA C&T's industrial base by improving a) the modernization of specifications with correct, current, and complete requirements to eliminate errors, omissions, and outdated information; b) collaboration between the Services and DLA to increase "jointness" of uniform and individual equipment items; and c) the availability of credible, reliable, and timely data and analysis tools so DLA C&T managers can make effective supply chain decisions. MUST II will develop more powerful AI based tools for conversion of legacy text and image			

Exhibit R-2A, RDT&E Project Justification: PB 2022 Defense Logistics Agency		Date: May 2021
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 2020	FY 2021	FY 2022

technical data into digital models. All new item technical requirement information will be captured as data (vs. pdf images) using one of the MUST I developed and implemented tools – the Supply Request Package (SRP). The SRP is being used by all the Military Services and other DLA customers when items are introduced into DLA Troop Support for sustainment. MUST II will work with the Services to promote the use of data formats that are compatible with the digital document model paradigm. Digital document models will become the "single source of truth" for technical requirements and provide common visibility to all stakeholders. These models can be efficiently managed (queried, analyzed, updated) and will be capable of supplying data directly to manufacturing processes. Joint processes will be reengineered to take advantage of the digital model data. Prototype tools and interfaces will also be developed to improve digital model utility for the industrial base.

DLIR will continue to support DLA's Technical Data Management Transformation (TDMT) efforts to determine IT architecture needs and to ensure DLA's MBE architecture meets/exceeds DoD compliance objectives and integrates with Military Services irrespective of platforms. DLIR will also explore Digital Manufacturing Enterprise models that shift procurement strategy orientation from items to on-demand manufacturing capacity. This contracted capacity can be tapped repeatedly on demand using an existing procurement process, rather than triggering multiple individual processes. Additionally, DLIR will continue exploring Digital Rights Management (DRM) tools and techniques to improve the security of TDPs and support the eventual development of functional requirements for the "Catalog of the Future" (COTF) by identifying and prototyping new cleansing tools and methods while simultaneously cleansing data. Finally, DLIR will look for opportunities to collaborate with MxD focusing on digital manufacturing, digital twin, digital thread, cybersecurity, and supply chain resiliency to build a Model Based Enterprise (MBE) and training DLA employees and small and midsize contractors on MBE.

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 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.

FY 2021 to FY 2022 Increase/Decrease Statement:

-Increase of $2.000 million from internal realignment within the ManTech Program Element of $2.000 million from Additive Manufacturing (AM), to Defense Logistics Information Research (DLIR) and Military Unique Sustainment Technology (MUST) for

Exhibit R-2A, RDT&E Project Justification: PB 2022 Defense Logistics Agency		Date: May 2021
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 2020	FY 2021	FY 2022
increased investment priorities for Digital Data Modernization. These investments will continue to benefit the AM program through improvement to sharing technical data and requirements with the industrial base, a critical component to AM. -$0.725 million reduction for Inflation for Non-Pay/Non-Fuel Purchases was incorrectly coded to Manufacturing Technology under the Improving Technical and Logistics Information (ITLI) Strategic Focus Area (SFA) and was intended for the Defense Microelectronics Activity for non-pay/non-fuel inflation. The funding will be adjusted correctly upon enactment of FY 2022 funding.			
Accomplishments/Planned Programs Subtotals	5.979	4.966	6.039

	FY 2020	FY 2021
Congressional Add: Rare Earth Magnets	-	4.000
FY 2021 Plans: Explore domestic sources to build domestic capacity for recycled rare earth magnets critical to weapon system sustainment. Building domestic source capacity will reduce foreign dependence, and supply chain vulnerability to price increases and access.		
Congressional Adds Subtotals	-	4.000

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.

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Exhibit R-2, RDT&E Budget Item Justification: PB 2022 Defense Logistics Agency	Date: May 2021
Appropriation/Budget Activity 0400: *Research, Development, Test & Evaluation, Defense-Wide* / BA 3: *Advanced Technology Development (ATD)*	**R-1 Program Element (Number/Name)** PE 0603712S / *Logistics Research and Development Technology (Log R&D)*

COST ($ in Millions)	Prior Years	FY 2020	FY 2021	FY 2022 Base	FY 2022 OCO	FY 2022 Total	FY 2023	FY 2024	FY 2025	FY 2026	Cost To Complete	Total Cost
Total Program Element	63.866	17.402	10.235	12.418	-	12.418	-	-	-	-	Continuing	Continuing
EMM: *Enhancing Analysis, Modeling, and Decision Support (formerly Analytic & Decision Support)*	12.512	2.611	2.729	2.782	-	2.782	-	-	-	-	Continuing	Continuing
GLTD: *Improving Logistics Processes (formerly Logistics Process)*	23.070	2.437	4.044	5.116	-	5.116	-	-	-	-	Continuing	Continuing
04: *Emergent Logistics R&D Requirements (formerly Innovative Products & Services for DLA Customers)*	28.284	12.354	3.462	4.520	-	4.520	-	-	-	-	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 2022 Defense Logistics Agency	Date: May 2021
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 2020	FY 2021	FY 2022 Base	FY 2022 OCO	FY 2022 Total
Previous President's Budget	17.402	10.235	10.355	-	10.355
Current President's Budget	17.402	10.235	12.418	-	12.418
Total Adjustments	0.000	0.000	2.063	-	2.063
• Congressional General Reductions	-	-			
• Congressional Directed Reductions	-	-			
• Congressional Rescissions	-	-			
• Congressional Adds	-	-			
• Congressional Directed Transfers	-	-			
• Reprogrammings	-	-			
• SBIR/STTR Transfer	-	-			
• Inflation for Civilian Pay	-	-	0.010	-	0.010
• Inflation for Non-Pay/Non-Fuel Purchases	-	-	-0.356	-	-0.356
• Decrease for Travel	-	-	-0.026	-	-0.026
• Internal Realignment from DRAS2 PE 0605090S	-	-	0.930	-	0.930
• Internal Realignment from ManTech PE 0603680S	-	-	1.500	-	1.500
• Retired Pay Accrual	-	-	0.005	-	0.005

Congressional Add Details ($ in Millions, and Includes General Reductions)	FY 2020	FY 2021
Project: 04: *Emergent Logistics R&D Requirements (formerly Innovative Products & Services for DLA Customers)*		
Congressional Add: *Energy Readiness Program for Fuel Conversion*	5.000	-
Congressional Add: *Energy Readiness Program for Liquid Hydro-carbon Fuel*	5.000	-
Congressional Add Subtotals for Project: 04	10.000	-
Congressional Add Totals for all Projects	10.000	-

Change Summary Explanation

FY 2021:

Exhibit R-2, RDT&E Budget Item Justification: PB 2022 Defense Logistics Agency	Date: May 2021
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)*

-SBIR/STTR Transfer: Due to an error while coding FY 2021 Enactment, the SBIR/STTR transfer is not reflected in the exhibit totals. Programs were indeed taxed and the funding was transferred to the SBIR PE 0605502S. For LOG R&D, the SBIR/STTR transfer is $0.355M.

FY 2022:
-Decrease for Travel: Defense-Wide activities are directed to maximize their travel funding through the use of technology, such as video teleconference, and cost-efficient transportation options.
-Internal Realignment from DRAS2 PE 0605090S: DRAS2 was still under development when the program was terminated. Since the system was not complete, it did not reach its intended purpose of replacing the existing DRAS system. The DRAS2 Program Cancellation Acquisition Decision Memorandum is dated April 9, 2020. Due to coding error, the funding increase was moved to the Emergent Logistics R&D Requirements Strategic Focus Area (SFA). Upon enactment, funding will move to the Enhancing Analysis, Modeling, and Decision Support SFA in order to support DLA Strategic Plan priorities in digital business transformation and data analytics.
-Internal Realignment from ManTech PE 0603680S: Funding moved from ManTech to LOG for requirements.
-Retired Pay Accrual: Agency Contribution Assumption FY 22 rate was increased by 1.1%.

Exhibit R-2A, RDT&E Project Justification: PB 2022 Defense Logistics Agency			Date: May 2021
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 2020	FY 2021	FY 2022 Base	FY 2022 OCO	FY 2022 Total	FY 2023	FY 2024	FY 2025	FY 2026	Cost To Complete	Total Cost
EMM: *Enhancing Analysis, Modeling, and Decision Support (formerly Analytic & Decision Support)*	12.512	2.611	2.729	2.782	-	2.782	-	-	-	-	Continuing	Continuing
Quantity of RDT&E Articles	-	-	-	-	-	-	-	-	-	-		

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 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 2020	FY 2021	FY 2022
Title: Enhancing Analysis, Modeling, and Decision Support	2.611	2.729	2.782
FY 2021 Plans: 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 2022 Plans: 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			

Exhibit R-2A, RDT&E Project Justification: PB 2022 Defense Logistics Agency		Date: May 2021
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 2020	FY 2021	FY 2022
expertise in key areas of research such as 5G Networks, Sensor Internet of Things (IoT), Blockchain, Quantum Computing, Artificial Intelligence/Machine Learning (AI/ML), Augmented Reality (AR), Automated Storage and Retrieval Systems (AS/RS), Performance Management, Automated Inventory, 3D Warehouse Mapping, 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 2021 to FY 2022 Increase/Decrease Statement:*** No significant change; however, the Internal Realignment from DRAS2 to LOG R&D of approximately $0.930 million was intended to increase funding for the Strategic Distribution and Disposition (SDD) program in FY 2022 in order to support DLA Strategic Plan priorities in digital business transformation and data analytics. Due to a coding error, the funding increase was incorrectly moved to the Emergent Logistics R&D Requirements Strategic Focus Area (SFA). Upon enactment, the coding will be corrected and moved to the SDD program.			
Accomplishments/Planned Programs Subtotals	2.611	2.729	2.782

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 2022 Defense Logistics Agency			Date: May 2021
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 2020	FY 2021	FY 2022 Base	FY 2022 OCO	FY 2022 Total	FY 2023	FY 2024	FY 2025	FY 2026	Cost To Complete	Total Cost
GLTD: *Improving Logistics Processes (formerly Logistics Process)*	23.070	2.437	4.044	5.116	-	5.116	-	-	-	-	Continuing	Continuing
Quantity of RDT&E Articles	-	-	-	-	-	-	-	-	-	-		

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) and Acquisition Modernization Research (AMR) programs 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 2020	FY 2021	FY 2022
Title: Improving Logistics Processes (ILP)	2.437	4.044	5.116
FY 2021 Plans: The Weapon System Sustainment (WSS) program will continue research of artificial intelligence / machine learning (AI/ML) to enhance predictive analytics capabilities through improved metadata management and data quality, and advancements in quantum computing. Research will include application of commercial AI/ML capabilities to improve demand forecasts. In addition, WSS will begin a multi-pronged effort to enhance supply chain risk management using emergent technologies to improve risk assessment, market intelligence, and illumination of supply chain threats. The Acquisition Modernization Research (AMR) program will officially be established in FY 2022. Current efforts are funded under the Weapons Systems Sustainment Program and focus on DLA Acquisition efforts to provide enhanced market intelligence research capabilities, contract quality, and best value acquisitions. A comprehensive groundwork study will be conducted to			

Exhibit R-2A, RDT&E Project Justification: PB 2022 Defense Logistics Agency		Date: May 2021
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 2020	FY 2021	FY 2022
identify areas where additional research is needed to support modernization. WSS will conduct a project to develop supporting technology for market intelligence and expansion of previously developed capabilities to additional supply chains. ***FY 2022 Plans:*** The Weapon System Sustainment (WSS) program will continue assessment of artificial intelligence / machine learning, quantum-computing capabilities, and begin research into edge computing. WSS will conduct use cases for data analytics improvements, and AI/ML application such as adaptive training and improvements to key processes supporting warfighter readiness. Efforts to improve supply chain risk management identified in FY 2021 will continue. The Acquisition Modernization Research (AMR) program will continue efforts to expand market intelligence capabilities to all DLA supply chains, develop a minimum viable product for a contract quality control system, and pursue best value acquisition practices. In addition, AMR will prioritize and begin pursuit of research areas identified in the FY 2021 groundwork study. ***FY 2021 to FY 2022 Increase/Decrease Statement:*** $0.500 million from Battery Network, $0.500 million from Forgings, and $0.500 million from Advanced Microcircuit Emulation programs is realigned from the ManTech Program Element to the Log R&D Program Element for increased investments in Data Management and Predictive Analytics.			
Accomplishments/Planned Programs Subtotals	2.437	4.044	5.116

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 2022 Defense Logistics Agency			Date: May 2021
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 2020	FY 2021	FY 2022 Base	FY 2022 OCO	FY 2022 Total	FY 2023	FY 2024	FY 2025	FY 2026	Cost To Complete	Total Cost
04: *Emergent Logistics R&D Requirements (formerly Innovative Products & Services for DLA Customers)*	28.284	12.354	3.462	4.520	-	4.520	-	-	-	-	Continuing	Continuing
Quantity of RDT&E Articles	-	-	-	-	-	-	-	-	-	-		

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 2020	FY 2021	FY 2022
Title: Emergent Logistics R&D Requirements	2.354	3.462	4.520
FY 2021 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 investigate emergent commercial technologies, like distributed ledger blockchain technology, to pilot and produce a business case for developing a more informed supply chain for a DLA Major Subordinate Command. Additionally, SCM will produce a groundwork study that identifies the requirements, gaps, costs, and			

Exhibit R-2A, RDT&E Project Justification: PB 2022 Defense Logistics Agency		Date: May 2021
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 2020	FY 2021	FY 2022
benefits of pursuing a supply chain digital twin for supply chain resilience and risk mitigation at DLA. Finally, SCM will pilot Augmented Reality (AR) applications and continue to address emergent and out of budget cycle requirements and opportunities including Other Transaction Authority (OTA) efforts as they arise. ***FY 2022 Plans:*** The Energy Readiness Program (ERP) will continue with 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's efforts to assist the military services in the qualification and certification of alternative fuels to meet military specification requirements will diminish proportionate with the military's decreased resources necessary to complete these efforts. SCM will initiate efforts to provide DLA the ability to perform system-wide supply chain optimization, scenario evaluation, and risk assessment through a supply chain digital twin - a model of an end-to-end supply chain that is continuously updated with digital data. Additionally, SCM will complete R&D efforts in support of a blockchain pilot and continue to address emergent and out of budget cycle requirements and opportunities including Other Transaction Authority (OTA) efforts as they arise. ***FY 2021 to FY 2022 Increase/Decrease Statement:*** The increase is due to the Internal Realignment from DRAS2 to LOG R&D of $0.930 million; however, due to a coding error, the funding increase intended for the Strategic Distribution and Disposition (SDD) program under the Enhancing Analysis, Modeling, and Decision Support Strategic Focus Area (SFA) was incorrectly moved to the Emergent Logistics R&D Requirements SFA. Upon enactment, the coding will be corrected and moved to the SDD program.			
Accomplishments/Planned Programs Subtotals	2.354	3.462	4.520

	FY 2020	FY 2021
Congressional Add: Energy Readiness Program for Fuel Conversion	5.000	-
FY 2020 Accomplishments: Committed funds for "Scale-up and Optimization of Advanced Pyrolysis Oil from Woody Biomass Material for Refining to Military and Commercial Transportation Fuels" initiative.		
Congressional Add: Energy Readiness Program for Liquid Hydro-carbon Fuel	5.000	-

Exhibit R-2A, RDT&E Project Justification: PB 2022 Defense Logistics Agency		Date: May 2021
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)*

	FY 2020	FY 2021
FY 2020 Accomplishments: Continued work with University of Maine for research in the "Biomass Conversation to Liquid Hydrocarbon Fuels, Chemicals and Nanocellulose" program.		
Congressional Adds Subtotals	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-2, RDT&E Budget Item Justification: PB 2022 Defense Logistics Agency	Date: May 2021
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 2020	FY 2021	FY 2022 Base	FY 2022 OCO	FY 2022 Total	FY 2023	FY 2024	FY 2025	FY 2026	Cost To Complete	Total Cost
Total Program Element	915.428	201.544	136.049	160.821	-	160.821	-	-	-	-	Continuing	Continuing
001: *Technology Development*	446.017	111.671	50.429	0.000	-	0.000	-	-	-	-	Continuing	Continuing
003: *Trusted Foundry*	469.411	89.873	85.620	0.000	-	0.000	-	-	-	-	Continuing	Continuing
004: *Defense MicroElectronics Activity (DMEA)*	0.000	0.000	0.000	160.821	-	160.821	-	-	-	-	Continuing	Continuing

A. Mission Description and Budget Item Justification

The Defense Microelectronics Activity (DMEA) 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 via partnerships with the Defense Industrial Base, and by alternative means 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 advanced microelectronics solutions.

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. Access to mainstream, 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, latent vulnerabilities, malicious insertions, reliability issues particular to 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, as well as continued development, and incorporation, of quantifiable assurance mechanisms.

DMEA provides the Department with 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.

DMEA also provides the Department with front door access to SOTA microelectronics design and manufacturing capabilities with the added benefit of accredited facilities and processes, which employ quantifiable assurance mechanisms, to meet confidentiality, integrity, availability, performance and delivery needs while the Department transitions to a zero trust model. DMEA also provides the Services and Defense Agencies with a competitive cadre of accredited suppliers and advanced hardware assurance capabilities that can meet the needs of mission critical/essential systems for microelectronics components.

Exhibit R-2, RDT&E Budget Item Justification: PB 2022 Defense Logistics Agency	Date: May 2021
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 2020	FY 2021	FY 2022 Base	FY 2022 OCO	FY 2022 Total
Previous President's Budget	201.544	124.049	126.051	-	126.051
Current President's Budget	201.544	136.049	160.821	-	160.821
Total Adjustments	0.000	12.000	34.770	-	34.770
• Congressional General Reductions	-	-			
• Congressional Directed Reductions	-	-			
• Congressional Rescissions	-	-			
• Congressional Adds	-	5.000			
• Congressional Directed Transfers	-	7.000			
• Reprogrammings	-	-			
• SBIR/STTR Transfer	-	-			
• Inflation for Civilian Pay	-	-	0.388	-	0.388
• Inflation for Non-Pay/Non-Fuel Purchases	-	-	-0.564	-	-0.564
• MGUE Transfer from PDW	-	-	35.000	-	35.000
• Decrease for Travel	-	-	-0.284	-	-0.284
• Retired Pay Accrual	-	-	0.230	-	0.230

Congressional Add Details ($ in Millions, and Includes General Reductions)	FY 2020	FY 2021
Project: 001: *Technology Development*		
Congressional Add: *Cyber Accelerator Increase*	30.000	-
Congressional Add: *GaN-on-Si-Based RF Front-end Increase*	5.000	5.000
Congressional Add Subtotals for Project: 001	35.000	5.000
Project: 003: *Trusted Foundry*		
Congressional Add: *MGUE Transfer from PDW*	-	7.000
Congressional Add Subtotals for Project: 003	-	7.000
Congressional Add Totals for all Projects	35.000	12.000

Change Summary Explanation

FY 2021:

-SBIR/STTR Transfer: Due to an error while coding FY21 Enactment, the SBIR/STTR transfer is not reflected in the exhibit totals. Programs were indeed taxed and the funding was transferred to the SBIR PE 0605502S. For DMEA, the SBIR/STTR transfer is $4.330M.

Exhibit R-2, RDT&E Budget Item Justification: PB 2022 Defense Logistics Agency	Date: May 2021
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)*

FY 2022:
-Inflation for Non-Pay/Non-Fuel Purchases: An additional $0.725 million reduction was incorrectly coded to Manufacturing Technology and was intended for the Defense Microelectronics Activity for non-pay/non-fuel inflation. The funding will be adjusted correctly upon enactment of FY 2022 funding.
-MGUE Transfer from PDW for $35M
-Retired Pay Accrual: Agency Contribution Assumption FY 22 rate was increased by 1.1%.
-Decrease for Travel: Defense-Wide activities are directed to maximize their travel funding through the use of technology, such as video teleconference, and cost-efficient transportation options.

Exhibit R-2A, RDT&E Project Justification: PB 2022 Defense Logistics Agency			Date: May 2021
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 2020	FY 2021	FY 2022 Base	FY 2022 OCO	FY 2022 Total	FY 2023	FY 2024	FY 2025	FY 2026	Cost To Complete	Total Cost
001: *Technology Development*	446.017	111.671	50.429	0.000	-	0.000	-	-	-	-	Continuing	Continuing
Quantity of RDT&E Articles	-	-	-	-	-	-	-	-	-	-		

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.

Exhibit R-2A, RDT&E Project Justification: PB 2022 Defense Logistics Agency		Date: May 2021
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 2020	FY 2021	FY 2022
Title: Technology Development Accomplishments/Plans	76.671	45.429	-
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 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 to FY 2022 Increase/Decrease Statement: The FY 2021 to FY 2022 decrease is due to Technology Development (P001) and Trusted Foundry (P003) merging into Defense Microelectronics Activity (P004).			
Accomplishments/Planned Programs Subtotals	76.671	45.429	-

	FY 2020	FY 2021
Congressional Add: Cyber Accelerator Increase	30.000	-
FY 2020 Accomplishments: $30M increase for cyber accelerator - Established a Cyber Accelerator to demonstrate viable solutions for next generation (future) DoD technology needs through commercial enterprise use cases to access and motivate private investment in dual use technologies.		
Congressional Add: GaN-on-Si-Based RF Front-end Increase	5.000	5.000
FY 2020 Accomplishments: $5M increase for GaN-on-Si-Based RF Front-end - Commenced a technology validation effort to evaluate the engineering required to introduce GaN to a traditional 200mm CMOS fabrication facility.		
FY 2021 Plans: $5M increase for GaN-on-Si-Based RF Front-end - DMEA plans to continue its efforts (phase 2) on scaling and establishing a domestic 200mm Gallium Nitride (GaN) on Silicon (Si) source at an industry partner.		
Congressional Adds Subtotals	35.000	5.000

Exhibit R-2A, RDT&E Project Justification: PB 2022 Defense Logistics Agency		Date: May 2021
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*

C. Other Program Funding Summary ($ in Millions)

N/A

Remarks

D. Acquisition Strategy

N/A

Exhibit R-2A, RDT&E Project Justification: PB 2022 Defense Logistics Agency			Date: May 2021
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 2020	FY 2021	FY 2022 Base	FY 2022 OCO	FY 2022 Total	FY 2023	FY 2024	FY 2025	FY 2026	Cost To Complete	Total Cost
003: *Trusted Foundry*	469.411	89.873	85.620	0.000	-	0.000	-	-	-	-	Continuing	Continuing
Quantity of RDT&E Articles	-	-	-	-	-	-	-	-	-	-		

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 2020	FY 2021	FY 2022
Title: Trusted Foundry	89.873	78.620	-
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).			

Exhibit R-2A, RDT&E Project Justification: PB 2022 Defense Logistics Agency		Date: May 2021
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 2020	FY 2021	FY 2022
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 2021 to FY 2022 Increase/Decrease Statement:*** The FY 2021 to FY 2022 decrease is due to Technology Development (P001) and Trusted Foundry (P003) merging into Defense Microelectronics Activity (P004).			
Accomplishments/Planned Programs Subtotals	89.873	78.620	-

	FY 2020	FY 2021
Congressional Add: MGUE Transfer from PDW	-	7.000
FY 2021 Plans: $7M MGUE DLA requested transfer from PDW - DMEA plans to execute the first option year of a two year extension of a critical process technology required for the DoD to complete its procurement of MGUE ASICs.		
Congressional Adds Subtotals	-	7.000

C. Other Program Funding Summary ($ in Millions)

N/A

Remarks

D. Acquisition Strategy

N/A

Exhibit R-2A, RDT&E Project Justification: PB 2022 Defense Logistics Agency			Date: May 2021
Appropriation/Budget Activity 0400 / 3	R-1 Program Element (Number/Name) PE 0603720S / *Microelectronics Technology Development and Support (DMEA)*	Project (Number/Name) 004 / *Defense MicroElectronics Activity (DMEA)*	

COST ($ in Millions)	Prior Years	FY 2020	FY 2021	FY 2022 Base	FY 2022 OCO	FY 2022 Total	FY 2023	FY 2024	FY 2025	FY 2026	Cost To Complete	Total Cost
004: *Defense MicroElectronics Activity (DMEA)*	0.000	0.000	0.000	160.821	-	160.821	-	-	-	-	Continuing	Continuing
Quantity of RDT&E Articles	-	-	-	-	-	-	-	-	-	-		

A. Mission Description and Budget Item Justification

DMEA maintains 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, cyber and combat missions.

These funds allow DMEA to maintain and enhance critical, microelectronics design, aggregation, fabrication, post-processing, assembly, hardware assurance 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 in accordance with applicable operational security standards, particularly as the technologies advance and industry is increasingly unable or unwilling to provide them.

The Department, other US Agencies, and the Intelligence Community require uninterrupted access to design and manufacturing processes to produce custom integrated circuits designed specifically for military purposes. DMEA partners with industry to provide the required solutions, and the necessary front-door access to commercial SOTA microelectronics design and manufacturing capabilities to meet confidentiality, integrity, availability, performance and delivery needs. If industry cannot or will not provide the required solutions, only then does DMEA provide the necessary solutions using in-house capabilities. A critical element required to enable continued success is DMEA's protection of the industry partners' valuable Intellectual Property (IP). DMEA is an 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 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 CH-53E Sea Stallion, Virginia Class Submarines, Columbia Class Submarines, UH-60 Blackhawk, Air Force Air Combat Command, US Army Corps of Engineers, E-3 AWACS, C5ISREW CHEETAH,

Exhibit R-2A, RDT&E Project Justification: PB 2022 Defense Logistics Agency		Date: May 2021
Appropriation/Budget Activity 0400 / 3	**R-1 Program Element (Number/Name)** PE 0603720S / *Microelectronics Technology Development and Support (DMEA)*	**Project (Number/Name)** 004 / *Defense MicroElectronics Activity (DMEA)*

Military GPS User Equipment, NASA Parker Solar Probe, Naval Research Laboratory High Power Microwave Office, 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 2020	FY 2021	FY 2022
Title: Defense Microelectronics Activity Accomplishments/Plans	-	-	160.821
FY 2022 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. To meet the increased missions seen in the last several years by CCMDs, Special Operations, and the Intelligence Community, 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 contribute to the Department-wide hardware assurance efforts, all to meet quick turn solutions on which CCMDs and Special Operations can rely. Per section 224 of the 2020 NDAA, DMEA will facilitate the availability of tiers of trust and levels of security for assured and commercial SOTA semiconductor technology to Department weapon system programs, research organizations, and other Federal Agencies through the DMEA contracts. DMEA will assist the cadre of accredited suppliers in the incorporation of the standards for production of the critical components and services needed for appropriate defense systems while contributing to the development and transition to a zero trust approach or hybrid zero trust approach. DMEA will continue to support DoD programs in utilizing operational security standards and conducting ACMAs in support of the program protection planning process. DMEA will leverage new models for the use of in-house capabilities to support STEM workforce development, mainstream semiconductor technology fabrication, and streamlined access to advanced technologies. MGUE Transfer from PDW for $35M: DLA requested transfer to execute the second option year of a two year extension of a critical process technology required for the DoD to complete its procurement of MGUE ASICs. This will fully fund the Capacity Reservation, which ensures DLA's vendors have access to the Trusted Foundry production lines. ***FY 2021 to FY 2022 Increase/Decrease Statement:*** The FY 2021 to FY 2022 decrease is due to Technology Development (P001) and Trusted Foundry (P003) merging into Defense Microelectronics Activity (P004) with the addition of the MGUE transfer from Procurement, DW for $35M.			
Accomplishments/Planned Programs Subtotals	-	-	160.821

C. Other Program Funding Summary ($ in Millions)

N/A

Remarks

Exhibit R-2A, RDT&E Project Justification: PB 2022 Defense Logistics Agency		Date: May 2021
Appropriation/Budget Activity 0400 / 3	**R-1 Program Element (Number/Name)** PE 0603720S / *Microelectronics Technology Development and Support (DMEA)*	**Project (Number/Name)** 004 / *Defense MicroElectronics Activity (DMEA)*

D. Acquisition Strategy

N/A

Exhibit R-4, RDT&E Schedule Profile: PB 2022 Defense Logistics Agency		Date: May 2021
Appropriation/Budget Activity 0400 / 3	**R-1 Program Element (Number/Name)** PE 0603720S / *Microelectronics Technology Development and Support (DMEA)*	**Project (Number/Name)** 004 / *Defense MicroElectronics Activity (DMEA)*

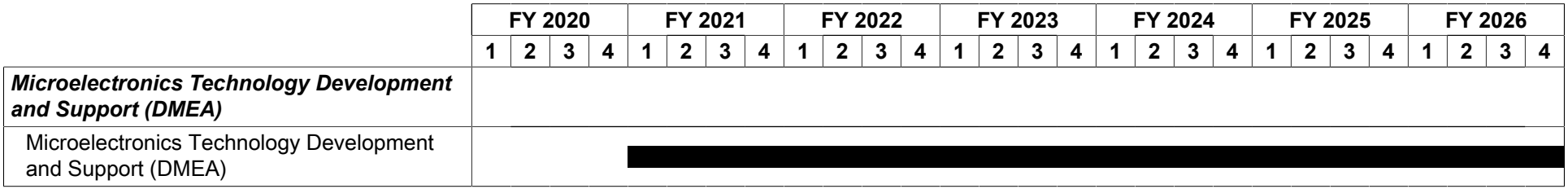

Exhibit R-4A, RDT&E Schedule Details: PB 2022 Defense Logistics Agency		Date: May 2021
Appropriation/Budget Activity 0400 / 3	**R-1 Program Element (Number/Name)** PE 0603720S / *Microelectronics Technology Development and Support (DMEA)*	**Project (Number/Name)** 004 / *Defense MicroElectronics Activity (DMEA)*

Schedule Details

	Start		End	
Events by Sub Project	**Quarter**	**Year**	**Quarter**	**Year**
Microelectronics Technology Development and Support (DMEA)				
Microelectronics Technology Development and Support (DMEA)	1	2021	4	2026

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Exhibit R-2, RDT&E Budget Item Justification: PB 2022 Defense Logistics Agency	Date: May 2021
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 2020	FY 2021	FY 2022 Base	FY 2022 OCO	FY 2022 Total	FY 2023	FY 2024	FY 2025	FY 2026	Cost To Complete	Total Cost
Total Program Element	30.115	2.291	1.377	0.679	-	0.679	-	-	-	-	Continuing	Continuing
09: *Enterprise Funds Distribution*	30.115	2.291	1.377	0.679	-	0.679	-	-	-	-	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 2020	FY 2021	FY 2022 Base	FY 2022 OCO	FY 2022 Total
Previous President's Budget	2.291	1.377	0.687	-	0.687
Current President's Budget	2.291	1.377	0.679	-	0.679
Total Adjustments	0.000	0.000	-0.008	-	-0.008
• Congressional General Reductions	-	-			
• Congressional Directed Reductions	-	-			
• Congressional Rescissions	-	-			
• Congressional Adds	-	-			
• Congressional Directed Transfers	-	-			
• Reprogrammings	-	-			
• SBIR/STTR Transfer	-	-			
• Inflation for Non-Pay/Non-Fuel Purchases	-	-	-0.008	-	-0.008

Change Summary Explanation

FY 2021:

SBIR/STTR Transfer: Due to an error while coding FY21 Enactment, the SBIR/STTR transfer is not reflected in the exhibit totals. Programs were indeed taxed and the funding was transferred to the SBIR PE 0605502S. For EFD, the SBIR/STTR transfer is $0.050M.

Exhibit R-2A, RDT&E Project Justification: PB 2022 Defense Logistics Agency			Date: May 2021
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 2020	FY 2021	FY 2022 Base	FY 2022 OCO	FY 2022 Total	FY 2023	FY 2024	FY 2025	FY 2026	Cost To Complete	Total Cost
09: *Enterprise Funds Distribution*	30.115	2.291	1.377	0.679	-	0.679	-	-	-	-	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 2020	FY 2021	FY 2022
Title: Enterprise Funds Distribution (EFD)	2.291	1.377	0.679
Description: EFD will distribute funds to the Military Departments and the Defense Agencies.			
FY 2021 Plans:			

Exhibit R-2A, RDT&E Project Justification: PB 2022 Defense Logistics Agency		Date: May 2021
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 2020	FY 2021	FY 2022
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 2022 Plans:*** Deploy System Change Requests (SCR's) to support post deployment requirements and required enhancements. ***FY 2021 to FY 2022 Increase/Decrease Statement:*** FY 2022 is lower due to the majority of EFD's development to be completed in FY 2021.			
Accomplishments/Planned Programs Subtotals	2.291	1.377	0.679

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 2022 Defense Logistics Agency			Date: May 2021
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 2020 Cost	FY 2020 Award Date	FY 2021 Cost	FY 2021 Award Date	FY 2022 Base Cost	FY 2022 Base Award Date	FY 2022 OCO Cost	FY 2022 OCO Award Date	FY 2022 Total Cost	Cost To Complete	Total Cost	Target Value of Contract
Savantage Solutions	Option/ FP	Savantage Solutions : Rockville, MD	14.158	-		-		-		-		-	0.000	14.158	14.158
TeraThink/CGI Corporation	C/FFP	TeraThink Corporation/CGI : Reston, VA	14.465	2.291	Dec 2019	1.377	Dec 2020	0.679	Dec 2021	0.000		0.679	Continuing	Continuing	Continuing
TBD	C/FFP	TBD : TBD	1.492	-		-		-		-		-	0.000	1.492	1.492
Prior Year Contracts	Option/ Various	Multiple : Multiple	-	-		-		-		-		-	Continuing	Continuing	-
		Subtotal	30.115	2.291		1.377		0.679		0.000		0.679	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 2020		FY 2021		FY 2022 Base		FY 2022 OCO		FY 2022 Total	Cost To Complete	Total Cost	Target Value of Contract
Project Cost Totals	30.115	2.291		1.377		0.679		0.000		0.679	Continuing	Continuing	N/A

Remarks

Exhibit R-4, RDT&E Schedule Profile: PB 2022 Defense Logistics Agency		Date: May 2021
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*

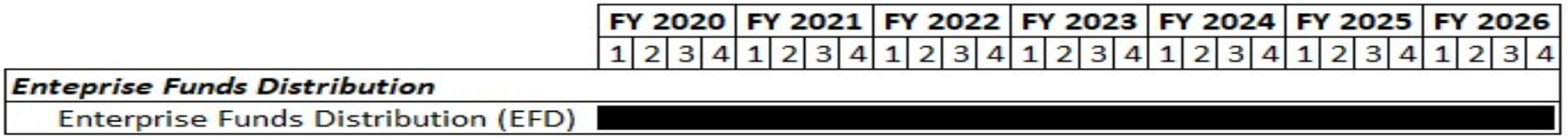


Exhibit R-4A, RDT&E Schedule Details: PB 2022 Defense Logistics Agency		Date: May 2021
Appropriation/Budget Activity 0400 / 5	**R-1 Program Element (Number/Name)** PE 0605070S / *DoD Enterprise Systems Development and Demonstration*	**Project (Number/Name)** 09 / *Enterprise Funds Distribution*

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	1	2021	4	2026

Exhibit R-2, RDT&E Budget Item Justification: PB 2022 Defense Logistics Agency	Date: May 2021
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 2020	FY 2021	FY 2022 Base	FY 2022 OCO	FY 2022 Total	FY 2023	FY 2024	FY 2025	FY 2026	Cost To Complete	Total Cost
Total Program Element	181.447	23.114	20.537	32.254	-	32.254	-	-	-	-	Continuing	Continuing
01: *Defense Agencies Initiative - Financial System*	181.447	23.114	20.537	32.254	-	32.254	-	-	-	-	Continuing	Continuing

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

A. Mission Description and Budget Item Justification

The Defense Agencies Initiative (DAI) program, a Category I Defense Business System, is an Enterprise Resource Planning (ERP) based program that was originally created to solve Defense Agency financial management problems through standard end-to-end business processes delivered by commercial off-the-shelf (COTS) software. DAI's mission is to provide an auditable, Chief Financial Officer (CFO) Act compliant business environment for the Defense customer organizations with accurate, timely, and authoritative financial data. DAI supports continued development and fielding of its current Increment 3 baseline. Previous funding for DAI Increments 1 and 2 were documented in the Defense Enterprise Business Systems program element 50605070S00. Increment 3 will deliver new financial capabilities including Defense Working Capital Fund (DWCF) and Re-Sale accounting plus a major application upgrade.

B. Program Change Summary ($ in Millions)	FY 2020	FY 2021	FY 2022 Base	FY 2022 OCO	FY 2022 Total
Previous President's Budget	23.114	20.537	23.390	-	23.390
Current President's Budget	23.114	20.537	32.254	-	32.254
Total Adjustments	0.000	0.000	8.864	-	8.864
• Congressional General Reductions	-	-			
• Congressional Directed Reductions	-	-			
• Congressional Rescissions	-	-			
• Congressional Adds	-	-			
• Congressional Directed Transfers	-	-			
• Reprogrammings	-	-			
• SBIR/STTR Transfer	-	0.000			
• Inflation for Non-Pay/Non-Fuel Purchases	-	-	-0.393	-	-0.393
• Program Increase for DFAS and DISA Working Capital Fund Accounts Migration	-	-	8.014	-	8.014
• Program Increase for USMC Migration	-	-	1.243	-	1.243

Change Summary Explanation

FY 2021:

Exhibit R-2, RDT&E Budget Item Justification: PB 2022 Defense Logistics Agency	Date: May 2021
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*

-SBIR/STTR Transfer: Due to an error while coding FY21 Enactment, the SBIR/STTR transfer is not reflected in the exhibit totals. Programs were indeed taxed and the funding was transferred to the SBIR PE 0605502S. For DAI, the SBIR/STTR transfer is $0.712M.

FY 2022:
-Provides $8.014M for the DLA to migrate DFAS and DISA Working Capital Fund Accounts into the DAI.
-Provides $1.243M to DLA to migrate the USMC into DAI, an Enterprise Resource Planning System.

Exhibit R-2A, RDT&E Project Justification: PB 2022 Defense Logistics Agency			Date: May 2021
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 2020	FY 2021	FY 2022 Base	FY 2022 OCO	FY 2022 Total	FY 2023	FY 2024	FY 2025	FY 2026	Cost To Complete	Total Cost
01: *Defense Agencies Initiative - Financial System*	181.447	23.114	20.537	32.254	-	32.254	-	-	-	-	Continuing	Continuing
Quantity of RDT&E Articles	-	-	-	-	-	-	-	-	-	-		

Project MDAP/MAIS Code: 0491

A. Mission Description and Budget Item Justification

DAI mission is to deliver an auditable, CFO Act compliant business environment for Defense customer organizations 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 multiple 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 four consecutive annual unmodified System and Organization Controls report (SOC-1).

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 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).

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 12.2.8 (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).

Exhibit R-2A, RDT&E Project Justification: PB 2022 Defense Logistics Agency		Date: May 2021
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*

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.

DAI is currently implemented at 26 Defense organizations and the Office of the Under Secretary of Defense, Comptroller (OUSD(C)). 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 implementations. In 2017, 2018, 2019, and 2020, DAI received unmodified audit opinions 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; configuration management; developing required Reports, Interfaces, Conversions, Extensions, Forms and Workflows (RICE-FW) objects; testing (cyber security, integration, functional, performance, conversion, user acceptance, operational); 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; data conversion; information assurance; database administration; as well as studies, coordination/analysis support.

DLA provides the Milestone Decision Authority (MDA), DLA Acquisitions (J7), and DLA Information Operations provides the Program Executive Officer (PEO), program manager, and PMO staff. The DAI PMO relies on DLA Acquisitions for most contracting support. Defense Information Systems Agency (DISA) data centers provide production, test and development, as well as Continuity of Operations (COOP) hosting, and the Joint Interoperability Test Command (JITC) for interoperability and performance testing. The DAI PMO serves as systems integrator.

Exhibit R-2A, RDT&E Project Justification: PB 2022 Defense Logistics Agency		Date: May 2021
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 2020	FY 2021	FY 2022
Title: Defense Agencies Initiative (DAI) - Financial System	23.114	20.537	32.254

Description: In FY 2020, the DAI PMO accomplished:
• Obtained 4th consecutive annual Unmodified Opinion by an Independent Public Auditor (best outcome).
• Deployed DAI Increment 3 Rel 2, an initial Defense Working Capital Fund (DWCF) capability, to a newly expanded/renamed Defense Counterintelligence and Security Agency.
• Deployed DAI Time & Labor Release in a large agency to over 3,500 new personnel based on an Executive Order.
• Developed/Tested DWCF and agency unique requirements and completed the study of 4th Estate common/core capabilities.
• Studied Agency unique requirements for Joint Chiefs of Staff (JCS), National Defense University (NDU), DeCA and DCSA.
• Developed necessary work instructions and training materials.
• Supported the Financial Management (FM) & time/labor operations for over 53k users at 26 organizations.
• Supported 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.
• Continued to mature the GRC capabilities by expanding Enterprise controls: Configuration, Access, Prevention & Transactions supporting audit findings, recommendations & CAPs.
• Maintained the technical operations 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.
• Conducted regular adversarial assessments, RMF continuous monitoring including code scans, an independent Cyber Economic Vulnerability Assessment and a Cooperative Vulnerability and Penetration Assessment.
• Obtained an interim Interoperability Certification or an Authority to Connect to the DoD Global Information Grid.
• The Program also performed developmental, operational and Cyber security testing with independent third parties under Office of the Secretary of Defense oversight. The Defense Logistics Agency contracted for an independent public accounting firm to conduct the annual FFMIA and SSAE 18 assessments and conduct Cyber security assessments on the system.
• Expand the utility of Robotic Process Automation to include repetitive PMO functions.

FY 2021 Plans:
In FY 2021, the DAI PMO will:
• Field DAI Increment 3 Rel 3 accounting maturation to users at existing agencies plus DeCA, Joint Staff, National Defense University (over 4.5K users).
• Development/Testing for DWCF and agency unique requirements and complete the study of US Marine Corps (USMC) and 4th Estate common/core capabilities.

Exhibit R-2A, RDT&E Project Justification: PB 2022 Defense Logistics Agency		Date: May 2021
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 2020	FY 2021	FY 2022
• Work instructions and training materials. • Mature the Financial Management (FM) & time/labor operations for over 90.1K users at over 26 organizations. • Develop updated work instructions and training materials. • Train 25K time and labor users and over 5K USMC financial users. • 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 mature the GRC capabilities by expanding Enterprise controls: Configuration, Access, Prevention as well as Transactions supporting audit findings, recommendations & CAPs. • Mature the technical operations including: application of DISA Security Technical Implementation Guides, hardware & software currency for servers operating systems, middleware & applications including patches; overseeing internal processes within the DISA Data Center 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. • Study costs associated with hosting DAI in the Oracle Cloud. • Expand utility of Robotic Process Automation to include repetitive PMO functions. ***FY 2022 Plans:*** In FY 2022, the DAI PMO will: • Field DAI Increment 3 Rel 4 accounting maturation to users at existing agencies plus USMC (over 5K users). • Development/Testing for DFAS DWCF unique requirements and complete the study of a major application upgrade. • DAI will complete the development and deployment of G-Invoicing capabilities to meet the OSD & Treasury Mandates for Oct 1, 2022. • DAI will continue to develop Robotic Process Automations (RPA) to enhance timeliness & quality of Tier2 Helpdesk request, testing, demonstrations, and incident resolution. • DAI will support the planned Full Operational Capability (FOC) of the Identity, Credential and Access Management (ICAM) program to systemically transmit Access Control Information from Agencies and provide DAI provisioning information to the ICAM centralized repository. • DAI will continue to expand the utility of Advana with DAI data supporting OUSD(C) and using organizations. ***FY 2021 to FY 2022 Increase/Decrease Statement:*** FY 2022 will be the first year that DAI will deploy financial capabilities to USMC and continue maturation of DWCF accounting capabilities necessary to meet Defense Finance and Accounting Service (DFAS) requirements. DAI projects supporting 123k users.			
Accomplishments/Planned Programs Subtotals	23.114	20.537	32.254

Exhibit R-2A, RDT&E Project Justification: PB 2022 Defense Logistics Agency		Date: May 2021
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*

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 2022 Defense Logistics Agency		Date: May 2021
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 2020 Cost	FY 2020 Award Date	FY 2021 Cost	FY 2021 Award Date	FY 2022 Base Cost	FY 2022 Base Award Date	FY 2022 OCO Cost	FY 2022 OCO Award Date	FY 2022 Total Cost	Cost To Complete	Total Cost	Target Value of Contract
DAI Compliance Support	Option/ CPIF	CACI Inc Federal : Chantilly, VA	31.280	5.854	Jun 2020	4.288	Jun 2021	5.345	Jun 2022	0.000		5.345	Continuing	Continuing	0.000
DAI Implementation Support	Option/ CPIF	CACI Inc Federal : Chantilly, VA	28.402	5.496	Mar 2020	5.682	Mar 2021	6.100	Mar 2022	0.000		6.100	Continuing	Continuing	0.000
DAI Infrastructure Support	Option/ CPIF	CACI ISS Inc : Fairfax, VA	14.476	4.000	May 2020	2.118	May 2021	3.010	May 2022	0.000		3.010	Continuing	Continuing	0.000
Global Model P2P Support	C/CPIF	IBM : TBD	3.418	2.408	Aug 2020	2.542	Aug 2021	3.766	Aug 2022	0.000		3.766	Continuing	Continuing	Continuing
Global Model A2R Support	C/CPIF	CACI, Inc : TBD	4.736	1.342	Apr 2020	2.336	Apr 2021	2.621	Apr 2022	0.000		2.621	Continuing	Continuing	Continuing
Requirements Management (RM) Support	MIPR	DISA : Fort Meade, MD	1.272	0.262	Oct 2019	0.256	Oct 2020	0.510	Oct 2021	0.000		0.510	Continuing	Continuing	Continuing
DCPDS/DAI Interface File Changes	MIPR	DLA Finance : Fort Belvoir, VA	0.037	0.008	Feb 2020	0.008	Feb 2021	0.193	Feb 2022	0.000		0.193	Continuing	Continuing	Continuing
Prior Year Contracts	Option/ Various	MULTI : MULTI	68.289	0.000		0.000		0.000		0.000		0.000	0.000	68.289	54.057
		Subtotal	151.910	19.370		17.230		21.545		0.000		21.545	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.

Support ($ in Millions)

Cost Category Item	Contract Method & Type	Performing Activity & Location	Prior Years	FY 2020 Cost	FY 2020 Award Date	FY 2021 Cost	FY 2021 Award Date	FY 2022 Base Cost	FY 2022 Base Award Date	FY 2022 OCO Cost	FY 2022 OCO Award Date	FY 2022 Total Cost	Cost To Complete	Total Cost	Target Value of Contract
Estimated SBIR/STTR:	TBD	TBD : TBD	2.789	0.864	Jun 2020	0.712	Jun 2021	1.118	Jun 2022	0.000		1.118	Continuing	Continuing	Continuing
		Subtotal	2.789	0.864		0.712		1.118		0.000		1.118	Continuing	Continuing	N/A

Exhibit R-3, RDT&E Project Cost Analysis: PB 2022 Defense Logistics Agency			Date: May 2021
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*	

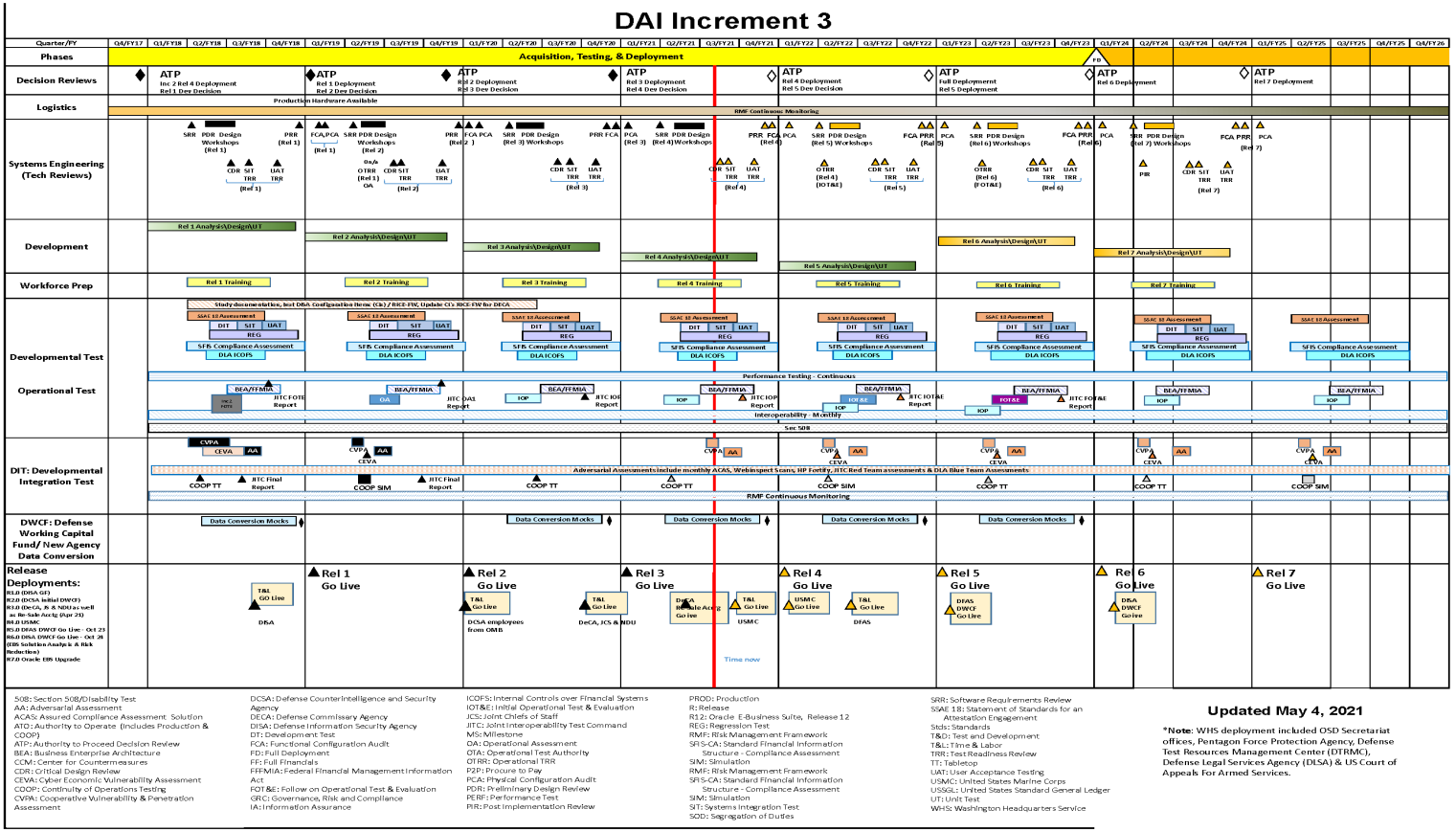
Test and Evaluation ($ in Millions)

Cost Category Item	Contract Method & Type	Performing Activity & Location	Prior Years	FY 2020 Cost	FY 2020 Award Date	FY 2021 Cost	FY 2021 Award Date	FY 2022 Base Cost	FY 2022 Base Award Date	FY 2022 OCO Cost	FY 2022 OCO Award Date	FY 2022 Total Cost	Cost To Complete	Total Cost	Target Value of Contract
DISA Hosting: Test and Development	MIPR	DISA : Pensacola, FL	13.832	2.245	Oct 2019	2.000	Oct 2020	7.891	Oct 2021	0.000		7.891	Continuing	Continuing	Continuing
Interoperability	MIPR	JITC : Fort Meade, MD	3.978	0.222	May 2020	0.200	May 2021	0.300	May 2022	0.000		0.300	Continuing	Continuing	Continuing
Performance and Regression Testing	MIPR	JITC : Fort Huachuca, AZ	3.967	0.313	Nov 2019	0.300	Nov 2020	1.250	Nov 2021	0.000		1.250	Continuing	Continuing	Continuing
Operational Test and Evaluation	MIPR	JITC : Fort Huachuca, AZ	4.742	0.000	Dec 2019	0.000		0.000		0.000		0.000	Continuing	Continuing	Continuing
DCPS Testing	MIPR	DFAS : Indianapolis, IN	0.229	0.100	Oct 2019	0.095	Oct 2020	0.150	Oct 2021	0.000		0.150	Continuing	Continuing	Continuing
		Subtotal	26.748	2.880		2.595		9.591		0.000		9.591	Continuing	Continuing	N/A

	Prior Years	FY 2020		FY 2021		FY 2022 Base		FY 2022 OCO		FY 2022 Total	Cost To Complete	Total Cost	Target Value of Contract
Project Cost Totals	181.447	23.114		20.537		32.254		0.000		32.254	Continuing	Continuing	N/A

Remarks

Exhibit R-4, RDT&E Schedule Profile: PB 2022 Defense Logistics Agency		Date: May 2021
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
DCSA: Defense Counterintelligence and Security Agency
DECA: Defense Commissary Agency
DISA: Defense Information Security Agency
DT: Development Test
FCA: Functional Configuration Audit
FD: Full Deployment
FF: Full Financials
FFRMIA: Federal Financial Management Information Act
FOTⅇ: 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
JCS: Joint Chiefs of Staff
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
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
USMC: United States Marine Corps
USSGL: United States Standard General Ledger
UT: Unit Test
WHS: Washington Headquarters Service

Updated May 4, 2021

***Note**: WHS deployment included 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 2022 Defense Logistics Agency		Date: May 2021
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 2022 Defense Logistics Agency	Date: May 2021
Appropriation/Budget Activity 0400: *Research, Development, Test & Evaluation, Defense-Wide* / BA 5: *System Development & Demonstration (SDD)*	**R-1 Program Element (Number/Name)** PE 0605090S / *Defense Retired and Annuitant Pay System 2 (DRAS2)*

COST ($ in Millions)	Prior Years	FY 2020	FY 2021	FY 2022 Base	FY 2022 OCO	FY 2022 Total	FY 2023	FY 2024	FY 2025	FY 2026	Cost To Complete	Total Cost
Total Program Element	55.905	6.368	1.638	0.000	-	0.000	-	-	-	-	Continuing	Continuing
01: *Defense Retired and Annuitant Pay System 2 (DRAS2)*	55.905	6.368	1.638	0.000	-	0.000	-	-	-	-	Continuing	Continuing

A. Mission Description and Budget Item Justification

DRAS2 was still under development when the program was terminated. Since the system was not complete, it did not reach its intended purpose of replacing the existing DRAS system. The DRAS2 Program Cancellation Acquisition Decision Memorandum is dated April 9, 2020.

B. Program Change Summary ($ in Millions)	FY 2020	FY 2021	FY 2022 Base	FY 2022 OCO	FY 2022 Total
Previous President's Budget	6.368	1.638	1.664	-	1.664
Current President's Budget	6.368	1.638	0.000	-	0.000
Total Adjustments	0.000	0.000	-1.664	-	-1.664
• Congressional General Reductions	-	-			
• Congressional Directed Reductions	-	-			
• Congressional Rescissions	-	-			
• Congressional Adds	-	-			
• Congressional Directed Transfers	-	-			
• Reprogrammings	-	-			
• SBIR/STTR Transfer	-	-			
• Inflation for Non-Pay/Non-Fuel Purchases	-	-	-0.011	-	-0.011
• Under-execution	-	-	-0.723	-	-0.723
• Internal Realignment to LOG PE 0603712S	-	-	-0.930	-	-0.930

Change Summary Explanation

FY 2021:

-SBIR/STTR Transfer: Due to an error while coding FY21 Enactment, the SBIR/STTR transfer is not reflected in the exhibit totals. Programs were indeed taxed and the funding was transferred to the SBIR PE 0605502S. For DRAS, the SBIR/STTR transfer is $0.060M.

FY 2022:

-Internal Realignment to LOG PE 0603712S: Moved baseline funding from DRAS2 to LOG. DRAS2 was still under development when the program was terminated. Since the system was not complete, it did not reach its intended purpose of replacing the existing DRAS system. The DRAS2 Program Cancellation Acquisition Decision Memorandum is dated April 9, 2020.

Exhibit R-2A, RDT&E Project Justification: PB 2022 Defense Logistics Agency			Date: May 2021
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 2020	FY 2021	FY 2022 Base	FY 2022 OCO	FY 2022 Total	FY 2023	FY 2024	FY 2025	FY 2026	Cost To Complete	Total Cost
01: *Defense Retired and Annuitant Pay System 2 (DRAS2)*	55.905	6.368	1.638	0.000	-	0.000	-	-	-	-	Continuing	Continuing
Quantity of RDT&E Articles	-	-	-	-	-	-	-	-	-	-		

A. Mission Description and Budget Item Justification

Moved baseline funding from DRAS2 to LOG R&D PE 0603712S. DRAS2 was still under development when the program was terminated. Since the system was not complete, it did not reach its intended purpose of replacing the existing DRAS system. The DRAS2 Program Cancellation Acquisition Decision Memorandum is dated April 9, 2020.

B. Accomplishments/Planned Programs ($ in Millions)	FY 2020	FY 2021	FY 2022
Title: Defense Retired and Annuitant Pay System 2 (DRAS2)	6.368	1.638	0.000
FY 2021 Plans: Funds will be realigned for higher DoD priorities. DRAS2 was still under development when the program was terminated. Since the system was not complete, it did not reach its intended purpose of replacing the existing DRAS system. The DRAS2 Program Cancellation Acquisition Decision Memorandum is dated April 9, 2020.			
FY 2022 Plans: Moved baseline funding from DRAS2 to LOG R&D PE 0603712S. DRAS2 was still under development when the program was terminated. Since the system was not complete, it did not reach its intended purpose of replacing the existing DRAS system. The DRAS2 Program Cancellation Acquisition Decision Memorandum is dated April 9, 2020.			
FY 2021 to FY 2022 Increase/Decrease Statement: Program's baseline was entirely moved to LOG R&D PE 0603712S. DRAS2 was still under development when the program was terminated. Since the system was not complete, it did not reach its intended purpose of replacing the existing DRAS system. The DRAS2 Program Cancellation Acquisition Decision Memorandum is dated April 9, 2020.			
Accomplishments/Planned Programs Subtotals	6.368	1.638	0.000

C. Other Program Funding Summary ($ in Millions)

N/A

Remarks

Exhibit R-2A, RDT&E Project Justification: PB 2022 Defense Logistics Agency		Date: May 2021
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)*

D. Acquisition Strategy

N/A

Exhibit R-3, RDT&E Project Cost Analysis: PB 2022 Defense Logistics Agency			Date: May 2021
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 2020 Cost	FY 2020 Award Date	FY 2021 Cost	FY 2021 Award Date	FY 2022 Base Cost	FY 2022 Base Award Date	FY 2022 OCO Cost	FY 2022 OCO Award Date	FY 2022 Total Cost	Cost To Complete	Total Cost	Target Value of Contract
DRAS2 System Development and Integration	Option/ IDIQ	CSRA : Chantilly, VA	27.915	5.568	Oct 2019	1.638		0.000		0.000		0.000	0.000	35.121	-
DRAS2 COTS License Purchase	Option/ IDIQ	CSRA/Oracle : To be Determined	14.029	0.000		0.000		0.000		0.000		0.000	0.000	14.029	-
DISA Hosting	MIPR	Virtual Operating Environment : Mechanicsburg, PA	1.769	0.000		0.000		0.000		0.000		0.000	0.000	1.769	-
Transaction Services Interface Design	Option/ IDIQ	Northrop Grumman DLA Transaction Services : Chambersburg, PA	4.202	0.000		0.000		0.000		0.000		0.000	0.000	4.202	-
Transaction Services Interface Development & Testing	Option/ IDDQ	Northrop Grumman DLA Transaction Services : Chambersburg, PA	2.074	0.800	Jul 2020	0.000		0.000		0.000		0.000	0.000	2.874	-
DRAS2 System Development & Integration	Option/ IDIQ	CSRA : Chantilly, VA	2.964	0.000		0.000		0.000		0.000		0.000	0.000	2.964	-
Interoperability Testing	MIPR	Joint Interoperability Test Command (JITC) : Fort Meade, MD	1.542	0.000		0.000		0.000		0.000		0.000	0.000	1.542	-
Training Effort	C/TBD	To be determined : To be determined	1.410	0.000		0.000		0.000		0.000		0.000	0.000	1.410	-
		Subtotal	55.905	6.368		1.638		0.000		0.000		0.000	0.000	63.911	N/A

	Prior Years	FY 2020		FY 2021		FY 2022 Base		FY 2022 OCO		FY 2022 Total	Cost To Complete	Total Cost	Target Value of Contract
Project Cost Totals	55.905	6.368		1.638		0.000		0.000		0.000	0.000	63.911	N/A

Remarks

Exhibit R-4, RDT&E Schedule Profile: PB 2022 Defense Logistics Agency		Date: May 2021
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)*

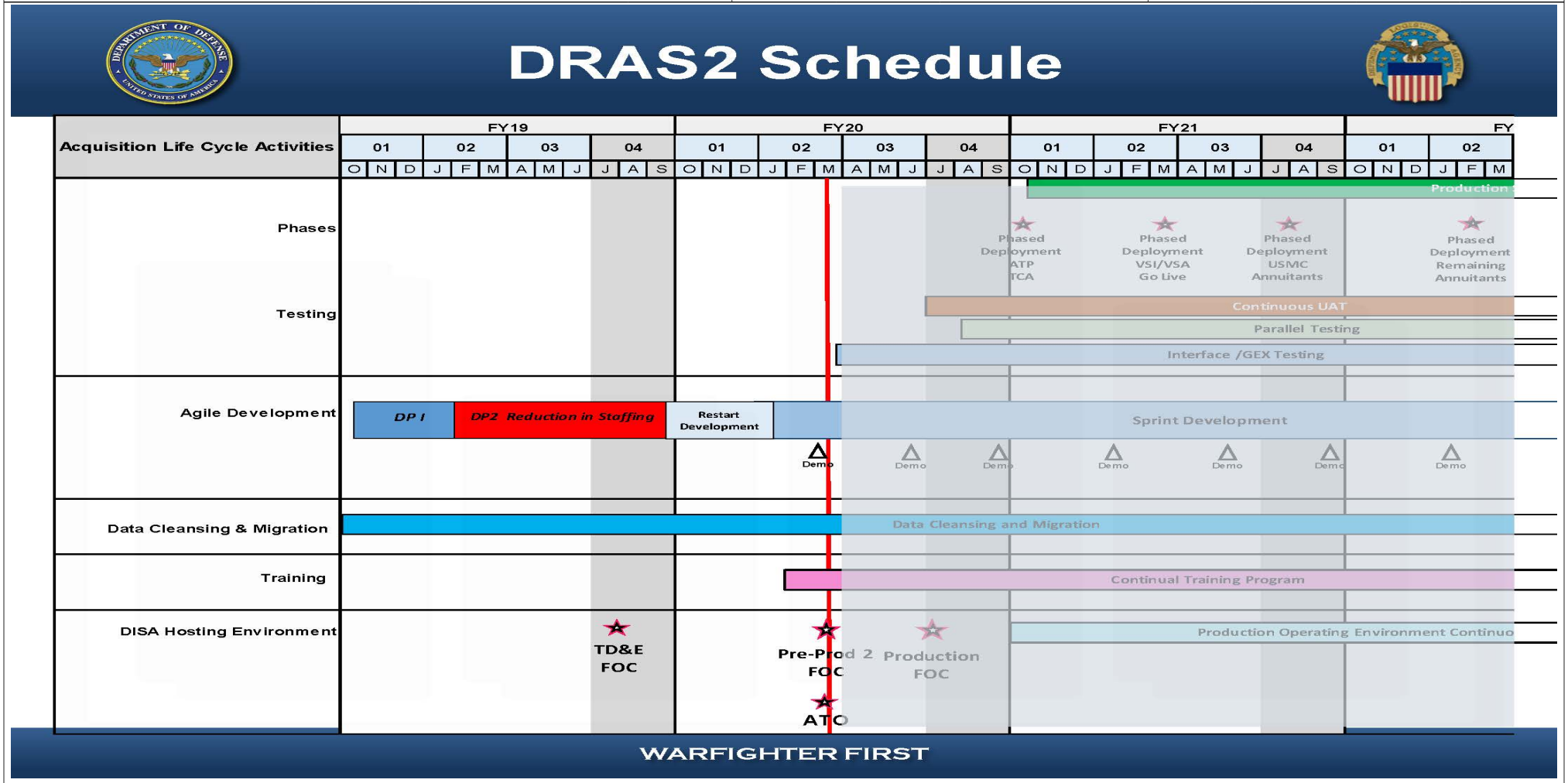

Exhibit R-4A, RDT&E Schedule Details: PB 2022 Defense Logistics Agency		Date: May 2021
Appropriation/Budget Activity 0400 / 5	**R-1 Program Element (Number/Name)** PE 0605090S / *Defense Retired and Annuitant Pay System 2 (DRAS2)*	**Project (Number/Name)** 01 / *Defense Retired and Annuitant Pay System 2 (DRAS2)*

Schedule Details

	Start		End	
Events by Sub Project	**Quarter**	**Year**	**Quarter**	**Year**
Defense Retired and Annuitant Pay System 2				
DRAS2	1	2014	2	2020

Exhibit R-2, RDT&E Budget Item Justification: PB 2022 Defense Logistics Agency	Date: May 2021
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 2020	FY 2021	FY 2022 Base	FY 2022 OCO	FY 2022 Total	FY 2023	FY 2024	FY 2025	FY 2026	Cost To Complete	Total Cost
Total Program Element	49.682	10.065	0.000	0.000	-	0.000	-	-	-	-	Continuing	Continuing
SBIR: *Small Business Innovative Research*	49.682	10.065	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 2020	FY 2021	FY 2022 Base	FY 2022 OCO	FY 2022 Total
Previous President's Budget	10.065	0.000	0.000	-	0.000
Current President's Budget	10.065	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	-	0.000			

Change Summary Explanation

FY 2021 Small Business Innovation Research (SBIR) and Small Technology Transfer (STTR) taxes for DLA programs establish the baseline for this program element. Due to an error while coding FY 2021 Enactment, the SBIR/STTR transfer is not reflected in the exhibit totals. Programs were indeed taxed and the funding was transferred to the SBIR PE 0605502S.

DLA SBIR/STTR taxes are $3.902M and Defense Microelectronics Agency (DMEA) are $4.330M.

Exhibit R-2A, RDT&E Project Justification: PB 2022 Defense Logistics Agency			Date: May 2021
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 2020	FY 2021	FY 2022 Base	FY 2022 OCO	FY 2022 Total	FY 2023	FY 2024	FY 2025	FY 2026	Cost To Complete	Total Cost
SBIR: *Small Business Innovative Research*	49.682	10.065	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 Modernization: The objectives under the nuclear modernization focus area, include: maintain nuclear systems readiness, qualify alternate sources of supply, improve quality of consumable parts; and increase materiel availability.
- Force Readiness and Lethality: The objectives under the force readiness and lethality focus area include: improve life cycle performance through technological advancement, innovation and reengineering; and mitigate single points-of-failure that threaten the readiness of weapons systems used by our Warfighters
- Supply Chain Innovation: The objectives under the supply chain innovation focus area, include: improve lead times, reduce lifecycle costs, maintain a secure and resilient supply chain; and provide opportunities for small business industrial base to enhance supply chain operations with technological innovations.
- Supply Chain Assurance: The objectives under the supply chain assurance focus area, include: secure the microelectronics supply chain, develop a domestic supply of rare earth elements; and adopt industrial base best practices associated with counterfeit risk reduction.

DMEA
- Advanced microelectronics concepts, technologies, and applications

B. Accomplishments/Planned Programs ($ in Millions)	FY 2020	FY 2021	FY 2022
Title: SBIR Accomplishments/Plans	10.065	0.000	-
FY 2021 Plans: DLA SBIR/STTR:			

Exhibit R-2A, RDT&E Project Justification: PB 2022 Defense Logistics Agency		Date: May 2021
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 2020	FY 2021	FY 2022
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 2021 to FY 2022 Increase/Decrease Statement:*** FY 2021 Small Business Innovation Research (SBIR) and Small Technology Transfer (STTR) taxes for DLA programs establish the baseline for this program element. Due to an error while coding FY 2021 Enactment, the SBIR/STTR transfer is not reflected in the exhibit totals. Programs were indeed taxed and the funding was transferred to the SBIR PE 0605502S. DLA SBIR/STTR taxes are $3.902M and Defense Microelectronics Agency (DMEA) are $4.330M. SBIR and STTR tax amounts are based on enacted budgets so FY 2022 amounts have not been established.			
Accomplishments/Planned Programs Subtotals	10.065	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 2022 Defense Logistics Agency	Date: May 2021
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 2020	FY 2021	FY 2022 Base	FY 2022 OCO	FY 2022 Total	FY 2023	FY 2024	FY 2025	FY 2026	Cost To Complete	Total Cost
Total Program Element	10.903	1.705	1.785	1.799	-	1.799	-	-	-	-	Continuing	Continuing
03: *Pacific Disaster Center*	10.903	1.705	1.785	1.799	-	1.799	-	-	-	-	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 2020	FY 2021	FY 2022 Base	FY 2022 OCO	FY 2022 Total
Previous President's Budget	1.705	1.785	1.821	-	1.821
Current President's Budget	1.705	1.785	1.799	-	1.799
Total Adjustments	0.000	0.000	-0.022	-	-0.022
• Congressional General Reductions	-	-			
• Congressional Directed Reductions	-	-			
• Congressional Rescissions	-	-			
• Congressional Adds	-	-			
• Congressional Directed Transfers	-	-			
• Reprogrammings	-	-			
• SBIR/STTR Transfer	-	0.000			
• Inflation for Non-Pay/Non-Fuel Purchases	-	-	-0.022	-	-0.022

Change Summary Explanation

FY 2021:

SBIR/STTR Transfer: Due to an error while coding FY21 Enactment, the SBIR/STTR transfer is not reflected in the exhibit totals. Programs were indeed taxed and the funding was transferred to the SBIR PE 0605502S. For PDC, the SBIR/STTR transfer is $0.065M.

Exhibit R-2A, RDT&E Project Justification: PB 2022 Defense Logistics Agency			Date: May 2021
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 2020	FY 2021	FY 2022 Base	FY 2022 OCO	FY 2022 Total	FY 2023	FY 2024	FY 2025	FY 2026	Cost To Complete	Total Cost
03: *Pacific Disaster Center*	10.903	1.705	1.785	1.799	-	1.799	-	-	-	-	Continuing	Continuing
Quantity of RDT&E Articles	-	-	-	-	-	-	-	-	-	-		

A. Mission Description and Budget Item Justification

The PDC 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 2020	FY 2021	FY 2022
Title: Pacific Disaster Center (PDC)	1.705	1.785	1.799
Description: The USD(A&S) will become the Operational Sponsor and functional OSD Principal Staff Assistant (PSA) for the program. USD(A&S) will continue to 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 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 DLA J32, Strategic Programs and Initiatives office will serve as the Program Manager for the PDC. The Program Manager 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 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.			

Exhibit R-2A, RDT&E Project Justification: PB 2022 Defense Logistics Agency		Date: May 2021
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 2020	FY 2021	FY 2022
FY 2021 Plans: -Enhance the DisasterAWARE platform, and related applications and tools. 1). Modernization of DisasterAWARE and related applications for improving access, navigation, and performance; 2) Increase platform scalability, resiliency, stability, and security by further leveraging Enterprise-class cloud services and monitoring tools; and 3) Continue to improve Mobile DisasterAWARE capabilities. -Enhance automation and modeling services supporting comprehensive and integrated multi-hazard monitoring, situational awareness, notification/warning, exposure estimation, and impact modeling and assessments. 1) Enhance the integration of hazard and exposure assessment outputs into automated mapping products, situational awareness, and needs assessment reports; 2) Extend and improve thematic coverage and hazard monitoring capabilities, including automation of hazard detection, impact area estimation, and notification; 3) Gain efficiencies and scalability through full or partial automation of manual processes and explore use of Artificial Intelligence algorithms and tools to augment current practices; 4) Develop processes to help maintain effective documentation and devise sustainable processes for new modeling, automation, and related communications; and 5) Increase flexibility and responsiveness of automated solutions; 6) Enhance ability to simulate actual conditions results during testing and prototyping. -Advance analytical to better understand severity of impacts to population by characterizing the socio-economic, political, health, cultural, and environmental factors that are influencing risk and resilience. 1) Improve mechanisms for RVA automation, communication, versioning, and service delivery; 2) Expands PDC's analytic and risk product offerings through enhanced automation and availability of risk products, information, and services; 3) Incorporation new tools and emerging data capabilities for refined reporting; 4) Leverage risk index approach in new and innovative ways to better describe human terrain; and 5) Develop new indicators that enable predictive outlooks for current and extended range planning. -Manage and maintain the most robust global data sets and related services to directly support the DoD in meeting their interagency support requirements. 1) Administer PDC's Global Enterprise Data policies, standards, and resources for consistency across the Center and its applications; 2) Streamline and automate data content development, validation, maintenance, management, and deployment processes; 3) Continue to enhance Enterprise Data holdings with authoritative global information; and 4) Explore new approaches and technologies for improved performance, reliability, and scaling, as well as total lifecycle costs, of data service.			
FY 2022 Plans: The FY 2022 Annual Plan will be published and presented during the Program Management Review in December 2021. Continue to modernize and sustain the DisasterAWARE system to support the DoD's Risk Assessment, Planning and Incidents Decision Support (RAPIDS) as well as Emergency Management Operations (EMOPS) (supporting the Department's and it's partner's Humanitarian Assistance and Disaster Recovery (HA/DR) and Defense Support of Civil Authorities (DSCA) missions.			
FY 2021 to FY 2022 Increase/Decrease Statement:			

Exhibit R-2A, RDT&E Project Justification: PB 2022 Defense Logistics Agency		Date: May 2021
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 2020	FY 2021	FY 2022
No significant change.			
Accomplishments/Planned Programs Subtotals	1.705	1.785	1.799

C. Other Program Funding Summary ($ in Millions)

N/A

Remarks

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 communities. 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 2022 Defense Logistics Agency			Date: May 2021
Appropriation/Budget Activity 0400 / 7	R-1 Program Element (Number/Name) PE 0708012S / *Pacific Disaster Center*	Project (Number/Name) 03 / *Pacific Disaster Center*	

Test and Evaluation ($ in Millions)

Cost Category Item	Contract Method & Type	Performing Activity & Location	Prior Years	FY 2020 Cost	FY 2020 Award Date	FY 2021 Cost	FY 2021 Award Date	FY 2022 Base Cost	FY 2022 Base Award Date	FY 2022 OCO Cost	FY 2022 OCO Award Date	FY 2022 Total Cost	Cost To Complete	Total Cost	Target Value of Contract
PDC Disaster AWARE: Early Warning and Decision Support Applications	MIPR	University of Hawaii Systems : Honolulu, HI	10.903	1.705	Dec 2019	1.785	Dec 2020	1.799	Dec 2021	-		1.799	Continuing	Continuing	Continuing
		Subtotal	10.903	1.705		1.785		1.799		-		1.799	Continuing	Continuing	N/A

	Prior Years	FY 2020		FY 2021		FY 2022 Base		FY 2022 OCO		FY 2022 Total	Cost To Complete	Total Cost	Target Value of Contract
Project Cost Totals	10.903	1.705		1.785		1.799		-		1.799	Continuing	Continuing	N/A

Remarks

Exhibit R-4, RDT&E Schedule Profile: PB 2022 Defense Logistics Agency		Date: May 2021
Appropriation/Budget Activity 0400 / 7	**R-1 Program Element (Number/Name)** PE 0708012S / *Pacific Disaster Center*	**Project (Number/Name)** 03 / *Pacific Disaster Center*

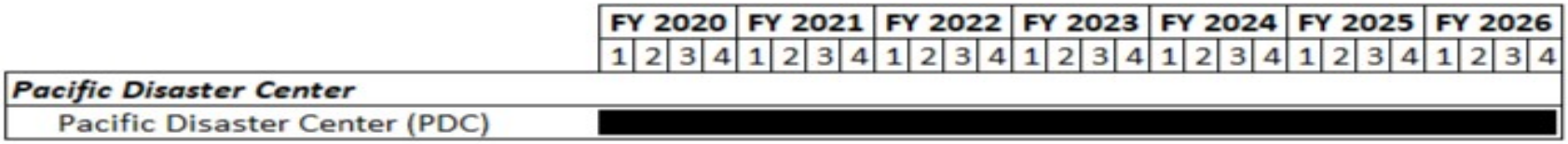

Exhibit R-2, RDT&E Budget Item Justification: PB 2022 Defense Logistics Agency	Date: May 2021
Appropriation/Budget Activity 0400: *Research, Development, Test & Evaluation, Defense-Wide* / BA 7: *Operational Systems Development*	**R-1 Program Element (Number/Name)** PE 0708047S / *Defense Property Accountability System (DPAS)*

COST ($ in Millions)	Prior Years	FY 2020	FY 2021	FY 2022 Base	FY 2022 OCO	FY 2022 Total	FY 2023	FY 2024	FY 2025	FY 2026	Cost To Complete	Total Cost
Total Program Element	6.631	3.545	7.301	6.390	-	6.390	-	-	-	-	Continuing	Continuing
ABC: *DPAS*	6.631	3.545	7.301	6.390	-	6.390	-	-	-	-	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, DPAS provides the Department an enterprise solution for asset management.

B. Program Change Summary ($ in Millions)	FY 2020	FY 2021	FY 2022 Base	FY 2022 OCO	FY 2022 Total
Previous President's Budget	3.545	7.301	6.914	-	6.914
Current President's Budget	3.545	7.301	6.390	-	6.390
Total Adjustments	0.000	0.000	-0.524	-	-0.524
• Congressional General Reductions	-	-			
• Congressional Directed Reductions	-	-			
• Congressional Rescissions	-	-			
• Congressional Adds	-	-			
• Congressional Directed Transfers	-	-			
• Reprogrammings	-	-			
• SBIR/STTR Transfer	-	-			
• Inflation for Non-Pay/Non-Fuel Purchases	-	-	-0.078	-	-0.078
• Under-execution	-	-	-0.446	-	-0.446

Change Summary Explanation

FY 2021:

-SBIR/STTR Transfer: Due to an error while coding FY21 Enactment, the SBIR/STTR transfer is not reflected in the exhibit totals. Programs were indeed taxed and the funding was transferred to the SBIR PE 0605502S. For DPAS, the SBIR/STTR transfer is $0.266M.

Exhibit R-2A, RDT&E Project Justification: PB 2022 Defense Logistics Agency			Date: May 2021
Appropriation/Budget Activity 0400 / 7	R-1 Program Element (Number/Name) PE 0708047S / *Defense Property Account ability System (DPAS)*	Project (Number/Name) ABC / *DPAS*	

COST ($ in Millions)	Prior Years	FY 2020	FY 2021	FY 2022 Base	FY 2022 OCO	FY 2022 Total	FY 2023	FY 2024	FY 2025	FY 2026	Cost To Complete	Total Cost
ABC: *DPAS*	6.631	3.545	7.301	6.390	-	6.390	-	-	-	-	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 2020	FY 2021	FY 2022
Title: DPAS completed the migration of the Air Force Equipment Management System (AFEMS) ***Description:*** DPAS completed the migration of the AFEMS. This achieved two milestones. The migration to DPAS enables the Air Force to achieve their financial audit goals for General Equipment due to DPAS providing the functionality required to properly account and report financial data. It also permits the shutdown of the AFEMS legacy system saving the Air Force considerable costs of upgrading this system.	3.545	-	-
Title: Technical Refresh ***Description:*** During the Technical Refresh, changes to the system processes will be made so accounting transactions for equipment assets from the warehouse portion of the system will 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 2021 Plans:*** Migration to the cloud. Technical Refresh to provide the users a new user interface and more efficient functionality to perform their mission. Implementation of JSF. Implementation of the Air Force Support Equipment Maintenance Activities and the Air Force Contractor Inventory Control Points for Government Furnished Material. ***FY 2022 Plans:*** Complete the Technical Refresh. Complete the Implementation of the Air Force Support Equipment Maintenance Activities and the Air Force Contractor Inventory Control Points for Government Furnished Material. ***FY 2021 to FY 2022 Increase/Decrease Statement:*** No significant change.	-	7.301	6.390
Accomplishments/Planned Programs Subtotals	3.545	7.301	6.390

Exhibit R-2A, RDT&E Project Justification: PB 2022 Defense Logistics Agency		Date: May 2021
Appropriation/Budget Activity 0400 / 7	**R-1 Program Element (Number/Name)** PE 0708047S / *Defense Property Account ability 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 2022 Defense Logistics Agency		Date: May 2021
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 2020 Cost	FY 2020 Award Date	FY 2021 Cost	FY 2021 Award Date	FY 2022 Base Cost	FY 2022 Base Award Date	FY 2022 OCO Cost	FY 2022 OCO Award Date	FY 2022 Total Cost	Cost To Complete	Total Cost	Target Value of Contract
DPAS Version 7 Development	C/CPIF	Leidos Inc : Camp Hill PA	6.631	0.000		0.000		-		-		-	0.000	6.631	6.631
DPAS Development 2020.1	C/FFP	Leidos Inc : Camp Hill PA	0.000	3.545	Sep 2020	0.000		-		-		-	0.000	3.545	3.545
DPAS Development Version 2021.1	SS/FFP	Leidos, Inc. : Camp Hill Pa	0.000	0.000		7.301	Aug 2021	-		-		-	Continuing	Continuing	7.301
DPAS Development Version 2020.2	Option/ FFP	Leidos Inc: : Camp Hill, PA	-	-		-		6.390	Aug 2022	-		6.390	Continuing	Continuing	6.390
		Subtotal	6.631	3.545		7.301		6.390		-		6.390	Continuing	Continuing	N/A

	Prior Years	FY 2020		FY 2021		FY 2022 Base		FY 2022 OCO		FY 2022 Total	Cost To Complete	Total Cost	Target Value of Contract
Project Cost Totals	6.631	3.545		7.301		6.390		-		6.390	Continuing	Continuing	N/A

Remarks

Exhibit R-4, RDT&E Schedule Profile: PB 2022 Defense Logistics Agency		Date: May 2021
Appropriation/Budget Activity 0400 / 7	**R-1 Program Element (Number/Name)** PE 0708047S / *Defense Property Accountability System (DPAS)*	**Project (Number/Name)** ABC / *DPAS*

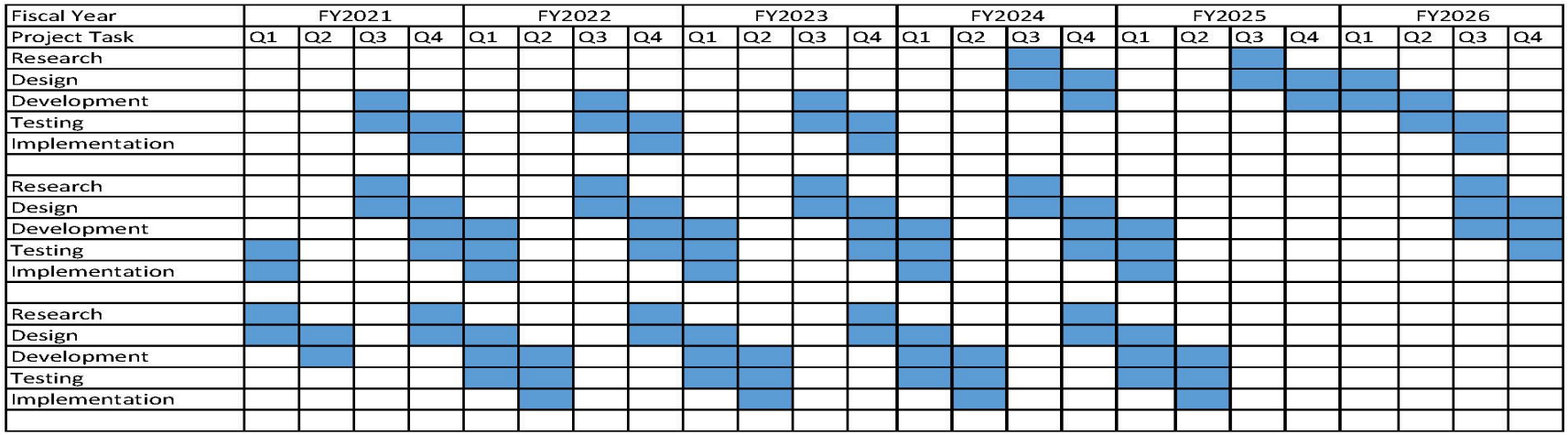

Exhibit R-4A, RDT&E Schedule Details: PB 2022 Defense Logistics Agency		Date: May 2021
Appropriation/Budget Activity 0400 / 7	**R-1 Program Element (Number/Name)** PE 0708047S / *Defense Property Accountability System (DPAS)*	**Project (Number/Name)** ABC / *DPAS*

Schedule Details

	Start		End	
Events by Sub Project	**Quarter**	**Year**	**Quarter**	**Year**
Defense Property Accountability System (DPAS)				
Defense Property Accountability System (DPAS)	1	2021	4	2026