# Department of Defense
# Fiscal Year (FY) 2019 Budget Estimates

February 2018

## Defense Logistics Agency

*Defense-Wide Justification Book Volume 5 of 5*

***Research, Development, Test & Evaluation, Defense-Wide***

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## Table of Volumes

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Department of Defense
FY 2019 President's Budget
Exhibit R-1 FY 2019 President's Budget
Total Obligational Authority
(Dollars in Thousands)

02 Feb 2018

| Appropriation | FY 2017 (Base + OCO) | FY 2018 PB Request with CR Adj Base | FY 2018 Total PB Requests* with CR Adj Base | FY 2018 PB Request with CR Adj OCO | FY 2018 Total PB Requests+ with CR Adj OCO |
|---|---|---|---|---|---|
| Research, Development, Test & Eval, DW | 189,190 | 319,796 | 319,796 | | |
| Total Research, Development, Test & Evaluation | 189,190 | 319,796 | 319,796 | | |

R-119PB: FY 2019 President's Budget (Published Version), as of February 2, 2018 at 12:42:22

Department of Defense
FY 2019 President's Budget
Exhibit R-1 FY 2019 President's Budget
Total Obligational Authority
(Dollars in Thousands)

02 Feb 2018

| Appropriation | FY 2018 Emergency Requests** Emergency | FY 2018 Less Enacted Div B P.L.115-96*** MDDE + Ship Repairs | FY 2018 Remaining Req Emergency | FY 2018 Total PB Requests* with CR Adj Base + OCO + Emergency** | FY 2018 Less Enacted DIV B P.L.115-96*** MDDE + Ship Repairs | FY 2018 Remaining Req with CR Adj Base + OCO + Emergency |
|---|---|---|---|---|---|---|
| Research, Development, Test & Eval, DW | | | | 319,796 | | 319,796 |
| Total Research, Development, Test & Evaluation | | | | 319,796 | | 319,796 |

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Department of Defense
FY 2019 President's Budget
Exhibit R-1 FY 2019 President's Budget
Total Obligational Authority
(Dollars in Thousands)

02 Feb 2018

| Appropriation | FY 2019 Base | FY 2019 OCO | FY 2019 Total |
|---|---|---|---|
| Research, Development, Test & Eval, DW | 273,011 | | 273,011 |
| Total Research, Development, Test & Evaluation | 273,011 | | 273,011 |

Department of Defense
FY 2019 President's Budget
Exhibit R-1 FY 2019 President's Budget
Total Obligational Authority
(Dollars in Thousands)

02 Feb 2018

| Summary Recap of Budget Activities | FY 2017 (Base + OCO) | FY 2018 PB Request with CR Adj Base | FY 2018 Total PB Requests* with CR Adj Base | FY 2018 PB Request with CR Adj OCO | FY 2018 Total PB Requests+ with CR Adj OCO |
|---|---|---|---|---|---|
| Advanced Technology Development | 129,264 | 270,925 | 270,925 | | |
| System Development And Demonstration | 35,623 | 44,177 | 44,177 | | |
| Management Support | 4,554 | | | | |
| Operational System Development | 19,749 | 4,694 | 4,694 | | |
| Total Research, Development, Test & Evaluation | 189,190 | 319,796 | 319,796 | | |
| **Summary Recap of FYDP Programs** | | | | | |
| Research and Development | 169,441 | 315,102 | 315,102 | | |
| Central Supply and Maintenance | 19,749 | 4,694 | 4,694 | | |
| Total Research, Development, Test & Evaluation | 189,190 | 319,796 | 319,796 | | |

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| Summary Recap of Budget Activities | FY 2019 Base | FY 2019 OCO | FY 2019 Total |
|---|---|---|---|
| Advanced Technology Development | 230,376 | | 230,376 |
| System Development And Demonstration | 35,060 | | 35,060 |
| Management Support | 4,000 | | 4,000 |
| Operational System Development | 3,575 | | 3,575 |
| Total Research, Development, Test & Evaluation | 273,011 | | 273,011 |

| Summary Recap of FYDP Programs | | | |
|---|---|---|---|
| Research and Development | 269,436 | | 269,436 |
| Central Supply and Maintenance | 3,575 | | 3,575 |
| Total Research, Development, Test & Evaluation | 273,011 | | 273,011 |

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

| Line No | Program Element Number | Item | Act | FY 2017 (Base + OCO) | FY 2018 PB Request with CR Adj Base | FY 2018 Total PB Requests* with CR Adj Base | FY 2018 PB Request with CR Adj OCO | FY 2018 Total PB Requests+ with CR Adj OCO | Sec |
|---|---|---|---|---|---|---|---|---|---|
| 48 | 0603680S | Manufacturing Technology Program | 03 | 19,736 | 40,511 | 40,511 | | | U |
| 50 | 0603712S | Generic Logistics R&D Technology Demonstrations | 03 | 14,541 | 10,611 | 10,611 | | | U |
| 51 | 0603713S | Deployment and Distribution Enterprise Technology | 03 | 6,618 | | | | | U |
| 53 | 0603720S | Microelectronics Technology Development and Support | 03 | 88,369 | 219,803 | 219,803 | | | U |
| | | Advanced Technology Development | | 129,264 | 270,925 | 270,925 | | | |
| 127 | 0605070S | DOD Enterprise Systems Development and Demonstration | 05 | 3,661 | 6,266 | 6,266 | | | U |
| 129 | 0605080S | Defense Agency Initiatives (DAI) - Financial System | 05 | 27,194 | 24,436 | 24,436 | | | U |
| 130 | 0605090S | Defense Retired and Annuitant Pay System (DRAS) | 05 | 4,768 | 13,475 | 13,475 | | | U |
| | | System Development And Demonstration | | 35,623 | 44,177 | 44,177 | | | |
| 157 | 0605502S | Small Business Innovative Research | 06 | 4,554 | | | | | U |
| 170 | 0606942S | Assessments and Evaluations Cyber Vulnerabilities | 06 | | | | | | U |
| | | Management Support | | 4,554 | | | | | |
| 241 | 0708011S | Industrial Preparedness | 07 | 15,984 | | | | | U |
| 243 | 0708012S | Pacific Disaster Centers | 07 | 1,690 | 1,770 | 1,770 | | | U |

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Defense-Wide
FY 2019 President's Budget
Exhibit R-1 FY 2019 President's Budget
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(Dollars in Thousands)

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

| Line No | Program Element Number | Item | Act | FY 2018 Emergency Requests** Emergency | FY 2018 Less Enacted Div B P.L.115-96*** MDDE + Ship Repairs | FY 2018 Remaining Req Emergency | FY 2018 Total PB Requests* with CR Adj Base + OCO + Emergency** | FY 2018 Less Enacted DIV B P.L.115-96*** MDDE + Ship Repairs | FY 2018 Remaining Req with CR Adj Base + OCO + Emergency | Sec |
|---|---|---|---|---|---|---|---|---|---|---|
| 48 | 0603680S | Manufacturing Technology Program | 03 | | | | 40,511 | | 40,511 | U |
| 50 | 0603712S | Generic Logistics R&D Technology Demonstrations | 03 | | | | 10,611 | | 10,611 | U |
| 51 | 0603713S | Deployment and Distribution Enterprise Technology | 03 | | | | | | | U |
| 53 | 0603720S | Microelectronics Technology Development and Support | 03 | | | | 219,803 | | 219,803 | U |
| | | | | | | | 270,925 | | 270,925 | |
| | | Advanced Technology Development | | | | | | | | |
| 127 | 0605070S | DOD Enterprise Systems Development and Demonstration | 05 | | | | 6,266 | | 6,266 | U |
| 129 | 0605080S | Defense Agency Initiatives (DAI) - Financial System | 05 | | | | 24,436 | | 24,436 | U |
| 130 | 0605090S | Defense Retired and Annuitant Pay System (DRAS) | 05 | | | | 13,475 | | 13,475 | U |
| | | | | | | | 44,177 | | 44,177 | |
| | | System Development And Demonstration | | | | | | | | |
| 157 | 0605502S | Small Business Innovative Research | 06 | | | | | | | U |
| 170 | 0606942S | Assessments and Evaluations Cyber Vulnerabilities | 06 | | | | | | | U |
| | | Management Support | | | | | | | | |
| 241 | 0708011S | Industrial Preparedness | 07 | | | | | | | U |
| 243 | 0708012S | Pacific Disaster Centers | 07 | | | | 1,770 | | 1,770 | U |

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

| Line No | Program Element Number | Item | Act | FY 2019 Base | FY 2019 OCO | FY 2019 Total | Sec |
|---|---|---|---|---|---|---|---|
| 48 | 0603680S | Manufacturing Technology Program | 03 | 49,667 | | 49,667 | U |
| 50 | 0603712S | Generic Logistics R&D Technology Demonstrations | 03 | 11,778 | | 11,778 | U |
| 51 | 0603713S | Deployment and Distribution Enterprise Technology | 03 | | | | U |
| 53 | 0603720S | Microelectronics Technology Development and Support | 03 | 168,931 | | 168,931 | U |
| | | Advanced Technology Development | | 230,376 | | 230,376 | |
| 127 | 0605070S | DOD Enterprise Systems Development and Demonstration | 05 | 3,173 | | 3,173 | U |
| 129 | 0605080S | Defense Agency Initiatives (DAI) - Financial System | 05 | 21,156 | | 21,156 | U |
| 130 | 0605090S | Defense Retired and Annuitant Pay System (DRAS) | 05 | 10,731 | | 10,731 | U |
| | | System Development And Demonstration | | 35,060 | | 35,060 | |
| 157 | 0605502S | Small Business Innovative Research | 06 | | | | U |
| 170 | 0606942S | Assessments and Evaluations Cyber Vulnerabilities | 06 | 4,000 | | 4,000 | U |
| | | Management Support | | 4,000 | | 4,000 | |
| 241 | 0708011S | Industrial Preparedness | 07 | | | | U |
| 243 | 0708012S | Pacific Disaster Centers | 07 | 1,770 | | 1,770 | U |

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|---|---|---|---|---|---|---|---|---|---|
| 244 | 0708047S | Defense Property Accountability System | 07 | 2,075 | 2,924 | 2,924 | | | U |
| | | Operational System Development | | 19,749 | 4,694 | 4,694 | | | |
| Total Research, Development, Test & Eval, DW | | | | 189,190 | 319,796 | 319,796 | | | |

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|---|---|---|---|---|---|---|---|---|---|---|
| 244 | 0708047S | Defense Property Accountability System | 07 | | | | 2,924 | | 2,924 | U |
| | | Operational System Development | | | | | 4,694 | | 4,694 | |
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| Line No | Program Element Number | Item | Act | FY 2019 Base | FY 2019 OCO | FY 2019 Total | Sec |
|---|---|---|---|---|---|---|---|
| 244 | 0708047S | Defense Property Accountability System | 07 | 1,805 | | 1,805 | U |
| | | Operational System Development | | 3,575 | | 3,575 | |
| Total Research, Development, Test & Eval, DW | | | | 273,011 | | 273,011 | |

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R-119PB: FY 2019 President's Budget (Published Version), as of February 2, 2018 at 12:42:22

## Program Element Table of Contents (by Budget Activity then Line Item Number)

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



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

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

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| Exhibit R-2, RDT&E Budget Item Justification: PB 2019 Defense Logistics Agency | | | | | | | | | | | Date: February 2018 | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Appropriation/Budget Activity<br>0400: *Research, Development, Test & Evaluation, Defense-Wide I* BA 3: *Advanced Technology Development (ATD)* | | | | | R-1 Program Element (Number/Name)<br>PE 0603680S *I Manufacturing Technology Program (ManTech)* | | | | | | | |
| **COST ($ in Millions)** | **Prior Years** | **FY 2017** | **FY 2018** | **FY 2019 Base** | **FY 2019 OCO** | **FY 2019 Total** | **FY 2020** | **FY 2021** | **FY 2022** | **FY 2023** | **Cost To Complete** | **Total Cost** |
| Total Program Element | 0.000 | 19.736 | 40.511 | 49.667 | - | 49.667 | 40.848 | 41.199 | 41.382 | 42.169 | Continuing | Continuing |
| IBMP: *Improving Industrial Base Manufacturing Processes (formerly Material Availability)* | 0.000 | 14.157 | 16.227 | 16.109 | - | 16.109 | 16.670 | 16.519 | 16.686 | 17.131 | Continuing | Continuing |
| AAA: *Maintaining Viable Supply Sources (formerly High Quality Sources)* | 0.000 | 4.302 | 17.103 | 27.770 | - | 27.770 | 19.422 | 19.749 | 19.825 | 20.094 | Continuing | Continuing |
| OOO: *Improving Technical and Logistics Information (formerly Industry and Customer Collaboration* | 0.000 | 1.277 | 7.181 | 5.788 | - | 5.788 | 4.756 | 4.931 | 4.871 | 4.944 | 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 affordably meets the warfighters' needs in a 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 the 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; 2) Maintaining Viable Sources of Supply; and 3) Improving Technical and Logistics Information.

• The Improving Industrial Base Manufacturing Processes 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 Procurement), Castings (Procurement Readiness Optimization—Advanced Casting Technology), Forgings (Procurement Readiness Optimization—Forging Advance System Technology), Batteries (Battery Network) and Additive Manufacturing.

• Maintaining Viable Supply Sources includes efforts to assure the commercial industrial base can satisfy DLA materiel requirements without relying on foreign sources for microcircuits and critical strategic materials. 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.

• The Improving Technical and Logistics Information SFA include 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.

| B. Program Change Summary ($ in Millions) | FY 2017 | FY 2018 | FY 2019 Base | FY 2019 OCO | FY 2019 Total |
|---|---|---|---|---|---|
| Previous President's Budget | 31.259 | 40.511 | 50.098 | - | 50.098 |
| Current President's Budget | 19.736 | 40.511 | 49.667 | - | 49.667 |
| Total Adjustments | -11.523 | 0.000 | -0.431 | - | -0.431 |
| • Congressional General Reductions | - | - | | | |
| • Congressional Directed Reductions | - | - | | | |
| • Congressional Rescissions | - | - | | | |
| • Congressional Adds | 10.000 | - | | | |
| • Congressional Directed Transfers | - | - | | | |
| • Reprogrammings | -20.185 | - | | | |
| • SBIR/STTR Transfer | -1.338 | - | | | |
| • Inflation Adjustment | - | - | -0.431 | - | -0.431 |

**Change Summary Explanation**

In FY2017, Manufacturing Technology received a Congressional Add for $10M for the Casting program with emphasis on Steel Castings. Under the FY2017 CR, PE 30603680S was considered a new start so ManTech business was executed under 70708011S resulting in reprogramming amount of $16.184M. The remaining reprogramming amount is a $1.963M reprogramming to Generic Logistics R&D as well as the USTRANSCOM amount owed to ManTech in the amount of $2.218M. Under the FY2017 CR, a portion of ManTech's funding was provided to USTRANSCOM to continue business operations. Upon enactment, the USTRANSCOM funding is being returned to ManTech. In FY2017, the Small Business Innovation Research and Small Technology Transfer Research tax amounted to $1.338M.

In FY2019, program increased for the development of electron beam manufacturing processes for microcircuits (+$9.000M – to Maintaining Viable Supply Sources). Inflation adjustments for Non-Pay/Non-Fuel Pay purchases and Civilian Pay decreased the program baseline in FY2019.

| Exhibit R-2A, RDT&E Project Justification: PB 2019 Defense Logistics Agency | | | | | | | | | | | Date: February 2018 | |
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| Appropriation/Budget Activity<br>0400 / 3 | | | | | R-1 Program Element (Number/Name)<br>PE 0603680S / *Manufacturing Technology Program (ManTech)* | | | | Project (Number/Name)<br>IBMP / *Improving Industrial Base Manufacturing Processes (formerly Material Availability)* | | | |
| **COST ($ in Millions)** | **Prior Years** | **FY 2017** | **FY 2018** | **FY 2019 Base** | **FY 2019 OCO** | **FY 2019 Total** | **FY 2020** | **FY 2021** | **FY 2022** | **FY 2023** | **Cost To Complete** | **Total Cost** |
| IBMP: *Improving Industrial Base Manufacturing Processes (formerly Material Availability)* | 0.000 | 14.157 | 16.227 | 16.109 | - | 16.109 | 16.670 | 16.519 | 16.686 | 17.131 | Continuing | Continuing |

**A. Mission Description and Budget Item Justification**

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

The Battery Network (BATTNET) 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 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, enhanced quality, and improved surge demand capabilities.

The Casting program works to ensure a stable, reliable, and competitive domestic casting industrial base for the weapon system needs of the Department of Defense (DoD). Castings works with industry, universities, and the Casting Industry Associations to identify projects to improve the materials, processes and business practices of the nation's foundry industry. The program aligns its projects with strategic issues and focus areas within the DLA and DoD. 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 to develop new capabilities in the areas of inspection, materials, processes, modeling, and design. Once developed, these capabilities will support the foundry industry,

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| **Appropriation/Budget Activity**<br>0400 / 3 | **R-1 Program Element (Number/Name)**<br>PE 0603680S / *Manufacturing Technology Program (ManTech)* | **Project (Number/Name)**<br>IBMP / *Improving Industrial Base Manufacturing Processes (formerly Material Availability)* |

where these technologies will be tested and implemented, usually in conjunction with the 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 and the Defense Logistics Agency. Working with industry, universities, and the Forging Industry Association to identify projects to improve the materials, processes and business practices of the nation's forging industry. The program aligns its projects with strategic issues and focus areas within the DLA and DoD. 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 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 Additive Manufacturing (AM) 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 2017 | FY 2018 | FY 2019 |
|---|---|---|---|
| ***Title:*** Improving Industrial Base Manufacturing Processes (formerly Material Availability) | 14.157 | 16.227 | 16.109 |
| ***FY 2018 Plans:***<br>The Battery Network will initiate new projects and continue efforts from FY17 for improving the production readiness, transition, and standardization of soldier and system batteries within the DLA supply chain. The Battery Network will also transition new battery manufacturing technologies developed in Small Business Innovative Research (SBIR) - electrode laser cutting, solvent-free electrode production, low cost materials production or recycling, advanced performance cells. DLA will also continue initiatives for manufacturing and material improvements in the vacuum electron tube supply base (used in microwave and radar systems) and pursue additional opportunities. | | | |

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| **Appropriation/Budget Activity**<br>0400 / 3 | **R-1 Program Element (Number/Name)**<br>PE 0603680S / *Manufacturing Technology Program (ManTech)* | **Project (Number/Name)**<br>IBMP / *Improving Industrial Base Manufacturing Processes (formerly Material Availability)* |

| B. Accomplishments/Planned Programs ($ in Millions) | FY 2017 | FY 2018 | FY 2019 |
|---|---|---|---|
| The Subsistence Network program plans to initiate and execute short-term projects in FY18, and continue efforts from FY17. SUBNET will also continue to pursue SBIR Topics in Subsistence. The Subsistence Network will also continue to work with community partners (military services, industry, and academia) to leverage the latest technologies, encourage innovation and modernization, and promote manufacturing improvements in the subsistence supply chain.<br><br>The Castings program plans to investigate, develop and deploy innovative enterprise and technical solutions to improve casting supply chains for the Department of Defense and the Defense Logistics Agency to support the warfighter. A Broad Agency Announcement (BAA) closed in FY17 and from that, we competitively award contracts to fulfill those requirements. Projects will be required to include a business case with specific metrics and a transition plan for success. The Casting program will also continue executing projects approved and awarded in prior years.<br><br>The Forging program will continue executing projects approved and awarded in prior years. In addition, the Forging program will receive an increase in funding to cover the unfunded requirements identified during the PBR17 process. Projects will investigate, develop and deploy innovative enterprise and technical solutions to improve forging supply chains for the DoD and DLA to support the warfighter. We competitively award contracts to fulfill those requirements. Projects will include a business case with specific metrics and transition plan for success.<br><br>The AM program plans to leverage Industry and the Military Service Engineering Support Activities (via Service-level agreements with the Army, Navy, Marine Corps, Air Force) ORNL and the Department of Energy by providing funding for AM support activities work identified under the respective agreements. Desired outcomes include: acceleration of rapid qualification and certification methodologies for AM, identification of AM applications for castings and forging preforms, rapid cast production and repair of castings using AM, exploration of conversion of recyclable materials to AM material, improved reverse engineering processes for AM purposes, and optimization of polymer and metal AM production to obtain land, air and sea and expeditionary platform spare parts. These efforts seek to increase the number of AM parts qualified for procurement and achieve savings from the associated lead-time, storage costs, transportation costs, in some cases reduction of fuel consumption due to lighter design and material options. Overall DLA Enterprise AM efforts will provide alternatives in product realization in order to address unfulfilled Warfighter readiness needs.<br>***FY 2019 Plans:***<br>The Battery Network will initiate new projects for improving the production readiness, transition, and standardization of soldier and system batteries within the DLA supply chain. The 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, | | | |

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| **Appropriation/Budget Activity**<br>0400 / 3 | **R-1 Program Element (Number/Name)**<br>PE 0603680S / *Manufacturing Technology Program (ManTech)* | **Project (Number/Name)**<br>IBMP / *Improving Industrial Base Manufacturing Processes (formerly Material Availability)* |

| B. Accomplishments/Planned Programs ($ in Millions) | FY 2017 | FY 2018 | FY 2019 |
|---|---|---|---|

advanced performance cells, and deep-discharge lithium-ion capabilities. The program will continue addressing additional requirements for manufacturing and material improvements in the vacuum electron tube supply base.

The Subsistence Network program plans to research and execute short-term innovative projects to improve the subsistence supply chain in FY19, and continue efforts from FY18. The Subsistence Network will attend subsistence trade and industry events to leverage technology innovations and promote manufacturing improvements. The program will also pursue SBIR Topics in Subsistence. The Subsistence Network will work with community partners (military services, industry, and academia) to leverage the latest technologies, encourage innovation and modernization, and promote manufacturing improvements in the subsistence supply chain.

The Castings program plans to research, develop and deploy innovative and technical solutions to ensure a viable and competitive domestic industrial base for the DoD and DLA in support of the needs of the warfighter. The program will use competitively awarded contracts to fulfill these requirements; projects are required to include a business case with specific metrics and a transition plan for success. The Casting program will continue to work with industry, academia, and the leading Industry Associations to identify improvements to materials, processes, and business practices of the nation's metal casting industry. The Casting program will continue to execute projects approved and awarded in prior years but will also maintain focus on future development and needs while executing projects awarded in FY19.

The Forging program will investigate, develop and deploy innovative enterprise and technical solutions to strengthen the forging supply chain and the forging industry. The program will explore alternative forging manufacturing methods, materials and modeling to reduce production lead time and costs. Enhancements to modeling and simulation software coupled with forging process and post-processing improvements are some projects that align the forging program with fulfilling the needs of the warfighter. The Forging program will also continue to execute projects approved and awarded in prior years.

The AM Program plans to fund technically proficient efforts that accelerate the rapid qualification and certification methodologies for AM items, identify the best AM applications for castings and forging preforms, achieve precise repeatability of part fabrication using an AM technical data package at simultaneous geographic points of need and prove the delivery of AM parts to warfighters deployed at expeditionary sea, land or air bases. Using market research, requests for information/proposals, Broad Agency Announcements (BAA), DLA R&D will identify the best courses of action to negotiate intellectual property for AM fabrication data to keep these items competitive. The DLA R&D efforts include the proof of concept of using digital thread methodologies to effectively manage manufacturing data and maintain a consistent AM product from design through qualification and acceptance. Collaboration will continue with the Military Service Engineering Support Activities (via Service-level agreements with the Army, Navy, Marine Corps, Air Force) and the Department of Energy by providing funding for AM work identified under the respective

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| B. Accomplishments/Planned Programs ($ in Millions) | FY 2017 | FY 2018 | FY 2019 |
|---|---|---|---|
| agreements. The partnership with ORNL will allow further options with the Big Area AM (BAAM) family of parts. DLA will leverage Military Services and Industry collaboration to develop digital verification and validation (including measures of effectiveness and key performance parameters) of AM technical data and first article testing for polymers and metals, and critical and non-critical items. These efforts seek to increase the number of AM parts qualified for procurement and achieve savings from the associated lead-time, storage costs, transportation costs, in some cases reduction of fuel consumption due to lighter design and material options.<br>***FY 2018 to FY 2019 Increase/Decrease Statement:***<br>FY19 increase is to begin to automate combat rations visual inspections and prepare for future innovative nanotechnology packaging systems for combat rations. | | | |
| **Accomplishments/Planned Programs Subtotals** | 14.157 | 16.227 | 16.109 |

**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.

**E. Performance Metrics**

40% of applicable projects (ex. non-studies) will transition.

| Exhibit R-2A, RDT&E Project Justification: PB 2019 Defense Logistics Agency | | | Date: February 2018 |
|---|---|---|---|
| Appropriation/Budget Activity<br>0400 / 3 | R-1 Program Element (Number/Name)<br>PE 0603680S / *Manufacturing Technology Program (ManTech)* | Project (Number/Name)<br>AAA / *Maintaining Viable Supply Sources (formerly High Quality Sources)* | |

| COST ($ in Millions) | Prior Years | FY 2017 | FY 2018 | FY 2019 Base | FY 2019 OCO | FY 2019 Total | FY 2020 | FY 2021 | FY 2022 | FY 2023 | Cost To Complete | Total Cost |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| AAA: *Maintaining Viable Supply Sources (formerly High Quality Sources)* | 0.000 | 4.302 | 17.103 | 27.770 | - | 27.770 | 19.422 | 19.749 | 19.825 | 20.094 | Continuing | Continuing |

**A. Mission Description and Budget Item Justification**

The Maintaining Viable Supply Sources SFA are 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 former Material Acquisition Electronics (MAE) program.

The MAE Roadmap has four major thrusts in Digital Microcircuits: Advanced Schottky TTL, TTL Compatible CMOS, 512 Kilobit RAM/ROM and Mega Gate ASIC. The Roadmap also includes a new major thrust area: Linear Microcircuits. 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 17 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 2017 | FY 2018 | FY 2019 |
|---|---|---|---|
| ***Title:*** Maintaining Viable Supply Sources (formerly High Quality Sources) | 4.302 | 17.103 | 27.770 |
| ***FY 2018 Plans:***<br>MAE will continue planning for the specific emulation technology implementations to support specific device family groups in consonance with Customer and Agency requirements. MAE will continue a major new thrust in emulation to address Linear Microcircuits in addition to its traditional focus on Digital. Several efforts will address basic design, manufacturing, electrical test and quality/reliability requirements for establishing a basis for product-oriented developments across the FYDP. MAE will also complete development and transition TTL-Compatible CMOS Microcircuit Emulation capability into full-scale production increasing DLA's ability to re-establish sourcing of non-procurable microcircuit NSNs. The newly transitioned emulation capabilities will address several discontinued device families and will increase the potential emulation production envelope by several hundred NSNs. MAE will also continue development of additional emulation capabilities including development of a 1 million gate Application-Specific Integration Circuit (ASIC) and 256K Read-Only and Random-Access Memory Emulation Capabilities. It will begin applying 350 nanometer emulation technology to specific part families for additional NSNs. | | | |
| ***FY 2019 Plans:***<br>MAE will continue planning for the specific emulation technology implementations to support specific device family groups in consonance with Customer and Agency requirements. It will begin digital microcircuit process development at the 250 nanometer technology node including development of electron-beam lithography techniques. MAE will continue a major new thrust in emulation to address Linear Microcircuits in addition to its traditional focus on Digital. Several efforts will address basic design, | | | |

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| **Appropriation/Budget Activity**<br>0400 / 3 | **R-1 Program Element (Number/Name)**<br>PE 0603680S / *Manufacturing Technology Program (ManTech)* | **Project (Number/Name)**<br>AAA / *Maintaining Viable Supply Sources (formerly High Quality Sources)* |

| B. Accomplishments/Planned Programs ($ in Millions) | FY 2017 | FY 2018 | FY 2019 |
|---|---|---|---|
| manufacturing, electrical test and quality/reliability requirements for establishing a basis for product-oriented developments across the FYDP. MAE will complete and transition 20-Volt operational amplifier emulation capability into full-scale production increasing DLA's ability to re-establish sourcing of non-procurable microcircuit NSNs. MAE will continue 40-Volt operational amplifier and analog switch projects started in FY18. It will continue applying 350 nanometer emulation technology to specific part families for additional NSNs including 256K Static Random Access Memory (SRAM).<br>***FY 2018 to FY 2019 Increase/Decrease Statement:***<br>The proposed FY19 one-year $9M investment in equipment will graduate the Advanced Microcircuit Emulation program from soon to be antiquated photolithographic manufacturing techniques to use the more advanced electron beam lithography microcircuit manufacturing methods, which will support at least two future generations of technology over 10 to 15 years. | | | |
| **Accomplishments/Planned Programs Subtotals** | 4.302 | 17.103 | 27.770 |

**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.

**E. Performance Metrics**

40% of applicable projects (ex. non-studies) will transition.

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| Appropriation/Budget Activity<br>0400 / 3 | R-1 Program Element (Number/Name)<br>PE 0603680S / *Manufacturing Technology Program (ManTech)* | Project (Number/Name)<br>OOO / *Improving Technical and Logistics Information (formerly Industry and Customer Collaboration* | |

| COST ($ in Millions) | Prior Years | FY 2017 | FY 2018 | FY 2019 Base | FY 2019 OCO | FY 2019 Total | FY 2020 | FY 2021 | FY 2022 | FY 2023 | Cost To Complete | Total Cost |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| OOO: *Improving Technical and Logistics Information (formerly Industry and Customer Collaboration* | 0.000 | 1.277 | 7.181 | 5.788 | - | 5.788 | 4.756 | 4.931 | 4.871 | 4.944 | Continuing | Continuing |

**A. Mission Description and Budget Item Justification**

The Improving Technical and Logistics Information 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 MUST Program focus addresses GAO Report 12-707 recommendations for DoD to establish a "knowledge-based approach" to collaborate on define and communicate of military unique requirements. DLA has the responsibility to communicate and 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 reduce the lead-time between Individual Item and Equipment (IIE) development and sustainment from years to months. The Program focuses on technologies that will transform the military IIE 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 DLIR program researches core technology to improve the quality, speed, and interoperability of logistics data. DLA must transform business practices and methodologies as the data for weapons systems evolves 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 fundamental shift for DLA is driven by the Model-Based Enterprise approach, which is influencing 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 the Defense Standardization Program Office (DSPO) are key stakeholders in the DLIR initiatives to modernize the representation and delivery of weapons systems data. The DLIR program researches and demonstrates the use of innovative technologies to streamline DLA operations; current thrusts include development of logistics data interoperability and availability, and research into the transformation of DLA data repositories to a digitally linked, model-based enterprise.

The Technical and Logistical Data Interoperability will pioneer methods to capture data from military Services, Original Equipment Manufacturers (OEMs), and suppliers to form a seamless thread of interoperable and linked data models.

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

| Exhibit R-2A, RDT&E Project Justification: PB 2019 Defense Logistics Agency | | Date: February 2018 |
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| **Appropriation/Budget Activity**<br>0400 / 3 | **R-1 Program Element (Number/Name)**<br>PE 0603680S / *Manufacturing Technology Program (ManTech)* | **Project (Number/Name)**<br>OOO / *Improving Technical and Logistics Information (formerly Industry and Customer Collaboration* |

| B. Accomplishments/Planned Programs ($ in Millions) | FY 2017 | FY 2018 | FY 2019 |
|---|---|---|---|
| ***Title:*** Improving Technical and Logistics Information (formerly Industry and Customer Collaboration | 1.277 | 7.181 | 5.788 |
| ***FY 2018 Plans:***<br>DLIR plans to resume moving DLA from PDF Tech Data to Smart Data and Engineering Models and leveraging semantic technology to improve logistics data across the DLA Enterprise.<br><br>MUST plans to continue test and validation pilots as well as process reengineering. In addition MUST plans to begin a schedule for prototype development and demonstration to be initiated in FY19.<br><br>Emerging Manufacturing Technology program enables DLA to investigate 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 to the warfighter earlier. 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. | | | |
| ***FY 2019 Plans:***<br>DLIR plans to continue assisting DLA improve the quality and interoperability of logistics data across the Enterprise and for the defense industrial base. Specifically, DLIR will initiate the Logistics Interoperability Technology Extension (LITE) project. LITE proposes publishing logistics documents as data instead of PDF utilizing advanced semantic interpretation techniques to extract and model the data inside the document. This approach will be based upon open standards to improve publishability of documents and to ensure broad industry adoption. LITE will enable improved interoperability between DOD internal and external data sources.<br><br>MUST plans to conduct test and validation pilots, process reengineering to provide complete Function Requirement Document (FRD) for transition. The focus will be the Product Test Center (PTC) industry reporting module, the TexSpec conversion for Spec Change Management, the Supply Request Package (SRP) process reengineering and the Shade Instrument Large Scale Pilot. Schedule for Implementations with complete FRDs will start in FY19.<br><br>The EMT program enables DLA to investigate 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. 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 begin in FY19 to advance Digital Manufacturing by developing a comprehensive approach to take advantage of integrated, computer-based systems of simulation, three-dimensional (3D) visualization, analytics | | | |

| Exhibit R-2A, RDT&E Project Justification: PB 2019 Defense Logistics Agency | | Date: February 2018 |
|---|---|---|
| **Appropriation/Budget Activity**<br>0400 / 3 | **R-1 Program Element (Number/Name)**<br>PE 0603680S / *Manufacturing Technology Program (ManTech)* | **Project (Number/Name)**<br>OOO / *Improving Technical and Logistics Information (formerly Industry and Customer Collaboration* |

| B. Accomplishments/Planned Programs ($ in Millions) | FY 2017 | FY 2018 | FY 2019 |
|---|---|---|---|
| and various collaboration tools to create and manufacture products to support the warfighter. Additionally, any emergent Strategic Materials requirements will be addressed through the EMT program.<br><br>***FY 2018 to FY 2019 Increase/Decrease Statement:***<br>FY19 decrease due to funds realignment to Maintaining Viable Supply Sources. | | | |
| **Accomplishments/Planned Programs Subtotals** | 1.277 | 7.181 | 5.788 |

**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.

**E. Performance Metrics**

40% of applicable projects (ex; non-studies) will transition.

| Exhibit R-2, RDT&E Budget Item Justification: PB 2019 Defense Logistics Agency | | | | | | | | | | | Date: February 2018 | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Appropriation/Budget Activity<br>0400: *Research, Development, Test & Evaluation, Defense-Wide* / BA 3: *Advanced Technology Development (ATD)* | | | | | R-1 Program Element (Number/Name)<br>PE 0603712S / *Logistics Research and Development Technology (Log R&D)* | | | | | | | |
| **COST ($ in Millions)** | **Prior Years** | **FY 2017** | **FY 2018** | **FY 2019 Base** | **FY 2019 OCO** | **FY 2019 Total** | **FY 2020** | **FY 2021** | **FY 2022** | **FY 2023** | **Cost To Complete** | **Total Cost** |
| Total Program Element | 120.123 | 14.541 | 10.611 | 11.778 | - | 11.778 | 12.067 | 12.358 | 12.548 | 12.786 | Continuing | Continuing |
| 0: *Prior Years* | 105.030 | 0.000 | 0.000 | 0.000 | - | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 | Continuing | Continuing |
| EMM: *Enhancing Analysis, Modeling, and Decision Support (formerly Analytic & Decision Support)* | 3.471 | 4.090 | 4.062 | 4.131 | - | 4.131 | 4.223 | 4.321 | 4.414 | 4.496 | Continuing | Continuing |
| GLTD: *Improving Logistics Processes (formerly Logistics Process)* | 5.413 | 4.990 | 3.849 | 3.904 | - | 3.904 | 4.015 | 4.128 | 4.214 | 4.280 | Continuing | Continuing |
| 04: *Emergent Logistics R&D Requirements (formerly Innovative Products & Services for DLA Customers)* | 6.209 | 5.461 | 2.700 | 3.743 | - | 3.743 | 3.829 | 3.909 | 3.920 | 4.010 | Continuing | Continuing |

**A. Mission Description and Budget Item Justification**

The Defense Logistics Agency 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 forces 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. Logistics 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 SFAs:
•Enhancing Analysis, Modeling, and Decision Support: 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: R&D efforts to develop and implement advanced technology in logistics processes over and above current baseline systems.
•Emergent Logistics R&D Requirements: R&D efforts to support emergent Logistics R&D requirements that arise out of the budget cycle. These out of cycle requirements always occur. The 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 2019 Defense Logistics Agency | Date: February 2018 |
|---|---|
| **Appropriation/Budget Activity**<br>0400: *Research, Development, Test & Evaluation, Defense-Wide I* BA 3: *Advanced Technology Development (ATD)* | **R-1 Program Element (Number/Name)**<br>PE 0603712S *I Logistics Research and Development Technology (Log R&D)* |

| B. Program Change Summary ($ in Millions) | FY 2017 | FY 2018 | FY 2019 Base | FY 2019 OCO | FY 2019 Total |
|---|---|---|---|---|---|
| Previous President's Budget | 11.011 | 10.611 | 11.881 | - | 11.881 |
| Current President's Budget | 14.541 | 10.611 | 11.778 | - | 11.778 |
| Total Adjustments | 3.530 | 0.000 | -0.103 | - | -0.103 |
| • Congressional General Reductions | - | - | | | |
| • Congressional Directed Reductions | - | - | | | |
| • Congressional Rescissions | - | - | | | |
| • Congressional Adds | 4.000 | - | | | |
| • Congressional Directed Transfers | - | - | | | |
| • Reprogrammings | -0.037 | - | | | |
| • SBIR/STTR Transfer | -0.433 | - | | | |
| • Inflation Adjustment | - | - | -0.103 | - | -0.103 |

**Change Summary Explanation**

In FY2017, the Logistics R&D program received a Congressional Add for $4M to support and advance cellulosic biofuels. The program reprogramed funds to Manufacturing Technology in the amount of $0.037M. In FY2017, the Small Business Innovation Research and Small Technology Transfer Research tax amounted to $0.433M.

Inflation adjustments for Non-Pay/Non-Fuel Pay purchases and Civilian Pay decreased the program baseline in FY2019.

| Exhibit R-2A, RDT&E Project Justification: PB 2019 Defense Logistics Agency | | | Date: February 2018 |
|---|---|---|---|
| Appropriation/Budget Activity<br>0400 / 3 | R-1 Program Element (Number/Name)<br>PE 0603712S / *Logistics Research and Development Technology (Log R&D)* | Project (Number/Name)<br>0 / *Prior Years* | |

| COST ($ in Millions) | Prior Years | FY 2017 | FY 2018 | FY 2019 Base | FY 2019 OCO | FY 2019 Total | FY 2020 | FY 2021 | FY 2022 | FY 2023 | Cost To Complete | Total Cost |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 0: *Prior Years* | 105.030 | 0.000 | 0.000 | 0.000 | - | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 | Continuing | Continuing |

**A. Mission Description and Budget Item Justification**

Prior Years include:

-Medical Logistics Network (MLN): $10.334M. This project was realigned to Strategic Focus Area (SFA) Emergent Logistics R&D Requirements. The MLN program supports the Medical Directorate's mission to develop and implement the critical logistics and medical supply chain business practices that ensure the cost-effective and efficient distribution of medical materiel to the full range of Military Health System operations.

-Weapon System Sustainment (WSS): $29.625M. This project was realigned to SFA Improving Logistics Processes. The WSS program spans multiple weapon systems and supply chains to improve internal processes, provide new methods, reduce costs and lead times, and ultimately, improve readiness for DLA customers.

-Supply Chain Management (SCM): $20.574M. This project was realigned to SFA Emergent Logistics R&D Requirements. The SCM program provides the Agency with the resources needed to quickly take advantage of new ideas emerging from the Center Commanders, Process Owners, or Staff Directors.

-Strategic Distribution & Disposition (SDD): $19.396M. This project was realigned to SFA Enhancing Analysis, Modeling, and Decision Support. The SDD program improves DLA's distribution and disposition capabilities, operational effectiveness, and efficiency in support of the Services, COCOMs, and DOD in CONUS, OCONUS, and deployed locations.

-Energy Readiness Program (ERP): $15.796M. This project was realigned to SFA Emergent Logistics R&D Requirements. The ERP includes Program Management Office Support (PMO) for developing program strategies and goals; Alternate Energy Development (AED) to include test and certification to support the addition of synthetic and alternative fuels to mobility fuel specifications and acquisition plan; Improving Class IIIB supply chain through Current Product Improvement (CPI) (such as the study and development of fuel additives and studies to increase sources of supply) and Infrastructure & Process Improvement (such as the development of analytical tools).

-Defense Logistics Information Research (DLIR): $9.305M. This project was realigned to Industrial Manufacturing PE 70708011S. The DLIR program researches, identifies, and implements potential or existing technologies using high-risk, high payoff tools, methods, techniques, and products. DLIR improves functional and business processes using the latest technologies available to support the nation's warfighter. The technical areas of interest is the development of Logistics Data Interoperability & Availability. Enhances the functionality and compatibility of data in a complex data environment using supply chain relationships and lifecycle management to allow flexible visibility.

| Exhibit R-2A, RDT&E Project Justification: PB 2019 Defense Logistics Agency | | | Date: February 2018 |
|---|---|---|---|
| **Appropriation/Budget Activity**<br>0400 / 3 | **R-1 Program Element (Number/Name)**<br>PE 0603712S / *Logistics Research and Development Technology (Log R&D)* | **Project (Number/Name)**<br>EMM / *Enhancing Analysis, Modeling, and Decision Support (formerly Analytic & Decision Support)* | |

| COST ($ in Millions) | Prior Years | FY 2017 | FY 2018 | FY 2019 Base | FY 2019 OCO | FY 2019 Total | FY 2020 | FY 2021 | FY 2022 | FY 2023 | Cost To Complete | Total Cost |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| EMM: *Enhancing Analysis, Modeling, and Decision Support (formerly Analytic & Decision Support)* | 3.471 | 4.090 | 4.062 | 4.131 | - | 4.131 | 4.223 | 4.321 | 4.414 | 4.496 | Continuing | Continuing |

**A. Mission Description and Budget Item Justification**

This 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. The Strategic Distribution and Disposition (SDD) thrust will develop and implement analytical tools, models, and simulations of logistics and supply chain processes related to distribution and disposition.

The mission of the SDD program is to assist DLA Distribution and Disposition Services in anticipating, assessing, and meeting current and future Warfighter requirements by leveraging R&D to infuse innovative solutions.

| B. Accomplishments/Planned Programs ($ in Millions) | FY 2017 | FY 2018 | FY 2019 |
|---|---|---|---|
| ***Title:*** Enhancing Analysis, Modeling, and Decision Support | 4.090 | 4.062 | 4.131 |
| ***FY 2018 Plans:***<br>SDD will complete the lead-acid and Lithium-Ion battery technology projects in support DLA Distribution and provide support to the Distribution Modernization Program (DMP) to identify, evaluate, and test disruptive technologies. | | | |
| ***FY 2019 Plans:***<br>SDD plans to continue providing analytical and decision support to DLA Distribution and Disposition Services providing advanced analytical tools such as Business Case Analyses (BCAs) that support DLA Distribution and Disposition Services strategic decisions. Additionally, SDD will continue to support the Distribution Modernization Program as necessary to identify, evaluate, and test disruptive technologies including drone technologies applicable to distribution and disposition. | | | |
| ***FY 2018 to FY 2019 Increase/Decrease Statement:***<br>No significant Increase/Decrease in FY19 Budget for SDD. | | | |
| **Accomplishments/Planned Programs Subtotals** | 4.090 | 4.062 | 4.131 |

**C. Other Program Funding Summary ($ in Millions)**

N/A

| Exhibit R-2A, RDT&E Project Justification: PB 2019 Defense Logistics Agency | | Date: February 2018 |
|---|---|---|
| **Appropriation/Budget Activity**<br>0400 / 3 | **R-1 Program Element (Number/Name)**<br>PE 0603712S / *Logistics Research and Development Technology (Log R&D)* | **Project (Number/Name)**<br>EMM / *Enhancing Analysis, Modeling, and Decision Support (formerly Analytic & Decision Support)* |

**C. Other Program Funding Summary ($ in Millions)**

**Remarks**

Due to the decline of planned requirements, the Medical Logistics Network realigned to the Emergent Logistics R&D Requirements SFA in FY19.

**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.

**E. Performance Metrics**

40% of applicable projects (ex. non-studies) will transition.

| Exhibit R-2A, RDT&E Project Justification: PB 2019 Defense Logistics Agency | | | Date: February 2018 |
|---|---|---|---|
| Appropriation/Budget Activity<br>0400 / 3 | R-1 Program Element (Number/Name)<br>PE 0603712S / *Logistics Research and Development Technology (Log R&D)* | Project (Number/Name)<br>GLTD / *Improving Logistics Processes (formerly Logistics Process)* | |

| COST ($ in Millions) | Prior Years | FY 2017 | FY 2018 | FY 2019 Base | FY 2019 OCO | FY 2019 Total | FY 2020 | FY 2021 | FY 2022 | FY 2023 | Cost To Complete | Total Cost |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| GLTD: *Improving Logistics Processes (formerly Logistics Process)* | 5.413 | 4.990 | 3.849 | 3.904 | - | 3.904 | 4.015 | 4.128 | 4.214 | 4.280 | Continuing | Continuing |

**A. Mission Description and Budget Item Justification**

Logistics Processes are R&D efforts within the Weapon System Sustainment Program (WSS) undertaken to develop and implement advanced technology in the internal DLA logistics processes. 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.

This strategic focus area has 2 thrusts: Technical/Quality (T/Q) Process Improvements and Selected Process Improvements.

T/Q Process Improvements to reduce material and internal costs and improve support to warfighters. Services have engineering responsibility for most Class IX parts. Many T/Q sub-processes involve interactions with Service engineering functions, which often are time-consuming and costly. Other key T/Q sub-processes are essential to the procurement function, such as analysis of parts content, source capabilities and problem resolution.

Selected Process Improvements cover processes outside the scope of the Technical/Quality (T/Q) function. Although all DLA processes are in scope, the focus for FY 2019 is on the Procurement process, especially aspects driving internal costs and delays in awards.

| B. Accomplishments/Planned Programs ($ in Millions) | FY 2017 | FY 2018 | FY 2019 |
|---|---|---|---|
| ***Title:*** Improving Logistics Processes (LP) | 4.990 | 3.849 | 3.904 |
| ***FY 2018 Plans:***<br>In FY2018, WSS will work with procurement to implement their long-term process improvement plans. Projects will focus on the areas of obtaining Market Intelligence, Industrial Outreach, and Long-Term Contract cost reduction. WSS will work with TQ to develop an Anti-Counterfeiting Roadmap of projects aimed at identifying and eliminating the threat of counterfeit parts entering the supply chain. | | | |
| ***FY 2019 Plans:***<br>In FY2019, WSS will continue working with Procurement to implement their long term process improvement plans to include follow on projects in the areas of Administrative and Production Lead Time Management. Another main thrust for FY2019 will be the execution of projects identified in the Anti-Counterfeiting Roadmap of FY2018. | | | |
| ***FY 2018 to FY 2019 Increase/Decrease Statement:*** | | | |

| Exhibit R-2A, RDT&E Project Justification: PB 2019 Defense Logistics Agency | | Date: February 2018 |
|---|---|---|
| **Appropriation/Budget Activity**<br>0400 / 3 | **R-1 Program Element (Number/Name)**<br>PE 0603712S / *Logistics Research and Development Technology (Log R&D)* | **Project (Number/Name)**<br>GLTD / *Improving Logistics Processes (formerly Logistics Process)* |

| B. Accomplishments/Planned Programs ($ in Millions) | FY 2017 | FY 2018 | FY 2019 |
|---|---|---|---|
| No significant Increase/Decrease in FY19 Budget. | | | |
| **Accomplishments/Planned Programs Subtotals** | 4.990 | 3.849 | 3.904 |

**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.

**E. Performance Metrics**

40% of applicable projects (ex. non-studies) will transition.

| Exhibit R-2A, RDT&E Project Justification: PB 2019 Defense Logistics Agency | | | Date: February 2018 |
|---|---|---|---|
| **Appropriation/Budget Activity**<br>0400 / 3 | **R-1 Program Element (Number/Name)**<br>PE 0603712S / *Logistics Research and Development Technology (Log R&D)* | **Project (Number/Name)**<br>04 / *Emergent Logistics R&D Requirements (formerly Innovative Products & Services for DLA Customers)* | |

| COST ($ in Millions) | Prior Years | FY 2017 | FY 2018 | FY 2019 Base | FY 2019 OCO | FY 2019 Total | FY 2020 | FY 2021 | FY 2022 | FY 2023 | Cost To Complete | Total Cost |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 04: *Emergent Logistics R&D Requirements (formerly Innovative Products & Services for DLA Customers)* | 6.209 | 5.461 | 2.700 | 3.743 | - | 3.743 | 3.829 | 3.909 | 3.920 | 4.010 | Continuing | Continuing |

**A. Mission Description and Budget Item Justification**

Emergent Logistics R&D SFA includes R&D efforts to develop new products and services for DLA customers. The 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) Roadmap addresses emerging and out of cycle requirements that always occur and new products and services developed by DLA to include investments to qualify domestic, ultra-high modulus, carbon fiber material for Defense and National Security space systems in order to mitigate the supply chain costs and risks of this strategic material.

| B. Accomplishments/Planned Programs ($ in Millions) | FY 2017 | FY 2018 | FY 2019 |
|---|---|---|---|
| ***Title:*** Emergent Logistics R&D Requirements | 5.461 | 2.700 | 3.743 |
| ***FY 2018 Plans:***<br>SCM will continue to address the emerging technology opportunities that occur out of the budget cycle. This allows DLA to get a head start undertaking new technological advances without disrupting ongoing programs. In the past DLA R&D has been able to cut 12 to 24 months off the project starting lead-times. Saving the lead-time allows the agency to begin to realize the benefits of implementing new technology sooner than would otherwise be the case and maintain continuity of funding and activity for baseline programs. The Program will initiate the Advanced Thermoelectric Technology project to improve the current thermoelectric heater technology so it is more fuel-efficient, has an increased heating range, reduced maintenance requirements, and a longer service life. The Advanced Thermoelectric Heater will replace the existing Space Heater Convective standard heaters currently stocked at DLA, and will provide DoD a single, versatile heater that reduces the logistics footprint and satisfies the space heating requirements of expeditionary forces. Additionally, SCM will support DLA Strategic Materials with one or more cost saving opportunities that exist for DLA via recycling and recovery initiatives.<br><br>In FY18, the AM project will be funded under PE 0603680S / Manufacturing Technology Program (ManTech) Project 7 - Improving Industrial Base Manufacturing Processes (formerly Material Availability). This realignment will maintain continuity of funding and activity for this program. | | | |

| Exhibit R-2A, RDT&E Project Justification: PB 2019 Defense Logistics Agency | | Date: February 2018 |
|---|---|---|
| **Appropriation/Budget Activity**<br>0400 / 3 | **R-1 Program Element (Number/Name)**<br>PE 0603712S / *Logistics Research and Development Technology (Log R&D)* | **Project (Number/Name)**<br>04 / *Emergent Logistics R&D Requirements (formerly Innovative Products & Services for DLA Customers)* |

| B. Accomplishments/Planned Programs ($ in Millions) | FY 2017 | FY 2018 | FY 2019 |
|---|---|---|---|
| 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.<br><br>***FY 2019 Plans:***<br>SCM will continue to address the emerging opportunities that occur in the supply chain. Initiatives will align strategically and produce benefits such as reduced operating costs, enhanced organizational responsiveness and reliability, network resiliency, and streamlined customer service. Emerging technology requirements for the medical supply chain will be addressed, as appropriate in SCM. (Mission moved from Enhancing Analysis, Modeling, and Decision Support SFA.) Additionally, SCM will complete the Advanced Thermoelectric Technology project to improve the current thermoelectric heater technology so it is more fuel-efficient, has an increased heating range, reduced maintenance requirements, and a longer service life. The Advanced Thermoelectric Heater will replace the existing Space Heater Convective standard heaters currently stocked at DLA, and will provide DoD a single, versatile heater that reduces the logistics footprint and satisfies the space heating requirements of expeditionary forces.<br><br>Strategic Materials: Program will address supply chain risks in Strategic and Critical Materials as needed to include qualifying alternate materials and sources, recycling or reclaiming strategic materials, and developing new manufacturing processes for strategic materials. Artificial Intelligence technologies applicable to logistics operations will be investigated and, where appropriate, prototyped. Applications for Block Chain technologies will be investigated and prototyped in the SCM SFA.<br><br>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 ERP program will investigate and prototype, as appropriate, drone technologies applied to the energy operations.<br><br>***FY 2018 to FY 2019 Increase/Decrease Statement:***<br>Funding increased to develop improvements in the Class IIIB fuel and energy supply chain and support research in the areas of alternative bulk liquid fuels and alternative energy for the military services. Specifically Test Method Developments/Revisions, Fuel Chemistry and Contamination Identification / Characterization, and Logistics systems Improvements/Enhancements. | | | |
| **Accomplishments/Planned Programs Subtotals** | 5.461 | 2.700 | 3.743 |

**C. Other Program Funding Summary ($ in Millions)**

N/A

| Exhibit R-2A, RDT&E Project Justification: PB 2019 Defense Logistics Agency | | Date: February 2018 |
|---|---|---|
| **Appropriation/Budget Activity**<br>0400 / 3 | **R-1 Program Element (Number/Name)**<br>PE 0603712S / *Logistics Research and Development Technology (Log R&D)* | **Project (Number/Name)**<br>04 / *Emergent Logistics R&D Requirements (formerly Innovative Products & Services for DLA Customers)* |

**C. Other Program Funding Summary ($ in Millions)**

**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.

**E. Performance Metrics**

40% of applicable projects (ex. non-studies) will transition.

| Exhibit R-2, RDT&E Budget Item Justification: PB 2019 Defense Logistics Agency | | | | | | | | | | | Date: February 2018 | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Appropriation/Budget Activity<br>0400: *Research, Development, Test & Evaluation, Defense-Wide* / BA 3: *Advanced Technology Development (ATD)* | | | | | R-1 Program Element (Number/Name)<br>PE 0603713S / *Deployment and Distribution Enterprise Technology* | | | | | | | |
| **COST ($ in Millions)** | **Prior Years** | **FY 2017** | **FY 2018** | **FY 2019 Base** | **FY 2019 OCO** | **FY 2019 Total** | **FY 2020** | **FY 2021** | **FY 2022** | **FY 2023** | **Cost To Complete** | **Total Cost** |
| Total Program Element | 175.886 | 6.618 | 0.000 | 0.000 | - | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 | 182.504 |
| 0: *Prior Years* | 62.214 | 0.000 | 0.000 | 0.000 | - | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 | 62.214 |
| 8: *Command and Control/ Optimization/Modeling and Simulation* | 73.951 | 2.000 | 0.000 | 0.000 | - | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 | 75.951 |
| 9: *Cyber* | 11.216 | 1.018 | 0.000 | 0.000 | - | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 | 12.234 |
| 10A: *Global Access* | 28.505 | 3.600 | 0.000 | 0.000 | - | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 | 32.105 |

**Note**

In FY 2017, PE 0603713S (BA3) Deployment and Distribution Enterprise Technology and PE 0603264S (BA3) Agile Transportation for the 21st Century Theater were transferred to a single PE in the Air Force budget (PE 0604776F) in order to support auditability, increase management efficiency, and reduce administrative actions.

**A. Mission Description and Budget Item Justification**

USTRANSCOM is tasked to provide globally integrated, agile deployment and distribution solutions as well as related enabling capabilities to support national security, force readiness and sustainability within an increasingly constrained defense budget. Unpredictable/extended global distribution routes, limited visibility of sustainment requirements, force packaging limitations, lift constraints, anti-access/area denial concerns, complex supply chains, as well as non-networked battlefield command and control, planning, and decision support tools impede timely customer logistical support. To project unimpeded global power and influence, USTRANSCOM must have access to relevant, real-time information, invest in enabling capabilities that contribute to mission success, ensure the viability of our capabilities, and implement a relevant transportation strategy. Effective knowledge sharing, decision support and transparency across the joint logistics enterprise, facilitated by secure enterprise-wide visibility into logistical processes as well as the ability to effectively collaborate/operate in a contested cyberspace, is required to promote the effective/efficient/ responsive global management of force projection and sustainment resources.

| Exhibit R-2, RDT&E Budget Item Justification: PB 2019 Defense Logistics Agency | Date: February 2018 |
|---|---|
| **Appropriation/Budget Activity**<br>0400: *Research, Development, Test & Evaluation, Defense-Wide I* BA 3: *Advanced Technology Development (ATD)* | **R-1 Program Element (Number/Name)**<br>PE 0603713S *I Deployment and Distribution Enterprise Technology* |

| B. Program Change Summary ($ in Millions) | FY 2017 | FY 2018 | FY 2019 Base | FY 2019 OCO | FY 2019 Total |
|---|---|---|---|---|---|
| Previous President's Budget | 0.000 | 0.000 | 0.000 | - | 0.000 |
| Current President's Budget | 6.618 | 0.000 | 0.000 | - | 0.000 |
| Total Adjustments | 6.618 | 0.000 | 0.000 | - | 0.000 |
| • Congressional General Reductions | - | - | | | |
| • Congressional Directed Reductions | - | - | | | |
| • Congressional Rescissions | - | - | | | |
| • Congressional Adds | - | - | | | |
| • Congressional Directed Transfers | - | - | | | |
| • Reprogrammings | 6.618 | - | | | |
| • SBIR/STTR Transfer | - | - | | | |

**Change Summary Explanation**

NOTE: In FY 2017, PE 0603713S (BA3) Deployment and Distribution Enterprise Technology and PE 0603264S (BA3) Agile Transportation for the 21st Century Theater were transferred to a single PE in the Air Force budget (PE 0604776F) in order to support auditability, increase management efficiency, and reduce administrative actions.

Under the FY2017 CR, this program remained in DLA's baseline. Once the budget was enacted, DLA is working, to get the funding returned from USTRANSCOM. Currently, the remaining programs awaiting the return of funds is Generic Logistics R&D (PE 30603712S) and Defense Agencies Initiatives (DAI) (PE50605080S).

| Exhibit R-2A, RDT&E Project Justification: PB 2019 Defense Logistics Agency | | | Date: February 2018 |
|---|---|---|---|
| Appropriation/Budget Activity<br>0400 / 3 | R-1 Program Element (Number/Name)<br>PE 0603713S / *Deployment and Distribution Enterprise Technology* | Project (Number/Name)<br>0 / *Prior Years* | |

| COST ($ in Millions) | Prior Years | FY 2017 | FY 2018 | FY 2019 Base | FY 2019 OCO | FY 2019 Total | FY 2020 | FY 2021 | FY 2022 | FY 2023 | Cost To Complete | Total Cost |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 0: *Prior Years* | 62.214 | 0.000 | 0.000 | 0.000 | - | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 | 62.214 |

**A. Mission Description and Budget Item Justification**

Prior Years includes:

-Capabilities Based Logistics: $7.342M. The Department requires procedures and technologies which provide enterprise-level capabilities critical to the distribution system to improve performance of the end-to-end DOD supply chain in direct support of the full range of military operations. Ability to rapidly respond to customers' changing demands, with a reliably high level of service. These needs include: capabilities which enhance any supply or transportation mission (aeromedical, air refueling, joint logistics over-the-shore, and seabasing); analysis, tailoring and implementation of selected best enterprise-level practices from industry; and tools/ procedures to optimize transportation plus supply (distribution) plans and schedules in support of an entire operation. This project addresses the required mission support to combatant commanders and other customers in the area of capability-based logistics.

-Deployment and Distribution Velocity Management: $6.869M. DOD requires procedures/technologies targeted at optimizing throughput at the nodes and through the conduits of the deployment and distribution supply chains, from origin to point of use and return to include: inventory management enhancers (includes node cargo management/tracking); materiel handling innovations (including methods of reducing handling); improved physical access to nodes (includes aircraft all-weather visual systems); port throughput enhancements (includes in-port time reduction methods); and innovative delivery methods (for example, precision airlift, autonomous re-supply). This project addresses required mission support to combatant commanders and other customers of DOD's distribution and transportation systems in the area of deployment/distribution velocity management.

-Cross Domain Intuitive Planning: $2.408M. Procedures/technologies which improve decision-making and collaboration within the supply chain, from the planning stage to real-time execution and retrograde operations, without need for highly specialized operators of the tools. Projects in this area address following areas: decision support tools for any echelon of the supply chain or decision-maker, distribution process simulations and models for analysis and training, distribution demand forecasting/execution monitoring tools, on-line training, automated decision-maker support (e.g., queuing, alerting, recommended courses of action), automated status monitoring with information fusion and drilldown capability, and resilient C2 infrastructure capabilities. This project will provide required mission support to combatant commanders and other distribution/transportation customers in the area of collaborative planning/execution/information sharing/decision support tools.

-End-to-End Visibility: $7.039M. Enhanced end-to-end visibility of all aspects of power projection/sustainment spectrum is required to improve the effectiveness/efficiency of deployment/distribution/redeployment operations to ensure warfighter support and confidence. This requires investigation into next generation Automated Information Technology (AIT)/Total Asset Visibility (TAV) technologies and/or container security to improve end-to-end distribution visibility, enhance planning/execution, and transform sustainment operations. Includes the ability to determine immediate, reliable, and accurate shipment status through system access or event management. Develop an over-arching process/system architecture which will integrate existing and innovative new programs across the supply chain to provide complete In Transit Visibility (ITV) data, to include visibility of non-DoD cargo during humanitarian/disaster relief operations. The ability of USTRANSCOM to supply transportation support for homeland defense and/or disaster relief depends on effective ways to link with other governmental and civilian agencies. Additionally need to explore the many

| Exhibit R-2A, RDT&E Project Justification: PB 2019 Defense Logistics Agency | | Date: February 2018 |
|---|---|---|
| **Appropriation/Budget Activity**<br>0400 / 3 | **R-1 Program Element (Number/Name)**<br>PE 0603713S / *Deployment and Distribution Enterprise Technology* | **Project (Number/Name)**<br>0 / *Prior Years* |

barriers across the Joint Deployment and Distribution Enterprise (JDDE), to include non-DoD government entities, coalition partners, non-government organizations, and commercial industry, which can create confusion/conflict or detract from the optimization of the JDDE.

-Distribution Planning and Forecasting: $8.504M. There is a lack of collaborative distribution planning, based on an understanding of aggregated customer requirements, for optimizing the end-to-end distribution process. Planning, forecasting and collaboration are insufficiently advanced to fully synchronize people, processes and assets to execute planned operations. Automated tools should be able to dynamically analyze/predict demand and provide input to advanced distribution planning systems. Project investigates the need for flexible end-to-end enhanced modeling and simulation and collaborative decision support tools.

-Joint Transportation Interface: $14.917M. Synchronizing strategic/theater delivery capabilities to meet increasingly dynamic customer needs. Transportation information exchange across the DOD is inhibited by the disparity of systems, differing data standards, and insufficient interfaces. Queries and retrieval of status and shipment information cannot be executed due to lack of connectivity between the various components of the supply chain. The ability to maintain situational awareness of movements at macro/micro (drill down) levels, with associated force and sustainment cargo on board; to track force packages progress, and rapidly determine the impact of any delays or changes to sailing progress and arrival at port of debarkation; and to conduct "what -if" impact assessment of possible changes to delivery asset's course, speed or departure/arrival information as it relates to force or force package delivery/impact of any change on the closure of force packages in theater is required. The ability of USTRANSCOM to supply transportation support for homeland defense and/or disaster relief depends on effective ways to link with other governmental and civilian agencies. Also need to explore the many barriers across the Joint Deployment and Distribution Enterprise (JDDE), to include non-DOD government entities, coalition partners, non-government organizations, and commercial industry, which can create confusion/conflict or detract from the optimization of the JDDE.

-Distribution Protection/Safety/Security: $15.135M. The Theater Commander has not always been able to provide the appropriate security in a timely manner during deployment. In some cases there are insufficient security assets to oversee convoy security in-country; therefore, all movement requirements are competing for the same limited resources. Additionally need to explore new, portable methods of detecting hazardous/asymmetric materials in very small quantities to support safe logistics operations. Also explore technologies to enhance the capability to deliver personnel/materiel to anti-access/austere airfields and seaports.

| Exhibit R-2A, RDT&E Project Justification: PB 2019 Defense Logistics Agency | | | Date: February 2018 |
|---|---|---|---|
| **Appropriation/Budget Activity**<br>0400 / 3 | **R-1 Program Element (Number/Name)**<br>PE 0603713S / *Deployment and Distribution Enterprise Technology* | **Project (Number/Name)**<br>8 / *Command and Control/Optimization/ Modeling and Simulation* | |

| COST ($ in Millions) | Prior Years | FY 2017 | FY 2018 | FY 2019 Base | FY 2019 OCO | FY 2019 Total | FY 2020 | FY 2021 | FY 2022 | FY 2023 | Cost To Complete | Total Cost |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 8: *Command and Control/ Optimization/Modeling and Simulation* | 73.951 | 2.000 | 0.000 | 0.000 | - | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 | 75.951 |

**A. Mission Description and Budget Item Justification**

Capabilities which improve deployment, distribution and supply chain decision-making/collaboration (e.g., planning stage to real-time execution/retrograde operations) without need for highly specialized operators. Projects in this area address the following: decision support tools, distribution process simulations/analytics, distribution demand forecasting/execution monitoring, training, automated decision-maker support (e.g., queuing, alerting, courses of action), automated status monitoring with information fusion to include drilldown capability, and resilient C2 infrastructure capabilities. Current planning/forecasting/collaboration capabilities do not permit full synchronization of people, processes and assets to execute planned operations. Automated tools must be able to dynamically analyze/predict demand and provide input to advanced distribution planning systems to include the capability for Combatant Commanders to manage theater transportation operations from the port of debarkation to the point of need. Transportation information exchange across the DOD is inhibited by disparate systems, multiple data standards and insufficient interfaces. The ability to rapidly determine the impact of any delays/changes and conduct "what -if" impact assessments on the closure of force packages is required. This project addresses the required mission support to combatant commanders and other customers in the area of C2, Optimization, and Modeling and Simulations.

| Exhibit R-2A, RDT&E Project Justification: PB 2019 Defense Logistics Agency | | | Date: February 2018 |
|---|---|---|---|
| Appropriation/Budget Activity<br>0400 / 3 | R-1 Program Element (Number/Name)<br>PE 0603713S / *Deployment and Distribution Enterprise Technology* | Project (Number/Name)<br>9 / *Cyber* | |

| COST ($ in Millions) | Prior Years | FY 2017 | FY 2018 | FY 2019 Base | FY 2019 OCO | FY 2019 Total | FY 2020 | FY 2021 | FY 2022 | FY 2023 | Cost To Complete | Total Cost |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 9: *Cyber* | 11.216 | 1.018 | 0.000 | 0.000 | - | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 | 12.234 |

**A. Mission Description and Budget Item Justification**

USTRANSCOM requires mission assurance in a persuasive/dynamic cyber environment. USTRANSCOM requires the procedures/technologies to improve cyber surveillance and control of networks across multiple domains and the ability to continue critical network operations in contested unclassified and classified network environments. The Command also needs the ability to differentiate between valid/unauthorized users and determine/quantify the trustworthiness of hardware/software systems. Additionally must have the ability to rapidly analyze & correlate data regarding malicious activities, select/evoke real-time defense actuators, perform automated reasoning capabilities that address data quality issues, and the ability to rapidly return to a known/safe operating state.

| Exhibit R-2A, RDT&E Project Justification: PB 2019 Defense Logistics Agency | | | Date: February 2018 |
|---|---|---|---|
| **Appropriation/Budget Activity**<br>0400 / 3 | **R-1 Program Element (Number/Name)**<br>PE 0603713S / *Deployment and Distribution Enterprise Technology* | **Project (Number/Name)**<br>10A / *Global Access* | |

| COST ($ in Millions) | Prior Years | FY 2017 | FY 2018 | FY 2019 Base | FY 2019 OCO | FY 2019 Total | FY 2020 | FY 2021 | FY 2022 | FY 2023 | Cost To Complete | Total Cost |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 10A: *Global Access* | 28.505 | 3.600 | 0.000 | 0.000 | - | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 | 32.105 |

**A. Mission Description and Budget Item Justification**

DoD requires procedures/technologies targeted at optimizing throughput at the nodes as well as across the conduits of the deployment and distribution supply chains, from origin to point of use as well as return. Needed capabilities include inventory/cargo management, materiel handling innovations, improved physical node access, port throughput enhancements, innovative delivery methods (e.g., precision airlift, autonomous re-supply), and cargo/container security. This project addresses required mission support to combatant commanders and other customers of DoD's distribution and transportation systems in the area of deployment/distribution velocity management, manned/unmanned systems to the point of effect, and increased global reach in austere/anti-access environments.

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| Exhibit R-2, RDT&E Budget Item Justification: PB 2019 Defense Logistics Agency | Date: February 2018 |
|---|---|
| **Appropriation/Budget Activity**<br>0400: *Research, Development, Test & Evaluation, Defense-Wide* / BA 3: *Advanced Technology Development (ATD)* | **R-1 Program Element (Number/Name)**<br>PE 0603720S / *Microelectronics Technology Development and Support (DMEA)* |

| COST ($ in Millions) | Prior Years | FY 2017 | FY 2018 | FY 2019 Base | FY 2019 OCO | FY 2019 Total | FY 2020 | FY 2021 | FY 2022 | FY 2023 | Cost To Complete | Total Cost |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Total Program Element | 392.266 | 88.369 | 219.803 | 168.931 | - | 168.931 | 172.442 | 157.720 | 160.280 | 170.393 | Continuing | Continuing |
| 001: *Technology Development* | 216.668 | 44.833 | 133.074 | 73.471 | - | 73.471 | 75.111 | 59.200 | 60.169 | 61.210 | Continuing | Continuing |
| 003: *Trusted Foundry* | 175.598 | 43.536 | 86.729 | 95.460 | - | 95.460 | 97.331 | 98.520 | 100.111 | 109.183 | Continuing | Continuing |

**A. Mission Description and Budget Item Justification**

The Department finds it critical to National Security to maintain an ability to produce low volume state-of-the-practice (SOTP) and legacy microelectronics that are unavailable from commercial foundries. The Defense Microelectronics Activity (DMEA) uniquely accomplishes this mission for the Department by providing a guaranteed and Trusted source of supply of microelectronics parts that are essential to combat operations. In addition DMEA provides the rare technology capability to bridge the gap between research and application allowing DMEA to develop, manage and implement innovative microelectronic solutions to enhance mission capability. This unique research and engineering capability will be leveraged to develop low-volume, high mix fabrication processes for state-of-the-art (SOTA) technologies that meet the Department's performance and reliability needs.

This is a critical capability in an atmosphere of diminishing domestic semiconductor manufacturing capability and increasing worldwide supply chain risks with threats to defense microelectronics. Trusted access to SOTA technologies remains a major challenge and therefore it is most important to develop a long term Trusted source for the Department. Threats to Defense Microelectronics include counterfeiting, Trojan horses, specific reliability issues in military environments, and rapid obsolescence coming from an unpredictable and unsecured supply chain. As fiscal pressures force the Department to maintain its weapon systems longer than originally planned, extended combat use increases their attrition and increases the need for DMEA's unique capabilities.

Microelectronics is a crucial technology and central for all operations within the Department. Yet, as vital as this technology is to Department operations, the defense market represents less than 0.1% share of the total global semiconductor market. The Department frequently requires low volume SOTP and legacy microelectronics long after commercial foundries have moved on to advanced technology levels. There is also the major challenge of the ability of Defense R&D Programs to access Trusted SOTA technologies when developing new systems. Consequently, the semiconductor industry does not respond to the Department's particular needs of low volumes, long availability time frames, or its high-level security concerns. To meet these requirements, DMEA procures commercial licenses to organically produce semiconductor technologies that are no longer commercially manufactured or are unavailable due to no-bids owing to low volume requirements. These licenses enable DMEA to be the Department's microelectronics supplier of last resort, providing the Department with a long-term, trusted, and guaranteed source of these critical parts. This proven model can be extended to SOTA technologies by acquiring advanced commercial process Intellectual Property (IP) and implementing it in a copy exact approach.

DMEA provides increasingly rare microelectronics design and fabrication expertise to ensure that the Department can field systems capable of ensuring technological superiority over potential adversaries. DMEA provides decisive, quick turn solutions for defense, intelligence, special operations, cyber and combat missions as well as microelectronic components that are unobtainable in the commercial market. DMEA has established increased ties with the Intelligence Community (IC) and Combatant Commanders to understand their specific threats and opportunities that can be exploited by quicker, more resilient microelectronic solutions. This knowledge of varying

| Exhibit R-2, RDT&E Budget Item Justification: PB 2019 Defense Logistics Agency | Date: February 2018 |
|---|---|
| **Appropriation/Budget Activity**<br>0400: *Research, Development, Test & Evaluation, Defense-Wide I* BA 3: *Advanced Technology Development (ATD)* | **R-1 Program Element (Number/Name)**<br>PE 0603720S *I Microelectronics Technology Development and Support (DMEA)* |

requirements across a broad and diverse range of combatant environments and missions – along with its unique technical perspective – allows DMEA to develop, manage and implement novel microelectronic solutions to enhance mission capability. DMEA uses these cutting-edge technology capabilities and products in the solutions it develops for its military clientele. After many years of performing analogous efforts, the technical experience, mission knowledge, and practical judgment that are gained from preceding efforts are incorporated into subsequent technology maturation projects. DMEA has years of experience understanding the maturity of US and world microelectronics technology and knows what it takes to adapt the technology for the US warfighter. Based on the results of the knowledge DMEA acquires through technology forecasting, effective modeling/simulation, prototyping and experimentation, DMEA influences program requirements with recommended improvements and advancements. DMEA's capabilities make it a key tool that can be leveraged by the entire US Government in the intelligent and rapid development and application of advanced technologies to identified military needs.

Working alongside industry, DMEA utilizes a business model that establishes a pathway that accelerates the delivery of superior semiconductor technologies. DMEA's uniquely flexible foundry supports the Department with a wide variety of integrated circuits using various processes that were developed by commercial manufacturers and which are now guaranteed to remain in one location for as long as they are needed. To obtain these processes, DMEA works closely with U.S. semiconductor industry partners to acquire process licenses. DMEA incorporates commercial technology, along with accelerated acquisition methods to accelerate delivery of needed capability. In this way, DMEA revolutionizes the way the Department leverages commercial technology by exploiting business-cycle opportunities to access these technologies. In this way, the government ensures perpetual access to this technology without bearing the high, upfront process development and qualification costs.

These Government-held licenses allow for the transfer to DMEA of industry-developed IP and the related processes for Department needs. These licenses ensure no commercial conflicts by including industry's right to bid first on resulting production volumes. DMEA always looks to industry first to see if it can provide the required components. If industry cannot or will not, only then does DMEA provide the necessary prototypes and low volume production order. A critical element required to make this business model work effectively is protection of the industry partners' valuable IP and processes. DMEA is Government owned and operated, providing the structure and confidence necessary to ensure them that their 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. This includes the Counter-Rocket, Artillery, and Mortar (C-RAM) System, F-18 Super Hornet, F-22 Raptor, F-35, RQ-4 Global Hawk, MQ-9 Reaper, AEGIS Advanced Surface Missile System, Advanced Medium-Range Air-to-Air Missile (AMRAAM), HH-60G Pave Hawk Helicopter, Evolved Sea Sparrow Missile (ESSM), among many other programs. DMEA assists the Combatant Commands (COCOMs) including Special Ops, Cyber, Intelligence, and the Radiation-Hard communities.

| Exhibit R-2, RDT&E Budget Item Justification: PB 2019 Defense Logistics Agency | Date: February 2018 |
|---|---|
| **Appropriation/Budget Activity**<br>0400: *Research, Development, Test & Evaluation, Defense-Wide I* BA 3: *Advanced Technology Development (ATD)* | **R-1 Program Element (Number/Name)**<br>PE 0603720S *I Microelectronics Technology Development and Support (DMEA)* |

| B. Program Change Summary ($ in Millions) | FY 2017 | FY 2018 | FY 2019 Base | FY 2019 OCO | FY 2019 Total |
|---|---|---|---|---|---|
| Previous President's Budget | 97.826 | 219.803 | 99.734 | - | 99.734 |
| Current President's Budget | 88.369 | 219.803 | 168.931 | - | 168.931 |
| Total Adjustments | -9.457 | 0.000 | 69.197 | - | 69.197 |
| • Congressional General Reductions | - | - | | | |
| • Congressional Directed Reductions | - | - | | | |
| • Congressional Rescissions | -8.000 | - | | | |
| • Congressional Adds | - | - | | | |
| • Congressional Directed Transfers | - | - | | | |
| • Reprogrammings | - | - | | | |
| • SBIR/STTR Transfer | -1.457 | - | | | |
| • Inflation Adjustment | - | - | -0.963 | - | -0.963 |
| • Program Requirements Increase | - | - | 70.160 | - | 70.160 |

**Change Summary Explanation**

DMEA received a Congressional Rescission in the amount of $8M for unobligated balances. In FY2017, the Small Business Innovation Research and Small Technology Transfer Research tax amounted to $1.457M.

Inflation adjustments for Non-Pay/Non-Fuel Pay purchases and Civilian Pay decreased the program baseline in FY2019. The FY2019 increases for continued support for the top four FY2018 microelectronics initiatives, including full access to the GlobalFoundries Fab 8 (14 nm) foundry, associated upgrades to GlobalFoundries's ASIC design, tape-in, and test capabilities to facilitate 14 nm designs for weapon system program support (e.g., Military Global Positioning System (GPS) User Equipment (MGUE), and procurement of foundry process intellectual property.

| Exhibit R-2A, RDT&E Project Justification: PB 2019 Defense Logistics Agency | | | Date: February 2018 |
|---|---|---|---|
| Appropriation/Budget Activity<br>0400 / 3 | R-1 Program Element (Number/Name)<br>PE 0603720S / *Microelectronics Technology Development and Support (DMEA)* | Project (Number/Name)<br>001 / *Technology Development* | |

| COST ($ in Millions) | Prior Years | FY 2017 | FY 2018 | FY 2019 Base | FY 2019 OCO | FY 2019 Total | FY 2020 | FY 2021 | FY 2022 | FY 2023 | Cost To Complete | Total Cost |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 001: *Technology Development* | 216.668 | 44.833 | 133.074 | 73.471 | - | 73.471 | 75.111 | 59.200 | 60.169 | 61.210 | Continuing | Continuing |

**A. Mission Description and Budget Item Justification**

The Technology Development funds provide DMEA with the core resources to execute its primary mission of providing an in-house ability to quickly develop and execute appropriate solutions to keep a weapon system operational, elevate its sophistication level, or to meet new threats. These solutions use high mix, low volume, unique microelectronics that are endemic to military requirements but are not commercially available. These funds provide for the development and support necessary to ensure rapid prototyping, insertion, and support of microelectronics technologies into fielded systems, particularly as the technologies advance. Extending this mission to include assured access to Trusted state-of-the-art (SOTA) technologies will more comprehensively ensure the integrity of microelectronics in all critical defense systems. DMEA maintains critical microelectronics design and fabrication skills to ensure that the Department is provided with systems capable of ensuring technological superiority over potential adversaries. DMEA provides an in-house capability to support these strategically important microelectronics technologies with distinctive resources to meet the Department's requirements across the entire spectrum of technology development, acquisition, and long-term support. This includes producing components to meet the Department's requirements for ultra-low volume, an extended availability timeframe, and a trusted, guaranteed and secure supply of microelectronics. These funds provide basic infrastructure upgrades to acquire IP and manufacturing capabilities of SOTA technologies via the copy exact model, as well as an in-house technical staff of skilled and experienced microelectronics personnel working in state-of-the-practice facilities providing technical and application engineering support for the implementation of advanced microelectronics research technologies from inspection and analysis through design, fabrication, test, assembly, integration and installation. These funds also provide for the recapitalization and modernization of aging microelectronic infrastructure, acquisition and implementation of design and test tools, the development of advanced techniques to inspect and analyze circuits, the adaptation of tools and processes to detect increasingly sophisticated counterfeit microelectronics in the defense supply chain, and the incorporation of the process technologies that are necessary to anticipate the needs of the Department as weapon system support requirements migrate toward current state-of-the-art technologies. DMEA's capabilities make it a key resource in the intelligent and rapid application of advanced technologies to add needed performance enhancements in response to the newest asymmetric threats and to modernize aging weapon systems. DMEA designs, develops, and supports vital classified assets for ongoing and time-sensitive specialized intelligence operations and missions of the Department and the Special Operations Commands.

Today's weapon systems experience extended field operations and are required to remain in service beyond planned replacement schedules, driving the need for growth in DMEA's unique capabilities. This need, along with the continual contraction of commercial resources, makes DMEA the only available resource allowing many systems to remain operational. As such, DMEA and its capability are considered National Critical Assets.

| B. Accomplishments/Planned Programs ($ in Millions) | FY 2017 | FY 2018 | FY 2019 |
|---|---|---|---|
| ***Title:*** Technology Development Accomplishments/Plans | 44.833 | 133.074 | 73.471 |
| ***FY 2018 Plans:***<br>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 | | | |

| Exhibit R-2A, RDT&E Project Justification: PB 2019 Defense Logistics Agency | | Date: February 2018 |
|---|---|---|
| **Appropriation/Budget Activity**<br>0400 / 3 | **R-1 Program Element (Number/Name)**<br>PE 0603720S / *Microelectronics Technology Development and Support (DMEA)* | **Project (Number/Name)**<br>001 / *Technology Development* |

| B. Accomplishments/Planned Programs ($ in Millions) | FY 2017 | FY 2018 | FY 2019 |
|---|---|---|---|
| asymmetric threats and to modernize aging weapon systems. The increased missions seen in the last several years by Combatant Commands (CCMDs) and Special Operations 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 capability by recapitalizing and modernizing aging microelectronic infrastructure, extending and upgrading process IP, 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. DMEA will complete installation of the cleanroom in the 200mm facility, and will begin installation of semiconductor fabrication equipment in the completed cleanroom. DMEA will procure critical 200mm process IP for integration into the 200mm facility.<br>***FY 2019 Plans:***<br>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) and Special Operations 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 capability by recapitalizing and modernizing aging microelectronic infrastructure, extending and upgrading process IP, 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. DMEA will complete installation of the cleanroom in the 200mm facility, and will begin installation of semiconductor fabrication equipment in the completed cleanroom. DMEA will start integration of the critical 200mm process IP into the 200mm facility.<br>***FY 2018 to FY 2019 Increase/Decrease Statement:***<br>FY2019 program decrease reflects a discontinuity in funding for certain FY2018 microelectronics initiatives, including the procurement and integration of 200mm foundry process intellectual property. | | | |
| **Accomplishments/Planned Programs Subtotals** | 44.833 | 133.074 | 73.471 |

**C. Other Program Funding Summary ($ in Millions)**

N/A

**Remarks**

**D. Acquisition Strategy**

N/A

| Exhibit R-2A, RDT&E Project Justification: PB 2019 Defense Logistics Agency | | Date: February 2018 |
|---|---|---|
| **Appropriation/Budget Activity**<br>0400 / 3 | **R-1 Program Element (Number/Name)**<br>PE 0603720S / *Microelectronics Technology Development and Support (DMEA)* | **Project (Number/Name)**<br>001 / *Technology Development* |

**E. Performance Metrics**

N/A

| Exhibit R-2A, RDT&E Project Justification: PB 2019 Defense Logistics Agency | | | Date: February 2018 |
|---|---|---|---|
| Appropriation/Budget Activity<br>0400 / 3 | R-1 Program Element (Number/Name)<br>PE 0603720S / *Microelectronics Technology Development and Support (DMEA)* | Project (Number/Name)<br>003 / *Trusted Foundry* | |

| COST ($ in Millions) | Prior Years | FY 2017 | FY 2018 | FY 2019 Base | FY 2019 OCO | FY 2019 Total | FY 2020 | FY 2021 | FY 2022 | FY 2023 | Cost To Complete | Total Cost |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 003: *Trusted Foundry* | 175.598 | 43.536 | 86.729 | 95.460 | - | 95.460 | 97.331 | 98.520 | 100.111 | 109.183 | Continuing | Continuing |

**A. Mission Description and Budget Item Justification**

The Department, other agencies, and the intelligence community require uninterruptible access to state-of-the-art design and manufacturing processes to produce custom integrated circuits designed specifically for military purposes. Under DoDI 5200.44, Application Specific Integrated Circuits (ASICs) in critical/essential systems must be procured from Trusted sources in order to avoid altered or sabotaged parts. Worldwide competition from foreign, state-subsidized manufacturing facilities continues to greatly reduce the number of U.S. semiconductor fabrication facilities available to be Trusted sources. The prevalence of sophisticated offshore design and manufacturing facilities with economic incentives of state subsidies have resulted in the outsourcing of electronics component and integrated circuit services to these offshore facilities. This production capability is of increasing importance as domestic semiconductor manufacturing resources continue to decline, especially in the scarce domestic production capacity of high performance and state-of-the-art semiconductor technologies. Commercial sources of microelectronics remain inherently unpredictable and constitute a continued supply chain risk regardless of Government investment. This trend threatens the integrity and worldwide leadership of the U.S. semiconductor industry by eliminating many domestic suppliers and reducing access to Trusted fabrication sources for advanced technologies, and is of acute concern to the defense and intelligence communities. Secure communications and cryptographic applications, along with most other key defense technologies, depend heavily upon 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. 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 2017 | FY 2018 | FY 2019 |
|---|---|---|---|
| ***Title:*** Trusted Foundry | 43.536 | 86.729 | 95.460 |
| ***FY 2018 Plans:***<br>Facilitate the availability of Trusted state-of-the-art semiconductor technology to DoD weapon system programs, research organizations, and other federal agencies through the DMEA Trusted Access Program Office (TAPO) contracts. Initiate efforts to extend Trusted access to 14 nm technology, including the securing of mask manufacturing and upgrading of Trusted ASIC design and test capabilities and capacity to facilitate 14 nm ASIC services needed by multiple DoD programs. Enhance the cadre | | | |

| Exhibit R-2A, RDT&E Project Justification: PB 2019 Defense Logistics Agency | | Date: February 2018 |
|---|---|---|
| **Appropriation/Budget Activity**<br>0400 / 3 | **R-1 Program Element (Number/Name)**<br>PE 0603720S / *Microelectronics Technology Development and Support (DMEA)* | **Project (Number/Name)**<br>003 / *Trusted Foundry* |

| B. Accomplishments/Planned Programs ($ in Millions) | FY 2017 | FY 2018 | FY 2019 |
|---|---|---|---|
| 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 provide the Department's programs and other agencies with Trusted access to leading edge semiconductor technologies. Start implementation of an approach for the on-shore fabrication of a Trusted Field-Programmable Gate Array (FPGA). Continue the development of capabilities for the inspection and analysis of ASICs and continuously refine the utilized methods for efficiency, accuracy, and applicability to multiple processes.<br>***FY 2019 Plans:***<br>Facilitate the availability of Trusted state-of-the-art semiconductor technology to DoD weapon system programs, research organizations, and other federal agencies through the DMEA Trusted Access Program Office (TAPO) contracts. Continue efforts to extend Trusted access to 14 nm technology for USG use through the TAPO contracts, and to provide access to 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.<br>***FY 2018 to FY 2019 Increase/Decrease Statement:***<br>FY2019 program decrease reflects a discontinuity in funding for certain FY2018 microelectronics initiatives, including access to the GlobalFoundries 14 nm foundry. | | | |
| **Accomplishments/Planned Programs Subtotals** | 43.536 | 86.729 | 95.460 |

**C. Other Program Funding Summary ($ in Millions)**

N/A

**Remarks**

**D. Acquisition Strategy**

N/A

**E. Performance Metrics**

N/A

| Exhibit R-2, RDT&E Budget Item Justification: PB 2019 Defense Logistics Agency | Date: February 2018 |
|---|---|
| **Appropriation/Budget Activity**<br>0400: *Research, Development, Test & Evaluation, Defense-Wide I* BA 5: *System Development & Demonstration (SDD)* | **R-1 Program Element (Number/Name)**<br>PE 0605070S *I DoD Enterprise Systems Development and Demonstration* |

| COST ($ in Millions) | Prior Years | FY 2017 | FY 2018 | FY 2019 Base | FY 2019 OCO | FY 2019 Total | FY 2020 | FY 2021 | FY 2022 | FY 2023 | Cost To Complete | Total Cost |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Total Program Element | 117.472 | 3.661 | 6.266 | 3.173 | - | 3.173 | 2.378 | 1.486 | 0.743 | 0.757 | Continuing | Continuing |
| 0: *Prior Years* | 100.112 | 0.000 | 0.000 | 0.000 | - | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 | Continuing | Continuing |
| 09: *Enterprise Funds Distribution* | 17.360 | 3.661 | 6.266 | 3.173 | - | 3.173 | 2.378 | 1.486 | 0.743 | 0.757 | 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). The DLA recognizes that DoD's business enterprise must be closer to its warfighting customers than ever before. Joint military requirements drive the need for greater commonality and integration of business and financial operations.

| B. Program Change Summary ($ in Millions) | FY 2017 | FY 2018 | FY 2019 Base | FY 2019 OCO | FY 2019 Total |
|---|---|---|---|---|---|
| Previous President's Budget | 5.660 | 6.266 | 3.200 | - | 3.200 |
| Current President's Budget | 3.661 | 6.266 | 3.173 | - | 3.173 |
| Total Adjustments | -1.999 | 0.000 | -0.027 | - | -0.027 |
| • Congressional General Reductions | - | - | | | |
| • Congressional Directed Reductions | - | - | | | |
| • Congressional Rescissions | - | - | | | |
| • Congressional Adds | - | - | | | |
| • Congressional Directed Transfers | - | - | | | |
| • Reprogrammings | - | - | | | |
| • SBIR/STTR Transfer | -0.139 | - | | | |
| • FY 2017 Request for Additional Appropriations Not Addressed | -1.860 | - | - | - | - |
| • Inflation Adjustment | - | - | -0.027 | - | -0.027 |

**Change Summary Explanation**

In FY2017, the Small Business Innovation Research and Small Technology Transfer Research tax amounted to $0.139M. In FY2017, EFD request for additional appropriations was not addressed.

Inflation adjustments for Non-Pay/Non-Fuel Pay purchases and Civilian Pay decreased the program baseline in FY2019.

| Exhibit R-2A, RDT&E Project Justification: PB 2019 Defense Logistics Agency | | | Date: February 2018 |
|---|---|---|---|
| Appropriation/Budget Activity<br>0400 / 5 | R-1 Program Element (Number/Name)<br>PE 0605070S / *DoD Enterprise Systems Development and Demonstration* | Project (Number/Name)<br>0 / *Prior Years* | |

| COST ($ in Millions) | Prior Years | FY 2017 | FY 2018 | FY 2019 Base | FY 2019 OCO | FY 2019 Total | FY 2020 | FY 2021 | FY 2022 | FY 2023 | Cost To Complete | Total Cost |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 0: *Prior Years* | 100.112 | 0.000 | 0.000 | 0.000 | - | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 | Continuing | Continuing |
| Quantity of RDT&E Articles | - | - | - | - | - | - | - | - | - | - | | |

**A. Mission Description and Budget Item Justification**

Prior Year includes:

-Business Enterprise Information Services (BEIS): $13.360M. The BEIS utilized the mature, existing infrastructure of Defense Corporate Database/Defense Corporate Warehouse (DCD/DCW), Defense Departmental Reporting System (DDRS), and Defense Cash Accountability System (DCAS) to provide timely, accurate, and reliable business information from across the DoD to support auditable financial statements as well as provide detailed information visibility for management in support of the Warfighter. The goals of BEIS were to ensure data compliance with Standard Financial Information Structure (SFIS) standards; provide security-defined, enterprise-level access to information for ad hoc management queries; and produce external financial management reports/statements based on standardized data.

-Defense Information System for Security (DISS): $70.319M. The DISS program was a family of systems solution that specifically addresses the security clearance and suitability determinations requirements of Section 3001 of Public Law 108-458, the Intelligence Reform and Terrorism Prevention Act of 2004 (IRTPA) which requires 90% of all clearances – whether Top Secret, Secret, or Confidential – to be completed within 60 days, as well as supports Homeland Security Presidential Directive 12 (HSPD-12) compliance across the DoD. The DISS electronically collects, reviews, and shares relevant data, government-wide, as mandated by the IRPTA and, guided by relevant Executive Orders, Congress, and GAO recommendations, deliver and maintain an appropriately vetted world-class workforce.

-Defense Travel System (DTS): $1.423M. The DTS program was a fully integrated, electronic, end-to-end financial management system that automates temporary duty travel for the Department of Defense (DoD). DTS meets unique DoD mission, security and financial system requirements within the guidelines of Federal and DoD travel policies and regulations. DTS automates travel authorizations, reservations and arrangements, voucher processing, payment, reconciliation, accountability and archiving. DTS employs Digital Signature and Login/Authentication which requires users to provide a signed response using a valid DoD Public Key Infrastructure (PKI) certificate to gain access to the DTS application. Travel documents created in DTS are digitally signed with the user's PKI certificate to provide a means of identifying the signer, verifying the document's integrity, and enforcing non-repudiation of the signature by the signer.

-Defense Retired and Annuitant Pay System (DRAS): $15.010M. The DRAS program established and maintained a modernized retired military pay accounts. DRAS 2 will replace the current Defense Retiree and Annuitant Systems (DRAS) and selected manual processes with proven state of the market technology using Clinger-Cohen guidance for selection of the solution. Rapid fielding techniques will be used to close business process gaps by delivering incremental capability that provides clear financial benefits.

| Exhibit R-2A, RDT&E Project Justification: PB 2019 Defense Logistics Agency | | | Date: February 2018 |
|---|---|---|---|
| Appropriation/Budget Activity<br>0400 / 5 | R-1 Program Element (Number/Name)<br>PE 0605070S / *DoD Enterprise Systems Development and Demonstration* | Project (Number/Name)<br>09 / *Enterprise Funds Distribution* | |

| COST ($ in Millions) | Prior Years | FY 2017 | FY 2018 | FY 2019 Base | FY 2019 OCO | FY 2019 Total | FY 2020 | FY 2021 | FY 2022 | FY 2023 | Cost To Complete | Total Cost |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 09: *Enterprise Funds Distribution* | 17.360 | 3.661 | 6.266 | 3.173 | - | 3.173 | 2.378 | 1.486 | 0.743 | 0.757 | Continuing | Continuing |
| Quantity of RDT&E Articles | - | - | - | - | - | - | - | - | - | - | | |

**A. Mission Description and Budget Item Justification**

Enterprise Funds Distribution (EFD) is a multi-service/multi-agency solution established as a key initiative to provide full visibility of funds distributed through echelon I and II for the Military Departments and at all levels for the Defense Agencies to improve and modernize the OUSD(C) funds distribution process. 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 2017 | FY 2018 | FY 2019 |
|---|---|---|---|
| ***Title:*** Enterprise Funds Distribution (EFD) | 3.661 | 6.266 | 3.173 |
| ***Description:*** EFD will distribute funds to the Military Departments and the Defense Agencies. | | | |
| ***FY 2018 Plans:*** | | | |

| Exhibit R-2A, RDT&E Project Justification: PB 2019 Defense Logistics Agency | | Date: February 2018 |
|---|---|---|
| **Appropriation/Budget Activity**<br>0400 / 5 | **R-1 Program Element (Number/Name)**<br>PE 0605070S / *DoD Enterprise Systems Development and Demonstration* | **Project (Number/Name)**<br>09 / *Enterprise Funds Distribution* |

| B. Accomplishments/Planned Programs ($ in Millions) | FY 2017 | FY 2018 | FY 2019 |
|---|---|---|---|
| Continue development and deployment of EFD Phase 2 requirements based on user group migration strategy. Deploy user migration wave 1<br>***FY 2019 Plans:***<br>Continue development and deployment of EFD Phase 2 requirements based on user group migration strategy. Deploy user migration wave 2<br>***FY 2018 to FY 2019 Increase/Decrease Statement:***<br>FY2019 is lower due to the majority of EFD's development to be completed in FY2018 and the primary focused to be on Wave II user migration and their required changes. | | | |
| **Accomplishments/Planned Programs Subtotals** | 3.661 | 6.266 | 3.173 |

**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 needed to ensure EFD is fully implemented for all appropriation data for the Military Services and Defense Organizations has led to a full deployment date of September 2016.

**E. Performance Metrics**

For performance, the objective is that 100% of the SFIS elements are SFIS compliant at FD.

| Exhibit R-3, RDT&E Project Cost Analysis: PB 2019 Defense Logistics Agency | | Date: February 2018 |
|---|---|---|
| **Appropriation/Budget Activity**<br>0400 / 5 | **R-1 Program Element (Number/Name)**<br>PE 0605070S / *DoD Enterprise Systems Development and Demonstration* | **Project (Number/Name)**<br>09 / *Enterprise Funds Distribution* |

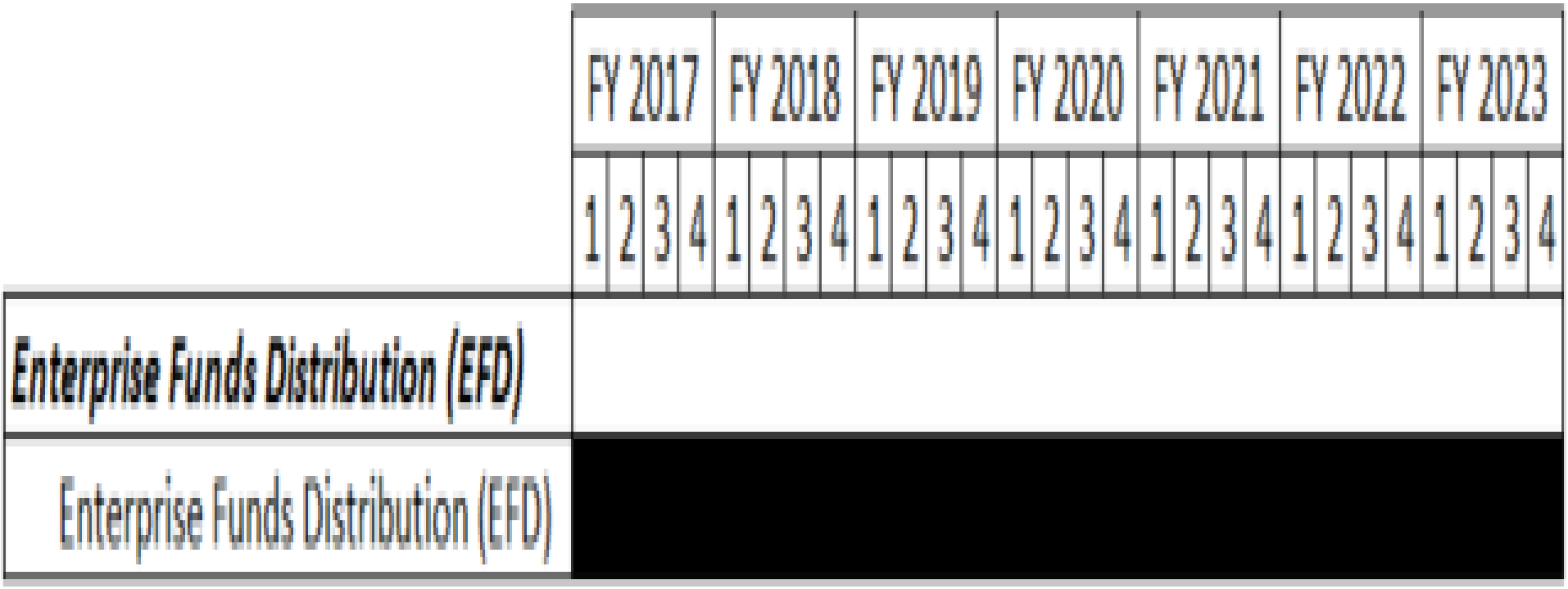
**Product Development ($ in Millions)**

| Cost Category Item | Contract Method & Type | Performing Activity & Location | Prior Years | FY 2017 Cost | FY 2017 Award Date | FY 2018 Cost | FY 2018 Award Date | FY 2019 Base Cost | FY 2019 Base Award Date | FY 2019 OCO Cost | FY 2019 OCO Award Date | FY 2019 Total Cost | Cost To Complete | Total Cost | Target Value of Contract |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Savantage Solutions | Option/ FP | Savantage Solutions : Rockville, MD | 14.158 | 0.000 | | 0.000 | | 0.000 | | 0.000 | | 0.000 | 0.000 | 14.158 | 14.158 |
| TeraThink Corporation | C/FFP | TeraThink Corporation : Reston, VA | 1.710 | 3.661 | Dec 2016 | 6.266 | Dec 2017 | 3.173 | Dec 2018 | 0.000 | | 3.173 | Continuing | Continuing | Continuing |
| TBD | C/FFP | TBD : TBD | 1.492 | 0.000 | | 0.000 | | 0.000 | | 0.000 | | 0.000 | 0.000 | 1.492 | 1.492 |
| | | **Subtotal** | 17.360 | 3.661 | | 6.266 | | 3.173 | | 0.000 | | 3.173 | Continuing | Continuing | N/A |

| | Prior Years | FY 2017 | | FY 2018 | | FY 2019 Base | | FY 2019 OCO | | FY 2019 Total | Cost To Complete | Total Cost | Target Value of Contract |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| **Project Cost Totals** | 17.360 | 3.661 | | 6.266 | | 3.173 | | 0.000 | | 3.173 | Continuing | Continuing | N/A |

**Remarks**

| Exhibit R-4, RDT&E Schedule Profile: PB 2019 Defense Logistics Agency | | Date: February 2018 |
|---|---|---|
| **Appropriation/Budget Activity**<br>0400 / 5 | **R-1 Program Element (Number/Name)**<br>PE 0605070S / *DoD Enterprise Systems Development and Demonstration* | **Project (Number/Name)**<br>09 / *Enterprise Funds Distribution* |



| Exhibit R-2, RDT&E Budget Item Justification: PB 2019 Defense Logistics Agency | Date: February 2018 |
|---|---|
| **Appropriation/Budget Activity**<br>0400: *Research, Development, Test & Evaluation, Defense-Wide I* BA 5: *System Development & Demonstration (SDD)* | **R-1 Program Element (Number/Name)**<br>PE 0605080S *I Defense Agencies Initiative (DAI) - Financial System* |

| COST ($ in Millions) | Prior Years | FY 2017 | FY 2018 | FY 2019 Base | FY 2019 OCO | FY 2019 Total | FY 2020 | FY 2021 | FY 2022 | FY 2023 | Cost To Complete | Total Cost |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Total Program Element | 110.325 | 27.194 | 24.436 | 21.156 | - | 21.156 | 23.673 | 21.806 | 25.336 | 25.815 | Continuing | Continuing |
| 01: *Defense Agencies Initiatives - Financial System* | 110.325 | 27.194 | 24.436 | 21.156 | - | 21.156 | 23.673 | 21.806 | 25.336 | 25.815 | Continuing | Continuing |

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

**A. Mission Description and Budget Item Justification**

This program supports the Defense Agencies Initiative (DAI) Increments 2 and 3, Category I Defense Business Systems. Previous funding for DAI Increment 1, as well as, FY2013 4th Quarter Increment 2, were documented in the Defense Enterprise Business Systems program element 0605070S. Increment 3 will deliver new capabilities: (Defense Working Capital fund and Re-Sale accounting); and an application upgrade.

| B. Program Change Summary ($ in Millions) | FY 2017 | FY 2018 | FY 2019 Base | FY 2019 OCO | FY 2019 Total |
|---|---|---|---|---|---|
| Previous President's Budget | 30.457 | 24.436 | 40.300 | - | 40.300 |
| Current President's Budget | 27.194 | 24.436 | 21.156 | - | 21.156 |
| Total Adjustments | -3.263 | 0.000 | -19.144 | - | -19.144 |
| • Congressional General Reductions | - | - | | | |
| • Congressional Directed Reductions | - | - | | | |
| • Congressional Rescissions | - | - | | | |
| • Congressional Adds | - | - | | | |
| • Congressional Directed Transfers | - | - | | | |
| • Reprogrammings | -2.400 | - | | | |
| • SBIR/STTR Transfer | -0.863 | - | | | |
| • Inflation Adjustment | - | - | -0.344 | - | -0.344 |
| • Program Rephasing | - | - | -18.800 | - | -18.800 |

**Change Summary Explanation**

Under the FY2017 CR, a portion of DAI's funding was provided to USTRANSCOM to continue business operations. Upon enactment, the USTRANSCOM funding is being returned to DIA resulting In the reprogramming amount owed to DAI for $2.4M. FY2017, the Small Business Innovation Research and Small Technology Transfer Research tax amounted to $0.863M.

Inflation adjustments for Non-Pay/Non-Fuel Pay purchases and Civilian Pay decreased the program baseline in FY2019.
FY2019 development will complete developing Defense Working Capital Fund (DWCF) accounting requirements necessary to serve as core and meet DISA requirements, and DeCA Re-sale accounting requirements study (to be developed in FY 2020).

| Exhibit R-2A, RDT&E Project Justification: PB 2019 Defense Logistics Agency | | | Date: February 2018 |
|---|---|---|---|
| Appropriation/Budget Activity<br>0400 / 5 | R-1 Program Element (Number/Name)<br>PE 0605080S / *Defense Agencies Initiative (DAI) - Financial System* | Project (Number/Name)<br>01 / *Defense Agencies Initiatives - Financial System* | |

| COST ($ in Millions) | Prior Years | FY 2017 | FY 2018 | FY 2019 Base | FY 2019 OCO | FY 2019 Total | FY 2020 | FY 2021 | FY 2022 | FY 2023 | Cost To Complete | Total Cost |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 01: *Defense Agencies Initiatives - Financial System* | 110.325 | 27.194 | 24.436 | 21.156 | - | 21.156 | 23.673 | 21.806 | 25.336 | 25.815 | Continuing | Continuing |
| Quantity of RDT&E Articles | - | - | - | - | - | - | - | - | - | - | | |

**Project MDAP/MAIS Code:** 0491

**A. Mission Description and Budget Item Justification**

The DAI mission is to deliver auditable Chief Financial Officer (CFO) Act compliant business environments for Defense Agencies providing accurate, timely, authoritative financial data supporting the DoD goal of standardizing financial management practices improving financial decision support, and supporting audit readiness. Currently, Defense Agencies use several different non-compliant financial management systems supporting diverse operational functions and the warfighter in decision-making and financial reporting. These disparate, non-integrated systems do not meet statutory requirements to produce timely, auditable reports.

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 and field activities across the DoD. DAI will support 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 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 is to deploy 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 12.2.5 (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 source).

DAI supports the 2014 Quadrennial Defense Review (QDR) Strategy 5, "Reform the business and support functions of the Defense enterprise". DAI is also aligned to the DOD Agency Strategic Fiscal Years 2015-2018, Goal 5: Reform and Reshape the Defense Institution, Key Strategic Initiative - Improving competitiveness through accountability and efficiency and SO 5.2: Improve financial processes, controls, and information via audit readiness. The objective of the DAI system is to achieve auditable, CFO Act compliant business environments for the Defense Agencies with accurate, timely, authoritative financial data.

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; Procure to Pay (P2P); Acquire to Retire (real property

| Exhibit R-2A, RDT&E Project Justification: PB 2019 Defense Logistics Agency | | Date: February 2018 |
|---|---|---|
| **Appropriation/Budget Activity**<br>0400 / 5 | **R-1 Program Element (Number/Name)**<br>PE 0605080S / *Defense Agencies Initiative (DAI) - Financial System* | **Project (Number/Name)**<br>01 / *Defense Agencies Initiatives - Financial System* |

lifecycle accounting only); Hire to Retire (Time and Labor reporting only); and Order to Cash. Release (Rel) 1 provided an application upgrade to Oracle R12 along with (P2P) enhancements facilitating SFIS/SLOA compliance and automated Time and Labor absence management. Rel 2 introduced Grants Financial Management accounting and the start of a phased implementation of Governance, Risk and Compliance (GRC) capabilities. Future capabilities will support Rel 3 Direct Treasury Disbursing and Budget Formulation as well as Rel 4 Defense Working Capital Fund accounting, and Re-Sale Accounting (for Defense Commissary Agency (DeCA).

DAI is currently implemented at 22 Defense Agencies and the Office of the Under Secretary of Defense, Comptroller, (OUSD(C)) and supports over 39,322 users. The program office is also responsible for operational sustainment of the system. Funds are required for additional government and contractor support, licenses, maintenance, and hardware to accomplish the remaining capability developments and organizational deployments, and initiate the annual Statement on Standards for Attestation Engagements No. 18 (SSAE 18) assertion packages. In 2017, the system received an unqualified SSAE 18 report.

The benefits of DAI are:
• Common business processes and Enterprise data standards (i.e., SFIS, SLOA, Procurement Data Standard (PDS) and Procurement Request Data Standard (PRDS));
• Access to real-time financial data transactions;
• Significantly reduced data reconciliation requirements;
• Enhanced analysis and decision support capabilities; and
• Use of United States Standard General Ledger (USSGL) Chart of Accounts to resolve DoD material weaknesses and deficiencies.

The DAI PMO completed the Oracle R12 application upgrade. The DAI PMO also provides system integration services that include: acquisition/financial management, project management; blueprinting; design, build, and unit test; developing required Reports, Interfaces, Conversions, Extensions, Forms and Workflows (RICE-FW) objects; testing (cyber security/information assurance, integration, functional, performance, conversion, user acceptance, operational); end-user training (train the trainer/ change management preparing the users for the cross functional skills and awareness needed to perform well with an integrated enterprise resource planning system); system deployment; conversion; information assurance; sustainment; data service; help desk support; as well as studies and analysis support.

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

| B. Accomplishments/Planned Programs ($ in Millions) | FY 2017 | FY 2018 | FY 2019 |
|---|---|---|---|
| ***Title:*** Defense Agencies Initiative (DAI) - Financial System | 27.194 | 24.436 | 21.156 |
| ***FY 2018 Plans:***<br>In FY 2018, the DAI PMO will:<br>• Field DAI Increment 2 Rel 4 to users at two large agencies (over 9,409 users).<br>• Development/Testing for DISA General Fund (GF) agency unique requirements and begin study/development of DWCF capabilities. | | | |

| Exhibit R-2A, RDT&E Project Justification: PB 2019 Defense Logistics Agency | | Date: February 2018 |
|---|---|---|
| **Appropriation/Budget Activity**<br>0400 / 5 | **R-1 Program Element (Number/Name)**<br>PE 0605080S / *Defense Agencies Initiative (DAI) - Financial System* | **Project (Number/Name)**<br>01 / *Defense Agencies Initiatives - Financial System* |

| B. Accomplishments/Planned Programs ($ in Millions) | FY 2017 | FY 2018 | FY 2019 |
|---|---|---|---|
| • Study/develop Agency unique requirements for DISA.<br>• Work instructions and training materials.<br>• Conduct Follow-on Test and Evaluation (FOT&E) event with using Agencies, which completes the DAI INC 2 cycle of independent Operational Assessments.<br>• Support the FM & time/labor for over 45k users at over 22 Agencies, Field Activities and organizations.<br>• Support the DoD Information Assurance Certification and Accreditation Risk Management Framework (RMF) process to support actions included in the Designated Authorizing Authority required Plan of Actions and Milestones including an independent Federal Information Systems Controls Audit Manual (FISCAM) Test of Design/Test of Effectiveness to result in a DAA decision to award an Authority to Operate.<br>• Continue to implement the Governance, Risk and Compliance (GRC) capabilities by expanding Enterprise controls: Configuration, Access, Prevention & Transactions supporting audit findings, recommendations & corrective action plans (CAPs).<br>• Maintain the technical operation including: application of DISA Security Technical Implementation Guides, hardware & software currency for servers operating systems, middleware & applications including patches; overseeing internal processes within the DISA Enterprise Computing Center (DECC) enclaves; & the daily operation of several interfaces with external systems leveraging DLA Transaction Services as well as established Federal Enterprise system web services.<br>• Conduct regular adversarial assessments, RMF continuous monitoring including code scans, an independent Cyber Economic Vulnerability Assessment (CEVA) and a Cooperative Vulnerability and Penetration Assessment (CVPA).<br>• Obtain or maintain an interim Interoperability Certification or an Authority to Connect to the DoD Global Information Grid.<br>• The Program will also perform developmental, operational and Cyber security testing with independent third parties under Office of the Secretary of Defense oversight. The Defense Logistics Agency will contract for an independent public accounting firm to conduct the annual FFMIA and SSAE 18 assessments and conduct Cyber security assessments on the system. | | | |
| ***FY 2019 Plans:***<br>In FY 2019, the DAI PMO will:<br>• Field DAI Increment 3 Rel 1 General Fund (GF) accounting to users at a large agency (over 5,722 users).<br>• Development/Testing for DWCF and agency unique requirements and complete the study of 4th Estate common/core capabilities.<br>• Study Agency unique requirements for DeCA.<br>• Work instructions and training materials.<br>• Conduct an independent operational assessment (OA) of DAI INC 3, REL 1.<br>• Support the Financial Management (FM) & time/labor operations for over 45k users at over 23 Agencies, Field Activities and organizations. | | | |

| Exhibit R-2A, RDT&E Project Justification: PB 2019 Defense Logistics Agency | | Date: February 2018 |
|---|---|---|
| **Appropriation/Budget Activity**<br>0400 / 5 | **R-1 Program Element (Number/Name)**<br>PE 0605080S / *Defense Agencies Initiative (DAI) - Financial System* | **Project (Number/Name)**<br>01 / *Defense Agencies Initiatives - Financial System* |

| B. Accomplishments/Planned Programs ($ in Millions) | FY 2017 | FY 2018 | FY 2019 |
|---|---|---|---|
| • 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.<br>• Continue to implement the GRC capabilities by expanding Enterprise controls:<br>Configuration, Access, Prevention & Transactions supporting audit findings, recommendations & CAPs.<br>• Maintain the technical operation including: application of DISA Security Technical Implementation Guides, hardware & software currency for servers operating systems, middleware & applications including patches; overseeing internal processes within the DECC enclaves; & the daily operation of several interfaces with external systems leveraging DLA Transaction Services as well as established Federal Enterprise system web services.<br>• Conduct regular adversarial assessments, RMF continuous monitoring including code scans, an independent Cyber Economic Vulnerability Assessment and a Cooperative Vulnerability and Penetration Assessment.<br>• Obtain or maintain an interim Interoperability Certification or an Authority to Connect to the DoD Global Information Grid.<br>• The Program will also perform developmental, operational and Cyber security testing with independent third parties under Office of the Secretary of Defense oversight. The Defense Logistics Agency will contract for an independent public accounting firm to conduct the annual FFMIA and SSAE 18 assessments and conduct Cyber security assessments on the system.<br>***FY 2018 to FY 2019 Increase/Decrease Statement:***<br>FY 2019 development will complete developing DWCF accounting requirements necessary to serve as core and meet DISA requirements. | | | |
| **Accomplishments/Planned Programs Subtotals** | 27.194 | 24.436 | 21.156 |

**C. Other Program Funding Summary ($ in Millions)**

N/A

**Remarks**

**D. Acquisition Strategy**

DAI is being 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 and Milestone Decision Authority (MDA).

In the Acquisition Decision Memorandum (ADM) of September 23, 2013, the MDA placed DAI Increment 1 in sustainment. Increment 2 addressed the Commercial Off The Shelf (COTS) application upgrade. The upgrade was completed (January 2015); therefore, Increment 2 Rel 1 subsumed Increment 1 for all users. A new ADM in June 2017 introduced Increment 3. When Increment 3, Rel 1 goes live, it will subsume Increment 2; therefore, only one DAI production baseline exists at any point in time.

| Exhibit R-2A, RDT&E Project Justification: PB 2019 Defense Logistics Agency | | Date: February 2018 |
|---|---|---|
| **Appropriation/Budget Activity**<br>0400 / 5 | **R-1 Program Element (Number/Name)**<br>PE 0605080S / *Defense Agencies Initiative (DAI) - Financial System* | **Project (Number/Name)**<br>01 / *Defense Agencies Initiatives - Financial System* |

**E. Performance Metrics**

The following performance metrics will be performed on the DAI system:

Functionality: Financial system performance. PEO will determine substantial compliance with the annual Investment Review of PMO assertion of compliance with the latest version of the Department's BEA in scope requirements for Defense Financial Management Improvement Guidance (DFMIG) and other laws regulations and policy. Objective: Substantial compliance.

Program Conformance to BEA Processes, Data Standards, and Business Rules. The PEO will determine substantial compliance with the annual Investment Review of PMO assertion of compliance with the latest version of the Department's BEA. Objective: Substantial compliance.

Net Ready Key Performance Parameter (NR-KPP)

Attribute (Att) A - Support net-centric DoD military operations

Mission: Transform the budget, finance, and accounting operations of the DoD Agencies to achieve accurate and reliable financial information in support of financial accountability and effective and efficient decision making throughout the Defense Agencies in support of the missions of the warfighter.

A.1. Budget to Report (B2R). DAI provides General Ledger, Trial Balance, Budget Execution, and Financial Reporting Capabilities.
DAI will measure the percentage of successful attempts to:
* Generate and transmit Trial Balance Reports. Objective-95%;
* Receive budget information from agency-specific systems, to support budget execution. Objective-95%; and
* Generate and transmit reports to support period end processing procedures. Objective-95%

A.2 Procure to Pay (P2P). DAI provides the capability to Order Materials and Services (Commitments), Record Purchases and Contract Information (Obligations) Pay Bills (Accounts Payable), and Create Ready to Pay File.
DAI will measure the percentage of successful attempts to:
* Exchange contract, obligation, receipt and invoice information with external systems to support procurement processes. Objective-95%;
* Receive Purchase Card information from external systems to manage government purchase cards (P-Cards). Objective-95%;
* Exchange data across agencies to support intergovernmental Purchase Request (PR) processes. Objective-95%;
* Receive travel related data from external systems to support travel financial accounting events. Objective-95%; and
* Exchange miscellaneous payment information with trading partners. Objective-95%.

A.3. Order to Cash (O2C). DAI provides the capability to Receive Customer Orders, Record Work Performed on the orders, Bill Customers, and Track Accounts Receivable.
DAI will measure the percentage of successful attempts to:

| Exhibit R-2A, RDT&E Project Justification: PB 2019 Defense Logistics Agency | | Date: February 2018 |
|---|---|---|
| **Appropriation/Budget Activity**<br>0400 / 5 | **R-1 Program Element (Number/Name)**<br>PE 0605080S / *Defense Agencies Initiative (DAI) - Financial System* | **Project (Number/Name)**<br>01 / *Defense Agencies Initiatives - Financial System* |

* Exchange data with external systems to support management of customer orders. Objective-95%;
* Exchange receivables data with external systems. Objective-95%; and
* Manage exchange collections data with external systems. Objective-95%.

A.4. Acquire to Retire (A2R). DAI provides the capability to record Asset Acquisition, Depreciation, and Disposal. DAI will measure the percentage of successful attempts to:
* Receive asset creation information from external systems. Objective-95%;
* Accumulate and transmit costs incurred for Capital Assets on Construction in Progress (CIP) and Work in Progress (WIP) projects. Objective-95%;
* Generate and transmit property accounting information. Objective-95%;
* Receive property maintenance data from external systems. Objective-95%; and
* Receive disposal of assets information from external systems. Objective-95%.

A.5. Cost Management (formerly Cost Accounting). DAI provides Cost Accounting and Allocation Capabilities.
DAI will measure the percentage of successful attempts to:
* Receive Project Budgets from external systems. Objective-95%; and
* Receive cost data to support cost collection processes. Objective-95%.

A. 6. Hire to Retire (H2R). DAI provides Civilian, Military, and Contractor Time and Labor capabilities. DAI will measure the percentage of successful attempts to:
* Exchange employee and timekeeping information with external systems. Objective-95%; and
* Process and send payroll data to external systems. Objective-95%.

NR-KPP Att B - Managed in the Network

1) Type of Networks that are connected:
- The DAI application supports multiple Defense Agencies, and thus is accessible from multiple network points. A typical user accesses the application via the web browser from his/her agency specific LAN/WAN and/or local site firewall configurations, traversing through the Non-Classified Internet Protocol Routing Network (NIPRNet) to reach the secure DAI application hosted within the DoD Demilitarized Zone (DMZ) which is controlled and managed by DISA.
- The DAI production application is hosted in a DISA DECC environment located in Ogden, UT and is managed by DAI Program Management Office

2) Measures of Performance (MOPs) to measure network entrance and management performance:
a) Network related (DISA) – as per DISA Catalog of Services
-Interactive Availability - Portion of network/system controlled by DISA CSD available to the partner during the interactive window
-Batch Throughput – Completion rate and delivery by specified time during batch window specified in SLA

b) Database related (DAI Program Management Office)

-System Availability
-On Line user system response

3) Network Management:
-The Agency (user) being supported is responsible for the communications infrastructure necessary for leaving their location to connect users to the NIPRNet
-DISA is responsible for communications on NIPRNet between the end user and the main DAI environment
-DAI Program Management Office is responsible for activities occurring within the application and the Oracle Database

4) Systems Management
-NIPRNet and Infrastructure - Centralized within DISA CSD
-DAI System – centralized within DAI Program Management Office

5) Network Configuration Parameters – N/A (within the realm of DISA management) DAI will measure the percentage of success for:
* Supports secure Internet/NIPRNET access to solution. Interactive Availability. Objective-98.5%;
* Supports secure Internet/NIPRNET access to solution. Batch Throughput. Objective-95%;
* Provides adequate system response and availability to support operations. System Availability. (Condition: 5000 users/hour) Objective-95%; and
* Provides adequate system response and availability to support operations. On-line system response. (Condition: 5000 users/hour) Objective-95%.

NR-KPP Att C - Effectively Exchange Information.
DAI will satisfy all top-level critical Information Exchange Requirements (IERs) with all required DoD Enterprise, DFAS, Defense Agencies, and Federal Systems, as documented in SV-6. There are 47 data exchanges with other systems. The objectives are 100% for accuracy and ten seconds to 1 day for timeliness. Additional details available upon request.

Major Performers:

CACI Inc Federal
Chantilly, VA
Global Model Implementation and Compliance Support to DAI

CACI Inc Federal
Chantilly, VA
DAI Implementation Support Services

CACI ISS, Inc
Fairfax, VA

| Exhibit R-2A, RDT&E Project Justification: PB 2019 Defense Logistics Agency | | Date: February 2018 |
|---|---|---|
| **Appropriation/Budget Activity**<br>0400 / 5 | **R-1 Program Element (Number/Name)**<br>PE 0605080S / *Defense Agencies Initiative (DAI) - Financial System* | **Project (Number/Name)**<br>01 / *Defense Agencies Initiatives - Financial System* |

Infrastructure Support

International Business Machines Corporation
Reston, VA
DAI Global Model Development for Procure to Pay (P2P), Order to Cash (O2C), Budget to Retire (B2R), and Customer Application Development (CAD)

CACI Inc Federal
Chantilly, VA
DAI Global Model Development for Acquire to Retire (A2R), Cost Accounting (CA), and Time and Labor (T&L)

Mythics Inc DBA
Virginia Beach, VA
Oracle CLM and Purchase Software

| Exhibit R-3, RDT&E Project Cost Analysis: PB 2019 Defense Logistics Agency | | | Date: February 2018 |
|---|---|---|---|
| Appropriation/Budget Activity<br>0400 / 5 | R-1 Program Element (Number/Name)<br>PE 0605080S / *Defense Agencies Initiative (DAI) - Financial System* | Project (Number/Name)<br>01 / *Defense Agencies Initiatives - Financial System* | |

**Product Development ($ in Millions)**

| Cost Category Item | Contract Method & Type | Performing Activity & Location | Prior Years | FY 2017 Cost | FY 2017 Award Date | FY 2018 Cost | FY 2018 Award Date | FY 2019 Base Cost | FY 2019 Base Award Date | FY 2019 OCO Cost | FY 2019 OCO Award Date | FY 2019 Total Cost | Cost To Complete | Total Cost | Target Value of Contract |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| DAI Compliance Support | Option/ CPFF | CACI Inc Federal : Chantilly, VA | 18.540 | 7.143 | Jun 2017 | 6.489 | Jun 2018 | - | | - | | - | 0.000 | 32.172 | 0.000 |
| DAI Compliance Support Follow-on | C/TBD | TBD : TBD | 0.000 | 0.000 | | 0.000 | | 6.683 | Jun 2019 | - | | 6.683 | Continuing | Continuing | Continuing |
| DAI Implementation Support | Option/ CPAF | CACI Inc Federal : Chantilly, VA | 15.600 | 6.651 | Mar 2017 | 6.151 | Mar 2018 | - | | - | | - | 0.000 | 28.402 | 0.000 |
| DAI Implementation Support Follow-on | C/TBD | TBD : TBD | 0.000 | 0.000 | | 0.000 | | 6.336 | Mar 2019 | - | | 6.336 | Continuing | Continuing | Continuing |
| DAI Infrastructure Support | Option/ FFP | CACI ISS Inc : Fairfax, VA | 8.183 | 3.472 | May 2017 | 2.821 | May 2018 | - | | - | | - | 0.000 | 14.476 | 0.000 |
| DAI Infrastructure Support Follow-on | C/TBD | TBD : TBD | 0.000 | 0.000 | | 0.000 | | 1.985 | May 2019 | - | | 1.985 | Continuing | Continuing | Continuing |
| Global Model P2P | C/FFP | IBM : Bethesda, MD | 19.212 | 2.715 | Aug 2017 | - | | - | | - | | - | 0.000 | 21.927 | 0.000 |
| Global Model P2P Follow-on | C/TBD | TBD : TBD | 0.000 | 0.000 | | 3.418 | Aug 2018 | - | | - | | - | Continuing | Continuing | Continuing |
| Global Model A2R | C/CPFF | CACI Inc Federal : Chantilly, VA | 9.012 | 1.134 | Apr 2017 | - | | - | | - | | - | 0.000 | 10.146 | 0.000 |
| Global Model A2R Follow-on | C/TBD | TBD : TBD | 0.000 | 0.000 | | 2.333 | Apr 2018 | 2.403 | Apr 2019 | - | | 2.403 | Continuing | Continuing | Continuing |
| DAI Data Conversion Support | Option/ FFP | Terathink : Reston, VA | 2.512 | 0.345 | Mar 2017 | - | | - | | - | | - | 0.000 | 2.857 | 0.000 |
| DAI Data Conversion Support Follow-on | C/TBD | TBD : TBD | 0.000 | 0.000 | | - | | - | | - | | - | Continuing | Continuing | Continuing |
| Requirements Management (RM) Support | MIPR | DISA : Fort Meade, MD | 0.876 | 0.000 | Oct 2017 | 0.237 | Oct 2018 | 0.159 | Oct 2019 | - | | 0.159 | Continuing | Continuing | Continuing |
| Global Model P2P Option 1 Increase | C/FFP | IBM : Bethesda, MD | 0.000 | 0.000 | | - | | - | | - | | - | 0.000 | 0.000 | 0.000 |
| Oracle Time & Labor Software License and Maintenance | C/FP | Mythics, Inc. : Virginia Beach, VA | 0.000 | 1.020 | May 2017 | - | | - | | - | | - | 0.000 | 1.020 | 0.000 |

| Exhibit R-3, RDT&E Project Cost Analysis: PB 2019 Defense Logistics Agency | | | Date: February 2018 |
|---|---|---|---|
| **Appropriation/Budget Activity**<br>0400 / 5 | **R-1 Program Element (Number/Name)**<br>PE 0605080S / *Defense Agencies Initiative (DAI) - Financial System* | **Project (Number/Name)**<br>01 / *Defense Agencies Initiatives - Financial System* | |

**Product Development ($ in Millions)**

| Cost Category Item | Contract Method & Type | Performing Activity & Location | Prior Years | FY 2017 Cost | FY 2017 Award Date | FY 2018 Cost | FY 2018 Award Date | FY 2019 Base Cost | FY 2019 Base Award Date | FY 2019 OCO Cost | FY 2019 OCO Award Date | FY 2019 Total Cost | Cost To Complete | Total Cost | Target Value of Contract |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| DCPDS/DAI Interface File Changes | MIPR | DLA Finance : Fort Belvoir, VA | 0.000 | 0.014 | Feb 2017 | 0.013 | Feb 2018 | 0.010 | Feb 2019 | - | | 0.010 | Continuing | Continuing | Continuing |
| Serena Capability | MIPR | TBD : TBD | 0.000 | 0.000 | | - | | - | | - | | - | Continuing | Continuing | Continuing |
| Global Model CAD | C/CPFF | CSC : Falls Church, VA | 3.205 | - | | - | | - | | - | | - | 0.000 | 3.205 | 0.000 |
| Jaws Professional Licenses | C/FFP | Immix : McLean, VA | 0.017 | - | | - | | - | | - | | - | 0.000 | 0.017 | 0.000 |
| Oracle Advanced Compression Licenses | TBD | TBD : TBD | 1.622 | - | | - | | - | | - | | - | 0.000 | 1.622 | 0.000 |
| Oracle Contract Lifecycle Management Licenses | C/FFP | Mythics Inc : Virginia Beach, VA | 7.408 | - | | - | | - | | - | | - | 0.000 | 7.408 | 0.000 |
| Oracle Licenses | MIPR | DISA : Pensacola, FL | 5.446 | - | | - | | - | | - | | - | 0.000 | 5.446 | 0.000 |
| Kurzweil 5000 508 Assistive Tech Licenses | C/FFP | Envision Technology Inc. : Bethesda, MD | 0.008 | - | | - | | - | | - | | - | 0.000 | 0.008 | 0.000 |
| Dragon Naturally Speaking 508 | C/FFP | Red River Computer Co : Claremont, NH | 0.007 | - | | - | | - | | - | | - | 0.000 | 0.007 | 0.000 |
| DISA/DITCO Delinquent Balance | MIPR | DISA DITCO : Scott AFB, IL | 0.017 | - | | - | | - | | - | | - | 0.000 | 0.017 | 0.000 |
| DBTA Section 1553 | MIPR | DFAS : Columbus, OH | 0.377 | - | | - | | - | | - | | - | 0.000 | 0.377 | 0.000 |
| Development Activities | C/TBD | TBD : TBD | 0.000 | - | | 0.000 | | - | | - | | - | Continuing | Continuing | Continuing |
| | | **Subtotal** | 92.042 | 22.494 | | 21.462 | | 17.576 | | - | | 17.576 | Continuing | Continuing | N/A |

**Support ($ in Millions)**

| Cost Category Item | Contract Method & Type | Performing Activity & Location | Prior Years | FY 2017 Cost | FY 2017 Award Date | FY 2018 Cost | FY 2018 Award Date | FY 2019 Base Cost | FY 2019 Base Award Date | FY 2019 OCO Cost | FY 2019 OCO Award Date | FY 2019 Total Cost | Cost To Complete | Total Cost | Target Value of Contract |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Estimated SBIR/STTR: | TBD | TBD : TBD | 0.000 | 1.112 | | 0.892 | | 0.785 | | - | | 0.785 | Continuing | Continuing | Continuing |
| | | **Subtotal** | 0.000 | 1.112 | | 0.892 | | 0.785 | | - | | 0.785 | Continuing | Continuing | N/A |

| Exhibit R-3, RDT&E Project Cost Analysis: PB 2019 Defense Logistics Agency | | Date: February 2018 |
|---|---|---|
| **Appropriation/Budget Activity**<br>0400 / 5 | **R-1 Program Element (Number/Name)**<br>PE 0605080S / *Defense Agencies Initiative (DAI) - Financial System* | **Project (Number/Name)**<br>01 / *Defense Agencies Initiatives - Financial System* |

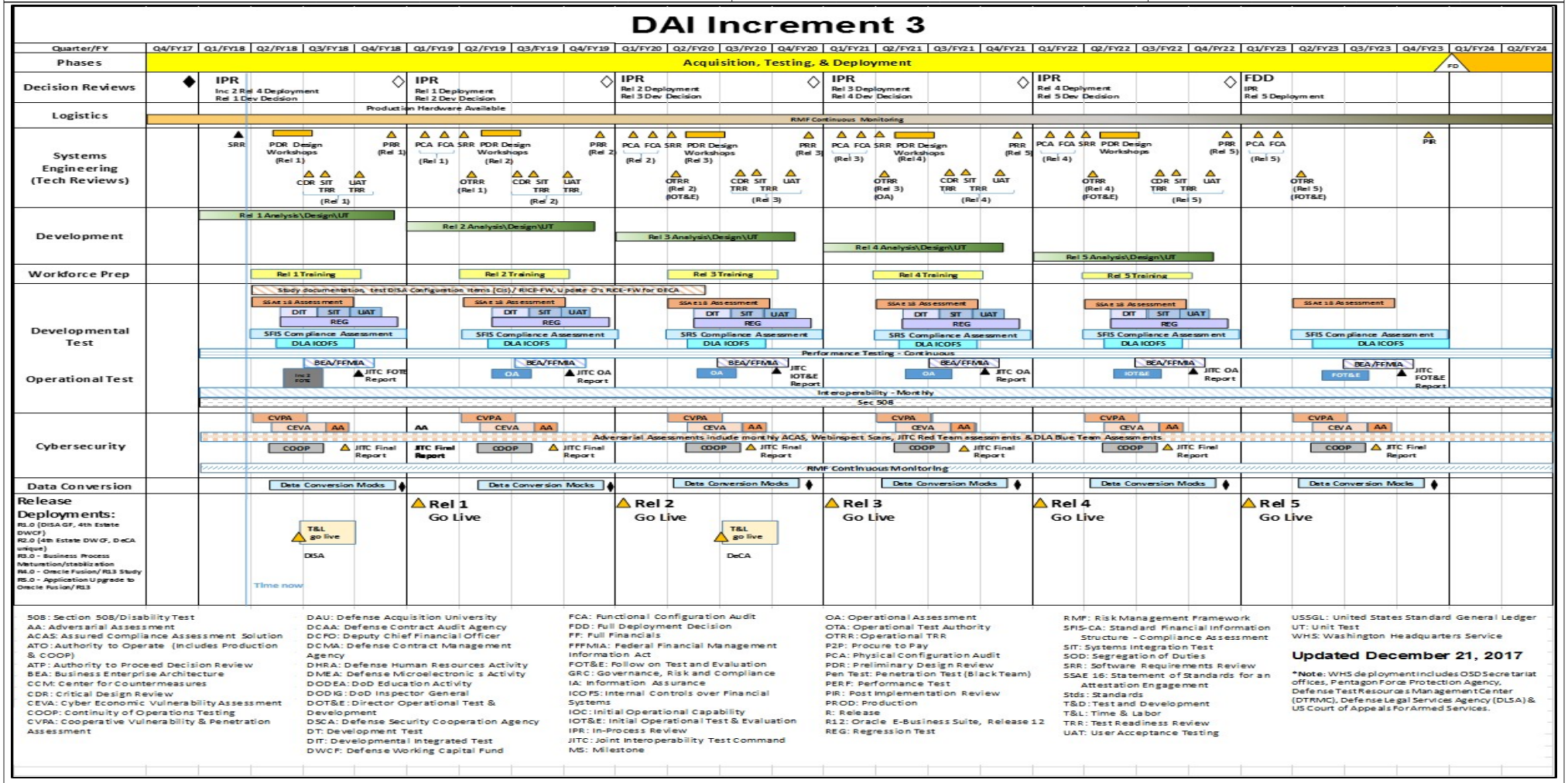
**Test and Evaluation ($ in Millions)**

| Cost Category Item | Contract Method & Type | Performing Activity & Location | Prior Years | FY 2017 Cost | FY 2017 Award Date | FY 2018 Cost | FY 2018 Award Date | FY 2019 Base Cost | FY 2019 Base Award Date | FY 2019 OCO Cost | FY 2019 OCO Award Date | FY 2019 Total Cost | Cost To Complete | Total Cost | Target Value of Contract |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| DISA Hosting: Test and Development | MIPR | DISA : Pensacola, FL | 10.242 | 2.696 | Oct 2016 | - | | 0.894 | Oct 2018 | - | | 0.894 | Continuing | Continuing | Continuing |
| Interoperability | MIPR | JITC : Fort Meade, MD | 3.273 | 0.134 | May 2017 | 0.281 | May 2018 | 0.290 | May 2019 | - | | 0.290 | Continuing | Continuing | Continuing |
| Performance and Regression Testing | MIPR | JITC : Fort Huachuca, AZ | 1.936 | 0.710 | Oct 2016 | 0.721 | Oct 2017 | 0.600 | Oct 2018 | - | | 0.600 | Continuing | Continuing | Continuing |
| Operational Test and Evaluation | MIPR | JITC : Fort Huachuca, AZ | 2.749 | 0.000 | Dec 2016 | 0.982 | Dec 2017 | 1.011 | Dec 2018 | - | | 1.011 | Continuing | Continuing | Continuing |
| DCPS Testing | MIPR | DFAS : Indianapolis, IN | 0.083 | 0.048 | Oct 2016 | 0.098 | Oct 2017 | 0.000 | Oct 2018 | - | | 0.000 | Continuing | Continuing | Continuing |
| Hosting Activities | TBD | TBD : TBD | 0.000 | 0.000 | | 0.000 | | 0.000 | | - | | 0.000 | Continuing | Continuing | Continuing |
| | | **Subtotal** | 18.283 | 3.588 | | 2.082 | | 2.795 | | - | | 2.795 | Continuing | Continuing | N/A |

| | Prior Years | FY 2017 Cost | FY 2017 Award Date | FY 2018 Cost | FY 2018 Award Date | FY 2019 Base Cost | FY 2019 Base Award Date | FY 2019 OCO Cost | FY 2019 OCO Award Date | FY 2019 Total Cost | Cost To Complete | Total Cost | Target Value of Contract |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| **Project Cost Totals** | 110.325 | 27.194 | | 24.436 | | 21.156 | | - | | 21.156 | Continuing | Continuing | N/A |

**Remarks**

| Exhibit R-4, RDT&E Schedule Profile: PB 2019 Defense Logistics Agency | | Date: February 2018 |
|---|---|---|
| **Appropriation/Budget Activity**<br>0400 / 5 | **R-1 Program Element (Number/Name)**<br>PE 0605080S / *Defense Agencies Initiative (DAI) - Financial System* | **Project (Number/Name)**<br>01 / *Defense Agencies Initiatives - Financial System* |




50B: Section 508/Disability Test
AA: Adversarial Assessment
ACAS: Assured Compliance Assessment Solution
ATO: Authority to Operate (Includes Production & COOP)
ATP: Authority to Proceed Decision Review
BEA: Business Enterprise Architecture
CCM: Center for Countermeasures
CDR: Critical Design Review
CEVA: Cyber Economic Vulnerability Assessment
COOP: Continuity of Operations Testing
CVPA: Cooperative Vulnerability & Penetration Assessment

DAU: Defense Acquisition University
DCAA: Defense Contract Audit Agency
DCFO: Deputy Chief Financial Officer
DCMA: Defense Contract Management Agency
DHRA: Defense Human Resources Activity
DMEA: Defense Microelectronic s Activity
DODEA: DoD Education Activity
DODIG: DoD Inspector General
DOT&E: Director Operational Test & Development
DSCA: Defense Security Cooperation Agency
DT: Development Test
DIT: Developmental Integrated Test
DWCF: Defense Working Capital Fund

FCA: Functional Configuration Audit
FDD: Full Deployment Decision
FF: Full Financials
FFFMIA: Federal Financial Management Information Act
FOT&E: Follow on Test and Evaluation
GRC: Governance, Risk and Compliance
IA: Information Assurance
ICOFS: Internal Controls over Financial Systems
IOC: Initial Operational Capability
IOT&E: Initial Operational Test & Evaluation
IPR: In-Process Review
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
Pen Test: Penetration Test (Black Team)
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
SIT: Systems Integration Test
SOD: Segregation of Duties
SRR: Software Requirements Review
SSAE 16: Statement of Standards for an Attestation Engagement
Stds: Standards
T&D: Test and Development
T&L: Time & Labor
TRR: Test Readiness Review
UAT: User Acceptance Testing

USSGL: United States Standard General Ledger
UT: Unit Test
WHS: Washington Headquarters Service

**Updated December 21, 2017**

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

| Exhibit R-4A, RDT&E Schedule Details: PB 2019 Defense Logistics Agency | | Date: February 2018 |
|---|---|---|
| **Appropriation/Budget Activity**<br>0400 / 5 | **R-1 Program Element (Number/Name)**<br>PE 0605080S / *Defense Agencies Initiative (DAI) - Financial System* | **Project (Number/Name)**<br>01 / *Defense Agencies Initiatives - Financial System* |

## Schedule Details

| | Start | | End | |
|---|---|---|---|---|
| **Events by Sub Project** | **Quarter** | **Year** | **Quarter** | **Year** |
| ***Defense Agencies Initiative (DAI)*** | | | | |
| Defense Agencies Initiative (DAI) | 1 | 2014 | 4 | 2023 |

| Exhibit R-2, RDT&E Budget Item Justification: PB 2019 Defense Logistics Agency | Date: February 2018 |
|---|---|
| **Appropriation/Budget Activity**<br>0400: *Research, Development, Test & Evaluation, Defense-Wide I* BA 5: *System Development & Demonstration (SDD)* | **R-1 Program Element (Number/Name)**<br>PE 0605090S *I Defense Retired and Annuitant Pay System (DRAS)* |

| COST ($ in Millions) | Prior Years | FY 2017 | FY 2018 | FY 2019 Base | FY 2019 OCO | FY 2019 Total | FY 2020 | FY 2021 | FY 2022 | FY 2023 | Cost To Complete | Total Cost |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Total Program Element | 27.815 | 4.768 | 13.475 | 10.731 | - | 10.731 | 6.609 | 1.769 | 1.805 | 1.839 | Continuing | Continuing |
| 01: *Defense Retired and Annuitant Pay System 2 (DRAS)* | 27.815 | 4.768 | 13.475 | 10.731 | - | 10.731 | 6.609 | 1.769 | 1.805 | 1.839 | Continuing | Continuing |

**A. Mission Description and Budget Item Justification**

The primary objective of Defense Retired and Annuitant Pay System 2 (DRAS 2) is to establish and maintain a modern retiree and annuitant pay system featuring automated, market technology in place of selected manual processes.

| B. Program Change Summary ($ in Millions) | FY 2017 | FY 2018 | FY 2019 Base | FY 2019 OCO | FY 2019 Total |
|---|---|---|---|---|---|
| Previous President's Budget | 7.949 | 13.475 | 2.226 | - | 2.226 |
| Current President's Budget | 4.768 | 13.475 | 10.731 | - | 10.731 |
| Total Adjustments | -3.181 | 0.000 | 8.505 | - | 8.505 |
| • Congressional General Reductions | - | - | | | |
| • Congressional Directed Reductions | - | - | | | |
| • Congressional Rescissions | - | - | | | |
| • Congressional Adds | - | - | | | |
| • Congressional Directed Transfers | - | - | | | |
| • Reprogrammings | - | - | | | |
| • SBIR/STTR Transfer | -0.181 | - | | | |
| • FY 2017 Request for Additional Appropriation Not Addressed | -3.000 | - | - | - | - |
| • Increased Program Requirements | - | - | 8.505 | - | 8.505 |

**Change Summary Explanation**

FY2017, the Small Business Innovation Research and Small Technology Transfer Research tax amounted to $0.181M. In FY2017, DRAS2 request for additional appropriations was not addressed.

The program increase in FY2019 in the amount of $8.505M is for system development, testing, training and hosting activities.

| Exhibit R-2A, RDT&E Project Justification: PB 2019 Defense Logistics Agency | | | Date: February 2018 |
|---|---|---|---|
| Appropriation/Budget Activity<br>0400 / 5 | R-1 Program Element (Number/Name)<br>PE 0605090S / *Defense Retired and Annuitant Pay System (DRAS)* | Project (Number/Name)<br>01 / *Defense Retired and Annuitant Pay System 2 (DRAS)* | |

| COST ($ in Millions) | Prior Years | FY 2017 | FY 2018 | FY 2019 Base | FY 2019 OCO | FY 2019 Total | FY 2020 | FY 2021 | FY 2022 | FY 2023 | Cost To Complete | Total Cost |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 01: *Defense Retired and Annuitant Pay System 2 (DRAS)* | 27.815 | 4.768 | 13.475 | 10.731 | - | 10.731 | 6.609 | 1.769 | 1.805 | 1.839 | Continuing | Continuing |
| Quantity of RDT&E Articles | - | - | - | - | - | - | - | - | - | - | | |

**A. Mission Description and Budget Item Justification**

The primary objective of DRAS 2 is to establish and maintain a modernized retired military pay accounts. DRAS 2 will replace the current Defense Retiree and Annuitant Systems (DRAS) and selected manual processes with proven state of the market technology. This modernization will allow for the consolidation of disparate DRAS systems and business processes, the reduction of system redundancies and inefficiencies, and increased customer satisfaction.

| B. Accomplishments/Planned Programs ($ in Millions) | FY 2017 | FY 2018 | FY 2019 |
|---|---|---|---|
| ***Title:*** Defense Retired and Annuitant Pay System (DRAS) 2 | 4.768 | 13.475 | 10.731 |
| ***FY 2018 Plans:***<br>Issue a Task Order for:<br>- Final Build development<br>- Perform System Integration, Interoperability, User Acceptance Testing, and Parallel Operations Testing<br>- User Training<br>- Establish production hosting environment and perform Cyber Defense Security activities. | | | |
| ***FY 2019 Plans:***<br>The system will transition to DFAS during FY2020. | | | |
| ***FY 2018 to FY 2019 Increase/Decrease Statement:***<br>Decrease in FY2019 as a result of reduced program requirements. | | | |
| **Accomplishments/Planned Programs Subtotals** | 4.768 | 13.475 | 10.731 |

**C. Other Program Funding Summary ($ in Millions)**

N/A

**Remarks**

**D. Acquisition Strategy**

DRAS2 achieved Milestone B in August 2016 and entered into the Engineering, Development, and Production Phase of the Acquisition Lifecycle. DRAS2 achieved a successful Critical Design Review in December 2017 and is now proceeding to System Development. DRAS2 is scheduled for Full Deployment during FY20.

| Exhibit R-2A, RDT&E Project Justification: PB 2019 Defense Logistics Agency | | Date: February 2018 |
|---|---|---|
| **Appropriation/Budget Activity**<br>0400 / 5 | **R-1 Program Element (Number/Name)**<br>PE 0605090S / *Defense Retired and Annuitant Pay System (DRAS)* | **Project (Number/Name)**<br>01 / *Defense Retired and Annuitant Pay System 2 (DRAS)* |

**E. Performance Metrics**

N/A

| Exhibit R-3, RDT&E Project Cost Analysis: PB 2019 Defense Logistics Agency | | | Date: February 2018 |
|---|---|---|---|
| **Appropriation/Budget Activity**<br>0400 / 5 | **R-1 Program Element (Number/Name)**<br>PE 0605090S / *Defense Retired and Annuitant Pay System (DRAS)* | **Project (Number/Name)**<br>01 / *Defense Retired and Annuitant Pay System 2 (DRAS)* | |

**Product Development ($ in Millions)**

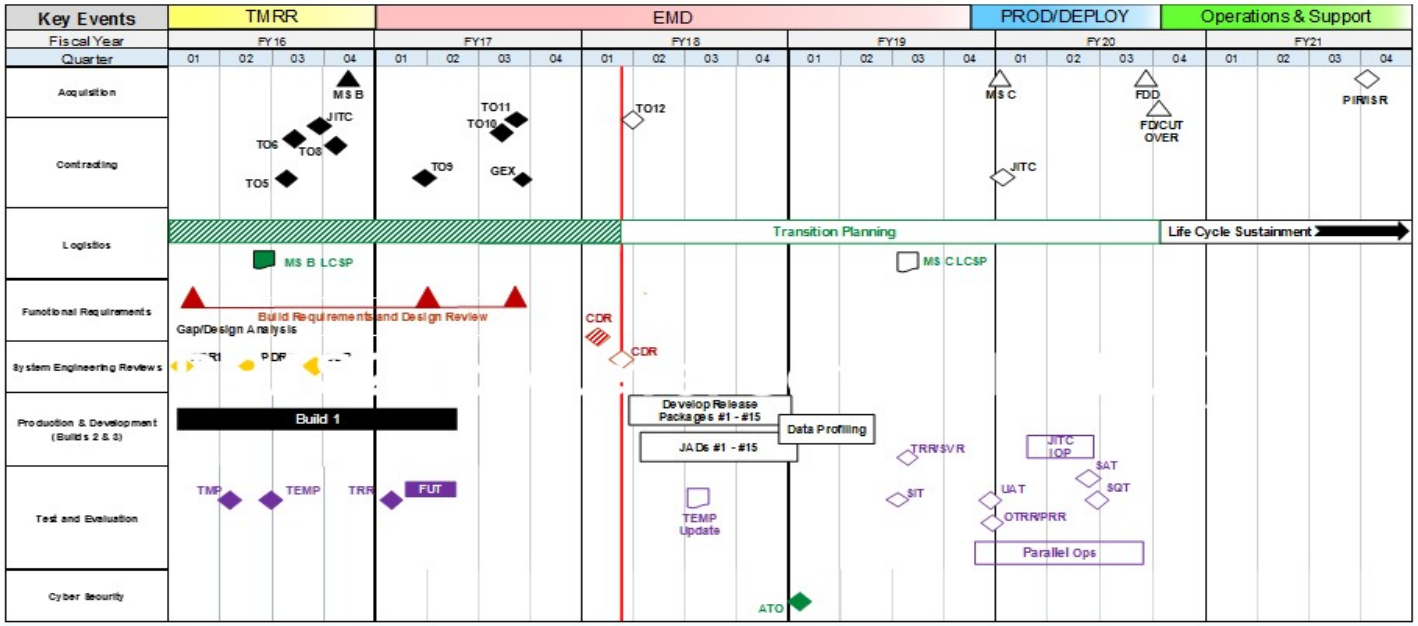
| Cost Category Item | Contract Method & Type | Performing Activity & Location | Prior Years | FY 2017 Cost | FY 2017 Award Date | FY 2018 Cost | FY 2018 Award Date | FY 2019 Base Cost | FY 2019 Base Award Date | FY 2019 OCO Cost | FY 2019 OCO Award Date | FY 2019 Total Cost | Cost To Complete | Total Cost | Target Value of Contract |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| DRAS2 System Development and Integration | Option/ IDIQ | CSRA : Chantilly, VA | 13.096 | 0.000 | Oct 2018 | 4.280 | Jan 2018 | 7.931 | Oct 2018 | 0.000 | | 7.931 | Continuing | Continuing | Continuing |
| DRAS2 COTS License Purchase | Option/ IDIQ | CSRA/Oracle : To be Determined | 10.443 | 3.586 | May 2017 | 0.000 | | 0.000 | | 0.000 | | 0.000 | Continuing | Continuing | 14.110 |
| DISA Hosting | MIPR | Virtual Operating Environment : Mechanicsburg, PA | 0.721 | 0.332 | Nov 2017 | 1.200 | Jan 2018 | 1.000 | Jan 2019 | 0.000 | | 1.000 | Continuing | Continuing | 2.590 |
| Transaction Services Interface Design | Option/ IDIQ | Northrop Grumman DLA Transaction Services : Chambersburg, PA | 2.900 | 0.850 | May 2016 | 0.452 | Nov 2017 | 0.000 | | 0.000 | | 0.000 | Continuing | Continuing | 4.162 |
| Transaction Services Interface Development & Testing | Option/ IDDQ | Northrop Grumman DLA Transaction Services : Chambersburg, PA | 0.655 | 0.000 | | 0.900 | Jul 2018 | 0.900 | Jul 2019 | 0.000 | | 0.900 | Continuing | Continuing | 1.910 |
| DRAS2 System Development & Integration | Option/ IDIQ | CSRA : Chantilly, VA | 0.000 | 0.000 | | 6.643 | May 2018 | 0.000 | | 0.000 | | 0.000 | Continuing | Continuing | 6.643 |
| Interoperability Testing | MIPR | Joint Interoperability Test Command (JITC) : Fort Meade, MD | 0.000 | 0.000 | | 0.000 | | 0.900 | Oct 2018 | 0.000 | | 0.900 | Continuing | Continuing | 0.900 |
| | | **Subtotal** | 27.815 | 4.768 | | 13.475 | | 10.731 | | 0.000 | | 10.731 | Continuing | Continuing | N/A |

| | Prior Years | FY 2017 | | FY 2018 | | FY 2019 Base | | FY 2019 OCO | | FY 2019 Total | Cost To Complete | Total Cost | Target Value of Contract |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| **Project Cost Totals** | 27.815 | 4.768 | | 13.475 | | 10.731 | | 0.000 | | 10.731 | Continuing | Continuing | N/A |

**Remarks**

| Exhibit R-4, RDT&E Schedule Profile: PB 2019 Defense Logistics Agency | | Date: February 2018 |
|---|---|---|
| **Appropriation/Budget Activity**<br>0400 / 5 | **R-1 Program Element (Number/Name)**<br>PE 0605090S / *Defense Retired and Annuitant Pay System (DRAS)* | **Project (Number/Name)**<br>01 / *Defense Retired and Annuitant Pay System 2 (DRAS)* |

# DRAS2 Top Level Schedule (TLS)




**Note: The IMS is currently being mitigated for PM approval based on DLA Contracts Office guidance pertaining to IDIQ contract limitations during FY19 & FY20. Milestone C and Full Deployment dates reflected are tentative.**

△ Milestone Decision
◇ Decision Point
◆ Completed
▭ Task Timeline (Planned)
▨ Partial Progress Indicator
▭ Document Review

MS B – Milestone B MS C – Milestone C FD – Full Deployment IATT – Interim Authority To Test ATO/ATC – Authority To Operate/Authority to Connect TMRR – Technology Maturation and Risk Reduction EMD - Engineering and Manufacturing Development PROD/DEPLOY – Production and Deployment Development SI – System Integrator TO – Task Order SRR – System Requirements Review SFR – System Functional Review PDR – Preliminary Design Review CDR – Critical Design Review - T-PDR Tailored Preliminary Design Review - T-CDR Tailored Critical Design Review (Build 1 – 3) OTRR – Operational Test Readiness Review PRR – Production Readiness Review ISR – In Service Review SEP – System Engineering Plan TMP – Test Management Plan TEMP – Test & Evaluation Master Plan SAT – System Acceptance Testing SIT – System Integration Testing TRR – Technology Readiness Review SVR – System Verification Review SQT - System Qualification Testing UAT – User Acceptance Testing – DTE – Developmental Test & Evalution. (SwQT) – Software Quality Testing – Regression, System Integration, Compliance and Functional User Testing) - JITC – Joint Interoperability Test Command Proto CRP – Prototype Conference Room Pilot 2, 4, 6

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| Exhibit R-2, RDT&E Budget Item Justification: PB 2019 Defense Logistics Agency | Date: February 2018 |
|---|---|
| **Appropriation/Budget Activity**<br>0400: *Research, Development, Test & Evaluation, Defense-Wide I* BA 6: *RDT&E Management Support* | **R-1 Program Element (Number/Name)**<br>PE 0605502S *I Small Business Innovative Research (SBIR)* |

| COST ($ in Millions) | Prior Years | FY 2017 | FY 2018 | FY 2019 Base | FY 2019 OCO | FY 2019 Total | FY 2020 | FY 2021 | FY 2022 | FY 2023 | Cost To Complete | Total Cost |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Total Program Element | 23.043 | 4.554 | 0.000 | 0.000 | - | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 | Continuing | Continuing |
| 01: *Small Business Innovative Research* | 23.043 | 4.554 | 0.000 | 0.000 | - | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 | Continuing | Continuing |

**A. Mission Description and Budget Item Justification**

Defense Logistics Agency's (DLA's) ability to deliver Americans the right logistics solution in every transaction requires more than successful management of the Department'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 2017 | FY 2018 | FY 2019 Base | FY 2019 OCO | FY 2019 Total |
|---|---|---|---|---|---|
| Previous President's Budget | 0.000 | 0.000 | 0.000 | - | 0.000 |
| Current President's Budget | 4.554 | 0.000 | 0.000 | - | 0.000 |
| Total Adjustments | 4.554 | 0.000 | 0.000 | - | 0.000 |
| • Congressional General Reductions | - | - | | | |
| • Congressional Directed Reductions | - | - | | | |
| • Congressional Rescissions | - | - | | | |
| • Congressional Adds | - | - | | | |
| • Congressional Directed Transfers | - | - | | | |
| • Reprogrammings | - | - | | | |
| • SBIR/STTR Transfer | 4.554 | - | | | |

**Change Summary Explanation**

FY2017 Small Business Innovation Research and Small Technology Transfer taxes for DLA programs amounted to $4.554M which established the baseline or this program element.

| Exhibit R-2A, RDT&E Project Justification: PB 2019 Defense Logistics Agency | | | Date: February 2018 |
|---|---|---|---|
| Appropriation/Budget Activity<br>0400 / 6 | R-1 Program Element (Number/Name)<br>PE 0605502S / *Small Business Innovative Research (SBIR)* | Project (Number/Name)<br>01 / *Small Business Innovative Research* | |

| COST ($ in Millions) | Prior Years | FY 2017 | FY 2018 | FY 2019 Base | FY 2019 OCO | FY 2019 Total | FY 2020 | FY 2021 | FY 2022 | FY 2023 | Cost To Complete | Total Cost |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 01: *Small Business Innovative Research* | 23.043 | 4.554 | 0.000 | 0.000 | - | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 | Continuing | Continuing |
| Quantity of RDT&E Articles | - | - | - | - | - | - | - | - | - | - | | |

**A. Mission Description and Budget Item Justification**

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

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

J6 R&D
- Nuclear Enterprise Support Office (NESO) Alternative Sources of Supply
- Additive Manufacturing Technologies, Process Controls, and Supply Chain
- Advanced Battery Manufacturing
- Advanced Aircraft Braking Systems
- Anti-Counterfeiting Technologies
- Medical 3D Printing of Prosthetics
- Seamless Self Sealing Fuel Bladders and Inflatables
- Strategic Materials Rare Earth Element Source Development
- Warehouse Modernization Technologies
- Subsistence Supply Chain Solutions
- Land & Maritime (L&M) Alternative Sources of Supply
- US Navy LCAC Power Supply Source Development
- US Air Force F-107 Engine Replacement Parts Source Development

DMEA
- Advanced microelectronics concepts, technologies, and applications

| Exhibit R-2A, RDT&E Project Justification: PB 2019 Defense Logistics Agency | | Date: February 2018 |
|---|---|---|
| **Appropriation/Budget Activity**<br>0400 / 6 | **R-1 Program Element (Number/Name)**<br>PE 0605502S / *Small Business Innovative Research (SBIR)* | **Project (Number/Name)**<br>01 / *Small Business Innovative Research* |

| B. Accomplishments/Planned Programs ($ in Millions) | FY 2017 | FY 2018 | FY 2019 |
|---|---|---|---|
| ***Title:*** SBIR Accomplishments/Plans | 4.554 | 0.000 | 0.000 |
| ***FY 2018 Plans:***<br>DLA SBIR/STTR: To continue execution of all active Phase I and Phase II SBIR/STTR Projects. In the DOD-wide 2017.3 and 2018.1 BAA's (Broad Agency Announcements), DLA expects twelve new topics. Anticipate the selection of one to three topics per area which will exhaust the FY 18 DLA SBIR funds. Upon completion, all active Phase I projects have the opportunity to compete for Phase II awards. DLA expects to award 12 new Phase II award. All Phase II awards utilize OSD/OSBP funding ($12M) per Support Agreement .<br>Continue execution of all active Phase I STTR projects. Upon completion, all active Phase I projects have the opportunity to compete for Phase II awards. Expect to award a single Phase II in early FY18.<br><br>DMEA SBIR/STTR: DMEA will continue execution of all active SBIR projects. All active Phase I projects have the opportunity to progress to Phase II. DMEA will begin to study the feasibility of a high-brilliance 9KeV x-ray source. DMEA will complete prototype development for a broadband quadrature mixer with integrated I/Q mismatch calibration, and a nano-resolution 3D integrated circuit reconstruction system | | | |
| ***FY 2019 Plans:***<br>DLA SBIR/STTR: Continue execution of all active Phase I and Phase II SBIR/STTR Projects. Work with other R&D Programs and other divisions with DLA to identify requirements that meet DLA's long and short term Strategic Objectives. Provide adequate guidance and mentorship to Phase II to projects to increase the likelihood of transition into government programs of record or commercial vultures.<br><br>DMEA SBIR/STTR: DMEA will continue to seek innovative technical solutions to DoD microelectronics research and development needs and increase private-sector commercialization of these innovations. | | | |
| **Accomplishments/Planned Programs Subtotals** | 4.554 | 0.000 | 0.000 |

**C. Other Program Funding Summary ($ in Millions)**

N/A

**Remarks**

| Exhibit R-2A, RDT&E Project Justification: PB 2019 Defense Logistics Agency | | Date: February 2018 |
|---|---|---|
| **Appropriation/Budget Activity**<br>0400 / 6 | **R-1 Program Element (Number/Name)**<br>PE 0605502S / *Small Business Innovative Research (SBIR)* | **Project (Number/Name)**<br>01 / *Small Business Innovative Research* |

**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)

**E. Performance Metrics**

SBIR /STTR programs measure performance in two separate metrics

1. Phase Progression: In terms of progression from Phase I to Phase II, to Phase III, DLA deems each successive progression success. DLA Seeks to have a 30% progression from one Phase to the next as a minimum.

2. Commercialization: The Congressional language defines "Commercialization," which is clarified by the Office of Secretary of Defense Office of Small Business Programs (OSD/OSBP) Re-Authorization Policy Directive:
- (Investment) The process of developing products, processes, technologies, or services; and/or
- (Sales) The production and delivery (whether by the originating party or by others) of products, processes, technologies, or services for sale to or use by the Federal Government or commercial markets

The Small Business Administration and OSD/OSBP assign a Commercialization Index based on progression within the Phases and reported successes

| Exhibit R-2, RDT&E Budget Item Justification: PB 2019 Defense Logistics Agency | Date: February 2018 |
|---|---|
| **Appropriation/Budget Activity**<br>0400: *Research, Development, Test & Evaluation, Defense-Wide* / BA 6: *RDT&E Management Support* | **R-1 Program Element (Number/Name)**<br>PE 0606942S / *Cyber Vulnerability Assessment and Mitigation* |

| COST ($ in Millions) | Prior Years | FY 2017 | FY 2018 | FY 2019 Base | FY 2019 OCO | FY 2019 Total | FY 2020 | FY 2021 | FY 2022 | FY 2023 | Cost To Complete | Total Cost |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Total Program Element | - | 0.000 | 0.000 | 4.000 | - | 4.000 | 0.000 | 0.000 | 0.000 | 0.000 | Continuing | Continuing |
| CVAM: *Cyber Vulnerability Assessment and Mitigation* | 0.000 | 0.000 | 0.000 | 4.000 | - | 4.000 | 0.000 | 0.000 | 0.000 | 0.000 | Continuing | Continuing |

**A. Mission Description and Budget Item Justification**

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

| B. Program Change Summary ($ in Millions) | FY 2017 | FY 2018 | FY 2019 Base | FY 2019 OCO | FY 2019 Total |
|---|---|---|---|---|---|
| Previous President's Budget | 0.000 | 0.000 | 0.000 | - | 0.000 |
| Current President's Budget | 0.000 | 0.000 | 4.000 | - | 4.000 |
| Total Adjustments | 0.000 | 0.000 | 4.000 | - | 4.000 |
| • Congressional General Reductions | - | - | | | |
| • Congressional Directed Reductions | - | - | | | |
| • Congressional Rescissions | - | - | | | |
| • Congressional Adds | - | - | | | |
| • Congressional Directed Transfers | - | - | | | |
| • Reprogrammings | - | - | | | |
| • SBIR/STTR Transfer | - | - | | | |
| • Program Establishment | - | - | 4.000 | - | 4.000 |

**Change Summary Explanation**

This is a new PE in FY 2019. This is a continuation of efforts funded within the management support for the Office of the Secretary of Defense PE 0604942D8Z Assessments and Evaluation.

| Exhibit R-2A, RDT&E Project Justification: PB 2019 Defense Logistics Agency | | | Date: February 2018 |
|---|---|---|---|
| **Appropriation/Budget Activity**<br>0400 / 6 | **R-1 Program Element (Number/Name)**<br>PE 0606942S / *Cyber Vulnerability Assessment and Mitigation* | **Project (Number/Name)**<br>CVAM / *Cyber Vulnerability Assessment and Mitigation* | |

| COST ($ in Millions) | Prior Years | FY 2017 | FY 2018 | FY 2019 Base | FY 2019 OCO | FY 2019 Total | FY 2020 | FY 2021 | FY 2022 | FY 2023 | Cost To Complete | Total Cost |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| CVAM: *Cyber Vulnerability Assessment and Mitigation* | 0.000 | 0.000 | 0.000 | 4.000 | - | 4.000 | 0.000 | 0.000 | 0.000 | 0.000 | Continuing | Continuing |
| Quantity of RDT&E Articles | - | - | - | - | - | - | - | - | - | - | | |

**A. Mission Description and Budget Item Justification**

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

| B. Accomplishments/Planned Programs ($ in Millions) | FY 2017 | FY 2018 | FY 2019 |
|---|---|---|---|
| ***Title:*** Cyber Vulnerability Assessment and Mitigation | 0.000 | - | 4.000 |
| ***FY 2019 Plans:***<br>Conduct cyber vulnerability assessments and mitigation on existing DLA Fuel Distribution Infrastructure | | | |
| ***FY 2018 to FY 2019 Increase/Decrease Statement:***<br>Program is established within DLA's RDT&E portfolio in FY2019. | | | |
| **Accomplishments/Planned Programs Subtotals** | 0.000 | - | 4.000 |

**C. Other Program Funding Summary ($ in Millions)**

N/A

**Remarks**

**D. Acquisition Strategy**

N/A

**E. Performance Metrics**

Vulnerabilities that are discovered through fuel distribution infrastructure assessments will have corrective action plans (CAPs) drawn up and mitigation efforts to close gaps will be initiated. 20% of CAPs will be closed within 1 year of discovery.

| Exhibit R-2, RDT&E Budget Item Justification: PB 2019 Defense Logistics Agency | | | | | | | | | | | | Date: February 2018 |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Appropriation/Budget Activity<br>0400: *Research, Development, Test & Evaluation, Defense-Wide* / BA 7: *Operational Systems Development* | | | | | R-1 Program Element (Number/Name)<br>PE 0708011S / *Industrial Preparedness* | | | | | | | |
| **COST ($ in Millions)** | **Prior Years** | **FY 2017** | **FY 2018** | **FY 2019 Base** | **FY 2019 OCO** | **FY 2019 Total** | **FY 2020** | **FY 2021** | **FY 2022** | **FY 2023** | **Cost To Complete** | **Total Cost** |
| Total Program Element | 131.718 | 15.984 | 0.000 | 0.000 | - | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 | 147.702 |
| 0: *Prior Years* | 109.875 | 0.000 | 0.000 | 0.000 | - | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 | 109.875 |
| 17: *Improving Industrial Base Manufacturing Processes (formerly Material Availability)* | 5.293 | 4.800 | 0.000 | 0.000 | - | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 | 10.093 |
| 18: *Maintaining Viable Supply Sources (formerly High Quality Sources)* | 10.188 | 8.590 | 0.000 | 0.000 | - | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 | 18.778 |
| 19: *Improving Technical and Logistics Information (formerly Industry and Customer Collaboration)* | 6.362 | 2.594 | 0.000 | 0.000 | - | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 | 8.956 |

**A. Mission Description and Budget Item Justification**

The Defense Logistics Agency (DLA) Industrial Preparedness Manufacturing Technology (IP ManTech) Program supports the development of a responsive, world-class manufacturing capability to affordably meet the warfighters' needs throughout the defense system life cycle. IP ManTech: Provides the crucial link between invention and product application to speed technology transitions. The program matures and validates emerging manufacturing technologies to support low-risk implementation in industry and Department of Defense (DoD) facilities, e.g. depots and shipyards. It addresses production issues early by providing timely solutions, thereby reducing risk and positively impacting system life cycle affordability by providing solutions to manufacturing problems before they occur.

Beginning in FY16, DLA ManTech was realigned into three Strategic Focus Areas (SFA): 1) Improving Industrial base Manufacturing Processes; 2) Maintaining Viable Sources of Supply; and 3) Improving Technical and Logistics Information.

• The Improving Industrial Base Manufacturing Processes SFA includes efforts to reduce industrial base material costs and production lead-times, while improving the quality of DLA managed products. This SFA subsumed the former supply chain oriented efforts in Subsistence Network (formerly known as the Combat Rations Network for Technology Implementation), Procurement Readiness Optimization—Advanced Casting Technology (PRO-ACT), Procurement Readiness Optimization—Forging Advance System Technology (PRO-FAST), and Battery Network (BATTNET). New manufacturing processes within the scope of this SFA include emerging technologies such as Additive Manufacturing.
• Maintaining Viable Supply Sources includes efforts to assure the commercial industrial base can satisfy DLA materiel requirements. This SFA subsumed the Material Acquisition Electronics ManTech efforts. In the future, it will include other DLA efforts to maintain a viable industrial capability in areas such as Strategic Materials.
• The Improving Technical and Logistics Information SFA include efforts to improve and facilitate the exchange of engineering and logistics information among DLA industry partners and customers. It includes the MANTECH program Military Uniform System Technology (MUST) (formerly known as Customer Driven Uniform

| Exhibit R-2, RDT&E Budget Item Justification: PB 2019 Defense Logistics Agency | Date: February 2018 |
|---|---|
| **Appropriation/Budget Activity**<br>0400: *Research, Development, Test & Evaluation, Defense-Wide I* BA 7: *Operational Systems Development* | **R-1 Program Element (Number/Name)**<br>PE 0708011S *I Industrial Preparedness* |

Manufacturing) and the Defense Logistics Information Research Program from P.E. 0603712S. 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.

NOTE: The single supply chain exhibits were removed as they are now included within the SFA exhibits.

| B. Program Change Summary ($ in Millions) | FY 2017 | FY 2018 | FY 2019 Base | FY 2019 OCO | FY 2019 Total |
|---|---|---|---|---|---|
| Previous President's Budget | 0.000 | 0.000 | 0.000 | - | 0.000 |
| Current President's Budget | 15.984 | 0.000 | 0.000 | - | 0.000 |
| Total Adjustments | 15.984 | 0.000 | 0.000 | - | 0.000 |
| • Congressional General Reductions | - | - | | | |
| • Congressional Directed Reductions | - | - | | | |
| • Congressional Rescissions | - | - | | | |
| • Congressional Adds | - | - | | | |
| • Congressional Directed Transfers | - | - | | | |
| • Reprogrammings | 15.984 | - | | | |
| • SBIR/STTR Transfer | - | - | | | |

**Change Summary Explanation**

Under the FY2017 CR, PE 30603680S was considered a new start so ManTech business was executed under this PE resulting in a reprogramming amount of $15.984M. See PE 30603680S for data.

| Exhibit R-2A, RDT&E Project Justification: PB 2019 Defense Logistics Agency | | | Date: February 2018 |
|---|---|---|---|
| Appropriation/Budget Activity<br>0400 / 7 | R-1 Program Element (Number/Name)<br>PE 0708011S / *Industrial Preparedness* | Project (Number/Name)<br>0 / *Prior Years* | |

| COST ($ in Millions) | Prior Years | FY 2017 | FY 2018 | FY 2019 Base | FY 2019 OCO | FY 2019 Total | FY 2020 | FY 2021 | FY 2022 | FY 2023 | Cost To Complete | Total Cost |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 0: *Prior Years* | 109.875 | 0.000 | 0.000 | 0.000 | - | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 | 109.875 |
| Quantity of RDT&E Articles | - | - | - | - | - | - | - | - | - | - | | |

**A. Mission Description and Budget Item Justification**

Prior Year includes:

-Combat Rations (CORANET): $6.632M. This project was realigned to Strategic Focus Area (SFA) Improving Industrial Base Manufacturing Processes. In 2015, DLA R&D expanded the Combat Rations Network (CORANET) program to include the “Subsistence Supply Chain (SUBNET),” which consists of the supply chain for military subsistence, including combat rations, field feeding equipment, garrison feeding and “market fresh." The goal of the SUBNET program is to maximize the capability and the capacity to produce and to encourage innovation and modernization needed to leverage the latest technologies.

-Customer Driven Uniform Manufacture (CDUM): $18.499M. This project was realigned to SFA Improving Technical and Logistics Information. The CDUM program concluded in October 2014, and the results have been implemented DOD wide for recruit items. Residual CDUM projects have been transitioned into the Military Unique Sustainment Technology (MUST) Program. The MUST Program was initiated in 4th quarter 2014. The strategic objective of the DLA MUST program is to identify, develop and adopt technologies that can significantly reduce the lead-time between Individual Item and Equipment (IIE) development and sustainment from years to months. The Program focuses on technologies that will transform the military IIE 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.

-Procurement Readiness Optimization - Advanced System Technology (PRO-ACT): $12.409M. This project was realigned to SFA Improving Industrial Base Manufacturing Processes. The Castings consortium objective is to develop new materials and technologies for the metalcasting industry to help DLA improve the supply of parts that contain castings. 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 to develop 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 in conjunction with the industry associations. These advancements will improve the metal casting supply chains for the DOD and the DLA to better support the warfighter. This is achieved through investments in projects aimed at reducing lead-time, reducing cost, and improving quality of castings critical to DOD weapon systems. The increase in funding will help develop new technology for casting suppliers, including inspection, materials, modeling, and design.

-Procurement Readiness Optimization - Forging Advanced System Technology (PRO-FAST): $5.627M. This project was realigned to SFA Improving Industrial Base Manufacturing Processes. The Forgings consortium objective is to develop new materials and technologies for the forging industry to help DLA improve the supply of parts that contain forgings. 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 Numbered 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 the technologies will be tested and implemented in conjunction with the industry associations.

| Exhibit R-2A, RDT&E Project Justification: PB 2019 Defense Logistics Agency | | Date: February 2018 |
|---|---|---|
| **Appropriation/Budget Activity**<br>0400 / 7 | **R-1 Program Element (Number/Name)**<br>PE 0708011S / *Industrial Preparedness* | **Project (Number/Name)**<br>0 / *Prior Years* |

These advancements will improve the forging supply chains for the DOD and the DLA to better support the warfighter. This is achieved through investments in projects aimed at reducing lead-time, reducing cost, and improving quality of forgings critical to DOD weapon systems. The increase in funding will help develop new technology for forging suppliers, including new methods for making forge dies (typically the longest lead time and most expensive item) and for simulation of metal flow inside the forge die (to eliminate trial and error development of the die).

-Material Acquisition Electronics (MAE): $58.396M. This project was realigned to SFA Maintaining Viable Supply Sources. The MAE program develops a capability to emulate most obsolete digital integrated circuits (ICs) in the Federal catalog using a single, flexible manufacturing line. DoD has estimated $2.9 billion is spent every five years redesigning circuit card assemblies. Many of these circuit card redesigns are performed to mitigate IC obsolescence. Commercial ICs have short Product Life Cycles (often only 18 months). IC Manufacturers subsequently move on to later generations of ICs, leaving little to no sources for their previous IC products. DoD maintains weapons systems much longer than IC lifecycles, resulting in an obsolescence problem. In order to avoid costs and potential readiness issues associated with buying/carrying excess inventories acquired before commercial availability ceases, or redesigning the next higher assembly to mitigate the obsolete IC, DLA (as the manager of 88% of the IC Federal Stock Class) must have the capability to manufacture needed IC devices.

-Battery Network (BATTNET): $8.312M. This project was realigned to SFA Improving Industrial Base Manufacturing Processes. The BATTNET program is focused on improving the supply and reducing the cost of procured batteries used in fielded weapon systems such as communication radios and armored vehicles. Batteries exhibit dynamic challenges for military logistics. BATTNET is a community of practice of battery supply chain members, engineering support activities, researchers, and users. BATTNET conducts R&D to address sustainment gaps and bridge technical solutions into higher MRLs for specific groups of batteries. For FY2014, DLA received 139,163 orders for 2.85 million batteries at $183M net value - compared to FY13 $176M and FY12 $216M.

| Exhibit R-2A, RDT&E Project Justification: PB 2019 Defense Logistics Agency | | | Date: February 2018 |
|---|---|---|---|
| **Appropriation/Budget Activity**<br>0400 / 7 | **R-1 Program Element (Number/Name)**<br>PE 0708011S / *Industrial Preparedness* | **Project (Number/Name)**<br>17 / *Improving Industrial Base Manufacturing Processes (formerly Material Availability)* | |

| COST ($ in Millions) | Prior Years | FY 2017 | FY 2018 | FY 2019 Base | FY 2019 OCO | FY 2019 Total | FY 2020 | FY 2021 | FY 2022 | FY 2023 | Cost To Complete | Total Cost |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 17: *Improving Industrial Base Manufacturing Processes (formerly Material Availability)* | 5.293 | 4.800 | 0.000 | 0.000 | - | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 | 10.093 |
| Quantity of RDT&E Articles | - | - | - | - | - | - | - | - | - | - | | |

**A. Mission Description and Budget Item Justification**

The Material Availability (MA) Strategic Focus Area (SFA) are R&D efforts undertaken with DLA's industrial base to reduce material costs, reduce the length and variability of Production Lead-Times, assure the DLA managed products meet 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 strategic focus area includes within its scope the former Combat Rations Program, the Battery Program, the Castings and the Forgings programs.

This SFA is comprised of five roadmaps for Batteries, Subsistence Network, Castings, Forgings, and Additive Manufacturing.

The Battery network 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. The network conducts R&D initiatives to address sustainment gaps and bridge technical solutions into higher MRLs for specific groups of batteries. For FY2014, DLA received 139,163 orders for 2.85 million batteries at $183M net value - compared to FY13 $176M and FY12 $216M. The Battery network 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 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 Subsistence Supply Chain consists of military subsistence, which includes combat rations, field feeding equipment, garrison feeding and market fresh products. The Subsistence Network (SUBNET) program is a manufacturing technology program and is the successor to the Combat Rations R&D program. SUBNET's community of practice will 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. The desired outcomes of the current short-term projects Microwave Assisted Thermal Sterilization (MATS), MRE Alternate Chemical Laminate, Optimize Combat Ration Inspection Costs, and Combat Rations Shelf Life Temperature Monitoring Project include testing of low risk, high-impact technology and process improvements that will improve the quality of individual and group combat rations, reduce cost, and provide efficiencies, then transitioning these improvements to industrial base suppliers and government suppliers.

The Castings consortium objective is to develop new materials and technologies for the metalcasting industry to help DLA improve the supply of parts that contain castings. Weapon system spare parts managed by DLA that contain castings are responsible for a disproportionate share of DLA's backorders or unfilled orders (UFOs).

| Exhibit R-2A, RDT&E Project Justification: PB 2019 Defense Logistics Agency | | Date: February 2018 |
|---|---|---|
| **Appropriation/Budget Activity**<br>0400 / 7 | **R-1 Program Element (Number/Name)**<br>PE 0708011S / *Industrial Preparedness* | **Project (Number/Name)**<br>17 / *Improving Industrial Base Manufacturing Processes (formerly Material Availability)* |

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 to develop 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 in conjunction with the industry associations. These advancements will improve the metalcasting supply chains for the DOD and the DLA to better support the warfighter. This is achieved through investments in projects aimed at reducing lead-time, reducing cost, and improving quality of castings critical to DOD weapon systems.

The Forgings consortium objective is to develop new materials and technologies for the forging industry to help DLA improve the supply of parts that contain forgings. 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 Numbered 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 the technologies will be tested and implemented in conjunction with the industry associations. These advancements will improve the forging supply chains for the DOD and the DLA to better support the warfighter. This is achieved through investments in projects aimed at reducing lead-time, reducing cost, and improving quality of forgings critical to DOD weapon systems.

The Additive Manufacturing (AM) objective is to establish AM as an effective alternative to conventional manufacturing and document the process for AM benefits. DLA needs to exploit AM technology as a lead-time and inventory reduction enabler.

| Exhibit R-2A, RDT&E Project Justification: PB 2019 Defense Logistics Agency | | | Date: February 2018 |
|---|---|---|---|
| Appropriation/Budget Activity<br>0400 / 7 | R-1 Program Element (Number/Name)<br>PE 0708011S / *Industrial Preparedness* | Project (Number/Name)<br>18 / *Maintaining Viable Supply Sources (formerly High Quality Sources)* | |

| COST ($ in Millions) | Prior Years | FY 2017 | FY 2018 | FY 2019 Base | FY 2019 OCO | FY 2019 Total | FY 2020 | FY 2021 | FY 2022 | FY 2023 | Cost To Complete | Total Cost |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 18: *Maintaining Viable Supply Sources (formerly High Quality Sources)* | 10.188 | 8.590 | 0.000 | 0.000 | - | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 | 18.778 |
| Quantity of RDT&E Articles | - | - | - | - | - | - | - | - | - | - | | |

**A. Mission Description and Budget Item Justification**

The High Quality Sources SFA are 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 former Material Acquisition Electronics program.

The Material Acquisition Electronics roadmap has four major thrusts in Digital Microcircuits: Advanced Schottky TTL, TTL Compatible CMOS, 512 Kilobit RAM/ROM and Mega Gate ASIC. The Roadmap also includes a new major thrust area: Linear Microcircuits. 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 17 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.

The Strategic Materials roadmap is a new thrust for the DLA Mantech program. It is designed to ensure that critical strategic materials are available from domestic sources and that process innovations are in place to efficiently process or recover strategic materials. Domestic capabilities can enhance national security and potentially reduce Defense Stockpile requirements.

| Exhibit R-2A, RDT&E Project Justification: PB 2019 Defense Logistics Agency | | | Date: February 2018 |
|---|---|---|---|
| Appropriation/Budget Activity<br>0400 / 7 | R-1 Program Element (Number/Name)<br>PE 0708011S / *Industrial Preparedness* | Project (Number/Name)<br>19 / *Improving Technical and Logistics Information (formerly Industry and Customer Collaboration)* | |

| COST ($ in Millions) | Prior Years | FY 2017 | FY 2018 | FY 2019 Base | FY 2019 OCO | FY 2019 Total | FY 2020 | FY 2021 | FY 2022 | FY 2023 | Cost To Complete | Total Cost |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 19: *Improving Technical and Logistics Information (formerly Industry and Customer Collaboration)* | 6.362 | 2.594 | 0.000 | 0.000 | - | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 | 8.956 |
| Quantity of RDT&E Articles | - | - | - | - | - | - | - | - | - | - | | |

**A. Mission Description and Budget Item Justification**

The Improving Technical and Logistics Information Strategic Focus Area (SFA) projects improve and facilitate the communication of technical and logistics information among industry, DLA's military customers and DLA. This SFA includes Military Unique Sustainment Technology (MUST) and the Defense Logistics Information Research (DLIR) (P.E. 0603712S) within its scope. The movement of the DLIR related work from P.E. 0603712S to the DOD ManTech Program aligns the funding to the critical interface between DLA and industry and away from internal DLA operations.

The MUST focus addresses GAO Report 12-707 recommendations that DOD to establish a "knowledge-based approach" to collaborate on define and communicate of military unique requirements. DLA has the responsibility to communicate and 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 reduce the lead-time between Individual Item and Equipment (IIE) development and sustainment from years to months. The Program focuses on technologies that will transform the military IIE 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 DLIR Model Based Enterprise effort will develop capabilities to systematically accept engineering and design data from the Military Services, validate and store item technical data in 3D models. There are two classes of data that must be addressed: newly designed parts for systems still in development and legacy parts for systems that are in sustainment. The problem with newly designed parts is capturing the complete and accurate designs. The legacy parts do not have digital engineering models which recreating the design in contemporary engineering systems.

The Technical and Logistical Data Interoperability will pioneer methods to capture data from military Services, Original Equipment Manufacturers (OEMs), and suppliers to form a seamless thread of interoperable and linked data models.

| Exhibit R-2, RDT&E Budget Item Justification: PB 2019 Defense Logistics Agency | Date: February 2018 |
|---|---|
| **Appropriation/Budget Activity**<br>0400: *Research, Development, Test & Evaluation, Defense-Wide* / BA 7: *Operational Systems Development* | **R-1 Program Element (Number/Name)**<br>PE 0708012S / *Pacific Disaster Centers* |

| COST ($ in Millions) | Prior Years | FY 2017 | FY 2018 | FY 2019 Base | FY 2019 OCO | FY 2019 Total | FY 2020 | FY 2021 | FY 2022 | FY 2023 | Cost To Complete | Total Cost |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Total Program Element | 18.291 | 1.690 | 1.770 | 1.770 | - | 1.770 | 1.770 | 1.785 | 1.821 | 1.856 | Continuing | Continuing |
| 1: *Logistics Support Activities (LSA)* | 12.488 | 0.000 | 0.000 | 0.000 | - | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 | 12.488 |
| 03: *Pacific Disaster Center* | 5.803 | 1.690 | 1.770 | 1.770 | - | 1.770 | 1.770 | 1.785 | 1.821 | 1.856 | 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, Technology, and Logistics) (OUSD(AT&L)) 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 hazard monitoring, early warning and decision support system, called RAPIDS, for the department.

| B. Program Change Summary ($ in Millions) | FY 2017 | FY 2018 | FY 2019 Base | FY 2019 OCO | FY 2019 Total |
|---|---|---|---|---|---|
| Previous President's Budget | 1.754 | 1.770 | 1.770 | - | 1.770 |
| Current President's Budget | 1.690 | 1.770 | 1.770 | - | 1.770 |
| Total Adjustments | -0.064 | 0.000 | 0.000 | - | 0.000 |
| • Congressional General Reductions | - | - | | | |
| • Congressional Directed Reductions | - | - | | | |
| • Congressional Rescissions | - | - | | | |
| • Congressional Adds | - | - | | | |
| • Congressional Directed Transfers | - | - | | | |
| • Reprogrammings | - | - | | | |
| • SBIR/STTR Transfer | -0.064 | - | | | |

**Change Summary Explanation**

FY2017, the Small Business Innovation Research and Small Technology Transfer Research tax amounted to $0.064M.

| Exhibit R-2A, RDT&E Project Justification: PB 2019 Defense Logistics Agency | | | Date: February 2018 |
|---|---|---|---|
| Appropriation/Budget Activity<br>0400 / 7 | R-1 Program Element (Number/Name)<br>PE 0708012S / *Pacific Disaster Centers* | Project (Number/Name)<br>1 / *Logistics Support Activities (LSA)* | |

| COST ($ in Millions) | Prior Years | FY 2017 | FY 2018 | FY 2019 Base | FY 2019 OCO | FY 2019 Total | FY 2020 | FY 2021 | FY 2022 | FY 2023 | Cost To Complete | Total Cost |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 1: *Logistics Support Activities (LSA)* | 12.488 | 0.000 | 0.000 | 0.000 | - | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 | 12.488 |
| Quantity of RDT&E Articles | - | - | - | - | - | - | - | - | - | - | | |

**A. Mission Description and Budget Item Justification**

This program is reported in accordance with Title 10, United States Code, Section 119 (a)(1) in the Special Access Program Annual Report to Congress. The staff cognizance and oversight will transfer from the DLA to the Defense Information Systems Agency (DISA) effective October 1, 2014. The USD(P) will continue to be the Operational Sponsor and functional OSD Principal Staff Assistant (PSA) for the program.

| Exhibit R-2A, RDT&E Project Justification: PB 2019 Defense Logistics Agency | | | Date: February 2018 |
|---|---|---|---|
| Appropriation/Budget Activity<br>0400 / 7 | R-1 Program Element (Number/Name)<br>PE 0708012S / *Pacific Disaster Centers* | Project (Number/Name)<br>03 / *Pacific Disaster Center* | |

| COST ($ in Millions) | Prior Years | FY 2017 | FY 2018 | FY 2019 Base | FY 2019 OCO | FY 2019 Total | FY 2020 | FY 2021 | FY 2022 | FY 2023 | Cost To Complete | Total Cost |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 03: *Pacific Disaster Center* | 5.803 | 1.690 | 1.770 | 1.770 | - | 1.770 | 1.770 | 1.785 | 1.821 | 1.856 | Continuing | Continuing |
| Quantity of RDT&E Articles | - | - | - | - | - | - | - | - | - | - | | |

**A. Mission Description and Budget Item Justification**

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

| B. Accomplishments/Planned Programs ($ in Millions) | FY 2017 | FY 2018 | FY 2019 |
|---|---|---|---|
| ***Title:*** Pacific Disaster Center (PDC) | 1.690 | 1.770 | 1.770 |

***Description:*** This program is reported in accordance with Title 10, United States Code, Section 119 (a)(1) in the Special Access Program Annual Report to Congress. The USD(P) will continue to be the Operational Sponsor and functional OSD Principal Staff Assistant (PSA) for the program. USD(AT&L) will provide acquisition oversight authority for the program.

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

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

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

| Exhibit R-2A, RDT&E Project Justification: PB 2019 Defense Logistics Agency | | Date: February 2018 |
|---|---|---|
| **Appropriation/Budget Activity**<br>0400 / 7 | **R-1 Program Element (Number/Name)**<br>PE 0708012S / *Pacific Disaster Centers* | **Project (Number/Name)**<br>03 / *Pacific Disaster Center* |

| B. Accomplishments/Planned Programs ($ in Millions) | FY 2017 | FY 2018 | FY 2019 |
|---|---|---|---|
| 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. | | | |
| ***FY 2018 Plans:***<br>Risk and Vulnerability Assessment<br>• Explore trend analysis based on existing Global RVA data accumulated of the prior years<br>• Improve analytical reporting/visualization and automated assessment capabilities using Global RVA data<br>• Incorporate country-report analytical capabilities into the above assessment reporting capabilities<br><br>Data<br>• Explore feasibility of hosting classified data in RAPIDS, should the application be hosted on SIPR<br>• Continue development of data sources for hazards and related observational data TBD<br><br>Modeling<br>• Integrate alerting capabilities and hazard impact modeling<br>• Continue enhancing application of hazard models to estimate initial needs for HA/DR support missions<br><br>Application<br>• Improve performance of the system and enhance user experience<br>• Improve mobile device-related features (e.g. battery usage, etc.)<br>• Continue evaluating new and innovative technologies for enhancing user experience (for RAPIDS) | | | |
| ***FY 2019 Plans:***<br>Risk and Vulnerability Assessment<br>• Collaborate with regional Combatant Commands (e.g., SOUTHCOM, PACOM, etc.) to integrate and visualize subnational RVA data into RAPIDS<br>• Improve sub-national analytical reporting/visualization and automated assessment capabilities<br><br>Data<br>• Explore new technologies for handling “big data”<br>• Improve analytical capabilities using “big data”, including use of social media for early detection of man-made hazards<br>• Continue development of data sources for hazards and related observational data TBD<br><br>Modeling | | | |

| Exhibit R-2A, RDT&E Project Justification: PB 2019 Defense Logistics Agency | | Date: February 2018 |
|---|---|---|
| **Appropriation/Budget Activity**<br>0400 / 7 | **R-1 Program Element (Number/Name)**<br>PE 0708012S / *Pacific Disaster Centers* | **Project (Number/Name)**<br>03 / *Pacific Disaster Center* |

| B. Accomplishments/Planned Programs ($ in Millions) | FY 2017 | FY 2018 | FY 2019 |
|---|---|---|---|
| • Integrate Global Exposure Model for high-resolution "impact and exposure" analytical reporting<br>• Continue enhancing application of hazard models to estimate initial needs for HA/DR support missions<br><br>Application<br>• Expand use and visualization of "big data", supporting higher-resolution baseline inventories<br>• Improve cross-device user experience (e.g., desktop, mobile tablets, smart phones, wearables, etc.)<br>• Integrate mass (alert) notification functions<br>• Continue evaluating new and innovative technologies for enhancing user experience (for RAPIDS)<br>***FY 2018 to FY 2019 Increase/Decrease Statement:***<br>No significant change. | | | |
| **Accomplishments/Planned Programs Subtotals** | 1.690 | 1.770 | 1.770 |

**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 communicates. Projects obtained and funded from this customer base serve as a means to determine PDC product and services relevancy.

**E. Performance Metrics**

Projects objectives and tasks are designed to build upon the previous year's successes and are consistent with the framework and direction provided by the Strategies 2016-2020 document (updated Nov 2016). At the beginning of each calendar year, an Annual Plan is in-place to guide the program and enable a framework for performance feedback to the DoD PDC Program Manager, the PDC Executive Director, WHS CA Contracting Office, and the UH. At the end of each calendar year, these stakeholders meet to review the past year performance and finalize a new Annual Plan for the next calendar year. This plan details a set of specific objectives to further capabilities and capacities supporting the PDC's mission and increasing operational value to the stakeholders.

| Exhibit R-3, RDT&E Project Cost Analysis: PB 2019 Defense Logistics Agency | | | Date: February 2018 |
|---|---|---|---|
| Appropriation/Budget Activity<br>0400 / 7 | R-1 Program Element (Number/Name)<br>PE 0708012S / *Pacific Disaster Centers* | Project (Number/Name)<br>03 / *Pacific Disaster Center* | |

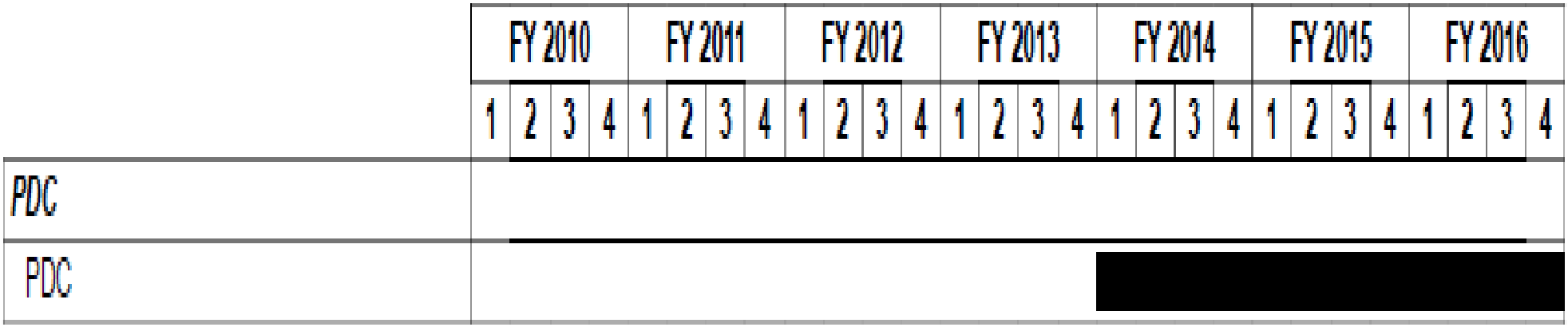
**Test and Evaluation ($ in Millions)**

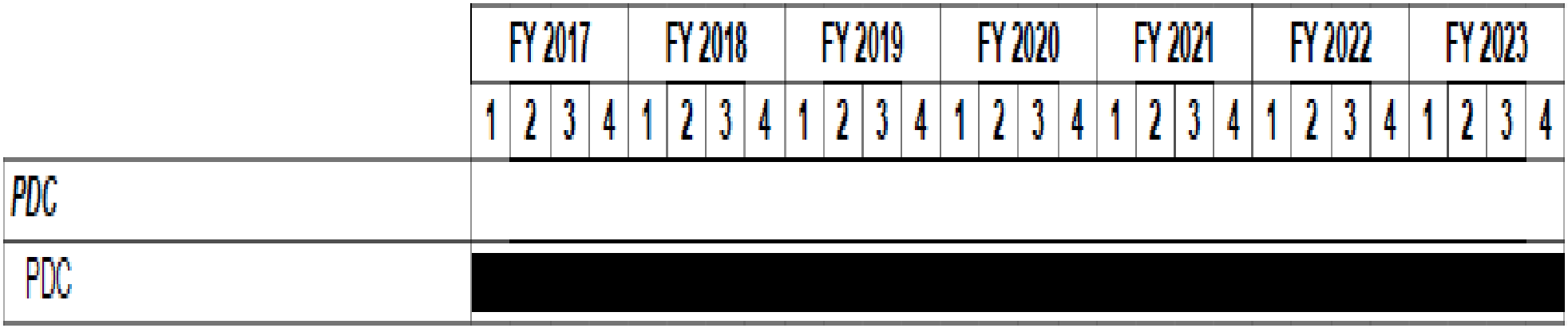
| Cost Category Item | Contract Method & Type | Performing Activity & Location | Prior Years | FY 2017 Cost | FY 2017 Award Date | FY 2018 Cost | FY 2018 Award Date | FY 2019 Base Cost | FY 2019 Base Award Date | FY 2019 OCO Cost | FY 2019 OCO Award Date | FY 2019 Total Cost | Cost To Complete | Total Cost | Target Value of Contract |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| PDC Disaster AWARE: Early Warning and Decision Support Applications | MIPR | University of Hawaii Systems : Honolulu, HI | 5.803 | 1.690 | Dec 2016 | 1.770 | Mar 2018 | 1.770 | Mar 2019 | 0.000 | | 1.770 | Continuing | Continuing | - |
| | | **Subtotal** | 5.803 | 1.690 | | 1.770 | | 1.770 | | 0.000 | | 1.770 | Continuing | Continuing | N/A |

| | Prior Years | FY 2017 | | FY 2018 | | FY 2019 Base | | FY 2019 OCO | | FY 2019 Total | Cost To Complete | Total Cost | Target Value of Contract |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| **Project Cost Totals** | 5.803 | 1.690 | | 1.770 | | 1.770 | | 0.000 | | 1.770 | Continuing | Continuing | N/A |

**Remarks**

| Exhibit R-4, RDT&E Schedule Profile: PB 2019 Defense Logistics Agency | | Date: February 2018 |
|---|---|---|
| **Appropriation/Budget Activity**<br>0400 / 7 | **R-1 Program Element (Number/Name)**<br>PE 0708012S / *Pacific Disaster Centers* | **Project (Number/Name)**<br>03 / *Pacific Disaster Center* |



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| Exhibit R-2, RDT&E Budget Item Justification: PB 2019 Defense Logistics Agency | Date: February 2018 |
|---|---|
| **Appropriation/Budget Activity**<br>0400: *Research, Development, Test & Evaluation, Defense-Wide* / BA 7: *Operational Systems Development* | **R-1 Program Element (Number/Name)**<br>PE 0708047S / *Defense Property Accountability System (DPAS)* |

| COST ($ in Millions) | Prior Years | FY 2017 | FY 2018 | FY 2019 Base | FY 2019 OCO | FY 2019 Total | FY 2020 | FY 2021 | FY 2022 | FY 2023 | Cost To Complete | Total Cost |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Total Program Element | 0.000 | 2.075 | 2.924 | 1.805 | - | 1.805 | 3.679 | 3.500 | 3.104 | 3.162 | Continuing | Continuing |
| ABC: *DPAS* | 0.000 | 2.075 | 2.924 | 1.805 | - | 1.805 | 3.679 | 3.500 | 3.104 | 3.162 | Continuing | Continuing |

**A. Mission Description and Budget Item Justification**

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

| B. Program Change Summary ($ in Millions) | FY 2017 | FY 2018 | FY 2019 Base | FY 2019 OCO | FY 2019 Total |
|---|---|---|---|---|---|
| Previous President's Budget | 2.154 | 2.924 | 2.972 | - | 2.972 |
| Current President's Budget | 2.075 | 2.924 | 1.805 | - | 1.805 |
| Total Adjustments | -0.079 | 0.000 | -1.167 | - | -1.167 |
| • Congressional General Reductions | - | - | | | |
| • Congressional Directed Reductions | - | - | | | |
| • Congressional Rescissions | - | - | | | |
| • Congressional Adds | - | - | | | |
| • Congressional Directed Transfers | - | - | | | |
| • Reprogrammings | - | - | | | |
| • SBIR/STTR Transfer | -0.079 | - | | | |
| • Inflation Adjustment | - | - | -0.025 | - | -0.025 |
| • Program Rephase | - | - | -1.142 | - | -1.142 |

**Change Summary Explanation**

FY2017, the Small Business Innovation Research and Small Technology Transfer Research tax amounted to $0.079M.

Inflation adjustments for Non-Pay/Non-Fuel Pay purchases and Civilian Pay decreased the program baseline in FY2019. The FY2019 funding request was reduced by $-1.142 million to account for the availability of prior year execution balances.

| Exhibit R-2A, RDT&E Project Justification: PB 2019 Defense Logistics Agency | | | Date: February 2018 |
|---|---|---|---|
| Appropriation/Budget Activity<br>0400 / 7 | R-1 Program Element (Number/Name)<br>PE 0708047S / *Defense Property Accountability System (DPAS)* | Project (Number/Name)<br>ABC / *DPAS* | |

| COST ($ in Millions) | Prior Years | FY 2017 | FY 2018 | FY 2019 Base | FY 2019 OCO | FY 2019 Total | FY 2020 | FY 2021 | FY 2022 | FY 2023 | Cost To Complete | Total Cost |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| ABC: *DPAS* | 0.000 | 2.075 | 2.924 | 1.805 | - | 1.805 | 3.679 | 3.500 | 3.104 | 3.162 | Continuing | Continuing |
| Quantity of RDT&E Articles | - | - | - | - | - | - | - | - | - | - | | |

**A. Mission Description and Budget Item Justification**

The DPAS system provides accountability and management functionality to the Department. The budgeted projects will provide enhancements to the existing capability, ensure efficient operability, and provide solutions for process gaps as they are discovered. The greater enhancements to DPAS allow the DoD to sunset legacy systems; DPAS assimilates the legacy functionality into the overall operations.

| B. Accomplishments/Planned Programs ($ in Millions) | FY 2017 | FY 2018 | FY 2019 |
|---|---|---|---|
| ***Title:*** Release DPAS v 4 | 2.075 | 2.924 | 1.805 |

***Description:*** Provide enhancements to the warehouse management functions; incorporate vehicle telematics; improve the data warehousing for transaction history.

***FY 2018 Plans:***

Provide functionality for event/project planning to include personnel and equipment resources; enhance interface with DAI to expect expense transactions for CIP Projects; provide interfaces to the Air Force logistics systems.

***FY 2019 Plans:***

DPAS has experienced exponential growth in the areas of IT asset management and Work Order/Ticket Management. The current Work Order/Ticket tracking capability in DPAS is rather generic and causes inefficiencies for both Vehicle Managers and IT Managers. DPAS will create a Work Order process that is more streamlined and targeted to these asset types. This will be done in one of two methods, depending on which solution will result in less maintenance cost in future years. The first method would be a process that changes the fields displayed and data values in drop down lists depending on the asset type. The second method would be to develop separate processes for the asset types. DPAS will conduct user meetings in FY18 to determine the full scope of the requirements and develop the capabilities in FY19.

DPAS will continue to provide support for the Financial Audit. The Department will have completed the first full audit and have findings that must be addressed. DPAS will work with each Service or Agency to determine the areas that DPAS can increase capability to permit the findings to be closed. At this time it is difficult to specifically state what these capabilities may be but DPAS is used by all components of the Department so there are sure to be areas that DPAS can implement capabilities to permit the Components to address the findings

***FY 2018 to FY 2019 Increase/Decrease Statement:***

| Exhibit R-2A, RDT&E Project Justification: PB 2019 Defense Logistics Agency | | Date: February 2018 |
|---|---|---|
| **Appropriation/Budget Activity**<br>0400 / 7 | **R-1 Program Element (Number/Name)**<br>PE 0708047S / *Defense Property Accountability System (DPAS)* | **Project (Number/Name)**<br>ABC / *DPAS* |

| B. Accomplishments/Planned Programs ($ in Millions) | FY 2017 | FY 2018 | FY 2019 |
|---|---|---|---|
| The FY 2019 funding request was reduced by $-1.142 million to account for the availability of prior year execution balances. | | | |
| **Accomplishments/Planned Programs Subtotals** | 2.075 | 2.924 | 1.805 |

**C. Other Program Funding Summary ($ in Millions)**

N/A

**Remarks**

**D. Acquisition Strategy**

N/A

**E. Performance Metrics**

DPAS will ensure the obligations and expenditures are in line with OSD (Comptroller) guidance, as currently issued.

| Exhibit R-3, RDT&E Project Cost Analysis: PB 2019 Defense Logistics Agency | | Date: February 2018 |
|---|---|---|
| **Appropriation/Budget Activity**<br>0400 / 7 | **R-1 Program Element (Number/Name)**<br>PE 0708047S / *Defense Property Accountability System (DPAS)* | **Project (Number/Name)**<br>ABC / *DPAS* |

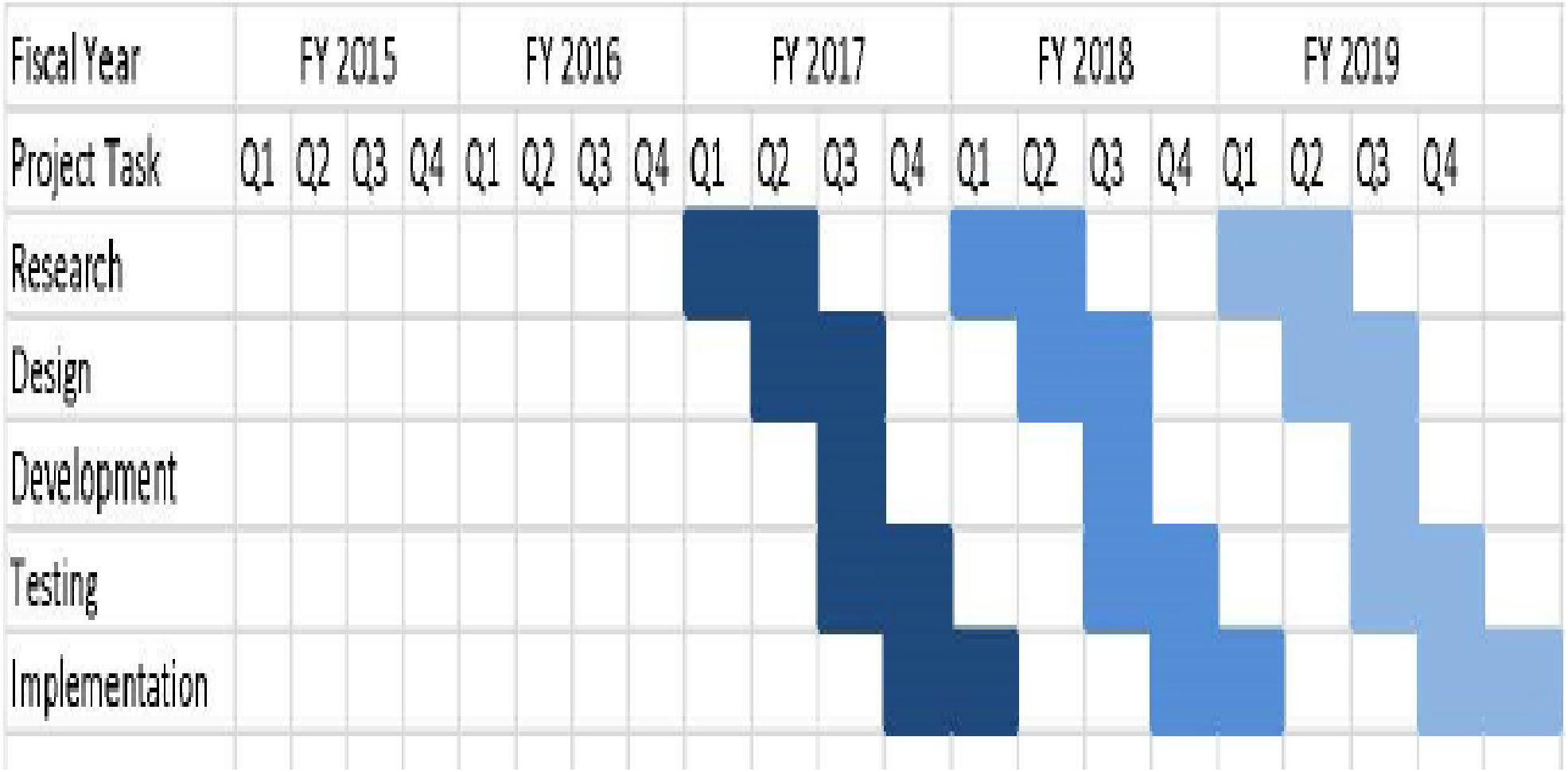
**Product Development ($ in Millions)**

| Cost Category Item | Contract Method & Type | Performing Activity & Location | Prior Years | FY 2017 Cost | FY 2017 Award Date | FY 2018 Cost | FY 2018 Award Date | FY 2019 Base Cost | FY 2019 Base Award Date | FY 2019 OCO Cost | FY 2019 OCO Award Date | FY 2019 Total Cost | Cost To Complete | Total Cost | Target Value of Contract |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| DPAS Version 4 Development | C/CPIF | Contractor TBD : TBD | 0.000 | 2.075 | Mar 2017 | 2.924 | Jun 2018 | 1.805 | Jun 2019 | 0.000 | | 1.805 | Continuing | Continuing | - |
| | | **Subtotal** | 0.000 | 2.075 | | 2.924 | | 1.805 | | 0.000 | | 1.805 | Continuing | Continuing | N/A |

| | Prior Years | FY 2017 | | FY 2018 | | FY 2019 Base | | FY 2019 OCO | | FY 2019 Total | Cost To Complete | Total Cost | Target Value of Contract |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| **Project Cost Totals** | 0.000 | 2.075 | | 2.924 | | 1.805 | | 0.000 | | 1.805 | Continuing | Continuing | N/A |

**Remarks**

| Exhibit R-4, RDT&E Schedule Profile: PB 2019 Defense Logistics Agency | | Date: February 2018 |
|---|---|---|
| **Appropriation/Budget Activity**<br>0400 / 7 | **R-1 Program Element (Number/Name)**<br>PE 0708047S / *Defense Property Accountability System (DPAS)* | **Project (Number/Name)**<br>ABC / *DPAS* |



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